There are two problems with this approach of calibrating the value of $\sigma$ using the churn data.

First, the diversion ratio equation of (2) is derived from manipulating both formulae of their own and cross elasticities. These elasticity formulae are obtained assuming only a marginal change in the price of DIRECTV $p^D$. Since the parameter $\sigma$ in Equation (3) is derived from Equation (2), it must be based on the same assumption that all prices are assumed to be constant except a marginal change in $p^D$. In practice, a change in one price will affect other prices. Therefore, formulae as in Equations (2) and (3) are incorrect.

The churn data indicate customers' choices after cancellation of their current service. There are many reasons for such a cancellation. Most relevant, it can be a result of a change in prices other than $p^D$; then, the formula in (2) no longer applies. Furthermore, given a price change in $p^D$, other price changes follow (as Joskow/Willig make clear in their welfare analysis). The observed churn data reflect the combined effect of these changes as well as other factors, such as, emerging problems with service quality on one or the other systems. It is not appropriate to treat the data as the result of a marginal change in price as required by the calibration model. Consequently, the calibrated value of $\sigma$ cannot be relied on in this analysis.

Second, there are many different ways to estimate the value of $\sigma$. No compelling reasons are offered as to why one way is better than another. For example, we calibrate Equation (2) based on the diversion ratio from DIRECTV to EchoStar, but we could calibrate the value of $\sigma$ based on the diversion ratio from EchoStar to DIRECTV – doing so produces a quite different estimate. If the diversion ratio from EchoStar to DIRECTV is $\sigma_{ES\rightarrow D}$ (reported on page ten of the Analysis), the calibrated value of $\sigma$ would be $\sigma_{D\rightarrow ES}$. Thus, the $\sigma$ value obtained by using the DIRECTV diversion ratio is $\sigma_{D\rightarrow ES}$ larger than that using the EchoStar diversion ratio. If we use a second reported DIRECTV diversion ratio of $\sigma_{D\rightarrow ES}^{*}$, the calibrated $\sigma$ is $\sigma_{D\rightarrow ES}^{*}$ larger than that using EchoStar diversion ratio. This inconsistency of estimates in calibrating $\sigma$ indicates the unreliability of the approach. Any analysis based on the value of $\sigma$ should not be relied upon in subsequent analysis.

(4) Joskow/Willig Assume The Existence Of Bertrand Competition Which Leads To Further Estimation Error Of The Welfare Gains For DBS Subscribers.

If, as they contend, there is product differentiation, it is possible for competing firms to set prices higher than the marginal costs without inducing all consumers to switch to a competitor's product. The Bertrand competition model assumes that firms with these demand conditions make simultaneous price. Although no justification is given, Joskow/Willig adopt such a model. In this section, we show that their model is inconsistent with widely accepted characteristic descriptions of MVPD markets.

The simulation in Joskow/Willig is based on an assumption that the merged EchoStar and DIRECTV will maximize profit by nationally pricing all aspects of the packages of EchoStar and DIRECTV equipment, installation, programming and special promotions. It is claimed that both companies have been practicing national pricing, and will simply continue to do so, although it is clearly evident from their marketing that they set a single
price only on program packages and offer regional or local discounts sporadically on the remaining parts of the package.

It is necessary to verify this assumption further, however, because the welfare calculation depends on its accuracy. If this assumption is correct, then two current DBS providers behave as Bertrand-Nash profit maximizers. Let the price sequence obtained in the Supplement be \( p_n^* \) (after the merger). Bertrand competition before the merger is described in (4).

\[
\begin{align*}
\max_{p^E} & \sum_i q_i^E (p_i) (p_i^E - c_i^E) \\
\max_{p^D} & \sum_i q_i^D (p_i) (p_i^D - c_i^D) \\
\max_{p^C} & q_i^C (p_i) (p_i^C - c_i^C)
\end{align*}
\]

Let the optimal price sequence before the merger obtained from (4) be \( p^* = (p_b^E, p_b^D; p_{1b}^C, p_{2b}^C, \ldots, p_{Nb}^C) \). The first order condition for the first maximization problem of (4) is given in (5):

\[
\frac{p_b^E - c_i^E}{p_b^E} \sum_i \varepsilon_i q_i^E = -\sum_i q_i^E
\]

After obtaining \( p_b^* \), we consider two issues: (a) verifying the model, and (b) studying the consistency of the welfare calculation.

To verify this model one compares this optimal price \( p_b^* \) with observed price \( p_b^o \); that is, the model is verified when \( p_b^* \) and \( p_b^o \) are approximately equal. To undertake such verification the optimal price from the model is estimated based on an observed marginal cost and elasticity, and then compared with the observed price.

With Equation (5), and observed marginal cost equal to $ per month, along with observed elasticity equal to , then the price expected from the model is . But the observed price from EchoStar's financial reports is . On any measure, the

---

5 We calculate the value using the monthly total marginal cost divided by the total number of subscribers. The information of the total cost and the number of subscribers are from the EchoStar 10K filing to the SEC. See page 37 in the document:
http://www.sec.gov/Archives/edgar/data/1001082/000103570402001116/d94539e10-k405.txt. The total operating cost includes operating expenses, cost of sales and general administration. It excludes the cost of marketing, non-cash compensation, and depreciation and amortization.

6 This number is average monthly revenue per subscriber as of December 31, 2001, obtained from EchoStar's 10K filing to the SEC. See page 37 in the document:
optimal model price is not an approximation of the current price. They differ by more than one third of the model price.

