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September 8, 2003

BY HAND DELIVERY

Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20054

Re: *Consolidated Application of General Motors Corporation, Hughes Electronics Corporation, and The News Corporation Limited for Authority to Transfer Control (MB Docket No. 03-124)*

Dear Ms. Dortch:

In this letter, General Motors Corporation ("GM"), Hughes Electronics Corporation ("Hughes"), and The News Corporation Limited ("News Corp.") (collectively, the "Applicants") respond to a report prepared for the Joint Cable Commenters by Professor William Rogerson[1] and a slide presentation made on behalf of Cablevision Systems Corporation by Professor Daniel Rubinfeld and Duncan Cameron of LECG, LLC.[2] As explained in the attached reports prepared by Charles River Associates, Inc.[3] and Lexecon Inc.,[4] many of the assumptions and theoretical underpinnings upon which Professor Rogerson and LECG rely are erroneous, and therefore lead to inaccurate and unfounded conclusions.

Both Professor Rogerson and LECG appear to concede that, even under their own set of assumptions, a permanent foreclosure strategy wherein News Corp. would

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1 "A Further Economic Analysis of the News Corp. Takeover of DIRECTV," William P. Rogerson, dated Aug. 4, 2003 ("Rogerson Second Report") (filed as an attachment to Letter from Bruce D. Sokler to Marlene H. Dortch, dated August 4, 2003).

2 "An Economic Analysis of the News Corp./DirecTV Transaction," Daniel L. Rubinfeld and Duncan Cameron, dated Aug. 19, 2003 ("LECG Presentation")(filed as an attachment to Letter from Tara M. Corvo to Marlene H. Dortch, dated August 20, 2003).

3 "News Corporation's Partial Acquisition of DIRECTV: A Further Economic Analysis," Charles River Associates, Inc., dated Sept. 8, 2003 ("CRA Second Report") (attached hereto as Exhibit 1)

4 "Response to William P. Rogerson and Daniel L. Rubinfeld and Duncan Cameron," Lexecon Inc., dated Sept. 8, 2003 ("Lexecon Second Report") (attached hereto as Exhibit 2).

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withhold programming from DIRECTV's multichannel video programming distribution ("MVPD") rivals would not be profitable for News Corp. Instead, they both focus on a temporary withholding strategy.[5] In their reports, CRA and Lexecon discuss at length the factual and conceptual errors in the Rogerson and LECG analyses, among which are the following:

- Professor Rogerson and LECG assume that withholding programming even for only one to three months would cause significant numbers of consumers to switch to DIRECTV. As demonstrated by the real-world instances of programming disruptions, this assumption is not supported by the data.[6]

- Professor Rogerson and LECG greatly overstate the potential gains from a temporary withholding strategy by making unrealistic assumptions about the longevity of new subscribers. For example, Professor Rogerson makes the unwarranted and unsupported assumption that *none* of the subscribers that switch to DIRECTV as a result of a temporary programming disruption *ever* switch back after the disruption has ceased. As a result, both Professor Rogerson and LECG fail to recognize that DIRECTV will not recoup equipment, installation, and other subscriber acquisition costs before some new subscribers disconnect.[7]

- Professor Rogerson and LECG totally ignore the real world implications of a temporary withholding strategy, including a number of countermeasures available to MVPDs as well as the potential degradation in the value of the programming withheld.[8] Such factors provide additional deterrents to the opportunistic behavior they hypothesize.

By correcting these and other errors in the analyses presented by Professor Rogerson and LECG, CRA and Lexecon again confirm that, because the amount and duration of subscriber switching necessary to achieve profitability is implausible, it would be economically irrational for News Corp. to pursue a temporary withholding strategy after acquiring an interest in DIRECTV. In the process, CRA provides an estimate of the magnitude of the pro-competitive incentives resulting from the reduction of double marginalization.

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5 Surprisingly, the lone example of temporary withholding discussed by LECG actually was a case in which the MVPD (Time Warner) pulled the signal over the objection of the programmer (ABC), rather than vice versa. *See* LECG Presentation at slides 3-5.

6 *See* CRA Second Report at 7-10; Lexecon Second Report at 6-13.

7 *See* CRA Second Report at 8-9: Lexecon Second Report at 14.

8 *See* CRA Second Report at 12, 17-18 29-30; Lexecon Second Report at 13-15.

Moreover, if the strategy hypothesized by Professor Rogerson and LECG were profitable, as they claim, we would expect to see it occur today through contractual arrangements. Yet we do not observe today (and, to Applicants' knowledge, have never observed) programmers attempting in general to replicate the economic results of a temporary withholding strategy through contracts with MVPDs. As discussed in the Lexecon Second Report, such contracts are not particularly difficult to write, and indeed one possible form of such arrangements developed naturally in connection with the Time Warner-Disney dispute cited by LECG.[9] Like Sherlock Holmes' "dog that did not bark," the absence of such contracts is strong evidence – in this case, that temporary withholding is not a profitable strategy.

In addition, both Professor Rogerson and LECG assert that the proposed transaction will enable News Corp. to bargain for higher programming prices from MVPDs because any loss of programming fees will be partially offset by gains from subscribers switching to DIRECTV.[10] Ignoring all other potential considerations, the theory posits that any change in circumstances that allows a programmer to diminish potential losses from withholding programming – no matter how demonstrably unprofitable such withholding would be if actually implemented – would change the "threat point" for negotiations with MVPDs, thereby giving the programmer additional bargaining power and ensuring that it can command higher prices.

