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# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

AUG 25 2011

Federal Communications Commission
Bureau / Office

In the Matters of	)
<b>EchoStar Satellite Operating Corporation</b>	) File No. SAT-LOA-20030609-00113 ) File No. SAT-MOD-20081229-00239
Certifications of Milestone Compliance	) Call Sign S2454
<b>EchoStar Satellite Operating Corporation</b>	) File No. SAT-MOD-20101124-00244 ) File No. SAT-AMD-20110330-00065
Application to Authorize Operations of the EchoStar 8 Satellite at the 86.5° W.L. Orbital Location	) Call Sign S2439 )

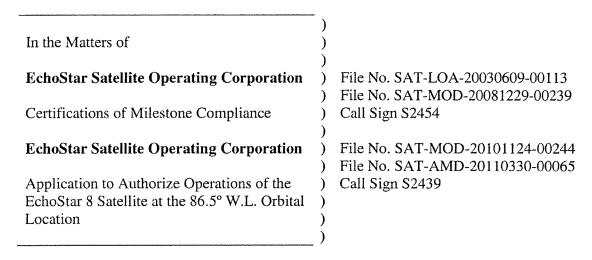
To the International Bureau

PETITION FOR RECONSIDERATION

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To the International Bureau

### PETITION FOR RECONSIDERATION

### I. INTRODUCTION

EchoStar Satellite Operating Corporation ("EchoStar") respectfully petitions the International Bureau to reconsider its July 23, 2011 order (the "Order") (1) finding that EchoStar Corporation (also "EchoStar"), had failed to meet the critical design review ("CDR") milestone for its authorization at 86.5° W.L., and (2) rejecting EchoStar's request to modify its 86.5° W.L. authorization to allow the in-orbit EchoStar 8 satellite to provide service from that orbital location. By declaring the authorization null and void, the Order – if not reconsidered – would

On April 21, 2011, the Commission consented to the *pro forma* assignment of EchoStar Corporation's authorization to construct, launch, and operate a Direct Broadcast Satellite ("DBS") satellite at 86.5° W.L to EchoStar Satellite Operating Corporation. *See* File No. SAT-ASG-20110224-00033 (granted Apr. 21, 2011). The *pro forma* assignment was consummated on May 23, 2011. *See* Letter from Pantelis Michalopoulos and L. Lisa Sandoval, Counsel for EchoStar Corporation and EchoStar Satellite Operating Corporation, to Marlene H. Dortch, Secretary, FCC, File No. SAT-ASG-20110224-00033 (May 23, 2011).

allow the potential inherent in the 86.5° W.L. orbital location to remain unrealized for the foreseeable future.<sup>2</sup>

With all due respect, the Order misapplies the Commission's milestone policy and precedent and runs contrary to the Commission's spectrum utilization policies, especially in this time of spectrum scarcity and financial crisis. EchoStar urges the Bureau to resist adopting a policy that satellite operators should let spectrum lie fallow rather than use it with anything other than a brand new satellite. Such a policy would be the practical result of the Order, one that is compounded by the fact that, absent reconsideration, consumers will be deprived of *any* potential service offerings from 86.5° W.L. for the foreseeable future, not just those offered by EchoStar. The Bureau should not allow that to happen.<sup>3</sup>

In addition, key new facts also justify reconsideration. First, EchoStar has developed methods to bolster even further the health and control of the EchoStar 8 satellite. Second, EchoStar is exploring innovative service offerings that may meet unfulfilled video programming needs in small markets and rural communities and that rely on the availability of capacity at 86.5° W.L. Finally, the virtually new EchoStar 15 satellite could soon be available to operate at 86.5° W.L., provided it is not already planned for service at another slot, if EchoStar 8 were to suffer any substantial anomalies.

<sup>&</sup>lt;sup>2</sup> EchoStar Certifications of Milestone Compliance, *Memorandum Opinion and Order*, DA 11-1251 (rel. July 26, 2011) (the "Order").

<sup>&</sup>lt;sup>3</sup> It is also worth noting that without reconsideration, the United States would likely lose its place in the priority queue at the International Telecommunication Union with respect to the use of the DBS frequencies at the 86.5° W.L. orbital location. U.S. priority rights will expire in early 2015 if the frequencies are not brought into use by that time.

