WILLKIE FARR & GALLAGHER LLP

DOCKET FILE COPY ORIGINAL

1875 K Street, NW
Washington, DC 20006-1238
Tel 202 303 1000
Fax 202 303 2000

FILED/ACCEPTED

MAR - 5 2010

Federal Communications Commission
Office of the Secretary

March 5, 2010

Via Hand Delivery

Marlene H. Dortch
Federal Communications Commission
Office of the Secretary
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: REDACTED – FOR PUBLIC INSPECTION
In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees, MB Docket No. 10-56

Dear Ms. Dortch:

On behalf of Comcast Corporation ("Comcast"), General Electric Company ("GE"), and NBC Universal, Inc. ("NBCU"), and in accordance with the First and Second Protective Orders adopted in this proceeding,[1] enclosed please find two redacted copies of an expert economic report, entitled "Application of the Commission Staff Model of Vertical Foreclosure to the Proposed Comcast-NBCU Transaction" ("Economists' Report"), prepared by Drs. Mark Israel and Michael L. Katz. The {{ }} symbols in the Economists' Report indicate where Highly Confidential Information has been redacted, and the [[ ]] symbols indicate where Confidential Information has been redacted. In addition, enclosed please find a cover letter summarizing the Economists' Report. An unredacted version of the Economists' Report and attachments and a version of the Economists' Report with Highly Confidential Information redacted pursuant to the Protective Orders are being filed simultaneously with the Office of the Secretary under separate cover.

The Confidential and Highly Confidential versions of this filing will be made available pursuant to the terms of the Protective Orders.

1 *See In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees*, MB Docket No. 10-56, Protective Order, DA 10-370 (Mar. 4, 2010) ("First Protective Order"); *In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees*, MB Docket No. 10-56, Protective Order, DA 10-371 (Mar. 4, 2010) ("Second Protective Order").

No. of Copies rec'd 0+1
List ABCDE

Respectfully submitted,

Michael H. Hammer
Counsel for Comcast Corporation

Enclosures

March 5, 2010

FILED/ACCEPTED

MAR - 5 2010

Federal Communications Commission
Office of the Secretary

Via Hand Delivery

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Room TW-A325
Washington, DC 20554

Re: *In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees*, MB Docket No. 10-56

Dear Ms. Dortch:

On January 28, 2010, General Electric Company ("GE") and Comcast Corporation ("Comcast") (collectively, "Applicants") filed their Applications and Public Interest Statement seeking approval to transfer control of certain Federal Communications Commission ("Commission") licensees as part of a proposed transaction that would combine the broadcast, cable programming, movie studio, theme park, and online content businesses of NBC Universal ("NBCU") with the cable programming and certain online content businesses of Comcast.[1] Applicants demonstrated in the Public Interest Statement that the proposed transaction is pro-consumer, pro-competitive, and strongly in the public interest.

Applicants file herewith an economic report, prepared by Drs. Mark Israel and Michael L. Katz, entitled "Application of the Commission Staff Model of Vertical Foreclosure to the Proposed Comcast-NBCU Transaction" ("Israel/Katz Report" or "Economists' Report"), which further supports Applicants' showing that the proposed transaction is in the public interest and should be approved expeditiously. Dr. Israel is a Senior Vice President at Compass Lexecon. His areas of expertise include antitrust, industrial organization, econometrics, business strategy, and the economics of information. Prior to joining Compass Lexecon, Dr. Israel was a faculty member at Northwestern University's Kellogg School of Management. Dr. Katz is the Director of the Institute for Business

1 *See In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees*, MB Docket No. 10-56, Applications and Public Interest Statement, Lead Application File Nos. BTCCDT-20100128AAG (MB), SES-ASG-20100201-00148 (IB), and 0004101576 (WTB) (filed Jan. 28, 2010) ("Public Interest Statement").

Innovation at the University of California, Berkeley. From January 1994 through January 1996, he was the Commission's Chief Economist. From September 2001 through January 2003, he served as the Deputy Assistant Attorney General for Economic Analysis at the U.S. Department of Justice.

The Israel/Katz Report contains Confidential and Highly Confidential business information and proprietary data. As a result, it is being submitted pursuant to the First and Second Protective Orders adopted by the Media Bureau in this proceeding.[2] A public version of the Economists' Report is being filed concurrently in Docket No. 10-56 for the public record.

In their report, Drs. Israel and Katz focus on the potential for foreclosure post-transaction of the NBC owned-and-operated ("O&O") stations' signals. Drs. Israel and Katz conduct their analysis using the mathematical model developed by the Commission staff to analyze the issue of vertical foreclosure in the News Corp.-DirecTV transaction.[3] Without endorsing the staff's model, Drs. Israel and Katz apply the model to the present transaction. Their analysis demonstrates empirically that, even using the staff's model, a strategy of withholding the NBC broadcast stations' signals from Comcast Cable's rival MVPDs would not be profitable and, therefore, is very unlikely to be pursued post-transaction.

