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Washington, DC 20554

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JUN 30 2010

Federal Communications Commission
Office of the Secretary

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:

Enclosed please find two redacted copies of the 2007 report by Benjamin Klein, Andres Lerner, and Emmett Dacey, which DIRECTV referenced in its comments in this proceeding.¹ As authorized by the Commission, DIRECTV has designated certain information in this report as highly confidential, and an unredacted version of this report has been filed under separate cover.

Respectfully submitted,



William Wiltshire
Counsel for DIRECTV

Enclosures

¹ Klein, Benjamin; Lerner, Andres; and Dacey, Emmett, "An Economic Analysis of DIRECTV Providing Local-Into-Local Service via Satellite in All 210 DMAs," attached to Letter from William Wiltshire, Counsel for DIRECTV to Marlene H. Dortch, Federal Communications Commission, *Consolidated Application of News Corporation, The DIRECTV Group, Inc., and Liberty Media Corporation for Authority to Transfer Control*, MB Docket No. 07-18 (filed Aug. 23, 2007).

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**An Economic Analysis of DIRECTV Providing
Local-into-Local Service via Satellite in All 210 DMAs**

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Executive Summary

- DIRECTV would incur a significant cost to provide local-into-local service via satellite in all DMAs. A conservative estimate of the net present value of such an investment is negative \$251 million.
- DIRECTV currently offers local-into-local via satellite service in 143 DMAs and plans to launch local-into-local via satellite by the end of 2007 in an additional 7 DMAs. These 150 DMAs comprise 94.6 percent of U.S. television households. The remaining 60 DMAs in which DIRECTV does not now offer or plan to offer local-into-local via satellite service comprise only 5.4 percent of U.S. television households, with only 2.4 percent of U.S. television households in DMAs without satellite local-into-local service from either DIRECTV or EchoStar.
- We estimate the expected market demand effects of introducing satellite local-into-local service in the remaining 60 DMAs. Estimates of the expected increase in DIRECTV gross additions and expected decrease in disconnects when DIRECTV provides local-into-local satellite services are derived using a regression analysis based on historical market data from DMAs in which DIRECTV has launched local-into-local via satellite. Although the introduction of satellite local-into-local service would have statistically significant positive demand effects in the 60 remaining DMAs, DIRECTV's incremental revenues from the increased demand would be substantially less than

the increased costs, both fixed and variable, required to provide satellite local-into-local service in these markets. The estimated net expected present value of such an investment, assuming EchoStar will not extend its satellite local-into-local service to additional DMAs, is negative \$251 million.

- The negative \$251 million estimate understates the likely net cost to DIRECTV of providing satellite local-into-local in all DMAs because it overstates the likely positive demand effects. DIRECTV is making available to all customers equipment that integrates off-air digital signals. Consequently, local SD and HD broadcast signals which are not delivered by satellite will nonetheless be available for integration into DIRECTV's service even in the smallest television markets. This would likely progressively dampen the positive demand effects that introducing local-into-local service by satellite in additional DMAs would have as the transition reaches completion.
- The sensitivity of the negative \$251 million profitability estimate is assessed with regard to various assumptions used in the empirical model. The assumptions that are varied fall into three main categories: (1) the statistical estimates of the market impacts from DIRECTV provision of satellite local-into-local service, (2) the assumption regarding whether EchoStar will or will not offer local-into-local in all DMAs, and (3) the discount rate and the terminal value used in the model. This sensitivity analysis indicates that, under a wide range of demand estimates and market and financial assumptions, DIRECTV's offering of satellite local-into-local in the remaining 60 DMAs would

be very unprofitable, with the range of estimated net expected present values falling between negative \$133 million and negative \$326 million.

- Providing local-into-local via satellite in the 60 remaining DMAs would not only be very costly and unprofitable for DIRECTV, but also unlikely to be socially efficient. Only 2.4 percent of consumers live in DMAs that by the end of 2007 will not have local-into-local satellite service from either DIRECTV or EchoStar. Moreover, if the large investments and DIRECTV efforts necessary to expand satellite local-into-local service in these remaining DMAs delayed DIRECTV's expansion of high-definition local signals or other advanced services in larger markets, consumers overall could very well be worse off and the Commission's goal of promoting the DTV transition could be hindered. Furthermore, because the costs to DIRECTV of providing local-into-local satellite services would not be incurred by EchoStar, DIRECTV could be placed at a competitive disadvantage, hampering its ability to compete effectively in the MVPD market.