One can also derive the marginal cost implied by the model from the observed price and elasticity and then compare this implied marginal cost with the observed marginal cost. We carry out the latter test for the marginal cost comparison by rewriting (5), as:

\[ e^E = \frac{p^E \sum q^E (1 + \varepsilon^E_i) q^E_i}{\sum \varepsilon^E_i q^E_i} = \frac{p^E (1 + \varepsilon^E)}{\varepsilon^E}. \quad (6) \]

In Equation (6), the second equality is obtained if \( \varepsilon^E_E = \varepsilon_E \), i.e., the elasticity is the same across different regions. This is an assumption, made explicit in various places in the Analysis. The estimate of cost in (6) is obtained using a price \( p^E \), and \( \varepsilon_E \) from Joskow/Willig. The implied marginal cost is \( \frac{\text{Cost}}{\text{subscriber}} \) while the observed marginal cost of EchoStar is \( \frac{\text{Cost}}{\text{subscriber}} \).

A similar conclusion can be drawn from DIRECTV. For DIRECTV, the observed price average \( p^D \), the own price elasticity is assumed to be \( \varepsilon_D \) (page 49 in the Analysis). From Equation (6), the model implied marginal cost is \( \frac{\text{Cost}}{\text{subscriber}} \), but the observed marginal cost from DIRECTV documents is \( \frac{\text{Cost}}{\text{subscriber}} \). The implied marginal cost is \( \frac{\text{Cost}}{\text{subscriber}} \) more than the observed marginal cost of DIRECTV.

The price and cost measures we describe here as "observed" are consistent with industry estimates. According to Morgan Stanley Dean Witter, programming expenses for DIRECTV for its two service packages (basic plus average premium) were $19.41 per subscriber per month and for EchoStar were $20.88 per month. After adding customer care and subscriber acquisition cost, the total marginal cost is $26.80 per month for DIRECTV and $30.39 per month for EchoStar, which are only \( \frac{\text{Cost}}{\text{subscriber}} \) and \( \frac{\text{Cost}}{\text{subscriber}} \) higher than the estimates used here for DIRECTV and EchoStar respectively. (See Table 2 in the earlier Declaration of Paul MacAvoy.)

The divergence between model-based estimates and those based on average revenues and costs outlays casts fundamental doubt on the Bertrand competitiveness assumption that is the basis for their model.

---

7 The number \( \frac{\text{Cost}}{\text{subscriber}} \) is the Average Revenue per Unit (ARPU), obtained from page 8 of the DIRECTV Marketing Plan 2002 (document FCC1D0001101483). ARPU is the all DIRECTV revenue, including commercial and NRNC, divided by total DIRECTV customers including commercial, suspends and pendings. (See page 6 of the document FCC1D0001101483).

8 The number \( \frac{\text{Cost}}{\text{subscriber}} \) is the Average Cost Per Unit (ACPU), obtained from page 8 of the DIRECTV Market Plan 2002 (document FCC1D0001101483). ACPU is all DIRECTV programming cost of sales, including channel rate card, sports rights, PPV fees and guarantees copyright and launch fees, license fee waivers and Purchase Accounting adjustment, divided by total DIRECTV customers. (See page 6 of the document FCC1D0001101483).
The adoption of a "correct" or "realistic" model is critical to forecasts of post-merger prices. This is because it is necessary to extrapolate the model-determined price change from the Merger based on current price.

Regardless of whether the model is accurate in rendering competition, this price change should be between \( p_s^* \) and \( p_a^* \), not between \( p_s^* \) and \( p_a^* \). In the Analysis, it appears that their extrapolation was between \( p_s^* \) and \( p_a^* \), so that welfare gains are overestimated since \( E(p_s^*) > p_a^* \), given that there are in fact differences in regional pricing. To indicate the concern with this inequality, we start from the extreme case that the DBS provider in each region behaves as an independent profit maximizer,

\[
p_i^E = \frac{c_i^E}{1 + \varepsilon_i^E},
\]

which is a convex function of \( \varepsilon_i^E \). According to Jensen's inequality (assuming limited variation in marginal cost \( c_i \)), \( E(p_i^E) > p_i^E \). In practice, regions do not necessarily behave independently, and the inequality still holds as long as degrees of optimal pricing exist. Thus, since \( E(p_s^*) > p_s^* \), using \( p_a^* \) as the benchmark will lead to an overestimate of the welfare gains from marginal cost reduction due to the Merger.

To determine the relationship between the price before the Merger in the Bertrand model \( p_a^E \) and the price after the Merger \( p_a^F \), the first order condition of the maximization problem after Merger in page nine of the Supplement is given in (7):

\[
\frac{P_s^E - c_s^E}{p_s^E} \sum_i \varepsilon_i^E q_i^E = -\sum_i q_i^E - \frac{p_a^D - c_s^D}{p_a^D} \sum_i q_i^E \varepsilon_i^D
\]

The difference between (5) and (7) is the extra term on the right hand side of (7). This term is negative. Therefore, the right hand side in (7) is smaller (larger in magnitude) than that in (5), i.e., \( p_a^E > p_a^F \). As a consequence, in order to arrive at a conclusion of significant welfare gain, the cost reduction after the Merger has to be large enough to compensate for the price increase due to reducing the number of firms from three to two where there is cable, and from two to one where there is no cable service. When the correct estimate of price \( p_s^E \) is used, we expect that this condition is not realized.

In order to understand the relationships among marginal costs and prices before and after the Merger, we conduct two experiments.