The "central finding" of the Israel/Katz Report is that "the proposed Comcast/NBCU/GE joint venture does not pose a significant threat of foreclosure."[4] This conclusion holds whether one analyzes permanent or temporary foreclosure strategies. In reaching this conclusion, Drs. Israel and Katz undertook three main steps:

First, they applied the staff model to the proposed transaction, making limited and appropriate modifications to account for the unique features of the proposed transaction and marketplace changes that have occurred since the News Corp.-DirecTV transaction. This yielded a "critical departure rate" at which subscribers would have to switch away from a foreclosed MVPD to a Comcast cable system in order to make up for the losses (*e.g.*, reduced advertising revenues) that a foreclosure strategy would impose on NBC.[5]

---

2 *See In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees*, MB Docket No. 10-56, Protective Order, DA 10-370 (Mar. 4, 2010) ("First Protective Order"); *In the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses or Transfer Control of Licensees*, MB Docket No. 10-56, Protective Order, DA 10-371 (Mar. 4, 2010) ("Second Protective Order").

3 *See In the Matter of General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee, For Authority to Transfer Control*, Memorandum Opinion and Order, 19 FCC Rcd 473 ¶ 15, Appendix D: Technical Appendix (2004).

4 Israel/Katz Report ¶ 4.

5 *Id.* ¶ 5.

Second, Drs. Israel and Katz undertook an econometric analysis of historical events to estimate the likely actual rates at which subscribers would switch away from an MVPD in response to temporary or permanent foreclosure of an NBC broadcast station. For both temporary and permanent foreclosure, Drs. Israel and Katz found that there is "no statistical evidence to support the proposition that large numbers of consumers would switch to Comcast if a rival MVPD were temporarily unable to provide them with access to the signal of a single network broadcast station."[6]

Third, Drs. Israel and Katz compared the "critical departure rate" of switching with the estimated actual switching rates. They found that "the econometric results provide no support for significant switching rates and certainly not for switching rates as high as the range of critical departure rates that we compute using an appropriately modified version of the Commission staff model."[7]

Drs. Israel and Katz conclude that the Commission staff model "does not support the conclusion that there is a significant threat that the Comcast/NBCU/GE joint venture would engage in foreclosure by withholding the retransmission rights to NBC broadcast stations' signals from Comcast's MVPD rivals."[8] To the contrary, they find that "it is difficult, if not impossible, to conceive of a situation in which application of the Commission staff model would convincingly establish that Comcast would be likely to withhold NBC stations' retransmission rights to implement a foreclosure strategy."[9]

The Israel/Katz Report's finding that foreclosure is highly unlikely as a matter of economics is bolstered by several legal protections that guard against foreclosure. For example, while the joint venture will have a board of directors initially consisting of three Comcast designees and two GE designees, the joint venture agreement provides that Comcast executives serving as directors or officers of the joint venture owe fiduciary duties to the joint venture and its members, including GE. These duties would be violated if the directors or officers of the joint venture made business decisions which knowingly sacrificed joint venture profits in order to increase Comcast's MVPD profits. GE has a strong incentive to enforce this provision.

In addition, the Communications Act already requires that broadcasters bargain in good faith with MVPDs regarding retransmission consent, and the Commission has adopted rules to enforce that duty.[10] To provide even further assurances, Applicants have voluntarily committed to extend the key components of the Commission's program access rules to negotiations with MVPDs for retransmission

---

6 *Id.* ¶ 124.

7 *Id.* ¶ 131.

8 *Id.* ¶ 132.

9 *Id.* ¶ 131.

10 *See* 47 U.S.C. § 325(b)(3)(C); 47 C.F.R. § 76.65.

rights to the signals of NBC and Telemundo O&O stations.[11] These additional legal protections underscore and strengthen the economic finding of Drs. Israel and Katz that "the most reasonable and defensible conclusion is that foreclosure is highly unlikely."[12]

Respectfully submitted,

Michael H. Hammer
WILLKIE FARR & GALLAGHER LLP
1875 K Street, NW
Washington, DC 20006
(202) 303-1000
Counsel for Comcast Corporation

A. Richard Metzger, Jr.
LAWLER, METZGER, KEENEY & LOGAN, LLC
2001 K Street, NW, Suite 802
Washington, DC 20006
(202) 777-7700
Counsel for General Electric Company

David H. Solomon
WILKINSON BARKER KNAUER, LLP
2300 N Street, NW, Suite 700
Washington, DC 20037
(202) 783-4141
Counsel for NBC Universal, Inc.