#### II. SUMMARY OF ARGUMENT

EchoStar has been fully committed to operating to the full extent of its DBS authorization at the 86.5° W.L. orbital location, and is working aggressively to ensure that service is provided over a healthy satellite. The Order, however, works against EchoStar's efforts to bring additional services and programming to U.S. consumers, and instead leaves a valuable orbital location and its associated spectrum resources lying fallow.

In particular, the Order reaches an adverse CDR finding despite ample evidence that all critical design decisions had been made and the satellite manufacturer was prepared to start construction with the appropriate direction from EchoStar. The Order then concludes that EchoStar 8 is an unacceptable alternative to EchoStar-86.5W (the satellite originally designated for the slot) in any event, despite the fact that EchoStar-86.5W was to be based on the same satellite bus, have the same transponder configuration and power levels, and have similar beam configurations as the EchoStar 8 satellite.

In reaching its conclusion, the Order disfavors EchoStar's plan for a simple reason – because EchoStar 8 is not a new satellite. In the Order's words, "it is not in the public interest to permit EchoStar to substitute an older in-orbit satellite for a new state-of-the-art satellite." But this amounts to stating that an empty orbital slot is superior to one occupied by a substitute satellite, no matter what level of technical parity exists between the original and its alternative. This runs counter to the Commission's spectrum utilization policy and is hard to reconcile with the principles underlying the Commission's fleet management policies, which allow operators to swap older satellites for newer ones without needing prior approval. The Order's approach, moreover, is particularly misplaced in this time of financial crisis.

<sup>&</sup>lt;sup>4</sup> *Id*. ¶ 1.

The fully functional EchoStar 8 satellite can utilize and provide service over 31 of the 32 DBS channels at the 86.5° W.L. orbital location. This makes EchoStar's request very different from the one the Bureau denied in the *Star One Order*. There the Bureau had based its decision on its findings that the proposed substitute had disparate capabilities and was nearing the end of its useful life. Neither of those findings applies here.

Even if the Order's analysis were sound, reconsideration is justified by new facts. First, EchoStar has developed a software solution that bolsters the prospects of EchoStar 8's successful operation at 86.5° W.L. for many years to come. Second, EchoStar and its primary customers, DISH Network Corporation and its subsidiaries (collectively, "DISH Network"), are assessing the viability of offerings that could expand small market and rural video programming options, but only if the capacity at 86.5° W.L. is available. Finally, the newly launched EchoStar 15 could soon be made available to operate at 86.5° W.L. (provided it is not already planned for service at another slot) in the event of an anomaly on EchoStar 8, further decreasing the chance of service interruptions from that location.

<sup>&</sup>lt;sup>5</sup> While one channel, Channel 26, cannot be used to transmit programming, it will be used to maintain accurate pointing and good service levels.

<sup>&</sup>lt;sup>6</sup> Star One, S.A. Petition for Declaratory Ruling to be Added to the Permitted List, *Order*, 25 FCC Rcd. 14338, 14341 ¶ 8 (2010) ("*Star One Order*").

<sup>&</sup>lt;sup>7</sup> See id.

### III. BACKGROUND AND PROCEDURAL HISTORY

On November 29, 2006, the Commission authorized EchoStar Satellite L.L.C., EchoStar's predecessor-in-interest, to construct a new satellite to provide DBS service from the 86.5° W.L. orbital location. The authorization came with the standard milestone schedule, which included requirements to contract for the satellite within one year, complete CDR within 2 years, complete construction within 4 years, and operate the satellite within 6 years of the November 29, 2006 authorization date. 9

On November 29, 2007, EchoStar filed with the Bureau a copy of its construction contract with Space Systems/Loral ("SS/L") to build the EchoStar-86.5W satellite. This filing satisfied the first milestone. One year later, on November 29, 2008, EchoStar submitted evidence that CDR was complete for EchoStar-86.5W, including a certification to that effect and more than 380 pages of CDR materials prepared by the spacecraft manufacturer, SS/L. 10

During this same time frame, a series of unanticipated events required EchoStar to reconsider its fleet development and deployment plans. As the Commission is aware, the loss of AMC-14 upon its launch in March 2008 placed considerable strains on EchoStar's ability to continue services from the critical 61.5° W.L. nominal orbital location. AMC-14 was intended to replace EchoStar 3 at that slot, and EchoStar 3 had already experienced several problems that had resulted in diminished service capacity. As EchoStar informed the Commission in its June 2008 report on the status of EchoStar 3, after the AMC-14 launch failure, EchoStar immediately

<sup>&</sup>lt;sup>8</sup> EchoStar Satellite L.L.C., Application to Construct, Launch, and Operate a Direct Broadcast Satellite at the 86.5° W.L. Orbital Location, *Order and Authorization*, 21 FCC Rcd. 14045 (2006).