Simply put, such a bargaining theory proves too much and, as with the temporary withholding theory, rests on a number of unsupported assumptions. It assumes that a News Corp. threat to withhold programming would be carried out (even though every party in this proceeding concedes that such withholding would be unprofitable to actually implement).[11] It assumes that enough consumers would switch to DIRECTV to measurably change the threat point.[12] It assumes that MVPDs will not take countermeasures in the face of withholding.[13] And it assumes that third parties, such as the owners of sports teams, have no ability to shape such decisions.[14] A theory resting upon such shaky assumptions provides no guidance to policymakers assessing the real-world implications of a proposed transaction.

Indeed, if this bargaining theory ever became an accepted tool for serious policy analysis, the consequences would be devastating. The theory implies that virtually ***every***

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9 *See* Lexecon Second Report at 25-27.

10 *See* Rogerson Second Report at 4; LECG Presentation at slide 11.

11 *See* Lexecon Second Report at 18-20.

12 *See* Lexecon Second Report at 20; CRA Second Report at 29.

13 *See* Lexecon Second Report at 15, 19 n.12; CRA Second Report at 29-31.

14 *See* Lexecon Second Report at 24-25; CRA Second Report at 31.

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vertical merger where an upstream firm sells to more than one downstream firm should be blocked. Such a *per se* theory would, for example, have provided a basis for blocking all prior vertical transactions in the cable industry (*e.g.*, Time Warner/Turner, AT&T/TCI). Moreover, the same logic would apply to all prior horizontal transactions involving one or more vertically integrated cable companies (*e.g.*, Cox Cable/Times Mirror, Advance-Newhouse/Time Warner, the Insight/AT&T joint venture, AT&T/MediaOne, and AT&T/Comcast) because an expansion of cable territory would increase the number of consumers who could switch from one of the DBS operators to the merged entity. Neither Professor Rogerson nor LECG has even attempted to show that parties involved in prior MVPD mergers engaged in temporary withholding tactics or were able to achieve price increases above the industry norm for their programming as a result of their mergers. Of course, all of these transactions were approved by the Commission and/or the Department of Justice/Federal Trade Commission – an outcome that would, as a practical matter, have been precluded were the opponents' theory accepted.

In this regard, it is worth noting that both Professor Rogerson and LECG ignore the one "natural experiment" best able to test their theory. Specifically, neither provides any evidence that the conduct they expect to result from News Corp.'s partial ownership interest in DIRECTV actually occurred during the period when News Corp. held a partial ownership interest in another DBS operator, EchoStar. Moreover, in response to similar concerns raised in connection with the EchoStar transaction, the Commission concluded that the existing program access and retransmission consent rules would provide sufficient avenues to redress any anticompetitive conduct.[15] The opponents have provided no basis for revisiting that conclusion or any evidence that any anticompetitive conduct arose from that partial integration.

Perhaps recognizing the limitations of their bargaining theory, neither Professor Rogerson nor LECG applies this logic to the combination of Cablevision and its R/L DBS subsidiary, which has announced plans to begin offering DBS service in October. If their bargaining theory were correct, the addition of this new MVPD alternative to Cablevision's programming assets should change its threat point and enhance its bargaining position – leading inevitably (under their theory) to higher programming prices.[16] Yet neither of the cable commenters in this proceeding nor their experts have expressed any concern over the combination of Cablevision and its DBS subsidiary.

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15 *See MCI Telecom. Corp. and EchoStar 110 Corp.*, 16 FCC Rcd. 21608, 21621-22 (1999).

16 It is ironic that Cablevision's experts, LECG, conspicuously avoid discussing any strategy involving regional sports network ("RSN") programming – an omission that is perhaps explained by the fact that Cablevision controls a number of RSNs, including those serving the New York City area where Cablevision's cable systems are the dominant MVPD.

The CRA Second Report and the Lexecon Second Report forcefully rebut the theories of potential anticompetitive consequences raised by Professor Rogerson and LECG and clearly demonstrate that there are no competition-related concerns to offset the cognizable and transaction-specific public interest benefits that will result from News Corp.'s proposed investment in Hughes. Accordingly, the parties urge the Commission to grant the Consolidated Application as expeditiously as possible.

Sincerely,

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William M. Wiltshire
Michael D. Nilsson
HARRIS, WILTSHIRE & GRANNIS LLP
1200 Eighteenth Street, N.W.
Washington, DC 20036
202-730-1300

Counsel for The News Corporation Limited

\s\

Gary M. Epstein
James H. Barker
John P. Janka
LATHAM & WATKINS
555 11th Street, N.W.
Suite 1000
Washington, DC 20004
202-637-2200

\s\

Richard E.Wiley
Lawrence W. Secrest III
Todd M. Stansbury
WILEY REIN & FIELDING
1776 K Street, N.W.
Washington, DC 20006
202-719-7000

Counsel for General Motors Corporation and Hughes Electronics Corporation

Enclosures

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News Corporation's Partial Acquisition of DIRECTV: A Further Economic Analysis

Steven C. Salop, Carl Shapiro, David Majerus, Serge Moresi and E. Jane Murdoch

September 8, 2003

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1. Introduction

1. In our initial submission, we showed that anticompetitive effects would not be expected to result from the proposed partial acquisition of DIRECTV by News Corporation (NC).[1] In particular, we showed that after the transaction, NC would not be able profitably to withhold any of its programming from DIRECTV's multichannel video programming distribution (MVPD) rivals. We then showed that there would not be upward pressure on non-discriminatory NC programming prices resulting from the transaction. Instead, the pricing pressure would be downward. Finally, we showed that even if it were assumed that NC were able to evade the program access rules (as well as the voluntary commitments) in order to price discriminate against DIRECTV's rivals, one still cannot predict that price would rise, once vertical efficiencies are taken into account. We constructed a linear model of full vertical integration to illustrate the complexity of this analysis. Indeed, in that model, on balance, there was an overall *downward* pressure on prices.