Enclosure

---

11 Public Interest Statement at 121.

12 Israel/Katz Report ¶ 132.

APPLICATION OF THE COMMISSION STAFF MODEL OF VERTICAL FORECLOSURE TO THE PROPOSED COMCAST-NBCU TRANSACTION

26 February 2010

Mark Israel
and
Michael L. Katz

Contents

I. INTRODUCTION

1. Comcast Corporation ("Comcast") and General Electric Company ("GE") propose to create a joint venture that combines the broadcast, cable programming, movie studio, theme park, and online content businesses of NBC Universal ("NBCU") with the cable programming and certain online content businesses of Comcast.[1] Comcast's cable systems will not be contributed to the joint venture and will continue to be owned and operated separately by Comcast. The joint venture will be majority-owned (51 percent) and managed by Comcast. GE will have a 49 percent ownership interest. As described in the Public Interest Statement and below, GE will have consent rights with respect to certain non-ordinary course matters, and the joint venture agreement provides that Comcast executives serving as directors or officers of the joint venture owe fiduciary duties to the joint venture and its members, including GE.[2]

2. We have been asked by counsel for Comcast to apply to this transaction the mathematical model developed by the staff of the Federal Communications Commission ("Commission") to analyze the issue of vertical foreclosure in the News Corp./DirecTV transaction.[3] Taking the same approach used by the Commission staff in assessing the News Corp./DirecTV transaction, we do not apply the staff model to the analysis of foreclosure strategies involving national cable

---

1 *See Applications for Consent to the Transfer of Control of Licenses, General Electric Company, Transferor, to Comcast Corporation, Transferee*, Applications and Public Interest Statement, Lead Application File Nos. BTCCDT-20100128AAG (MB), SES-ASG-20100201-00148 (IB), and 0004101576 (WTB) (filed Jan. 28, 2010) (hereinafter, *Public Interest Statement*).

2 *Public Interest Statement* at 14 & Appendix 4 § 6.01.

3 *See* Memorandum Opinion and Order, *In the Matter of General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee, For Authority to Transfer Control*, 19 FCC Rcd 473 (2004) (hereinafter, *News Corp.-Hughes Order*), Appendix D: Technical Appendix.

networks.[4] Instead, we use the staff model to analyze potential foreclosure strategies that would involve withholding the retransmission rights to broadcast stations, specifically NBC broadcast stations.[5, 6]

---

4 Appendix D of the *News Corp. - Hughes Order* did not apply the staff model to the analysis of "national and non-sports regional programming" (*i.e.*, cable networks) and the Order declined to require additional program access protections with respect to such programming. (*News Corp. - Hughes Order, ¶ 124.*) The Order (¶ 129) stated

> As we noted earlier, video programming in general, and cable programming in particular, are differentiated products, for which demand and substitutability may vary greatly across a continuum. The record does not support a conclusion that either News Corp. or other MVPDs consider News Corp.'s national and non-sports regional programming networks to be so highly desired by subscribers that they will switch MVPD providers to obtain it if temporarily foreclosed from accessing it on their incumbent providers' systems. Nor does the record contain any other evidence that consumers value this type of programming to such an extent that they will change MVPDs rather than substitute different programming carried by their chosen MVPD. Rather, we find that News Corp.'s general entertainment and news cable programming networks participate in a highly competitive segment of programming market with available reasonably close programming substitutes. [Internal footnotes omitted.]

If anything, foreclosure involving national cable networks would be even less likely as a consequence of the proposed Comcast/NBCU/GE transaction because Comcast—unlike DirecTV—does not have a national footprint. Instead, Comcast cable systems pass fewer than 50% of U.S. households. If Comcast were to withhold a cable network from a direct broadcast satellite service provider on a nationwide basis, doing so would reduce the audience of that network on a nationwide basis, but would potentially benefit Comcast only in those areas in which Comcast operates cable systems.

5 Absent the proposed transaction, NBCU does not own any regional sports networks ("RSNs"). Consequently, the proposed transaction does not affect Comcast's incentives to foreclose access to RSNs.

6 Given Telemundo's low ratings, both overall and relative to Univision, we also do not apply the staff model to analyze potential foreclosure strategies involving Telemundo. As of January 2009, for example, Telemundo's 24-hour rating was 0.265, which was less than 10% of NBC's 24-hour rating of 2.70. In prime time, Telemundo's rating of 0.613 was less than 14% of NBC's rating of 4.42. (Adam Swanson, "Nielsen Report - MyNetworkTV, ION lead majors in January; Telemundo, Univision top Hispanic affils," *SNL Interactive,* February 26, 2009.) To the extent one focuses on Spanish-language networks (on the grounds that certain consumers might have particularly strong preferences for Spanish-language programming), it is important to note that, among Spanish broadcast networks, Univision is "clearly the dominant player," and is the number one Spanish-language network in effectively all of the top DMAs by Spanish households, with TeleFutura and Azteca also viable alternatives in many DMAs. (Javier Maynulet, Senior Vice President, Finance and CFO of Telemundo, February 22, 2010, interview.)