In the first experiment, we estimate necessary magnitude of cost reduction to ensure the same price before and after the merger. Assume the cross and own elasticities are the same across different areas, i.e., \( \varepsilon_i^E = \varepsilon_E \) and \( \varepsilon_i^D = \varepsilon_{ED} \). Dividing (7) by (5), we have:
Equation (8) lists both EchoStar and DIRECTV. The parameter $\Delta$ is the cost reduction after the Merger. Further, let $p_a^E = p_h^E$ and $p_a^D = p_b^D$, and, for simplicity, assuming the same cost reduction for both EchoStar and DIRECTV:

$$\frac{(p_a^E - c_a^E + \Delta^E)}{(p_h^E - c_h^E)} = 1 + \varepsilon_{ED} \frac{p_a^D - c_a^D + \Delta^D}{p_a^D}$$

In (9), the values $\Delta^E$ and $\Delta^D$ are the necessary cost reductions that merely ensure the same price before and after the Merger.

Let $\varepsilon_{ED} = \boxed{\varepsilon_E}$, $\varepsilon_{DE} = \boxed{\varepsilon_D}$, $p^E = \boxed{\varepsilon_E}$, $p^D = \boxed{\varepsilon_D}$, $c^E = \boxed{\varepsilon_E}$, and $c^D = \boxed{\varepsilon_D}$. We have: $\Delta^E = \boxed{\varepsilon_E}$ and $\Delta^D = \boxed{\varepsilon_D}$. Based on the Analysis (Column D on page 52 of the Analysis), the most optimistic cost savings are $\boxed{\varepsilon_E}$ for EchoStar and $\boxed{\varepsilon_D}$ for DIRECTV. These are only for EchoStar and for DIRECTV of the cost savings that are necessary to even theoretically avoid consumer welfare loss (same prices before and after Merger) due to the Merger. An even larger cost reduction is necessary to have consumer welfare gains.

In the second experiment, we calibrate the after-Merger prices assuming the costs are lowered by the most optimistic estimate of cost reduction: $\boxed{\varepsilon_E}$ for DIRECTV and $\boxed{\varepsilon_D}$ for EchoStar. We calibrate the after-Merger prices $p_a^E$ and $p_a^D$ by solving the Equation (8). The values are: $p_a^E = \boxed{\varepsilon_E}$ and $p_a^D = \boxed{\varepsilon_D}$, the new prices would almost double. A welfare loss in the billions of dollars must occur at these high prices.

Our estimates are substantially at variance with those of Joskow/Willig because Joskow/Willig "calibrate" marginal cost while we use marginal cost measures derived from DIRECTV's internal documents and from the 10K filings of EchoStar. The Joskow/Willig "calibrated" marginal costs are inconsistent with observed measures of marginal costs from their company documents. They cannot predict the after-Merger price accurately from their hypothetical model of marginal costs. By using Joskow/Willig's model and their elasticity estimates, but data-based measures of marginal costs, we show that a significant welfare loss must occur even with the most optimistic estimates of cost reduction from the Merger. In conclusion, the Bertrand model and/or the price elasticity estimates of Joskow/Willig are flawed and any welfare calculation in Joskow/Willig is not applicable.
(5) Joskow/Willig Misestimate Welfare Gains From Expanding Local-into-Local Services.

The Merger is assumed to be necessary for New EchoStar to expand local-into-local (LIL) service. The argument provided in the Willig Declaration of February 25, 2002 can be characterized as follows: it is not profitable to provide LIL since current and/or planned near future capacity is not sufficient to allow direct broadcast to all relevant local markets. But it is not plausible to assume that DMAs ranked 71-210 will have LIL only because of the Merger. (EchoStar itself currently plans to introduce LIL in Burlington, Vermont (DMA 90).) And even if LIL service can only be introduced to the remaining DMAs after the Merger there is a significant overestimate of the welfare gain. Here we assess this overestimate, for the sake of argument.

As described in the Supplement, the mean utility of product j is $A_j = x_j\beta - a_p + \zeta$ where $x_j = 1$ if product j provides local service. An increase in mean utility level due to the introduction of local service is equivalent to a decrease in price $\beta/(-\alpha)$, which is used as the measure of a gain in welfare from new local service. Since the value of $\alpha$ is specified by “calibration,” only the value of the coefficient $\beta$ needs to be estimated.

There are three problems in estimating the value of $\beta$. The first problem is mechanical. On page 12 of the Supplement, Joskow/Willig use the following formula: $\beta^u = \log(s^l_b / s^0_b)$. A straightforward manipulation shows that a correct coefficient should be: $\beta^u = (1 - \sigma)\log(s^l_b / s^0_b)$. Since $\sigma = \underline{1}$, applying the formula on page 12 would result in a higher welfare gain than would be correct.

The second problem is that the formula to calculate the value of $\beta^l$ on page 11 of the Supplement is based on the assumption that all prices, including prices of DIRECTV $p^D$, EchoStar $p^E$ and cable $p^C$, are constant. If $\beta^l$ can only be obtained by assuming constant prices, the price variables should enter as control variables in the share regression. However, the regression equation on page 12 of the Supplement does not include any prices. During the sample period (January 1998 – March 2002), DIRECTV increased prices in August, 2000, while EchoStar increased prices in April, 2000 and again in February, 2001.9 In addition, we know that cable prices $p^C$ also vary significantly, as shown by the slide on page 21 entitled “Cable Price Changes Vary Greatly by MSO.”