2. Since we filed this analysis, there have been a number of additional comments filed, including one by Professor Rogerson and one by LECG. Professor Rogerson submitted a further analysis of the transaction in response to our submission in which he criticizes certain parts of our analysis.[2] LECG filed a slide presentation that criticizes our evaluation of the effect of the transaction, especially focusing on the effect the transaction will have on negotiation over the retransmission of NC-owned television stations.[3] After reviewing the criticisms that Professor Rogerson and LECG raise, we conclude that our initial conclusions still hold. Moreover, we find that many of the assumptions that both Professor Rogerson and LECG make in their analyses are

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1 *News Corporation's Partial Acquisition of DIRECTV: Economic Analysis of Vertical Foreclosure Claims*, by Steven C. Salop, Carl Shapiro, David Majerus, Serge Moresi, and E. Jane Murdoch, MB Docket No. 03-124, July 1, 2003 (*CRA Initial Report*).

2 *A Further Economic Analysis of the New Corp. Takeover of DIRECTV*, by William P. Rogerson, MB Docket No. 03-124, August 4, 2003 (*Second Rogerson Analysis*).

3 *An Economic Analysis of the News Corp/DirecTV Transaction*, by Daniel L. Rubinfeld and Duncan Cameron, August 19, 2003 (*LECG Presentation*).

unwarranted. In this submission, we examine their assumptions and demonstrate why they do not undermine our earlier conclusions.

3. This submission is organized as follows. In Section 2, we discuss total foreclosure. We discuss the reasons why a temporary foreclosure strategy for regional sports networks (RSNs) or owned-and-operated (O&O) television station programming would not be profitable. In Section 3, we discuss the impact of the transaction on NC's incentives to set non-discriminatory prices and our conclusion that NC would have incentives to reduce those prices, not raise them, relative to the prices they would set absent the transaction. In particular, we answer Professor Rogerson's criticisms of the analysis of this issue that we presented in our initial submission. In Section 4, we roughly estimate the magnitude of the incentive to reduce those non-discriminatory programming prices. In Section 5, we explain why we disagree with Professor Rogerson's claim that despite NC's minority ownership stake, its voluntary commitments, and the FCC program access rules, NC and DIRECTV would engage in joint profit maximization after the transaction. In Section 6, we briefly address Professor Rogerson's criticism of our use of standard industrial organization pricing theory and raising-rivals'-cost theory of exclusion instead of a model of bargaining interaction. We also address certain problems with his bargaining analysis. Section 7 concludes.

2. Total Foreclosure

4. In our initial submission, we explained why a total foreclosure strategy would be highly unprofitable for NC.[4] We analyzed the case of permanent refusal to provide NC programming to an MVPD. This result is true for foreclosure of access to cable networks, including RSNs, as well as permanent withholding of access to the signal of an O&O television station. The result can be illustrated with the YES Network experience in New York.[5] Based on the RSN margins reported in our initial

[4] *CRA Initial Report* at pages 26-54.

[5] Since on average NC earns more revenue per subscriber from its O&Os, the foreclosure is even less profitable if we were to use an O&O for this example.

submission, withholding access from Cablevision would have caused YES profits to fall by about per month, or annually.[6] Cablevision apparently lost 30,000 or fewer subscribers during the time it did not carry YES.[7] Taking the upper bound figure and assuming that all of these 30,000 subscribers that Cablevision lost switched to DIRECTV because it had a *de facto* exclusive for YES, DIRECTV would have earned profits of approximately per month, or annually from a permanent withholding strategy.[8] As a 34% owner of DIRECTV, NC would earn an additional per year from these additional subscribers that switched to DIRECTV. In addition, NC would earn the affiliate fee and advertising revenue for these additional subscribers, which is per month, or per year.[9] In sum, if NC owned the YES Network and permanently foreclosed Cablevision by withholding the YES program service, total profits at NC *would fall by* *per year*. Thus, this foreclosure strategy would not be profitable for NC. The inescapable conclusion from this example is that total foreclosure of its RSNs would not be a profitable strategy for NC after its partial acquisition of DIRECTV.

5. Professor Rogerson criticizes our total foreclosure analysis because our analysis treats DIRECTV and NC as separate companies, each maximizing its own income (including investment income, in the case of NC) instead of assuming joint profit maximization.[10] In Section 5, we explain why we disagree with Professor Rogerson on this issue.

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6 This assumes that the affiliate fees plus advertising revenue for YES is the same as for the NC owned RSNs, . There are 3 million Cablevision subscribers in the New York City Region. See Richard Sandomir, *Baseball; Pressure Increases on Cablevision to Carry YES*, The New York Times, March 8, 2002 at D1.

7 See *CRA Initial Report* at page 37. As we explained in our earlier submission, it is not clear how many subscribers ended their Cablevision service as a result of not being able to receive the YES Network and how many of these lost subscribers then began to subscribe to DIRECTV.

8 These profit figures are based upon an margin earned per customer per month over the long run, but this margin excludes an allocation of long run costs. As we explain below, when evaluating a temporary withholding of programming the correct margin to use is significantly different than this margin.