<sup>&</sup>lt;sup>9</sup> See id. at 14058 ¶ 25.

<sup>&</sup>lt;sup>10</sup> See Letter from Pantelis Michalopoulos, Counsel for EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC, File Nos. SAT-LOA-20030609-00113; SAT-AMD- 20051118-00244 (Dec. 1, 2008) ("EchoStar 86.5" W.L. CDR Submission").

began negotiations for the construction of a new satellite to shoulder the load of services from 61.5° W.L.<sup>11</sup> EchoStar entered into an agreement with its affiliate, DISH Network, for the newly built EchoStar 15 satellite to replace the continental United States ("CONUS") capacity provided by EchoStar 3 at 61.5° W.L. EchoStar 15 was successfully launched in 2010 and replaced the failing EchoStar 3 satellite.<sup>12</sup> EchoStar also subsequently entered into a contract with SS/L to build the EchoStar 16 satellite to provide spot beam capacity at 61.5° W.L. EchoStar 16 is slated for launch in 2012.

The 61.5° W.L. nominal orbital location is critical to DISH Network's national programming service. Over 2.5 million subscribers receive programming from 61.5° W.L. After the AMC-14 launch failure, and in light of the precarious health of EchoStar 3, EchoStar and DISH Network had to prioritize resources to ensure that these subscribers would not experience a significant loss in service. EchoStar and DISH Network therefore suspended work on Echostar-86.5W after the completion of CDR in October 2008 and concentrated on completing and launching EchoStar 15 and EchoStar 16. Maintaining current service levels to subscribers had to take priority over expanding service with additional orbital slots.

Despite the necessity of suspending work on the EchoStar-86.5W satellite, EchoStar was – and is – committed to bringing the 86.5° W.L. orbital location into use on a timely basis. At the same time that EchoStar and DISH Network were arranging to construct and launch the EchoStar 15 and EchoStar 16 satellites, EchoStar began discussions and ultimately entered into a relationship with Mexican satellite operator QuetzSat, S. de R.L. de C.V. ("QuetzSat") and its

<sup>&</sup>lt;sup>11</sup> See Confidential Letter from Pantelis Michalopoulos, Counsel for EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC, File No. SAT-STA-20080325-00082 (June 30, 2008).

<sup>&</sup>lt;sup>12</sup> EchoStar 3 experienced another anomaly in January 2010, requiring EchoStar to request Commission authority to move EchoStar 6 from 72.7° W.L. to 61.5° W.L. to ensure no loss of service. *See* File No. SAT-STA-20100203-00020 (granted Mar. 3, 2010).

partner, SES Global Latin America, S.A. ("SES"), whereby EchoStar would eventually lease substantial capacity on the QuetzSat-1 satellite at the Mexican 77° W.L. nominal orbital location once the satellite was launched in 2011. In the interim, under the agreement with QuetzSat, EchoStar would "reflag" the EchoStar 8 satellite under Mexican authority and operate it at 77° W.L. until QuetzSat-1 could take its place. Once QuetzSat-1 was launched and operational at 77° W.L., however, EchoStar 8 would be available for deployment to 86.5° W.L. in late 2011, well ahead of the operational milestone for EchoStar's 86.5° W.L. authorization.

These plans were fully consistent with past practice, long recognized by the Commission, of using older, in-orbit satellites to put to productive use new orbital locations, such as 148° W.L. and 157° W.L. Consequently, EchoStar filed the underlying modification application on November 29, 2010. EchoStar requested authority to operate EchoStar 8 at the 86.5° W.L. orbital location. It also asked for a finding that it (1) had met its completion of construction milestone for the 86.5° authorization because EchoStar 8 was already in-orbit and (2) the final operational milestone would also be met once EchoStar 8 became operational at 86.5° W.L.