Third, the omitted price variables in the share regressions create serious endogeneity problems. It is entirely possible that when and where consumers have LIL installed is a direct response to aggressive pricing of a cable competitor. The error term is therefore correlated with LIL. After an arrival of LIL, all equilibrium prices change and this change has to be captured in order to obtain the correct coefficient estimate. In both cases, the error is correlated with LIL. In addition to the endogeneity problem, the

---

9 Our calculation from the [data provided by EchoStar and DIRECTV](#).
change in shares $\Delta \text{Sh}_i$ could be correlated with $\Delta \text{Sh}_{i-1}$. None of these problems is dealt with in the Supplement.

Of the three, the most serious problem occurs as a result of the lack of prices in the share equation. Although no direct reasons are offered in the Supplement as to why prices are not in the share regressions, the discussion indirectly indicates that such regressions produce "wrong signs and implausible magnitudes" on price coefficients that "vary dramatically across and within models." (See page 29 of the Analysis.) For this reason, the "single unified econometric approach" model is abandoned in favor of their calibrated/estimated discrete choice model. However, when the abandoned model produces favorable results, because of elimination of the price information, it becomes the model of choice. Recognizing the problem of not including price information, the authors again apply the elasticity estimates obtained from discrete choice model to "adjust" the parameter estimate. This is an unacceptable search for "useful" values.

DBS services are provided in two generic classes of markets. In the first there are clusters of local markets not served by cable where customers to date have had an effective choice only between DIRECTV and EchoStar. These two firms have provided comparable, only slightly differentiated, programming and pricing packages. In all urban and some suburban locations there have been two DBS and one or slightly more than one wireline cable operator. The footprint of the cable provider has determined the geographic location of separate markets containing the majority of the subscribers throughout the United States. Joskow/Willig provide no analysis of existing competition or prospective changes from the Merger of these separate markets.

(6) The Joskow/Willig Model Formulations Result In Irrelevant Estimates Of Anti-Competitive Effects In Any Event.

If the proposed Merger between EchoStar and DIRECTV were to be approved, so that DBS rivalry between these two providers is terminated, consumers in non-cable markets lose the benefits of competition. In response to creating such a monopoly, the surviving firm promises to set the same prices in non-cable and cable markets. Promises notwithstanding, the merger-to-monopoly in non-cable markets is, by itself, sufficient concern to reject this proposed transaction.

These basic facts are not confronted in the Joskow/Willig Analysis because it assumes away the existence of non-cable markets. A definition of a single "nationwide" market is utter nonsense, made evident by the HHI estimates that fold various cable company "shares" from services in New England and California in the same "national" market. Their review of cable prices indicating substantial variability denies the existence of the single market. If it existed, then all cable prices would increase and/or decrease by the same amount (why otherwise should cable in one location of "the market" be cheaper than in another location).

The proposed Merger of EchoStar and DIRECTV, by creating a monopoly in non-cable markets, would generate significant welfare losses for millions of households. The two
DBS providers are not confined to any particular location within the continental United States, but retailers of their equipment are so confined and they compete in clusters with the same demand conditions. We identified 14 examples of such geographic clusters, and using the Warren Communications census-block database, mapped the largest, contiguous blocks not served by cable. There are over one million households in the largest of these clusters that would have no choice in MVPD service if the proposed Merger between EchoStar and DIRECTV were to be approved. There would be more than a half million in the Gulf Coast, and a quarter million in Hoosier, Appalachian, Chesapeake, and Central Midwest that would be vulnerable to a post-Merger reduction in service alternatives.

In the MacAvoy Declaration included with NRTC’s Petition to Deny, an alternative discussion of potential welfare losses attributable to the Merger is set forth, based on the Lerner Index, not Bertrand model. The analysis is confined to the non-cabled areas. Briefly summarized, the losses in the four clusters with large numbers of DBS households exceed one million dollars per month; that is, the combination of price increase on established service, and price increases that reduce service (deadweight loss) come to more than one million dollars in the Carolina, Gulf Coast, Hoosier, and Appalachian clusters. The estimated total loss across the 14 clusters would exceed ten million dollars per month. The rural consumers would in total lose $120 million per year, in the 14 clusters of rural markets, alone, for as many years as the monopoly would be effective. Thus, EchoStar’s proposed acquisition of DIRECTV would leave existing and potential DBS customers in rural areas where cable is not available without a significant choice of MVPD service. According to DIRECTV’s filings with the FCC, in August 2001, nearly thirty percent of its 8.7 million subscribers, or 2.5 million subscribers, live in areas not passed by cable. If market conditions at all such locations were like those in the 14 clusters, then total losses to all rural consumers by simple extrapolation would exceed $430 million per year for those subscribing to DIRECTV and $272 million for those subscribing to EchoStar. This extrapolation assumes that DBS subscribers in small clusters without cable pay the average price per month now, and the predicted monopoly price after the Merger levied on the average customer in the 14 large clusters. These losses are ignored in the Joskow/Willig studies because by assumption there are no markets where cable services are absent. The Joskow/Willig studies are irrelevant in so far as these antitrust concerns are not addressed.

We hereby certify under penalty of perjury that the foregoing is true and correct to the best of our knowledge, information and belief.