I. Introduction

1. We have been asked by The DIRECTV Group, Inc. (“DIRECTV”) to perform an independent economic analysis of the profitability of offering local-into-local service via satellite in all 210 DMAs. DIRECTV currently offers local-into-local service via satellite in 143 DMAs, and expects to launch the service in seven additional DMAs by the end of 2007. This report undertakes a profitability analysis of DIRECTV providing satellite local-into-local service in the remaining 60 DMAs.

2. The 60 DMAs in which DIRECTV does not offer, or intend to offer by the end of 2007, local-into-local service via satellite comprise only 5.4 percent of U.S. television households (Exhibit 1). Moreover, only 2.4 percent of television households live in the 31 DMAs that will not have local-into-local satellite service from either DIRECTV or EchoStar by the end of the year. The small percentage of U.S. consumers who live in DMAs without local-into-local satellite service suggests that the consumer benefits of offering the service in these markets are likely to be small. These limited consumer benefits must be balanced against the cost, both to DIRECTV and possibly consumers in other markets, of providing such local-into-local satellite service in the 60 remaining markets.

3. The report presents a profitability analysis of providing local-into-local via satellite service into the remaining 60 DMAs. The analysis indicates that extending local-into-local to these markets would be very unprofitable for DIRECTV, with the estimated expected net present value of such an investment equal to negative \$251 million. This profitability analysis is described in detail in what follows. First, a regression analysis is used to estimate the effect of DIRECTV providing local-into-local

via satellite service on its increased gross additions and reduced disconnects in the 60 remaining DMAs. The implied incremental DIRECTV revenues are then compared to estimated DIRECTV costs of providing local-into-local via satellite service in the 60 DMAs, including the cost of satellite capacity as well as subscriber acquisition and other costs. These revenue and cost streams are then discounted to obtain an estimated expected net present value of providing local-into-local via satellite service in the 60 DMAs. Finally, a sensitivity analysis of this profitability estimate is undertaken by adopting alternative market estimates and financial assumptions. This sensitivity analysis fully supports the conclusion that offering satellite local-into-local would be very unprofitable for DIRECTV.¹

II. Incremental Revenues from Local-into-local via Satellite

4. In order to assess the profitability of offering local-into-local via satellite in the 60 remaining DMAs, it is necessary to forecast two scenarios for each DMA. First, one must estimate DIRECTV revenues and costs if it does offer local-into-local via satellite in each of these DMAs. Second, one must estimate DIRECTV revenues and costs if it does not offer local-into-local via satellite. The incremental profits from providing local-into-local via satellite in the 60 DMAs is the difference between profits in these two scenarios.

A. Effect of providing local-into-local via satellite on gross additions and disconnects

5. A primary factor which affects the profitability of offering local-into-local satellite service in the remaining 60 DMAs is the effect of provision of the service on the

¹ The curriculum vitae of the authors are attached as Appendix A.

demand for DIRECTV in those DMAs. To the extent that local-into-local via satellite is valuable to consumers, we would expect that the demand for DIRECTV services would increase. This increase in demand should be reflected in a higher number of consumers who sign up for DIRECTV (referred to as gross additions) and/or a lower number of consumers who terminate their DIRECTV service (referred to as disconnects or churn).

6. We estimate the effect of provision of local-into-local service via satellite on gross additions and disconnects in the 60 DMAs using historical market data obtained from DIRECTV. The DIRECTV data contains monthly information for each of the 210 DMAs, including the number of subscribers, gross additions and disconnects, during the period from January 2003 to March 2007. The data set also includes the date on which DIRECTV and EchoStar launched local-into-local service via satellite for each DMA.²