Alternatively, EchoStar requested a waiver of the milestone requirements for 86.5° W.L. for good cause shown – namely, the planned deployment of EchoStar 8 at that orbital location. Despite the single event upset ("SEU") affecting EchoStar 8 earlier this year, which required EchoStar to change the frequencies on which it performs telemetry, tracking, and control ("TT&C"), the satellite remains fully functional, capable of providing high quality DBS service on all but one of the authorized channels at the 86.5° W.L. orbital location. EchoStar 8 was launched in 2002 and has a remaining lifetime of at least 5 years. The satellite is based on the

<sup>&</sup>lt;sup>13</sup> See Application for Modification, File No. SAT-MOD-20101124-00244, at 1, 9-10 (filed Nov. 24, 2010).

<sup>&</sup>lt;sup>14</sup> See generally File No. SAT-AMD-20110330-00065 (filed Mar. 30, 2011).

SS/L 1300 spacecraft bus – a highly reliable and advanced model bus that is still being ordered and launched today to provide high-powered Ku-band services around the world. As planned, the EchoStar-86.5W satellite was to be based on the same bus as EchoStar 8, support the same transponder configuration and power levels, and possess comparable beam configurations.

In January and February of this year, the Commission and EchoStar exchanged letters regarding the status of the EchoStar-86.5W satellite. Yet despite the availability of the fully functional EchoStar 8 satellite, on July 26, 2011, the International Bureau found that EchoStar had failed to meet the CDR milestone and denied EchoStar's request to operate EchoStar 8 at 86.5° W.L. and its request for waiver, deeming the EchoStar 86.5° W.L. authorization null and void.

## IV. ECHOSTAR MET THE CDR MILESTONE FOR THE 86.5° W.L. AUTHORIZATION

Because of the complexity of the CDR process, and in light of the varying approaches across the engineering world, the Commission has declined to set forth rigid requirements for the CDR milestone, instead choosing to articulate certain factors or submissions that may be considered as evidence that CDR is complete, including circumstantial indicators such as CDR payments under the satellite construction contract, and direct evidence such as affidavits from the satellite manufacturer. <sup>17</sup> However, because the Commission's CDR guidance has never

<sup>&</sup>lt;sup>15</sup> See, e.g., Gunter's Space Page, http://space.skyrocket.de/doc\_sat/ssloral-1300.htm (listing the LS-1300 orders, including a 2010 order for the Anik G1 satellite).

<sup>&</sup>lt;sup>16</sup> See Confidential Letter from Pantelis Michalopoulos, Counsel for EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC, File Nos. SAT-LOA-20030609-00113; SAT-MOD-20101124-00244 (Feb. 14, 2011).

<sup>&</sup>lt;sup>17</sup> Amendment of the Commission's Space Station Licensing Rules and Polices, *First Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd. 10760, 10833 ¶ 191 (2003) ("Space Station Reform Order").

purported to be an exhaustive list, additional or even different evidence of CDR may be submitted by satellite licensees.<sup>18</sup>

The Order, however, appears to turn these suggested indicators of CDR into fundamental prerequisites for the CDR showing without a rule change promulgated by the Commission. The Order places particular emphasis on the absence of the construction contract CDR payment. <sup>19</sup> EchoStar acknowledges that a CDR milestone payment under a construction contract may be evidence that CDR is complete, but such payment is not dispositive. Various business reasons exist for variances from initial payment plans, especially between parties that enjoy as long-standing and significant a business relationship as do EchoStar and SS/L. Rather, EchoStar's certification of CDR, in combination with the extensive CDR review materials prepared by the satellite manufacturer, provided ample evidence that CDR was complete in October 2008.

The Order also faults EchoStar's CDR submission because it does not "show how the components have been integrated into a functional electrical and mechanical design specific to the EchoStar-86.5W satellite." Yet EchoStar submitted a lengthy package of materials — prepared by SS/L — that represent the CDR assessments for the integrated satellite and each of its major subsystems. And nothing in Commission precedent requires satellite licensees to show unique design elements at CDR. Nonetheless, contrary to the assertions in the Order, EchoStar's CDR submission highlighted the exact manner in which the satellite design was

<sup>&</sup>lt;sup>18</sup> See id.; The International Bureau Provides Guidance Concerning the Critical Design Review Milestone Requirement, *Public Notice*, DA 04-787 (2004) ("CDR Guidance Notice").

<sup>&</sup>lt;sup>19</sup> See Order ¶ 7 ("[T]here is no evidence of significant expenditures at CDR that was due under the terms of the construction contract.").

<sup>&</sup>lt;sup>20</sup> Order ¶ 7.

<sup>&</sup>lt;sup>21</sup> See generally EchoStar 86.5° W.L. CDR Submission.