/s/
Li Gan

/s/
Paul W. MacAvoy
May 13, 2002

Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
Office of the Secretary
445-12th Street, SW
Washington, DC 20554

Re: Notice of Written Ex Parte Presentation;
Application of EchoStar Communications Corporation,
General Motors Corporation and Hughes Electronics Corporation,
Transferor, and EchoStar Communications Corporation, Transferee,
For Authority to Transfer Control
CS Docket Number 01-348

Dear Ms. Dortch:

On April 16, 2002, the undersigned and other representatives of our client the National Rural Telecommunications Cooperative (NRTC) met with Commission staff in connection with NRTC’s Petition to Deny the above-captioned Application.\(^1\) Dr. Paul W. MacAvoy of Yale University, an economic expert acting on behalf of NRTC in this proceeding, participated in the meeting.\(^2\)

During the meeting, Commission staff requested that Dr. MacAvoy submit additional information regarding his elasticity estimate. In particular, he was asked to analyze the impact on elasticity when he used a full set of data in his demand regression rather than only the first half of the data that contained relatively higher prices. Dr. MacAvoy’s response is attached. As indicated, his analysis using the full data set shows that the difference is only -.14, which is close to his original estimate using only the first half of the data.

\(^1\) See, NRTC Ex Parte Letter, CS Docket No. 01-348 (April 17, 2002). See also Petition to Deny By The National Rural Telecommunications Cooperative, CS Docket No. 01-348 (NRTC Petition) (February 4, 2002); NRTC Ex Parte Reply to Opposition, CS Docket No. 01-348 (NRTC Reply) (April 4, 2002).

\(^2\) NRTC Petition, Exhibit 1; NRTC Reply, Exhibit 1.
Should you have any questions or require any additional information, please feel free to contact the undersigned.

Sincerely,

Jack Richards

cc: Jim Bird
C. Anthony Bush
Neil A. Dellar
Kiran Duwadi
Barbara Esbin
Marcia Glauberman
Julius Knapp
JoAnn Lucanik
David Sappington
Royce Dickens Sherlock
Marilyn Simon
Donald Stockdale
Douglas Webbink
Harry Wingo
Qualex International
Pantelis Michalopoulos
Counsel for EchoStar Communications Corporation
Gary M. Epstein
Counsel for General Motors Corporation and Hughes Electronics
Query: How does the elasticity estimate from the first half data change when you use the full data set in the demand regression?

My reported elasticity (-1.55), is obtained using only the first half of the data where prices are relatively higher. The rationale for using the high-price half of data is that the post merger price is likely to be in this half. In order to compare the elasticity obtained from the first half (low price half) to the one with the second half, we consider a simple regression:

\[
\log(\text{number of subscribers}) = \text{constant} + b_1 \log(\text{price}) + b_2 \log(\text{density}) + b_3 \log(\text{population}) + b_4 \text{ dummy (1 if 2nd half)}
\]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>95% CI</th>
<th>T Statistic</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>b_1</td>
<td>-1.44</td>
<td>.60</td>
<td>-.29</td>
<td>-2.40</td>
<td>.018</td>
</tr>
<tr>
<td>b_2</td>
<td>-1.4</td>
<td>.029</td>
<td>-.83</td>
<td>-5.5</td>
<td>.000</td>
</tr>
<tr>
<td>b_3</td>
<td>.98</td>
<td>.033</td>
<td>-.009</td>
<td>3.1</td>
<td>.002</td>
</tr>
<tr>
<td>b_4 (dummy)</td>
<td>-.14</td>
<td>.073</td>
<td>-.29</td>
<td>-2.0</td>
<td>.046</td>
</tr>
</tbody>
</table>

\[ R^2 = .91 \]

Total number of DMA: 166

The estimated elasticity using the full sample is slightly lower (-1.44) in magnitude than the estimate obtained using only the first half data, which is -1.55. There is a slight but statistically significant difference in elasticity between the first half and the second half data. The first half has a slightly lower elasticity in magnitude than the one obtained from the second half data. The difference is small (-.14), and the new estimate using the full sample is close to our estimate using only the first half of the data.
In The Matter Of
VisionStar Incorporated
Application For Modification of
Authority To Construct, Launch
And Operate A Ka-band Satellite
System In The Fixed Satellite
Service

To: The Commission

PETITION TO DENY
BY THE
NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE

Steven T. Berman, Senior Vice President
Business Affairs and General Counsel

NATIONAL RURAL TELECOMMUNICATIONS
COOPERATIVE
2121 Cooperative Way, Suite 500
Herndon, VA 20171

Jack Richards
Kevin G. Rupy
Keller and Heckman LLP
1001 G Street, NW
Washington, D.C. 20001
(202) 434-4210

June 17, 2002
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>iii</td>
</tr>
<tr>
<td>I. NRTC BACKGROUND</td>
<td>3</td>
</tr>
<tr>
<td>II. COMMENTS</td>
<td>4</td>
</tr>
<tr>
<td>A. EchoStar’s Motives In Filing The Extension Request Are Suspect.</td>
<td>7</td>
</tr>
<tr>
<td>B. EchoStar Easily Could Have Satisfied Its Milestone Requirements.</td>
<td>10</td>
</tr>
<tr>
<td>C. EchoStar Has A Long History of Bad Faith And Disingenuous Behavior With The Commission.</td>
<td>14</td>
</tr>
<tr>
<td>D. EchoStar Is Undermining The Ka-Band Industry To Promote Its Proposed Merger With Hughes.</td>
<td>18</td>
</tr>
<tr>
<td>E. The Commission Should Revoke EchoStar’s License And Award It To A New Licensee Committed To Ka-band Deployment.</td>
<td>19</td>
</tr>
<tr>
<td>F. If EchoStar’s Extension Request Is Granted, The Commission Will Be Forced To Issue Extensions To All Ka-band Licensees.</td>
<td></td>
</tr>
<tr>
<td>III. CONCLUSION.</td>
<td></td>
</tr>
</tbody>
</table>

EXHIBIT A: ECHOSTAR/DIRECTV “FLIP FLOP” CHART  
EXHIBIT B: Ka-BAND MILESTONE CHART
SUMMARY

By failing to fund its VisionStar Ka-band project, EchoStar is attempting to demonstrate that only the proposed EchoStar/Hughes Merger will allow for the universal deployment of broadband satellite services. By abandoning its VisionStar obligation -- just as it abandoned WildBlue and StarBand -- EchoStar is attempting to "prove" that broadband deployment cannot occur without the Merger.