9 Because EchoStar did not carry YES in 2002, DIRECTV had *de facto* exclusive carriage of YES. Therefore, no subscribers leaving the foreclosed cable system will move to EchoStar, so NC will not realize any programming revenue gains through EchoStar.

10 He states: "I review these non-confidential calculations and explain why there is a serious conceptual error with them." *Second Rogerson Analysis* at page 8.

However, before doing so, it is noteworthy that foreclosing Cablevision from YES would have been unprofitable *even* if YES and DIRECTV were treated as a single firm owned by NC that maximizes joint profits. In that case, instead of NC suffering the loss of described above, it would have total losses of for the year.

6. In this regard, Professor Rogerson apparently concedes that total foreclosure would not be profitable, even under the joint profit maximization assumption. For example, Professor Rogerson states,

> *While the corrected calculations for the CRA model I presented above may not demonstrate that DirecTV's profits from foreclosure are likely to be greater than News Corp.'s programming losses, I think it is fair to say that they do demonstrate that DirecTV's profits are at least likely to significantly offset News Corp.'s programming losses.*[11]

Of course, for YES, this "offset" is not very significant, amounting to less than of the total loss.

7. Professor Rogerson subsequently confirms this conclusion, stating,

> *While it may not turn out to be generally profitable for News Corp. to permanently withdraw its programming from rival MVPDs after it acquires control of DirecTV, the revenue that News Corp. would lose from withdrawing programming from rival MVPDs will be at least partially offset by the profits that News Corp. would earn from subscribers that switch to DirecTV.*[12]

Professor Rogerson also dismisses a permanent foreclosure concern as a "red herring."[13]

8. In contrast to this position by Professor Rogerson, LECG first seems to suggest that a foreclosure strategy would be likely:

> *The proposed transaction is likely to create or enhance incentives for News Corp to withhold Fox Network programming from cable operators*

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11 *Id.* at page 16.

12 *Id.* at page 43.

13 *Id.* at page 15.

because News Corp's investment in DirecTV will reduce its cost of withholding retransmission consent.[14]

9. Later, though, LECG seems to be focusing on *temporary* withholding of programming, not on permanent withholding: "Applying the CRA methodology to a more likely scenario – a temporary withholding or threat of withholding…."[15] Similarly, Professor Rogerson suggests that temporarily withholding programming would be more profitable because he claims that it would involve a smaller sacrifice of program profits but still would cause a significant number of consumers to switch permanently to DIRECTV from the foreclosed MVPDs. In our view, the empirical evidence suggests that the resulting subscriber gains by DIRECTV would be quite small from such a temporary withholding of programming. For example, in the YES experience, 1% or fewer of Cablevision subscribers left the cable service during a *12 month* disruption of sports programming. A shorter temporary withholding would lead to even less consumer defection than this. This example is consistent with consumers waiting out the temporary disruption in order to stick with their existing MVPD service and to avoid the costs and inconvenience of switching. We would expect virtually all consumers to wait out the one-month temporary withholding assumed by LECG and allow the dispute to be resolved by the parties.[16]

10. In the remainder of this section, we describe the flaws in the analyses that were presented concerning a temporary withholding strategy. We first discuss Professor Rogerson's temporary withholding analysis and then we review LECG's temporary withholding analysis.

A. Professor Rogerson's Temporary Withholding Analysis

11. Professor Rogerson appears to agree that temporary withholding would lead to less consumer switching than (permanent) total foreclosure, stating, "it is important to note

14 *LECG Presentation* at slide 2.

15 *Id.* at slide 6.

16 One reason we would not expect consumers to switch in response to an extremely short-term withholding is that on average it takes almost a week from a consumer's purchase of the DIRECTV equipment to the date of equipment installation.

that all of these previous 'natural experiments' involved withdrawals of programming that consumers expected to be temporary."[17] However, he still argues that temporary foreclosure of RSNs would be profitable. We disagree for a number of reasons, which we discuss in this and subsequent sections.

12. Professor Rogerson overstates the vertically integrated firm's profit gains from temporary withholding because he assumes that if a customer switches in response to a temporary withholding of programming, that customer would *never* return to his initially preferred MVPD provider after the service was restored and would remain on the DIRECTV system forever.[18] This assumption is unwarranted. First, the expected lifetime of a DIRECTV subscriber is , not infinite. Second, the consumers who would switch initially are surely those who have less inertia (lower switching costs) than the average consumer, and so would be more likely to switch back to their initially preferred MVPD after the disruption is resolved. We understand that under current DIRECTV policy, in order to obtain free installation of the equipment, a customer must agree to remain a DIRECTV subscriber for at least a year.[19] If a customer leaves DIRECTV before one year, the customer must pay a termination penalty to DIRECTV. Accordingly, we assume that subscribers would not immediately switch back to their original MVPD once a short service disruption has been resolved. But, it seems reasonable that some significant fraction of the consumers would switch back to cable after a year with DIRECTV, or more generally, that these consumers would have a higher churn rate than does the average DIRECTV customer.

13. This potential to switch back to the previously foreclosed MVPD makes these incremental customers potentially less profitable to DIRECTV. DIRECTV would need to bear the installation and other upfront costs when subscribers first switch to DIRECTV, but might not maintain those incremental customers for as long on average as the typical customer. A new subscriber does not even provide a positive present value return to DIRECTV over variable and upfront costs unless the subscriber remains

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17 *Second Rogerson Analysis* at page 15.

18 *Id.* at pages 16-17.

19 This policy was not in place prior to 2001.

with DIRECTV for almost .[20] Therefore, those subscribers that switch to DIRECTV as a result of the temporary withholding of programming and then switch back to cable in less than actually end up *reducing* DIRECTV's profits on balance.