<sup>&</sup>lt;sup>22</sup> See generally Space Station Reform Order, 18 FCC Rcd. 10760; CDR Guidance Notice.

specific to EchoStar-86.5W. For example, SS/L tailored the tower and antenna support to the payload; redesigned the deployment and posturing mechanisms brackets to eliminate shear and to eliminate the high coefficient of thermal expansion mismatch; revised the reach of the wheel panels for Constellation wheels; and modified the subsystem support module to remove the cross-strap.<sup>23</sup> The Order disregards this information, along with the certification from EchoStar's Senior Vice President, Space Programs and Operations, that CDR was complete.<sup>24</sup>

The Order goes on to conclude that EchoStar's CDR submission somehow actually shows that "the design and development phase for this satellite has not ended."<sup>25</sup> This opinion is based on statements in the CDR package that certain analyses will be performed at a future date or are provided elsewhere in the CDR and do not appear in the provided materials.<sup>26</sup> But although CDR marks the point at which critical issues are vetted and a decision is made as to whether the project is ready to proceed to the construction phase, by no means does CDR set all design elements in stone. The outcome of coordination discussions, for example, may require adjustments to beam configurations and patterns, as in fact occurred here. Moreover, certain design decisions may be put off for finalization at a later date when their outcome would not affect key upfront construction elements. This does not mean that CDR is not complete. To find otherwise would belie the realities of complex procurement programs. Indeed, the Bureau has

<sup>&</sup>lt;sup>23</sup> See id. at S3-4–S3-5. Of course, the burden is to show that CDR is complete, not to submit a detailed, engineering level design of all aspects of component and subsystem integration.

<sup>&</sup>lt;sup>24</sup> See EchoStar 86.5° W.L. CDR Submission, at Attachment 1.

<sup>&</sup>lt;sup>25</sup> Order ¶ 7.

<sup>&</sup>lt;sup>26</sup> See id. ¶ 7 n.15.

acknowledged this reality in the past when it approved of CDR submissions even when certain data remained outstanding.<sup>27</sup>

And although CDR is "the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase begins,"<sup>28</sup> CDR does not necessarily coincide with metal actually being "bent." Complex engineering projects often stop or stall after CDR due to any number of factors. For example, financial challenges of proceeding with construction can make CDR a logical stopping point, as was the case with EchoStar-86.5W. Faced with the realities of ensuring continued service from the critical 61.5° W.L. location after a series of unanticipated setbacks with its satellite fleet, EchoStar had to make a choice about how to make the most of its in-orbit satellites and optimize the contribution of upcoming satellites to its existing obligations, all within the confines of a not-unlimited budget. For that reason, after CDR for EchoStar-86.5W, EchoStar focused on completing and launching EchoStar 15 and EchoStar 16. Actually constructing a satellite may be circumstantial evidence that CDR was complete (because one is a necessary precursor for the other), but surely starting construction is not a necessary component of the showing for the precursor milestone – CDR. Otherwise, the Commission would have to continually revisit its CDR findings in all cases in which a satellite is ultimately left unconstructed. Rather, the materials submitted by EchoStar constitute direct and sufficient evidence that CDR for EchoStar-86.5W was successfully concluded.

<sup>&</sup>lt;sup>27</sup> See Policy Branch Information: Actions Taken, *Public Notice*, File No. SAT-LOA-20031211-00350, DA 07-813 (2007) (finding EchoStar Satellite Operating Corporation in compliance with the CDR milestone despite the licensee's continued work on frequency data).

<sup>&</sup>lt;sup>28</sup> Space Station Reform Order, 18 FCC Rcd. at 10833 ¶ 191.

## V. THE BUREAU ERRED BY NOT GRANTING ECHOSTAR'S REQUEST TO USE ECHOSTAR 8 TO SATISFY THE REQUIREMENTS OF THE 86.5° W.L. AUTHORIZATION

### A. EchoStar 8 Fully Satisfies EchoStar's Commitments at 86.5° W.L.

The successful deployment of EchoStar 15 last year, the pending launch of QuetzSat-1, and the anticipated launch of EchoStar 16 in 2012, are combining to help move EchoStar past the challenges presented by the unanticipated loss of AMC-14 and the problems with EchoStar 3. Although these challenges required EchoStar to focus on other satellite development plans in lieu of the EchoStar-86.5W satellite, EchoStar's proposal to use EchoStar 8 at 86.5 ° W.L. would fulfill the commitments of its 86.5° W.L. authorization and, just as importantly, deliver services that otherwise could not be made available.