In its Extension Request, EchoStar argues that an economic downturn affecting financing of all Ka-band satellite projects justifies an extension of its milestone obligations. When examined in the context of EchoStar's overall fiscal well being, however, EchoStar seems to have missed its Ka-band milestones not as a result of the financial community's mood, but because of EchoStar's calculated business decisions.

In the last several quarters, EchoStar has disclosed to the Securities Exchange Commission (SEC) a series of highly lucrative earnings reports -- each seemingly better than the last. Revenues are up. EBITDA is up. Cash, cash equivalents and marketable investment securities are up. EchoStar's financial situation is strong enough to enable it to commit billions of dollars to to a monopoly Merger bid and other satellite projects -- but not to VisionStar.

As the Commission is well aware, EchoStar's regulatory history is rife with troubling conduct: willful violations of the Communications Act, knowing disregard for the Commission's Rules and Regulations and a complete disrespect for the Commission's authority. Like a story that keeps repeating itself, EchoStar again comes before the Commission -- like so many times before -- asking for forgiveness rather than permission.

After publicly disclosing months ago the need to file an extension of its Ka-band milestones, EchoStar waited until the last possible moment (i.e. the last day of the last month of
its "complete construction" milestone) to seek an extension -- just as EchoStar had done in response to the Commission's Request for Information in the EchoStar/Hughes Merger proceeding. Compounding its tardiness, EchoStar gives one excuse for its milestone failure to the FCC (a depressed financial market) and another to the SEC (a change in satellite design).

EchoStar's lack of candor with the Commission should be dealt with swiftly and decisively. The Commission should revoke EchoStar's Ka-band license and reassign it to a new licensee with an extended May 2005 milestone. To do otherwise would simply reward EchoStar for its misconduct.

At a minimum, the Commission should thoroughly investigate EchoStar's claims in its Extension Request. In particular, it should subpoena witnesses, examine documents and conduct a full investigation as to why and how EchoStar was "forced" to miss payments to its satellite contractor, as it claims. The Commission should seek the same information from the satellite contractor.

EchoStar has placed the Commission in an awkward position. If EchoStar's claims of a broad economic downturn are considered to be sufficient to justify its Extension Request, the Commission will be forced to grant similar extension requests to other similarly situated Ka-band licensees. If the Extension Request is denied, the orbital slot will need to be re-licensed. Either way, EchoStar's actions will have delayed its own Ka-band broadband deployment, chilled investment by others, and provided fodder for its proposed Merger.

This type of disingenuous behavior has become EchoStar's trademark, and it should not be countenanced further by the Commission. The Commission should revoke EchoStar's Ka-band license and award it to a new licensee.
BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In The Matter Of

VisionStar Incorporated

Application For Modification of
Authority To Construct, Launch
And Operate A Ka-band Satellite
System In The Fixed Satellite
Service

To: The Commission

PETITION TO DENY
BY THE
NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE

The National Rural Telecommunications Cooperative (NRTC), by its attorneys, hereby submits this Petition to Deny in response to the modification request filed by VisionStar Incorporated (VisionStar) in the above captioned proceeding (Extension Request). 1 VisionStar is a majority-owned -- 90% -- indirect subsidiary of EchoStar Communications Corporation (EchoStar). 2 For all practical purposes, VisionStar is EchoStar. EchoStar requests an extension of its construction completion date for its Ka-band satellite from April 2002 to April 2005, and an extension of its launch date from May 2002 to May 2005. The EchoStar Ka-band satellite is authorized for the 113° W.L. orbital location. 3

---

1 VisionStar Corporation Request for Extension of Time To Complete Construction and To Launch Fixed Satellite Service Satellite, File Nos. SAT-LOA-19950929-00156, SAT-T/C-20011215-00163 (filed April 30, 2002); See also Federal Communications Commission Report No. 00116, Satellite Space Applications Accepted for Filing, SAT-MOD-20020430-00075 (released May 17, 2002).
In filing its *Extension Request*, it is apparent that EchoStar -- as the Commission has found in the past -- is once again acting in bad faith. The *Extension Request* has absolutely nothing to do with EchoStar's failure to achieve its milestones, and everything to do with EchoStar's proposed merger with Hughes Electronics Corporation (Hughes) (the Merger).\(^4\) By single-handedly undermining the Ka-band market, EchoStar is attempting to demonstrate that only the Merger will allow for the universal deployment of broadband satellite services.

EchoStar's Ka-band milestones were easily obtainable for a company of its stature. Of the 24 Ka-band licensees, EchoStar was clearly the best suited to satisfy its construction and launch requirements. Yet while EchoStar has spent or committed to spend billions of dollars elsewhere, it has been unable fund a single satellite pursuant to a schedule established by the Commission and accepted by EchoStar when it received its VisionStar license last year. It failed to achieve its milestones not as a result of any market downturn, but because of a calculated business decision.