Comcast operates cable systems in five of the ten largest DMAs in terms of Spanish-speaking households, New York, Miami, Houston, Chicago, and San Francisco. Telemundo has O&O stations in each of these five DMAs. [[

]] (Ratings data provided by Telemundo, as drawn from Nielsen Station Index, November 2009. Ratings based on Monday-Sunday 7 a.m. – 1 a.m.)

3. We do not endorse narrow application of the Commission staff model developed to examine the News Corp./DirecTV transaction as the means of determining whether the proposed Comcast/NBCU/GE transaction would pose a significant risk of foreclosure. Instead, as described in detail below, we find that—because of certain central assumptions and oversimplifications—a narrow application of the staff model would lead to substantial overestimates of both the benefits of foreclosure to Comcast Cable and the likelihood that Comcast could force NBCU to participate in a strategy of withholding programming rights even if there were benefits to Comcast Cable. Although one could, in principle, construct ever more complicated versions of the model, doing so would not change the fact that the results of the Commission staff model are subject to a high degree of uncertainty. The model admits a wide range of estimates that are sensitive to the selection of key parameters, many of which cannot be quantified with precision or reliability. Hence, the results of the model should be viewed in a broader context that accounts both for factors not explicitly considered in the model and for the high degree of uncertainty associated with the numerical estimates generated by the model.

4. The central finding of this report is the following: examination of the available evidence supports the conclusion that the proposed Comcast/NBCU/GE joint venture does not pose a significant threat of foreclosure. Specifically, application of the Commission staff model, together with a comprehensive analysis that takes into account factors not readily captured by a narrow application of that model, supports the conclusion that foreclosure by withholding retransmission rights to NBC broadcast stations' signals is very unlikely.

5. Application of the model proceeds in three main steps. The first step is to calibrate to the proposed Comcast/NBCU/GE transaction the economic model developed by the Commission

staff to analyze the likely effects of the News Corp./DirecTV transaction. To do so, we make appropriate modifications to the staff model to account for unique features of the proposed transaction and for changes in the marketplace that have occurred since the News Corp./DirecTV transaction. For any given set of parameters used as inputs to the staff model, the resulting output of the model is a "critical departure rate" at which subscribers would have to switch away from a foreclosed MVPD in order for the resulting gains to Comcast Cable to make up for the losses that a foreclosure strategy would impose on the Comcast/NBCU/GE joint venture.[7] As we discuss extensively below, it is necessary to make assumptions about many of the specific values of the model's parameters, and various reasonable assumptions about these parameter values lead to a wide range of estimated critical departure rates. Consequently, proper application of the Commission staff model produces a range of estimates (rather than a single, point estimate that can be relied on with certainty) for the critical departure rate associated with each hypothetical foreclosure strategy. We report these ranges below.

6. As we explain in detail below, even the estimated critical departure rates at the high end of the reported ranges are conservative in several respects because the numerical calculations: (a) do not quantify and account for several costs that would be triggered if the joint venture were to attempt a foreclosure strategy, particularly the substantial risk of harm to the NBC network's business model; (b) fail to account fully for competitive counterstrategies that rival MVPDs could pursue to protect themselves from attempted foreclosure; and (c) overstate the degree to

---

7 Of course, in order for those switching *away from rival MVPDs* to generate profits for Comcast Cable, they must switch *to Comcast*. Therefore, as discussed below, one of the factors that determine how many subscribers must leave rival MVPDs for foreclosure potentially to be profitable is the diversion ratio to Comcast—that is, the percentage of those leaving the rival MVPD who switch to Comcast as opposed to a different MVPD. In particular, to generate a given level of incremental profits to Comcast in areas where Comcast's share (and, thus, the diversion ratio to Comcast) is low, more subscribers would have to leave the foreclosed MVPD than in areas where Comcast's share is high.

which temporary foreclosure would generate long-term subscriber growth for Comcast Cable. These observations reinforce the conclusion that foreclosure is unlikely.

7. The second step comprises a series of econometric analyses of historical events to determine whether and to what extent subscribers would be expected to move away from an MVPD in response to temporary loss of a single broadcast network, the "actual departure rate." We analyze two types of events: (a) retransmission disputes in which an MVPD lost access to a broadcast station's signals for between two days and just less than six months, and (b) situations in which a direct broadcast satellite ("DBS") service provider's rollout of local-into-local broadcast service in a particular Designated Market Area ("DMA") was hampered by the inability to come to terms with one of the "big-four" broadcast networks, so that the offering was incomplete for some period of time.

8. Our empirical results reveal no statistical evidence to support the proposition that significant numbers of consumers depart an MVPD that is temporarily unable to offer consumers access to a single broadcast network.[8] In evaluating the implication of this finding, it is important to keep in mind the fact that the econometric estimates admit a range of possibilities, including positive-but-small departure rates.[9] Our conclusion therefore is that, although there are surely at least some subscriber departures away from a rival MVPD that loses access to a

[8] As discussed in Section VI below, our econometric analysis proceeds by estimating the amount of switching to Comcast's cable systems in relevant areas and then converting the estimated rate of switching to Comcast into the estimated departure rate away from a rival MVPD.