EchoStar 8 is a modern and fully functional satellite capable of providing service over 31 DBS channels at the 86.5° W.L. orbital location. The proposed EchoStar-86.5W satellite was based on the same satellite bus and substantially the same transponder and beam configurations as EchoStar 8. Yet the Bureau incorrectly equates EchoStar's request to use EchoStar 8 at 86.5° W.L. to a recent application made by the Brazilian satellite operator, Star One, S.A.<sup>29</sup> The differences could not be more stark. In the *Star One Order*, the Commission denied Star One's request to substitute the 15 year old, C-band Star B1 space station for a new C- and Ku- band space station.<sup>30</sup> In that case, the proposed substitute satellite was at the end of its design life and was incapable of providing similar services or even operating over substantially all of the authorized frequency band. In contrast, EchoStar proposes to use a satellite with at least 5 remaining years left of design life. Importantly, EchoStar 8 is also capable of operating over virtually the entire authorized spectrum band, something the Star One replacement could not do.

<sup>&</sup>lt;sup>29</sup> See generally Star One Order, 25 FCC Rcd. 14338.

<sup>&</sup>lt;sup>30</sup> See id. at 14338 ¶ 1.

The Order fails to mention these key distinctions and instead faults EchoStar's request because EchoStar 8 is purportedly "not capable of meeting the state-of-the-art technical specifications of the proposed EchoStar-86.5W satellite." In fact, however, EchoStar 8 operates over the same spectrum band, at similar power levels, over the same coverage areas, and with similar beam configurations as the authorized and planned EchoStar-86.5W satellite.

Taking a page from the Bureau's own decision in the *Star One Order* is enough to reach the opposite conclusion from the one set forth in the Order and is the only one appropriate here:

EchoStar 8 is fully capable of providing the services "commensurate with the level and scope of the proposed [86.5° W.L] space station, upon which [EchoStar's] authorization is based." Like the planned EchoStar-86.5W satellite, EchoStar 8 could be used to provide direct-to-home television to consumers in the U.S. and Mexican markets. The only real difference between EchoStar 8 and the planned EchoStar-86.5W is the anticipated end-of-life date. But this date is of reduced practical significance given the extensive satellite fleet under EchoStar's control or direction.

The Order creates more than a mere preference for a new satellite over an in-orbit one. It essentially establishes a "brand-new satellite or bust policy" without regard to any actual service disparities between the offerings. It further inadequately accounts for the realities underlying the decisions that an operator of a large satellite fleet must confront. The Order refers only to EchoStar's "business decision" not to proceed with EchoStar-86.5W, when that decision, far

<sup>&</sup>lt;sup>31</sup> Order ¶ 8.

<sup>&</sup>lt;sup>32</sup> Star One Order, 25 FCC Rcd. at 14341 ¶ 8.

<sup>&</sup>lt;sup>33</sup> See EchoStar Satellite Corporation, Application of EchoStar Satellite Corporation for Authority to Construct, Launch and Operate a Direct Broadcast Satellite in the 12.2-12.7 GHz and 17.3-17.8 GHz Frequency Bands at the 86.5° W.L. Orbital Location, File No. SAT-LOA-20030609-00113, at 8-9 (filed June 9, 2003).

from one of convenience or one made in the name of the general economic climate, was compelled by the specific and unanticipated setbacks that EchoStar's fleet had experienced and that caused EchoStar to prioritize resources to ensure continuing service from the 61.5° W.L. orbital location. These realities should be weighed, too; otherwise, it is the U.S. consumer who receives service from satellite operators who ends up losing. Good service to the consumer requires a healthy business infrastructure, and a healthy business infrastructure must sometimes adapt existing business plans in the face of external forces. Here, EchoStar lost one satellite upon launch, and was faced with mounting problems with another satellite occupying a central position from the point of view of customer service. To meet these challenges, EchoStar did make a business decision to move resources away from Echostar-86.5W in order to ensure continuing service to existing customers. Yet EchoStar also worked diligently to find a way to provide service from 86.5 W.L. within its authorization timeframe and with a satellite offering equivalent capability. This is the type of decision that is a win for all involved, and should not be regarded as a demerit causing the forfeiture of EchoStar's authorization.