EchoStar has placed the Commission between a rock and a hard place. If the Commission finds that the current economic climate justifies EchoStar's failure to meet its milestones, then EchoStar will have effectively forced the Commission to grant extensions to all other similarly situated Ka-band licensees who face the same financial environment. If the *Extension Request* is denied, the orbital slot will need to be relicensed. Either way, EchoStar

---

\(^4\) Application of EchoStar Communications Corporation, General Motors Corporation and Hughes Electronics Corporation, Transferor; and EchoStar Communications Corporation, Transferee, For Authority to Transfer Control, File Number 01-348, p. 6 (filed December 3, 2001) (*Application*). See also Cable Service Bureau Action, EchoStar Communications Corporation, General Motors Corporation, and Hughes Electronics Corporation Seek FCC Consent for a Proposed Transfer of Control, CS Docket No. 01-348, DA 01-3005 (released December 21, 2001). NRTC filed a Petition to Deny the *Application*; See Petition to Deny of the National Rural Telecommunications Cooperative, *In the Matter of EchoStar Communications Corporation, General Motors Corporation and Hughes Electronics Corporation*, CS Docket No. 01-348 (filed February 4, 2002) (*NRTC Petition*).
will have successfully warehoused its Ka-band license and advanced its self-serving argument that broadband deployment is not possible unless the pending Merger is approved. 5

I. NRTC BACKGROUND.

1. NRTC is a not-for-profit cooperative comprised of 705 rural electric cooperatives, 128 rural telephone cooperatives and 189 independent rural telephone companies located throughout 46 states. Since 1986, NRTC's mission has been to provide advanced telecommunications technologies and services to rural America. NRTC has long represented the views of rural Americans before the FCC, the National Telecommunications and Information Agency (NTIA), and the United States Congress.

2. In 1994, NRTC assisted in capitalizing the launch of the DIRECTV satellite business. Through a Distribution Agreement between NRTC and Hughes Communications Galaxy, Inc. (DIRECTV's predecessor-in-interest), NRTC received exclusive program distribution and other rights to market DIRECTV's Direct Broadcast Satellite (DBS) programming and other services throughout much of rural America. NRTC, its members and affiliates currently distribute DIRECTV programming to approximately 1,800,000 rural households. Additionally, NRTC provides dial-up Internet access, 220 MHz wireless services, long distance telephone services, automated meter reading and other telecommunications services to its members and affiliates who in turn provide these services to rural consumers.

3. NRTC also provisions its members as Internet Service Providers and distributes broadband Internet access services via Ku-band satellite pursuant to agreements with StarBand Communications, Inc. (previously controlled by EchoStar) and Hughes Network Systems.

5 See Memorandum Opinion and Order, PanAmSat Licensee Corp., 16 FCC Rcd 11534, ¶12 (released May 25, 2001); Order, VisionStar, Inc., 16 FCC Rcd 11034, ¶4 (released May 25, 2001) (stating that warehousing is adverse to the public interest because it eliminates the "availability of services at the earliest possible date by blocking entry
During the past few years, NRTC has been actively involved in broadband deployment for rural Americans, supporting and serving its members who utilize wireline (DSL, cable modem) and wireless (terrestrial and satellite) technologies. NRTC and its members are even testing the feasibility of broadband delivery via electric power lines.

4. NRTC is convinced that the Ka-band will be an essential tool for the deployment of advanced telecommunications services to rural Americans. The Ka-band is a national resource that should not be jeopardized through one company’s attempt to warehouse a U.S. license in order to gain a DBS and broadband monopoly.

II. COMMENTS.

A. EchoStar’s Motives In Filing The Extension Request Are Suspect.

5. The Commission’s analysis of the Extension Request could begin with any number of questions. Why did EchoStar wait until the eleventh hour to ask the Commission for an extension? Why is EchoStar telling the Commission and the SEC different stories about its failure to achieve its milestones? How can EchoStar afford billions of dollars for a Merger and other satellite projects but cannot fund a single Ka-band satellite for VisionStar? No answers are provided in the Extension Request.

6. Months before EchoStar came to the Commission seeking an extension of time, it publicly disclosed that it would be unable to meet its milestones. On January 25, 2002 -- more than three months before filing its Extension Request -- EchoStar informed the SEC that “it is unlikely that we will meet [our Ka-band] milestones and we may need to request an extension...
from the FCC." One month later, in February 28, 2002, EchoStar confirmed with the SEC that it “will have to ask the FCC for an extension.”

7. Yet despite having this information no later than February 28, 2002 (and probably much earlier), EchoStar waited until the April 30, 2002, to file its Extension Request with the Commission. In fact, its Extension Request was filed on the very last day of the month in which it was required to complete construction of its satellite. This is the same tactic of waiting until the last minute to respond to a Commission requirement— for which the Commission previously chastised EchoStar in the Merger proceeding.

8. Clearly, the fact that a licensee of a scarce Ka-band authorization will miss a crucial FCC milestone is important information that the Commission deserves to receive as soon as it becomes available. After all, the core assets— the spectrum and orbital slots— belong to the American public, not to EchoStar. But for whatever reason, EchoStar informed the SEC and the investing public that it would miss this crucial milestone months before it so advised the Commission.