7. It is important to note at the outset that basing our analysis on these historical data will likely overstate the market impact of DIRECTV satellite local-into-local and therefore the potential profitability of offering the service in the additional 60 DMAs. This is because in those areas where DIRECTV will not provide local signals via satellite, DIRECTV has developed a mix of strategies to offer integrated service that incorporates local broadcast signals. For example, to date, DIRECTV has included a digital terrestrial tuner in every model of set-top box used to receive its HD service. This equipment is capable of incorporating any off-air digital broadcast signal available to the subscriber into the DIRECTV service in an integrated manner such that an off-air digital signal would appear in, and be accessible through, the on-screen program guide, just like other programming available via satellite. Those DIRECTV subscribers with

² Appendix B shows the 210 DMAs and the launch dates of DIRECTV and EchoStar satellite local-into-local.

non-HD service will need additional equipment to receive and integrate available off-air digital signals in this way, which is available through DIRECTV. Because broadcast television stations now must transmit a digital signal, this option will provide access to an increasing amount of local broadcast programming through the DIRECTV set-top box. Thus, local SD and HD broadcast signals which are not delivered by satellite will nonetheless be available for integration into DIRECTV's service even in the smallest television markets. This could progressively dampen the effect that introducing local-into-local service by satellite in additional DMAs would have as the transition reaches completion.

8. One factor that affects the profitability of DIRECTV offering satellite local-into-local is whether EchoStar also offers satellite local-into-local in those markets. In 29 of the 60 DMAs in which DIRECTV does not offer (and has no plans to offer by the end of the year) local-into-local satellite service, EchoStar currently offers the service.³ We initially assume that EchoStar will not extend its satellite local-into-local service to any additional markets. Thus, our model assumes that EchoStar will offer satellite local-into-local in the 29 markets in which it currently offers the service, but will not offer the service in the other 31 DMAs.⁴ To test the sensitivity of the profitability estimate to this assumption we alternatively assume in Section VI.B. that EchoStar will expand its satellite local-into-local service to these 31 DMAs.

9. Before undertaking a regression analysis of the effect of the provision of local-into-local via satellite on gross additions and disconnects using data from all 210 DMAs, we present a graphical analysis on selected markets in which DIRECTV has launched local-into-local via satellite during the period of the data. This illustrative

³ A list of these 29 markets is included in Appendix C.

⁴ A list of these 31 markets is included in Appendix D.

graphical analysis is then followed by a more precise estimate of the effect of offering local-into-local via satellite on gross additions and disconnects using regression analysis. The results of the two analyses are consistent, both showing that the launch of local-into-local via satellite increases gross additions and decreases disconnects.

1. Graphical analysis

10. We first analyze the effect of launching local-into-local service via satellite on gross additions and disconnects in those DMAs in which DIRECTV began such service during the period covered by the available data. Because it is necessary to observe gross additions and disconnects after DIRECTV's launch, we select DMAs in which there was at least a 12-month period of data after DIRECTV launched local-into-local. Accordingly, we analyze markets in which DIRECTV launched satellite local-into-local between January 2003 and March 2006. Gross additions and disconnects over time are calculated for each DMA as a percentage of total DIRECTV subscribers in the market.⁵ For instance, in a DMA with 1,000 DIRECTV subscribers and 20 gross additions in a particular month, the gross additions are 2 percent. We illustrate an approximation of the average effect of DIRECTV satellite local-into-local by aligning the month of DIRECTV's launch in all of these markets and calculating the average gross additions and disconnects for each month before and after DIRECTV's launch.

11. Markets in which EchoStar offers satellite local-into-local: The analysis of the impact of DIRECTV local-into-local via satellite varies depending on whether EchoStar offers or does not offer the service in the particular DMA. To assess the effect

⁵ Disconnects as a percentage of total subscribers are typically referred to as "churn." The average disconnect rate ("AVD") in the data provided by DIRECTV equals disconnects minus reconnects divided by the average of each month's beginning and ending total residential subscribers. We used this AVD rate as the measure of disconnects. Gross additions do not include reconnects.

of satellite local-into-local in markets where EchoStar offers the service, we select DMAs in which EchoStar launched local-into-local via satellite at least 6 months before DIRECTV. In these markets, there is a “pre-period” during which EchoStar offers local-into-local via satellite but DIRECTV does not, and a “post-period” during which both DIRECTV and EchoStar offer the service. There were 52 markets that met this criteria.⁶