[9] In addition to the usual statistical error, the estimated departure rates are subject to uncertainty for several reasons: although we study all the pertinent events that we can document, the total number of such events is fairly small; none of the events reflects the permanent withholding of a broadcast network; and our estimates are based on data regarding only consumers who switched to Comcast, not all consumers who switched away from their MVPDs.

broadcast network such as NBC, the amount of such switching to Comcast is sufficiently small as to be undetectable in Comcast's share data.

9. The third step in the application of the Commission staff model is to compare the critical departure rates calculated in the first step with the likely actual departure rates estimated in the second step. As just discussed, application of the Commission staff model yields a range of calculated critical departure rates and the econometric analysis yields a range of estimated actual departure rates. One could always cherry-pick a set of parameters and econometric estimates to make foreclosure appear profitable. The relevant question, however, is: what conclusion is supported by the full body of evidence? On that basis, we find that, given the wide range of possible critical departure rates—including substantial evidence that the critical departure rates may be quite high—and the lack of statistical support for a finding of high actual departure rates, the analytical framework developed by the Commission staff indicates that profitable foreclosure is unlikely.

10. Importantly, a comprehensive analysis that takes into account factors not readily captured by a narrow application of the Commission staff model strengthens the conclusions that foreclosure is unlikely. One critical factor is the presence of GE as an owner of NBCU following completion of the proposed transaction. GE will have contractual rights that it can invoke to protect its commercial self-interest in ensuring that NBCU does not participate in a foreclosure strategy that harms NBCU while helping Comcast's cable systems.[10] A second

[10] In addition, the Commission's retransmission consent "good faith" bargaining rules would also limit the ability of the joint venture to engage in anticompetitive foreclosure, as would the applicant's voluntary commitment to accept application of key elements of the Commission's program access rules to the joint venture's retransmission consent negotiations.

critical factor is the "fragile" nature of the NBC broadcast television network (as illustrated by its fourth-place ratings among the major broadcast networks). Strategies involving permanent foreclosure or repeated temporary foreclosure against multiple MVPDs would run a very significant risk of severely damaging the economic value of the NBC broadcast network—a risk that very likely would outweigh any potential benefits of foreclosure.

11. The remainder of this report is organized as follows. In Section II, we provide a broader perspective on the use of the Commission staff model to assess the likelihood of foreclosure. Specifically, we explain why the model is overly narrow and risks missing important considerations, which are not readily quantifiable but which are crucial to understanding why foreclosure is highly unlikely. In Section III, we summarize the logic and key parameters of the Commission staff model.

12. We begin the first step of the model's application in Section IV. There, we discuss the likely range of values for each of the key parameters of the model as they apply to the current, proposed transaction. We also update the model to account for: (a) changes in the marketplace that have occurred since the News Corp./DirecTV transaction, and (b) unique features of the proposed transaction that require additional modeling. In Section V, we report the range of critical departure rates estimated using the updated version of the Commission staff model.

13. The econometric analyses used to estimate actual departure rates (the second step in the Commission staff's analytical process) are presented in Section VI. Section VII completes the third step of the analytical process by explaining the conclusions that can be drawn by combining the critical departure rates from the Commission staff model with our econometric estimates of actual departure rates. Finally, Section VIII briefly concludes.

II. PUTTING THE COMMISSION STAFF MODEL IN PERSPECTIVE

14. In the News Corp./DirecTV matter, Commission staff developed an economic model on which the Commission relied to determine whether a firm vertically integrated into both broadcasting and multi-channel video distribution would likely find it profitable to withhold consent to retransmit its broadcast network—on a permanent or temporary basis—from rival MPVDs in a given DMA.[11] The fundamental approach of the model is to estimate the costs and benefits of foreclosure from the point of view of the vertically integrated firm (News Corp. in the earlier transaction; Comcast in the present, proposed one).[12]

15. Before describing the Commission staff model and applying it to the proposed transaction, it is important to recognize that an analysis based solely on the narrow application of the model runs a substantial risk of reaching the wrong conclusion. In particular, there are broad considerations that the model misses but that support the conclusion that the proposed transaction does not pose a threat of consumer harm from vertical foreclosure. Specifically, there are at least two critical respects in which narrow consideration of the model's arithmetic calculations misses important points.

16. First, the staff model ignores GE as a relevant decision maker. From GE's perspective, the costs of foreclosure, which are borne by the joint venture in which it holds an initial 49% interest, always outweigh its (zero) share of the benefits to Comcast's cable operations. Stated

---

[11] *News Corp.-Hughes Order,* Appendix D: Technical Appendix. Note that the Commission staff also developed a model to determine whether a firm that was vertically integrated into both RSNs and multi-channel video distribution would likely find it profitable to withhold access to its RSNs' signals from rival MVPDs. *(News Corp.-Hughes Order,* Appendix D, ¶¶ 25 – 47.) As described below, although our focus in the present report is on broadcast networks, some elements of the Commission staff's RSN model provide guidance for adapting the Commission staff's broadcast model to the proposed transaction.