9. The Commission has stated that a Ka-band licensee who “reasonably could not have believed” it was in milestone compliance was “required to file a request for an extension of the

---

7 SEC Form 10-K405, filed by EchoStar Communications, Inc., p. 10, February 28, 2002 (stating that EchoStar “will not complete construction or launch of the satellite by [its milestone] dates and will have to ask the FCC for an extension.”) (EchoStar 10-K405).
8 Letter from W. Kenneth Ferree, Chief, Cable Services Bureau, to Pantelis Michalopoulos, Counsel for EchoStar Communications, and Gary M. Epstein, Counsel for General Motors Corporation and Hughes Electronics Corporation (March 7, 2002); See also Letter from W. Kenneth Ferree, Chief, Cable Services Bureau, to Pantelis Michalopoulos, Counsel for EchoStar Communications, and Gary M. Epstein, Counsel for General Motors Corporation and Hughes Electronics Corporation (February 4, 2002).
9 See e.g., 47 C.F.R. § 1.65 (stating that applicants are responsible for the continuing accuracy and completeness of information furnished in a pending application or in Commission proceedings involving a pending application. Applicants are required to notify the Commission of any changes “as promptly as possible and in any event within 30 days.”).
milestones prior to [its milestone date]."10 EchoStar reasonably could not have believed months prior to April 2002 that it would achieve its milestone date. In fact, according to its SEC filing, EchoStar clearly knew that it would not achieve its assigned milestone date. Still, it remained silent with the Commission until the last minute.

10. With its Extension Request, EchoStar apparently thought it best to seek forgiveness, rather than to ask permission. Perhaps EchoStar simply forgot. Perhaps EchoStar was too busy spending money on its proposed Merger and other satellite projects to inform the Commission that it would miss its Ka-band milestones. Regardless, its decision to withhold this information from the Commission represents either a lack of concern or candor. As discussed below, in light of EchoStar's well-known track record at the Commission, the latter scenario seems much more likely. In any event, as a result of EchoStar's inaction, the Commission has been robbed of valuable time to ensure prompt deployment of a Ka-band satellite at the 113° W.L. orbital position.

11 EchoStar's further lack of candor can be found by contrasting the content of its Extension Request before the Commission with its SEC filings regarding the same topic. In its SEC filings, EchoStar claims that its milestone failures were a result of "among other things . . . changes in the VisionStar satellite design due to the recent failure of the Astrolink Ka-band satellite venture."11 Nowhere in the SEC filings does EchoStar go into the apparent lack of funding in the Ka-band industry.

12. Yet funding problems are the only grounds articulated by EchoStar in the Extension Request. EchoStar makes no mention of the satellite design or any specific impact of the Astrolink failure, only the overall bleak financial environment facing the entire Ka-band

---

industry. Perhaps EchoStar pursued this course because it is well established that a change in satellite design is a business decision that does not provide a basis for an extension of a Commission milestone.13

13. The Extension Request raises questions regarding EchoStar’s good faith. EchoStar knowingly withheld critical information from the Commission. It filed its Extension Request at the last minute. It reported conflicting reasons for its milestone failure. Further, it claimed that its inability to construct and launch a single Ka-band satellite was due solely to a flat financial market.

B. EchoStar Easily Could Have Satisfied Its Milestone Requirements.

14. The Extension Request is peppered with comments that emphasize EchoStar’s alleged financial woes. EchoStar says it has been adversely impacted by a “drought of funds”14 and has been “forced to delay certain payments.”15 It is difficult to perceive, however, how EchoStar cannot obtain financing for a single Ka-band satellite when it is reporting phenomenal earnings and committing huge amounts of capital to countless other projects (including a proposed Merger). Indeed, EchoStar seems to have missed its Ka-band milestones not as a result of the financial community’s mood, but because of EchoStar’s calculated business decisions.

15. EchoStar appears willing to commit funds towards almost any project so long as it is not related to its Ka-band obligations. For example, EchoStar has indicated that it will commit at

11 EchoStar S-3A, p. 19.
12 Moreover, far from painting Ka-band investments as a risky venture, EchoStar told the SEC in February 2002 that it “believe[s] that spot beam Ka-band satellites could become a cost effective way to offer consumers high-speed two-way internet access in the future,” and that it could be “successfully offered in urban and suburban areas.” EchoStar 10-K405, p. 10.
14 Extension Request, p. 6.
15 Extension Request, p. 3 (emphasis added).
least $7.0 billion to the proposed Merger. Only a few weeks prior to filing its Extension Request, EchoStar also asked the Commission for authority to launch and operate three new satellites for a yet-to-be established service at a potential cost of more than one billion dollars. EchoStar's willingness to commit billions to the Merger and other projects while professing poverty when confronted with its VisionStar Ka-band obligations -- undermines its credibility, to say the least.  

16. EchoStar’s stinginess towards its Ka-band obligations is readily apparent in its most recent Annual Report with the SEC. In that filing, EchoStar disclosed that it spent only a total of approximately $2.8 million on the EchoStar acquisition and has made loans to VisionStar totaling approximately $4.6 million as of December 31, 2001. This is an absolute pittance compared with its Merger and other expenditures. In fact, its VisionStar expenditures are a mere one tenth of one percent compared to the amounts spent or proposed in its Merger with Hughes.

17. EchoStar claims that the sour mood of the financial community not only has hampered EchoStar’s ability to obtain outside funding, but has dried up internal funding for its Ka-band project as well. Yet this purported lack of internal funding flies in the face of EchoStar’s published earnings.

18. While some companies in today’s financial market are truly experiencing a dearth of funds, EchoStar is not one of them. A mere two days after filing its Extension Request, EchoStar filed its First Quarter earnings results for 2002. EchoStar’s total revenue for the First Quarter

---

16 EchoStar 10K, p. 3.
18 Ex Parte Reply to Opposition of the National Rural Telecommunications Cooperative, In the Matter of EchoStar Communications Corporation, General Motors Corporation and Hughes Electronics Corporation, CS Docket No. 01-348, pp. 36-41 (filed April 4, 2002) (NRTC Reply); See also n. 45, infra.
19 EchoStar 10K, p. 10.