12. Exhibits 2(a) and 2(b) show the results of this illustrative analysis for gross additions and disconnects, respectively. Month “0” in these exhibits indicates the month of DIRECTV’s local-into-local launch in each of the 52 DMAs, with months to the left of this indicating the period before DIRECTV’s launch and months to the right of the zero indicating the period after DIRECTV’s launch. As expected, the analysis indicates that DIRECTV’s introduction of local-into-local via satellite has a positive effect on gross additions and a negative effect on disconnects. Exhibits 2(c) and 2(d) show the same analysis, but include the average gross additions and disconnects before and after DIRECTV’s launch. In particular, the analysis illustrated in Exhibit 2(c) indicates that, the average gross additions before providing local-into-local was ■■■ percent of subscribers per month. Gross additions increase subsequent to DIRECTV’s launch of local-into-local via satellite, with a more pronounced effect during the months immediately following the launch of the service. Accordingly, we calculate average gross additions for the first 12 months subsequent to the launch, and an average after the first 12 months. As Exhibit 2(c) shows, after launching local-into-local via satellite, average gross additions in these DMAs increase to ■■■ percent per month for the first

⁶ These markets are listed in Appendix E. There are 91 DMAs in which DIRECTV launched local-into-local service via satellite between January 2003 and March 2006. Out of these DMAs, EchoStar launched local-into-local via satellite less than 6 months before DIRECTV in 23 markets, EchoStar launched after DIRECTV in 12 DMAs and EchoStar does not offer local-into-local via satellite in 4 DMAs.

12 months, and to [REDACTED] percent thereafter. This is a [REDACTED] basis point increase in gross additions in the first 12 months, and a [REDACTED] basis point increase thereafter.

13. Exhibit 2(d) shows the result of the analogous analysis on DIRECTV’s introduction of local-into-local via satellite on disconnects. Before providing local-into-local via satellite, DIRECTV’s average disconnects in these 52 markets was [REDACTED] percent. After launching local-into-local via satellite, DIRECTV’s average disconnects in these DMAs decreases to [REDACTED] percent per month. This is a [REDACTED] basis point reduction in disconnects.⁷

14. Markets in which EchoStar does not offer satellite local-into-local: We perform an analogous graphical analysis on markets in which DIRECTV launched local-into-local via satellite before EchoStar. To do this, we select DMAs in which DIRECTV launched local-into-local via satellite at least 6 months before EchoStar. These markets allow us to observe the impact of DIRECTV satellite local-into-local when EchoStar does not offer the service. There were 12 markets that met this criterion.⁸ Exhibits 3(a) through 3(d) show the results of this graphical analysis.

⁷ [REDACTED]
 [REDACTED]
 [REDACTED] This may be due to, for example, competitive advertising campaigns by EchoStar and the cable companies when DIRECTV launches satellite local-into-local.

⁸ These markets are listed in Appendix F.

2. *Regression analysis*

15. A more precise estimate of the effect of local-into-local on gross additions and disconnects can be derived from regression analysis. There are a few advantages to regression analysis compared to the analysis described above, which took the simple averages across a subset of DMAs before and after the launch of DIRECTV's local-into-local via satellite. Regression analysis allows one to use all the data, to assess the statistical significance of the effects, and to control for other factors that may "confound" the effect we are attempting to measure.

16. Other factors that may affect the level of gross additions and disconnects could include relevant differences between DMAs. For example, the demand for DIRECTV's services, and hence gross additions and disconnects, may be affected by the services offered by the incumbent cable company in that DMA, such as high-definition, Internet broadband, and telephone services. The demand for DIRECTV may also be related to local marketing campaigns conducted by DIRECTV, EchoStar, and the incumbent cable companies.

17. In addition, there may be systematic DIRECTV-wide time patterns in gross additions and disconnects, including seasonality and long-term trends, that may affect gross additions and disconnects. For instance, graphs of DIRECTV's average gross additions and disconnects across all markets reveal that both exhibit significant seasonality, with both gross additions and disconnects significantly higher during the summer months (Exhibits 4(a) and 4(b)). Exhibit 4(a) also reveals that DIRECTV gross additions increased in 2004, from an average of about 2 percent in 2003 to an average of 2.5 percent in 2004. Most of this cross-section and time series variation is independent of whether DIRECTV offers local-into-local via satellite in a given market.