14. Stated differently, in evaluating the profitability of the temporary foreclosure, it would not be appropriate to use the same margin that was used for the permanent foreclosure analysis. This margin was calculated on the assumption that there was a steady state of customers switching to and from DIRECTV, so the variable subscriber acquisition costs could be amortized over the lifetime of the average customer. In analyzing temporary withholding of programming leading to customers switching, it is more appropriate to treat the subscriber acquisition costs as an up-front payment for gaining the customer and then discounted future revenues are netted against this cost. Under this methodology, the variable margin is higher per month, but the subscriber acquisition costs (SAC) must be recouped (in present value terms) before a customer becomes profitable. All of the SAC are not recouped until the customer has been with DIRECTV for at least .

15. We can show how this factor affects the profitability of temporarily withholding programming from a rival MVPD. DIRECTV spends in acquiring the average customer and earns per month above the variable cost of serving this customer.[21] DIRECTV's cumulative one-year disconnect rate for new subscribers for the twelve months ended June 30, 2003 was approximately . That is, of a cohort of new DIRECTV subscribers had dropped service one year after subscribing. In our example here, to reflect the higher disconnect rate of a cohort of incremental subscribers that switches from a previously preferred MVPD as a result of a temporary

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20 In evaluating this customer and all of the scenarios described below, we use a discount rate. It is our understanding that this is the hurdle rate used by DIRECTV when it evaluates investment opportunities.

21 These customer acquisition costs are just the marginal costs that DIRECTV incurs for signing up that customer— .

withholding, we assume that of them would switch back to the rival MVPD after 12 months with DIRECTV. We assume that the remaining new subscribers gained in response to the temporary foreclosure would have a monthly churn rate of .[22] Under these assumptions, a new subscriber switching to DIRECTV as the result of temporary withholding would have an expected net present value of to DIRECTV.[23] NC would receive only 34% of this value, so its expected value of a new DIRECTV subscriber would be .

16. For purposes of this temporary withholding example, we modify the scenario in which YES was withheld from Cablevision in New York. The programming cost to NC of withholding an RSN from a cable system with a subscriber base the size of Cablevision's in New York would be per month. Using Professor Rogerson's example of a temporary withholding lasting three months, the cost to NC of withholding the network for three months would be in present value terms using an annual discount rate of . Given its 34% ownership of DIRECTV, for NC to break even, DIRECTV would have to capture of the subscriber base of a cable system the size of Cablevision in New York (or over additional subscribers in the cable system's area). This would involve DIRECTV increasing its

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22 The expected lifetime of a DIRECTV subscriber is , and so the average constant churn rate per month is . If no DIRECTV subscribers disconnected in the first year of service, then a disconnect rate of for new subscribers at the end of month 12 and a churn rate thereafter would be consistent with an expected subscriber lifetime of months. In fact, DIRECTV's cumulative annual churn rate for new subscribers for the twelve months ended June 30, 2003 was approximately somewhat higher than . If one assumes of new subscribers disconnect at the <u>end</u> of the first year having met their contractual one-year service agreement, then an expected lifetime of months for the entire cohort implies an average constant churn rate of per month for the of subscribers who are still on the DIRECTV system at the start of the second year. Because the subscribers that come to DIRECTV as a result of the temporary withholding may be more likely than the average DIRECTV subscriber to switch back to their initial MVPD choice once their service contract is fulfilled, we assume a higher disconnect rate at the end of the first year (with no churn <u>during</u> the first year) and then the same average churn for the remaining new subscribers. The expected subscriber lifetime under these assumptions is months.

23 The expected net present value of a subscriber switching to DIRECTV is calculated as follows. DIRECTV incurs immediate subscriber acquisition costs and gains the present value of a twelve-month margin stream for all the subscribers that switch. For the that remain on the DIRECTV system after the first year, DIRECTV also gains the net present value of the subsequent margin stream, which shrinks at the monthly churn rate.

subscriber base by share points, or approximately of its initial base.[24] We derive this value for the critical (i.e., break-even) subscriber switching rate as follows. For every new subscriber that switches to DIRECTV, NC earns a net present value of from its share of DIRECTV's profits and three months of incremental programming profits.[25] To recoup the million in programming losses, DIRECTV must gain an additional subscribers, or of the cable system subscribers. Such large subscriber gains are extremely unlikely in that Cablevision likely lost less than 30,000 subscribers, or less than 1 percent of its subscriber base, *over the entire year* that YES was not available.[26] Thus, even for this temporary withholding scenario, foreclosure very likely would not be a profitable strategy for NC if it owned 34% of DIRECTV.[27]

17. DIRECTV is marketed in many rural areas by the NRTC. In these areas, DIRECTV earns a much lower margin on each subscriber, less than per subscriber per month.[28] This reduces the profitability of foreclosure and raises the critical subscriber switching rate. In these areas, DIRECTV would need to capture of the subscriber base of a cable system the size of Cablevision in New York.[29] This is well above the 1% or less that Cablevision lost from a *full-year* absence of YES.

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[24] The market size, MVPD subscribers, is estimated using the fact that DIRECTV had subscribers in Cablevision areas at the beginning of 2002; estimating EchoStar's subscribers as directly proportional to current national MVPD shares held by EchoStar and DIRECTV (times 9% divided by 13%); and assuming Cablevision had 3 million subscribers. See *CRA Initial Report* at page 20, Table 1, for EchoStar and DIRECTV national MVPD shares.