### B. The Bureau Erred by Not Granting EchoStar a Waiver

EchoStar alternatively requested a waiver of the milestones to the extent necessary, if the Bureau determined that EchoStar 8's use at 86.5° W.L. was insufficient to satisfy the diligence requirements of the authorization. A waiver is warranted when the petitioner demonstrates good cause for such action.<sup>34</sup> Good cause, in turn, exists "where particular facts would make strict compliance inconsistent with the public interest." Waiver is appropriate if "special circumstances warrant a deviation from the general rule and such deviation would better serve

<sup>&</sup>lt;sup>34</sup> See TMI Commc'ns. & Co., Ltd. P'ship and TerreStar Networks Inc. Application for Review and Request for Stay, *Memorandum Opinion and Order*, 19 FCC Rcd. 12603, 12618 ¶ 41 (2004); 47 C.F.R. § 1.3.

<sup>&</sup>lt;sup>35</sup> Ne. Cellular Tel. Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

the public interest than would strict adherence to the general rule."<sup>36</sup> Considerations for a waiver include the "more effective implementation of overall policy."<sup>37</sup>

Waiving the milestone requirements in this instance would more effectively implement the Commission policies on which the requirements are premised in the first place than does declaring the 86.5° W.L. authorization null and void. The DBS milestones "are designed to ensure that valuable spectrum is not warehoused, and that service is timely deployed for the benefit of the public." The Commission has further explained that warehousing is discouraged because it can "hinder the availability of services to the public at the earliest possible date by blocking entry by other entities willing and able to proceed immediately with the construction and launch of their satellite systems."

EchoStar's plan to fulfill its 86.5° W.L. commitments with the EchoStar 8 satellite did not "hinder the availability of services to the public at the earliest possible date by blocking entry by other entities willing and able to proceed immediately." EchoStar 8 was available within the original 86.5° W.L. authorization timeline to exploit nearly all of the 32 DBS channels at the orbital slot. Instead of permitting EchoStar to make use of the slot with the healthy and modern EchoStar 8 satellite, the Order has the unintended effect of allowing the continued "warehousing" of this slot for the indefinite future, thereby "hinder[ing] the availability of services to the public at the earliest possible date by blocking entry by other entities willing and

<sup>&</sup>lt;sup>36</sup> TMI Commc'ns. & Co., 19 FCC Red. at 12617 ¶ 39.

<sup>&</sup>lt;sup>37</sup> WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

<sup>&</sup>lt;sup>38</sup> Policies and Rules for the Direct Broadcast Satellite Service, *Report and Order*, 17 FCC Rcd. 11331, 11352 ¶ 42 (2002).

<sup>&</sup>lt;sup>39</sup> Space Station Reform Order, 18 FCC Rcd. at 10827 ¶ 173.

<sup>&</sup>lt;sup>40</sup> Id.

able to proceed immediately."<sup>41</sup> Because of the Order, no service may be provided from 86.5° W.L. for the foreseeable future in light of the moratorium on new DBS applications.<sup>42</sup> EchoStar's actions did not, therefore, result in any "warehousing" of spectrum.<sup>43</sup> To the contrary, EchoStar sought to maximize the utility of the 86.5° W.L. slot by identifying an inorbit satellite that could fulfill its commitments at the location. Accordingly, waiving the milestone requirements would be most consistent with the Commission's diligence principles. The Bureau erred by finding otherwise.

The position taken in the Order also appears to run counter to the Commission's spectrum utilization policies, especially in this time of spectrum scarcity. The Commission's recent activities have only underscored the focus on maximizing the use of available spectrum resources. By declaring the 86.5° W.L. authorization null and void in the face of EchoStar's proposal to use the modern and fully functional EchoStar 8 satellite at the slot, the Order risks undermining this policy.

Finally, the Order also undermines the principles inherent in the Commission's fleet management policies. <sup>45</sup> In the *Second Space Station Reform Order*, the Commission articulated a policy in favor of allowing fleet operators to exchange satellites in their fleet at an orbital

<sup>&</sup>lt;sup>41</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> See DBS Service Auction Nullified: Commission Sets Forth Refund Procedures For Auction No. 52 Winning Bidders and Adopts a Freeze On All New DBS Service Applications, *Public Notice*, 20 FCC Rcd. 20618 (2005).

<sup>&</sup>lt;sup>43</sup> See Space Station Reform Order, 18 FCC Rcd. at 10827 ¶ 173.