18. Differences across DMAs and systematic DIRECTV-wide time patterns in gross additions and disconnects are controlled in the regression by using a “fixed effects” model. A fixed effects model includes “dummy variables” for each DMA and for each time period (in this case, a month). By controlling for differences across DMAs and DIRECTV-wide time trends, the fixed effects regression model isolates the effect of DIRECTV’s launch of satellite local-into-local service in those markets in which DIRECTV launched the service during the period of the data. More precisely stated, the fixed effect model captures time series variation in particular DMAs in which DIRECTV launched satellite local-into-local during the period of the data, not cross-sectional variation in gross additions and disconnects across DMAs.

19. Another advantage of the regression analysis compared to the initial graphical analysis is that the regression analysis can control for whether EchoStar offers local-into-local via satellite, and the precise month in which EchoStar began the service in a particular market. We control for this by including a dummy variable that indicates the period in which EchoStar began to provide local-into-local via satellite in a particular DMA. Because the regression analysis can control for DIRECTV’s and EchoStar’s launch of local-into-local satellite service, it is not necessary to select, as we did in the graphical analysis, the subset of markets which depends on the timing of DIRECTV’s and EchoStar’s launch of the service. Accordingly, the regression uses information for all 210 DMAs.⁹

⁹ Because we use a “fixed effects” regression model, the impact of DIRECTV satellite local-into-local is estimated from markets in which DIRECTV began the service at some time during the period of the data. However, DMAs in which DIRECTV offered satellite local-into-local throughout the data period, or at no point during the data period, also affect the coefficients of interest because they influence the overall DIRECTV-wide time trend in gross additions and disconnects (*i.e.* the time fixed effects).

20. Two regressions are estimated -- one for DIRECTV's gross additions and one for disconnects. As in the graphical analysis, these variables are expressed as a percentage of total DIRECTV subscribers in the DMA. The primary variable of interest is an indicator for DIRECTV's launch of local-into-local via satellite in a particular DMA. We include two dummy variables indicating when DIRECTV began to offer local-into-local via satellite. The first dummy variable, *DTVinESin*, indicates the provision by DIRECTV of satellite local-into-local in markets where EchoStar previously began to offer the service.¹⁰ The second variable, *DTVinESout*, indicates DIRECTV satellite local-into-local in markets where EchoStar did not previously offer the service. We similarly include indicator variables for whether EchoStar offers local-into-local via satellite in markets where DIRECTV previously offered the service and in markets where DIRECTV did not offer the service at the time that EchoStar launched satellite local-into-local (respectively, "*ESinDTVin*" and "*ESinDTVout*").¹¹

21. Lastly, because the previous graphical analysis indicated that there may be a more pronounced effect on gross additions during the first year following DIRECTV's launch of satellite local-into-local, we also allow the effect to be different in the first year by including dummy variables which indicate the 12 months following DIRECTV's launch of local-into-local ("*DTVinESinBUMP*" and "*DTVinESoutBUMP*").

¹⁰ This dummy variable is equal to 0 for all months prior to DIRECTV's launch of satellite local-into-local, and is equal to 1 after DIRECTV's launch in markets where EchoStar also offers satellite local-into-local. This same methodology is used for all other dummy variables.

¹¹ Because the "dependent" variable is gross additions or disconnects expressed as a percentage of total subscribers, the coefficients on the dummy variables can be interpreted in the same way. [REDACTED]

25. Markets in which EchoStar does not offer satellite local-into-local: The launch of DIRECTV local-into-local via satellite in DMAs where EchoStar does not offer the service is associated with a [REDACTED] percentage point increase in gross additions in the [REDACTED] following the launch. After these [REDACTED] the effect of local-into-local is a [REDACTED] percentage point increase. Both of these estimates are statistically significant at a 99 percent level of confidence. The launch of DIRECTV local-into-local via satellite is also associated with a [REDACTED] percentage point reduction in disconnects in DMAs where EchoStar is not providing local-into-local via satellite. This estimate is also statistically significant at a 99 percent level of confidence.