[25] This total value to NC is the net present value of three months of RSN revenues, equal to per subscriber plus NC's share of the DIRECTV incremental profits Note that in the YES scenario, DIRECTV had *de facto* exclusive carriage of YES. In a similar situation, NC would not gain any incremental programming revenues through subscribers moving from the cable system to EchoStar because EchoStar also would not carry the RSN.

[26] In its comments on our analysis of the transaction, the LECG slides do not mention the YES experience, suggesting perhaps that LECG does not find fault with our conclusions on this evidence.

[27] If NC owned 50% of DIRECTV, the critical subscriber gain would be of the cable system subscribers, still well above the 1% or less that left Cablevision over the entire year that YES was not carried.

[28] *CRA Initial Report* at page 49.

[29] If NC had a 50% ownership interest in DIRECTV instead of 34%, the critical subscriber switching rate in NRTC areas would be

18. Moreover, these results overstate the profitability of foreclosure. This type of temporary withholding of RSNs from cable systems and/or EchoStar would involve additional costs to the RSN beyond the loss of affiliate fees and advertising revenue during the withholding period. As we discussed in our initial submission, the sports teams that own the rights to the RSN programming likely would demand additional fees as compensation for the games being available to fewer viewers.[30] They also would demand a share in any additional future profits. In addition, MVPDs may be more reluctant to carry or pay high prices for programming that is subject to periodic temporary disruptions. Finally, the temporary disruption may reduce future ratings of the RSN, as viewers try other programming, which then benefits from consumer inertia when the RSN returns. Therefore, not only would the foreclosure be unprofitable as it would not encourage enough consumer switching to pay off, but the foreclosure also would have long-term negative effects on the profitability of the RSN.

19. This conclusion is not surprising in the light of the historical evidence. If there were such large benefits to a vertically integrated programmer/MVPD from temporarily withholding programming from MVPD rivals, one might expect it to be a common occurrence. However, Professor Rogerson does not point to any such historical evidence. Indeed, in 1999, NC purchased a 32% financial interest in EchoStar. Yet, there is no evidence that NC then implemented a strategy of temporarily withholding regional sports programming from DIRECTV or from cable companies. Professor Rogerson discusses NC's disagreement with Time Warner that led to the removal of RSNs from various Time Warner cable systems in 2002 and the beginning of 2003,[31] but that dispute took place *after* NC had completed selling off its entire interest in EchoStar, the sale having been completed by the end of 2001.

20. Finally, as we discussed in our initial submission, if sports programming were such a powerful tool for advantaging one MVPD over another, Professor Rogerson's analysis would predict higher affiliate fees for such programming even in the absence of the

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30 *CRA Initial Report* at page 42.

31 *An Economic Analysis of the Competitive Effects of the Takeover of DirecTV by News Corp.*, by William P. Rogerson, MB Docket No. 03-124, June 13, 2003, at pages 15-16 *(First Rogerson Analysis)*.

proposed transaction, precisely because the RSN could move subscribers and disruption would be such a costly threat to the MVPD.

B. LECG's Temporary Withholding Analysis

21. One of our disagreements with LECG's analysis involves its analysis of temporary foreclosure. LECG's slides focus on O&O foreclosure with reference to a dispute between Time Warner and ABC/Disney.[32] This dispute occurred in 2000 and concerned carriage terms for the Disney programming line-up as well as retransmission of the Disney (ABC) O&Os by Time Warner. The negotiations between these two companies first gained significant publicity in early 2000, when there was the expectation that Time Warner might drop carriage of the local ABC station from its cable system in Houston in early March. The March black-out of the ABC station in Houston was avoided, and multiple extensions of the carriage terms for the station were negotiated, including one that extended into the beginning of the May sweeps period.[33] Even though ABC extended authorization for carriage of its O&O signals through May 24, Time Warner nonetheless dropped all ABC O&O stations from all of its systems for 39 hours on May 1-2 during sweeps week.[34] Time Warner restored ABC's O&O stations to the cable systems shortly before the FCC issued an order ruling that Time Warner had violated FCC rules.[35] Time Warner and Disney thereafter reached a six-year retransmission agreement.[36]

22. Notwithstanding the fact that this episode involved a cable operator's decision to deny carriage over a programmer's objection, LECG uses this short-term disruption as an example of the type of behavior that NC might use to disadvantage DIRECTV's MVPD rivals.[37] LECG evaluates the profitability of a *one-month* temporary

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32 LECG submitted its analysis on behalf of Cablevision, which has an ownership interest in a number of regional sports networks.

33 See *Time Warner Cable*, 15 FCC Rcd. 7882 (Cable Svc. Bur. 2000) at para. 4.

34 *Id.* at para. 4 and note 8.

35 *Id.* at note 8.

36 Mike McDaniel, *ABC-TV, Time Warner Reach Final Cable Deal,* The Houston Chronicle, May 26, 2000.

37 LECG discusses the Disney-Time Warner scenario in which O&O station programming was dropped only from the cable system, but its calculations reflect the absence of the programming on

withholding of O&O station programming from DIRECTV's rivals and estimates the required rival MVPD subscriber loss (expressed as MVPD share points) to make that withholding profitable. We explain next why LECG's calculations understate the amount of switching that would be required for the withholding to be profitable. We make a number of changes to correct the LECG analysis, as listed below. We also make a more reasonable assumption about the timing of disconnections. Taken together, these changes imply that about of the cable subscribers would have to switch to DIRECTV in order for the temporary withholding of an O&O for a one-month period to be profitable for NC. Moreover, even these calculations do not account for any adverse effect of the withholding on the ratings and advertising revenues of the O&O, either during or after the period of disruption.