[12] A more detailed description of the model's structure is provided in Section IV, below.

another way, as long as it has a significant stake in NBCU, GE has strong incentives to protect its ownership interest by seeing that the joint venture does not engage in costly foreclosure strategies, regardless of the benefits to Comcast Cable. It is our understanding that, under terms of the agreement establishing the joint venture, the venture's directors and officers owe fiduciary duties to the joint venture and its members, including GE.[13] These duties would be violated if directors and officers made business decisions that intentionally sacrificed joint venture profits in order to increase Comcast's MVPD profits—as any foreclosure strategy necessarily would do. Moreover, GE would presumably have every incentive to enforce these fiduciary duty provisions.

17. Second, narrow application of the model's calculation algorithm misses the fundamental point that a foreclosure strategy would be very risky for the NBC network, regardless of its owner. This is particularly true given NBC's current market position as the fourth-rated network in prime time.[14] As one NBC executive stated, "[i]t would make no business sense to risk significantly damaging the product by withholding NBC's retransmission rights."[15] A strategy of permanent foreclosure, or repeated episodes of temporary foreclosure, would risk "breaking the system" of ubiquitous distribution and relatively high viewership that distinguishes the NBC broadcast network from a highly rated cable network.[16] To the extent that NBC was considered by advertisers to be more like a cable network, NBC could suffer a substantial decline

---

13 *See* Amended and Restated Limited Liability Company Agreement of Navy, LLC at § 6.01(a) (hereinafter *Newco LLC Agreement*).

14 *See, e.g.*, "Prime-time TV Rankings; Familiar refrain: CBS wins; Surge from Grammy Awards helps the network win for the 16th time in 19 weeks," *Los Angeles Times*, February 3, 2010.

15 Edward Swindler, Executive Vice President and Chief Operating Officer, Advertising Sales, NBC Universal, January 31, 2010, interview.

16 *Id.*

in its ability to generate advertising revenue even for a given viewer base as "primetime inventory on a cable network costs about one-third as much as on broadcast on a CPM [cost per thousand impressions] basis."[17]

18. More generally, a significant foreclosure strategy could give rise to far-reaching harms due to the damage to NBC's reputation as a stable, widely distributed network. Foreclosure strategies could significantly reduce the value of NBC to viewers, affiliates, advertisers, and MVPD buyers of retransmission rights. As an additional example, advertisers on major events such as sporting championships or major awards shows do not want to risk losing a significant portion of the potential audience.[18] Consequently, a strategy of repeated temporary foreclosure would very likely reduce the perceived value of national advertising on the NBC network. There would also be a risk of harming what are currently highly rated shows (*e.g., Today* and the *NBC Nightly News*), jeopardizing the premium they command for ad sales—NBC already took deeper cuts on ad sales than the other major networks during 2009's "upfronts," due to lower ratings.[19] Moreover, even temporary foreclosure strategies risk reducing future NBC network and station ratings if viewers are induced to try other programming and possibly discover that they prefer

---

17 "For Turner exec, ratings don't ad up," *Hollywood Reporter,* April 14, 2009. The article goes on to note that NBC "secured a $51.06 CPM for 'Lipstick Jungle,' which averaged 4.18 million viewers in its final 13 episodes. ... [Turner Entertainment president David] Levy can only go as high as a $29 CPM for TNT's 'The Closer,' which remains the highest-rated series on cable and averaged 7.81 million viewers in its fourth-season run."

18 Edward Swindler, Executive Vice President and Chief Operating Officer, Advertising Sales, NBC Universal, January 31, 2010, interview.

19 In 2009, "most networks agreed to rollbacks in the price of reaching 1,000 viewers, or CPMs, in the 1% to 3% range, according to media buyers. NBC, owing to greater ratings shortfalls, has been offering CPM rollbacks in the negative mid-to-high-single-digit range, buyers said." Brian Steinberg, "TV upfront tally slips to $8 billion as networks take their chances on scatter; As prices fall 1% to 3%, the Big Five hold back up to 15% of inventory," *Advertising Age*, August 10, 2009.

that programming to NBC's.

19. One could incorporate these effects into the formal model by including new parameters and making assumptions about their values. Doing so would inevitably lead to the criticism that the specific parameter values were not firmly grounded in specific data. It is critical to recognize, however, that even though the expected costs from damaging NBC are very hard to quantify, that fact neither diminishes the significance of these costs nor justifies implicitly assuming that they are zero by ignoring them when evaluating the risk of foreclosure.