B. Gross additions and disconnects if DIRECTV does not offer local-into-local via satellite

26. In addition to estimating the effect of launching local-into-local via satellite on DIRECTV's gross additions and disconnects, in order to determine the profitability of this investment by DIRECTV it is necessary to calculate what gross additions and disconnects would be if DIRECTV did not offer the service in these 60 markets. The best predictor of the demand for DIRECTV if it did not offer local-into-local service is the past demand for DIRECTV. This is because we assume that EchoStar will continue to offer satellite local-into-local in the 29 markets in which it currently offers the service, and will not extend the service to any of the additional 31 markets. Accordingly, we assume that in these markets, DIRECTV's gross additions and disconnects if it does not offer satellite local-into-local will equal the average gross additions and disconnects over the last 12 months of the data for each DMA.

[REDACTED]

[REDACTED]

27. We assume that this level of gross additions and disconnects would remain constant if DIRECTV does not offer satellite local-into-local. This is a reasonable assumption because [REDACTED]

[REDACTED] Exhibits 5(a) and 5(b) show DIRECTV’s average gross additions and disconnects over time, respectively, in the 29 markets in which EchoStar offers satellite local-into-local.

[REDACTED] Exhibits 5(c) and 5(d) show that DIRECTV’s average gross additions and disconnects in the 31 markets where EchoStar does not offer satellite local-into-local have remained fairly constant over time.

28. Exhibits 6(a) and 6(b) present a summary of the market impact and baseline estimates for DMAs where EchoStar offers satellite local-into-local service and for DMAs where EchoStar does not offer the service, respectively.¹⁴ In the 29 DMAs where EchoStar offers satellite local-into-local (Exhibit 6(a)), the baseline gross additions and disconnects imply that the number of DIRECTV subscribers would [REDACTED]

[REDACTED] If DIRECTV did offer the service in these DMAs, we estimate that the number of DIRECTV subscribers would [REDACTED]

In the 31 DMAs where EchoStar does not offer satellite local-into-local (Exhibit 6(b)), the baseline gross additions and disconnects imply that the number of DIRECTV [REDACTED]

[REDACTED] If DIRECTV did offer the service in these DMAs, the number of DIRECTV subscribers is expected [REDACTED]

¹⁴ Appendix H summarizes the market impact estimates and how we apply regression results and baseline estimates.

29. The exhibits show that there is a greater expected positive gain from DIRECTV's launch of satellite local-into-local when EchoStar does not offer the service in the DMA. This can be seen by comparing the top line in Exhibit 6(b) with the top line in Exhibit 6(a). The number of DIRECTV subscribers would increase by [REDACTED] if EchoStar did not offer satellite local-into-local and by [REDACTED] if EchoStar did offer the service. However, the impact of DIRECTV satellite local-into-local also depends on what would occur if DIRECTV did not make the investments to provide satellite local-into-local. As Exhibit 6(a) shows, there would be a much larger decrease in DIRECTV subscribers if DIRECTV did not provide satellite local-into-local in markets where EchoStar offers the service. The decrease in subscribers in such markets is estimated to be [REDACTED] compared to maintaining the same level of subscribers in markets where EchoStar does not offer the service (Exhibit 6(b)). The overall market impact of satellite local-into-local depends on the gap between the two lines in Exhibits 6(a) and 6(b), which is approximately the same.

30. The differential estimates of gross additions and disconnects under the alternative assumptions that EchoStar offers or does not offer local-into-local satellite service make economic sense. In particular, the impact of DIRECTV local-into-local via satellite is considerably greater for gross additions when EchoStar does not offer the service ([REDACTED]) than when EchoStar offers the service ([REDACTED]). The impact is lower, however, for disconnects when EchoStar does not offer the service ([REDACTED]) than when EchoStar offers the service ([REDACTED]). When EchoStar does not offer satellite local-into-local in a particular market, DIRECTV can achieve a significant increase in gross additions by offering satellite local-into-local and taking customers away from EchoStar. The impact on DIRECTV gross additions is not as pronounced in markets where EchoStar does

offer local-into-local because a much lower number of EchoStar subscribers are expected to switch to DIRECTV in response to DIRECTV offering satellite local-into-local. However, the opposite is true with respect to disconnects. In markets where EchoStar offers satellite local-into-local, DIRECTV's disconnects are high because of subscribers switching to EchoStar.¹⁵ Offering local-into-local via satellite in these markets will significantly decrease the number of DIRECTV subscribers switching to EchoStar, and hence significantly reduce DIRECTV's disconnects. This effect on DIRECTV disconnects is not as significant in markets where EchoStar does not offer local-into-local because there is unlikely to be a high level of disconnects by DIRECTV subscribers switching to EchoStar in those DMAs.