23. We make the following changes to LECG's assumptions.

- The formula used by LECG amortized the SAC over 60 months, beginning in the second month of the subscription period. We bring the SAC forward one month.
- LECG used public information to derive the margin for DIRECTV. We use information obtained directly from the company. As we mentioned in paragraph 15 above, that margin is per month, not $29.84. We use the margin.
- LECG assumed that the SAC was $595 while the actual SAC (, as noted above) is . We use the figure.
- In its calculation, LECG assumes that the average DIRECTV customer remains on the service for 60 months. In fact, the average length of time that a customer is with DIRECTV is months. LECG assumes further that <u>every</u> consumer takes DIRECTV service for <u>exactly</u> 60 months, instead of making an assumption that more closely reflects actual experience, which is that some consumers churn off DIRECTV in fewer than 60 months and some churn off after more than 60 months.[38] We take a monthly churn rate into account. Because of the effect of

both cable and EchoStar. In our discussion of LECG results below, where it is relevant, we modify their formula slightly to reflect withholding solely from the cable system.

38 In fact, LECG's formula is inconsistent with its own assumption because it includes 61 months of revenues rather than 60.

discounting future revenues earned, accounting for a monthly churn rate (as opposed to assuming that all customers maintain a subscription for exactly 60 months) has a significant impact on the critical subscriber gain needed for NC to break even.

- As discussed in our evaluation of Professor Rogerson's temporary foreclosure analysis, we would expect the subscribers that came to DIRECTV as the result of a temporary foreclosure of an O&O to have a relatively higher churn rate. We make the assumption that there is no churn for the first year (to reflect the commitment to one year of service when signing up for DIRECTV) but that after this first year, of subscribers disconnect. We assume that the remaining subscribers subsequently churn at a rate of per month.

- LECG apparently uses a different interest rate when amortizing the SAC than it does when calculating the net present value of the foreclosure. We use the same interest rate for the amortization as well as the discounting.

- LECG uses three different interest rates for discounting the cash flows over time, with the highest of these rates being 10%. However, in its planning process, DIRECTV uses as its discount ("hurdle") rate for new investments.[39] In our calculations, we use a discount rate.

- While LECG *discusses* temporary withholding of programming from a cable operator, they *calculate* the profitability of withholding O&O programming from all rival MVPDs. In our example, we calculate the subscriber movement necessary for profitable withholding from a cable operator only. Thus, in our example, NC also gains some programming revenues through subscribers that move from the cable system to EchoStar. We assume subscriber movements to DIRECTV and

[39] LECG's slides suggest that the discount rate might equal the weighted-average cost of capital ("WACC"). DIRECTV management policies set out a hurdle rate for new project. That the hurdle rate is higher than the WACC of the firm is not surprising. See Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill, Fifth Edition, 1996, pages 204-206 for an explanation.

EchoStar are proportional to the operators' current national MVPD shares of 13% and 9%, respectively.[40]

24. As stated above, given all these changes, DIRECTV would have to gain about new subscribers, or of cable subscribers in a market the size of the Time Warner franchise area in Houston, in order for it to be profitable for NC to withhold the O&O station's programming from a cable system for one month.[41] Such a subscriber gain in that area would involve DIRECTV increasing its subscriber base by share points, an increase of over an estimated subscriber share of .[42] This is much larger than LECG's results.

25. LECG also considered a scenario we presented in our initial submission, to reflect the realization that some cable subscribers would start using an antenna and an A/B switch (or another TV at home that is not connected to cable) to get the local ABC station instead of switching to DIRECTV. Assuming that 33% of affected subscribers receive the O&O signal over the air once it is removed from the rival MVPD systems and that the discount rate is 10%, LECG reported that DIRECTV would need to gain of MVPD subscribers, which would correspond to roughly new subscribers in an

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40 Thus, for every dollar of advertising revenue NC gains when a subscriber moves from the foreclosed cable system to DIRECTV, we assume NC also gains 69 cents in advertising revenue for a subscriber moving from the foreclosed cable system to EchoStar.

41 We estimate that there were roughly MVPD subscribers in the Time Warner cable franchise areas in Houston in 2000. This estimate is based on the fact that DIRECTV had subscribers in Time Warner areas in Houston at year-end 1999, reports that Time Warner had 665,000 subscribers in Houston, and an estimate of EchoStar's size relative to DIRECTV in the same proportion as current national MVPD shares held by EchoStar and DIRECTV. See *LECG Presentation* at slide 4 for Time Warner subscriber base in Houston and *CRA Initial Report* at page 20, Table 1, for EchoStar and DIRECTV national MVPD shares.

42 LECG also calculates critical subscriber gains necessary for profitable one-month withholding of an O&O station, assuming that NC increases its ownership share of DIRECTV to 50%. LECG's calculations with a 10% discount rate would imply a required gain of about additional subscribers. (Tailoring the LECG formula to reflect foreclosure of only the cable system, assuming MVPD shares based on Houston data, but otherwise accepting LECG's parameters, lowers the critical subscriber gains by DIRECTV slightly, to .) Making all of the relevant changes to the LECG numbers and assuming NC has a 50% ownership interest in DIRECTV, we find that DIRECTV would have to gain additional subscribers, a number equal to of the Time Warner subscribers in the Houston area.

area like Houston.[43] However, when we make the corrections and other changes described above, the number of new subscribers needed is roughly . Because the 33% of Time Warner subscribers receiving the O&O signal over the air will have lower incentives to switch than the 67% that do not receive the signal over the air, more of these new subscribers must be obtained largely from 67% of the original cable subscribers in Houston. DIRECTV must be able to gain about of the Time Warner subscribers who do not receive the O&O signal over the air or of the total Time Warner subscribers.