20. This discussion of unquantified effects brings up a final point. The Commission staff model is subject to a high degree of uncertainty. In particular, the staff model yields very noisy estimates of the critical departure rates, making it difficult to rely on the model to demonstrate (or disprove) the possibility that foreclosure would become profitable as a result of the present transaction. We explore this point formally in Section V.D below, but it is important to keep in mind from the outset.

III. FORMAL DESCRIPTION OF THE COMMISSION STAFF MODEL

21. The Commission staff model is intended to provide a means of determining whether a firm vertically integrated into both broadcasting and multi-channel video distribution would find it profitable to withhold retransmission consent rights as a foreclosure strategy. The model builds on the central observation that, all else equal, the profitability of foreclosure is greater the greater the number of consumers who would be induced to switch to the integrated firm's video distribution service if rivals were denied retransmission rights for the integrated firm's broadcast signal.

22. This relationship holds because foreclosure has costs and benefits. The costs arise because withholding the rights to retransmit a broadcast signal generally results in fewer viewers for that broadcast signal, which reduces the broadcast operation's advertising revenues. In addition, the broadcast operation will have to forgo cash and/or in-kind payments that it otherwise would receive for granting retransmission rights. These costs arise even if no consumers switch their MVPD provider in response to the loss of the broadcast signal. In contrast, the benefits of foreclosure arise only to the extent that consumers are induced to switch from rival MVPDs to the video distribution operations of the integrated firm engaged in foreclosure.

23. The Commission staff model provides a method of calculating the critical value for the number of subscribers that would have to depart from the foreclosed, rival MVPD in order for the profit loss suffered by the integrated firm's broadcast operations from the foreclosure to equal the profit gain to the integrated firm's MVPD operations.[20] If the actual number of subscribers leaving the foreclosed MVPD is below this critical value, then foreclosure is unprofitable for the integrated firm.

24. The model Commission staff used to calculate the costs and benefits of foreclosure in the News Corp./DirecTV matter assumes that: (a) the broadcast operations of the integrated firm engage in foreclosure of all rival MVPDs simultaneously, and (b) the broadcast operations earn

[20] *News Corp.-Hughes Order*, Appendix D, ¶ 2.

no profits from the sale of retransmission consent rights.[21, 22] Consider the costs of a foreclosure strategy under these assumptions. These costs are calculated by comparing the profits of the integrated firm's broadcast operations with and without the foreclosure:

- Absent foreclosure, the broadcast operation earns revenues by selling advertising that reaches the subscribers of MVPDs that retransmit its signal. The total amount is equal to the advertising revenue per subscriber per month, labeled *BroadcastAdProfit*, times the number of subscribers to rival MVPDs.[23]
- Now, consider foreclosure. In response to the loss of the broadcast signal from their service provider, each customer will take one of three actions:
  - fraction d will leave their MVPD and switch to a different MVPD at which they can still obtain the broadcast signal;[24]
  - fraction a will stay with their current MVPD but obtain access to the broadcast signal through alternative means (*e.g.*, receive the signal over the air); and
  - the remaining fraction, $(1 - a - d)$, will remain with their MVPD and forgo watching the broadcast station's content.

---

21 In particular, the Commission staff model used to analyze broadcast networks in the News Corp./DirecTV matter assumes that News Corp. would engage in foreclosure against all rival MVPDs within a DMA simultaneously, even in the case of temporary foreclosure. (*News Corp.-Hughes Order*, Appendix D, ¶ 8.) As discussed in Section IV.B.1 below, the existence of staggered termination dates for the NBC O&O stations' retransmission agreements makes such a strategy impossible in the present instance. Instead, it would be possible for Comcast and NBC to engage in temporary foreclosure only against a subset of rival MVPDs in a given DMA at any particular time. For permanent foreclosure, there would be several years when only a subset of MVPDs could be denied access to NBC O&O stations' signals, until all MVPD contracts had come up for renewal.

22 The Commission staff model does not include a term for payments for retransmission consent. As discussed below, this may be because explicit cash payments were relatively uncommon at the time of the News Corp./DirecTV transaction and the value of in-kind payments is difficult to quantify.

23 There are assumed to be no marginal costs associated with advertising, so the monthly advertising revenue is also the monthly incremental profit per subscriber.

24 The Commission did not include formal notation for this departure rate in the *News Corp.-Hughes Order*.

25. Under the Commission staff model, the costs of foreclosure to the broadcast operations are as follows. There are no costs associated with those consumers who switch to a different MVPD to obtain the broadcast signal or those consumers who stay with their current MVPD but obtain the broadcast signal through alternative means (*e.g.*, receive the signal over the air); these consumers continue to receive the broadcast content and serve as the basis for advertising sales. However, the remaining $(1 - a - d)$ of consumers remain with their MVPD and forgo watching the broadcast station's content, which results in a loss of *BroadcastAdProfit* for each such consumer. Hence, the total costs of the foreclosure as calculated by the Commission staff model are:

$$\textit{Foreclosure Costs} = (1 - a - d) \times \textit{BroadcastAdProfit} \times \textit{RivalMVPDSubs}.$$