C. Existing DIRECTV subscribers switching to satellite local-into-local

31. If DIRECTV offered local-into-local via satellite in the remaining 60 DMAs, DIRECTV would also earn incremental revenues from existing DIRECTV subscribers who will have the option to sign up for the service. Accordingly, it is necessary to determine how many existing subscribers would elect to receive satellite local-into-local.

32. DIRECTV provided information on the number of existing subscribers who signed up for local-into-local in the DMAs where it was previously launched. To estimate the percentage of existing DIRECTV subscribers in the remaining 60 DMAs who are expected to sign up for local-into-local service via satellite, we examine 41 DMAs where DIRECTV launched the service in 2004. This subset of DMAs is appropriate for the current analysis because a service visit to change a subscriber's

¹⁵ Exhibits 5(b) and 5(d) indicate that DIRECTV's level of disconnects is considerably higher in the 29 markets where EchoStar offers satellite local-into-local service than in the 31 markets where EchoStar does not offer the service.

outdoor unit (ODU) was needed in those markets. A service visit would also be required for subscribers in the 60 DMAs who sign up for satellite local-into-local in order to change the subscriber's ODU, one or more boxes, and multi-switch.

33. In the 41 DMAs, ██████████ of existing DIRECTV subscribers elected to receive satellite local-into-local as of May 31, 2006.¹⁶ Accordingly, we assume in our model that ██████████ of existing DIRECTV subscribers would sign up for satellite local-into-local during the first two years of service.¹⁷

D. Incremental revenues per subscriber

1. New DIRECTV subscribers

34. The regression analysis described above estimates the incremental subscribers that DIRECTV can expect to obtain by offering satellite local-into-local in the 60 remaining markets. In order to assess the profitability of offering the service, it is necessary to also estimate the incremental revenues per subscriber. We estimate the revenue per subscriber based on DIRECTV's projected revenue per subscriber. DIRECTV refers to this measure as the average monthly revenue per user ("ARPU"). DIRECTV's ARPU, which includes both base and premium package revenue, is projected to be ██████████ in the first year of revenues.¹⁸ We also account for anticipated percentage increases in revenues that are proportionately commensurate with expected increases in programming costs.¹⁹

¹⁶ See Appendix I.

¹⁷ We assume that 100 percent of new subscribers will take satellite local-into-local.

¹⁸ Interviews with DIRECTV officials.

¹⁹ Interviews with DIRECTV officials.

2. Existing DIRECTV subscribers

35. We assume that the subscriber fee for local-into-local via satellite is [REDACTED] [REDACTED] DIRECTV will receive this incremental revenue from each existing and new subscriber who elects to take local-into-local via satellite once it is offered. Historically, DIRECTV has charged [REDACTED] [REDACTED] for monthly subscription packages without local-into-local via satellite compared to packages including satellite local-into-local.

III. Costs of Providing Local-into-local Via Satellite

36. The analysis described above shows that DIRECTV's introduction of local-into-local via satellite has a statistically significant effect on the demand for DIRECTV's services. This section of the report provides an estimate of the costs to DIRECTV of supplying local-into-local via satellite in the 60 remaining DMAs.

A. Cost of satellite capacity

37. DIRECTV provision of local-into-local service via satellite in a DMA requires a significant commitment of satellite capacity. DIRECTV could offer local-into-local to the remaining 60 DMAs either by using its existing satellites or by purchasing a new satellite. It is important to note that, from an economic perspective, the cost of these two alternatives will not necessarily differ. While purchasing an additional satellite implies a large capital expenditure, using existing satellite capacity has an opportunity cost. Opportunity cost refers to the value of alternative uses of the satellite capacity. The profitability of such alternative uses is the opportunity cost of using the satellite capacity to provide satellite local-into-local to the remaining 60 DMAs. There is no reason to believe that the profitability of alternative uses of the satellite capacity is