26. LECG also suggests that in the case of a temporary disruption, DIRECTV's SAC would be lower than its current SAC.

27. Finally, LECG suggests that overall the Houston episode was extremely costly to Time Warner because of the high valuation of cable subscribers that is implicit in cable transactions.[44] But, use of that figure is inappropriate. This valuation of a subscriber in a cable transaction captures the per-subscriber value of an ongoing business with an expected growth rate, not the value of an incremental subscriber resulting from an exclusion strategy, so it is not the appropriate value to use. Nor would this valuation apply to the value of an extra subscriber to DIRECTV. It is also interesting to note that Time Warner itself contemporaneously claimed that ABC would suffer greater losses from the episode than would the cable system.[45]

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43 Modifying the LECG formula to reflect foreclosure of only the cable system, assuming MVPD shares based on Houston data, but otherwise accepting LECG's parameters, lowers the critical subscriber gain by DIRECTV to subscribers.

44 *LECG Presentation* at slide 5, citing valuations as high as $3,400 per cable subscriber.

45 See *Back at the Brink: Channel 13's Fate on Cable Remains Unresolved,* The Houston Chronicle, March 30, 2000, at page 1 (quoting Ron McMillan, president of Time Warner-Houston, saying, "I think the bigger hit would be taken by ABC, because their Nielsen ratings would drop like a rock.

28. LECG also suggests that the Houston episode cost "Disney/ABC virtually nothing."[46] It is clearly not the case that the one-month disruption analyzed by LECG would be virtually costless. First, if the local stations were removed from the Time Warner system during the sweeps period (as they were in this case), the lower viewership resulting from not being available would reduce the advertising rates the stations were able to earn for the next year.[47] Second, keeping the ABC stations off the cable systems might cause consumers to change their viewing patterns. During the period of disruption, viewers would begin to watch other competing programming and might not return to the ABC network or the local ABC-owned station when the programming becomes available again on the cable system a month later. This might be especially important with respect to local news broadcasts and other local programming.[48] In discussing the dispute between Disney and Time Warner, Disney CEO Michael Eisner said, "There is a certain cost to reputation. Our brand is very important to us."[49] Therefore, a one-month disruption could be extremely costly to ABC/Disney and any future temporary withholding of an O&O would be costly to that O&O. Finally, if MVPDs anticipate that NC's O&O's (or other programming) will be subject to opportunistic threats of future temporary disruptions, the MVPD will be less willing to purchase rights to that programming or will not be willing to pay as much for it. In this sense, a pattern of "looking for a fight" could turn out to be a dysfunctional, unprofitable business strategy.

29. In sum, it is clear that a temporary withholding of programming in the form of an O&O would not be profitable after the proposed transaction is consummated.

We believe they would lose tremendous amounts of money on advertising. That's going to far outweigh what the damage would be for us in a dollar-and-cents standpoint.").

46 *LECG Presentation* at slide 5.

47 It is against the FCC rules for a cable system to remove a station from its lineup during the sweeps month. It is our understanding that after the FCC investigated this episode, Time Warner had to pay a fine of $72,000. *See Time Warner Cable*, 16 FCC Rcd. 5403 (Cable Svc. Bur. 2001).

48 Diane Mermigas, *A Very Expensive Spat: Battle Could Hurt Both Disney and Time Warner*, Electronic Media, May 8, 2000.

49 *Id.*

3. Non-Discriminatory Price Increases

30. In our initial submission, we explained why NC would face downward pressure on its prices after the transaction. This result follows from the incentive to eliminate double marginalization in conjunction with the program access rules, the voluntary commitments and Hughes' fiduciary responsibility to its shareholders.[50] This result was quite general and did not depend on particular numerical assumptions.

31. As we discussed in our earlier submission, this result assumes that programming prices to MVPDs are offered on non-discriminatory terms (what we referred to as "uniform" terms). In this regard, we understand that some MVPDs negotiate most-favored-nation (MFN) clauses in their programming contracts to ensure that they receive the best prices and terms offered (to other similarly situated MVPDs). Furthermore, we understand that some recent contracts have included audit rights that allow the MVPD to have an independent auditor review all of the programmer's contracts to ensure that the MVPD is obtaining non-discriminatory terms. These MFNs reinforce and support the ability of program access rules to severely limit (even if not completely eliminate) a programmer's ability to price discriminate.

32. Professor Rogerson criticizes our analysis of the non-discriminatory pricing incentives but does not question our conclusion that downward pressure on prices will result from the transaction. Furthermore, his comments on this part of our analysis all are focused on a single paragraph in our submission and appear to be based on his misunderstanding of that paragraph. Specifically, in our earlier submission, we commented on testimony by Gene Kimmelman, stating,

> *First, the presumption in the quote that all cable operators would simply accept and pay higher fees for Fox programming is clearly inconsistent with the fact that Fox's fees today already maximize the profits that Fox can earn on its programming. Fox must believe today, in the pre-acquisition world, that raising its affiliate fees would run the risk of losing carriage on some cable systems; or it would have raised its fees already.*

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50 *CRA Initial Report* at pages 57-62. As we discussed in our initial report, this pricing pressure may not result in nominal prices for particular programming being lower than they are today, but instead might lead to higher quality programming or future price increases being lower then they would be otherwise.