26. The benefits due to foreclosure arise from those consumers who are induced by foreclosure to switch from rival MVPDs to the MVPD undertaking the foreclosure. In theory, foreclosure could trigger a subscriber of a foreclosed MVPD to switch to another MVPD other than the one engaging in foreclosure. For example, if a cable MVPD were to foreclose one DBS MVPD, its subscribers could switch to a different DBS MVPD or a telco MVPD, rather than the cable MVPD. The model needs to account for this fact, which can be done by decomposing the degree as switching into two parts:

fraction of consumers who leave their current MVPDs and switch to the integrated MVPD	=	fraction of consumers who leave a foreclosed MVPD for any other MVPD	×	fraction of those consumers who switch MVPDs who specifically choose the integrated MVPD as their new MVPD

27. To make this formal, we must add some notation that was not used in the Commission staff model. Formally, let d denote the fraction of consumers who leave a foreclosed MVPD for any other MVPD, and let α denote the fraction of those consumers who switch MVPDs who specifically choose the integrated MVPD as their new MVPD. α is known as the "diversion ratio." With this notation, the fraction of subscribers switching from the foreclosed MPVD to the integrated MVPD engaging in foreclosure is equal to $\alpha \times d$. In its analysis of foreclosure involving broadcast retransmission rights in the News Corp./DirecTV transaction, Commission staff considered only scenarios in which the integrated firm engaged in foreclosure against all rival MVPDs simultaneously, and thus the model assumed that $\alpha = 1$.[25]

28. In the Commission staff model, *MVPDProfit* denotes the amount that the integrated firm's MVPD operations earn on each incremental subscriber, and s denotes the share of the MVPD operation's profits that accrue to the integrated firm. The integrated firm will earn profits of $s \times$ *MVPDProfit* per subscriber times the number of subscribers garnered as a consequence of the foreclosure. Hence, the total benefits of foreclosure as calculated by the Commission staff model are:

$$\textit{Foreclosure Benefits} = s \times \textit{MVPDProfit} \times \alpha \times d \times \textit{RivalMVPDSubs} \ .$$

29. In the Commission staff's permanent foreclosure model, the costs and benefits of foreclosure are the same each month. Consequently, one can determine whether foreclosure is

---

[25] The Commission staff dealt with situations in which $\alpha < 1$ in the *News Corp.-Hughes Order* (Appendix D, ¶ 29) when analyzing potential foreclosure of RSNs, as it assumed that DirecTV would not withhold access from EchoStar's DISH Network and, therefore, that DISH Network would acquire a percentage of the consumers switching from foreclosed MVPDs proportional to its market share. This approach is followed in the modifications to the base model in Section IV.B.1 below, as we allocate those consumers who depart from a foreclosed MVPD to all un-foreclosed MVPDs in the DMA in proportion to their current DMA-specific subscriber shares.

profitable by comparing the costs and benefits of foreclosure in a given month.[26] The expressions for the costs and benefits of foreclosure given in the preceding paragraphs can be used to find the share of rival MVPDs' subscribers that would have to depart from those MVPDs in order for the gains in subscriber revenue for the integrated firm's MVPD operations to equal the integrated firm's loss of broadcast advertising revenue:

$$d^{crit} \equiv \frac{(1-a)\times BroadcastAd\,\Pr ofit}{BroadcastAd\,\Pr ofit + s\times MPVD\,\Pr ofit\times\alpha}.$$ [27]

30. The fraction given by d^{crit} is share is called the "critical departure rate." If the actual departure rate is below the critical departure rate, then foreclosure is unprofitable according to the Commission staff model.

31. For the case of temporary foreclosure, the Commission staff model predicts what would happen if access to the broadcast signal were withheld from rival MVPDs for only one month.[28] The costs of foreclosure during the single month in which it occurs are the same as in the permanent foreclosure model. However, based on the assumption that people who switch MVPDs to obtain the broadcast signal will shift back to their former MVPD slowly (if at all) due to switching costs or other sources of "inertia," the Commission staff model predicts that the

---

[26] As we discuss below, once one takes into account the unique features of the proposed transaction, {{ }}, it is no longer appropriate to compare the costs and benefits of foreclosure in a single month. However, the fundamental framework remains applicable. In particular, we maintain the simplifying assumption implicit in the Commission staff model that those consumers induced to switch multichannel video service providers all switch immediately, without delving into the complexities created by future switches to or away from Comcast.

[27] The *News Corp.-Hughes Order* provides the formula for the critical *total number* of subscribers, as opposed to the *fraction* or rate of subscribers. (Appendix D: Technical Appendix, footnote 8.) The logic underlying the formula in footnote 8 of the *News Corp.-Hughes Order* is identical to the logic underlying the formula presented here, and each formula implies the other.

[28] *News Corp.-Hughes Order,* Appendix D, ¶ 15.