<sup>&</sup>lt;sup>44</sup> See, e.g., FCC, Connecting America: The National Broadband Plan, at 75-76 (2010); Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, 19 FCC Rcd. 17503 (2004).

<sup>&</sup>lt;sup>45</sup> Amendment of the Commission's Space Station Licensing Rules and Policies, *Second Report and Order and Declaratory Order*, 18 FCC Rcd. 12507, 12509-11 ¶¶ 6-9 (2003) ("Second Space Station Reform Order").

location so long as service to customers was not interrupted and operations with the new satellite were within the bounds of the original authorization and coordination parameters. <sup>46</sup> Critically, the Commission *did not* require that the original and substitute satellites be identical to one another. <sup>47</sup> Impliedly, this policy recognizes that the public interest is not adversely affected when the exchange is transparent to the consumer, the scope of the authorization remains unchanged, and interference potential is not increased. In fact, the public interest is better served because the policy allows fleet operators to maximize the use of in-orbit resources. <sup>48</sup> Although EchoStar recognizes that the fleet management rules were not technically applicable to EchoStar's request for 86.5° W.L., the underlying principles of the fleet management policy supports the request: The substitution would have been transparent to potential customers, did not raise interference concerns, and would have been within the boundaries of the current authorization. Therefore by declaring the authorization null and void in lieu of permitting EchoStar 8 to provide service from the location, the Order undermines the principles of the Commission's fleet management policies.

### VI. NEW FACTS JUSTIFY RECONSIDERATION

New facts also justify reconsideration. First, while the Bureau was considering EchoStar's request to modify its 86.5° W.L. authority to permit use of EchoStar 8 at that location, EchoStar 8 experienced an SEU that interfered with its ability to provide service. The

<sup>&</sup>lt;sup>46</sup> See id. at 12510 ¶ 8.

<sup>&</sup>lt;sup>47</sup> *Id.* ("[T]he satellite to be substituted for the satellite initially assigned at a particular orbit location must be technically identical to the original satellite *or must operate within the original satellite's authorization and/or coordinated parameters."*) (emphasis added).

<sup>&</sup>lt;sup>48</sup> There has been concern that the fleet management rules have been underutilized because of overly restrictive interpretation. *See*, *e.g.*, Letter from Mary Bono Mack, Member of Congress, to Julius Genachowski, Chairman, FCC (Sept. 9, 2009) (noting a concern that the fleet management policies are "so narrowly interpreted" that they are of little utility in practice).

SEU affected TT&C operations with the satellite. At the time of the event, EchoStar had to realign its fleet operations to ensure uninterrupted service from the critical 61.5° W.L. orbital location. Since that realignment, however, EchoStar has developed a software solution that bolsters the prospects of EchoStar 8's successful operation at 86.5° W.L. for years to come. This is in addition to the recent confirmation, yielded through rigorous testing, that EchoStar 8 continues to have multiple command paths available using its 14 GHz commanding systems, again increasing the already excellent chances that EchoStar 8 will remain healthy and continue to provide high quality video service until at least 2016.

Second, EchoStar and DISH Network are exploring unique service opportunities from the 86.5° W.L. orbital slot in addition to serving the capacity requirements of DISH Network. EchoStar and DISH Network are assessing the viability of niche offerings that would expand small market and rural video programming options, including distribution services on behalf of small telco providers. EchoStar believes that the 86.5° W.L. capacity is a critical input to any such potential service offering.

Finally, owing to an expansion of the EchoStar fleet, the EchoStar 15 satellite could be made available for reassignment to 86.5° W.L. relatively soon in the unlikely event that any serious problems should arise with EchoStar 8. EchoStar is close to completing construction on EchoStar 16, and the satellite is slated for launch in 2012. Once launched, EchoStar 16 will provide critical services at the 61.5° W.L. orbital location. EchoStar has developed a capacity plan that could allow EchoStar to free up EchoStar 15 from service at 61.5° W.L. once EchoStar 16 is fully operational and make the satellite available for service at 86.5° W.L. in the event of a problem with EchoStar 8, and provided that EchoStar 15 is not already planned for service at another slot. Until that time, other satellites in EchoStar's fleet, such as EchoStar 6, are capable

of acting as back up for the EchoStar 8 satellite. Consequently, there is little risk of interruption to EchoStar's services once it commences operations at 86.5° W.L.

### VII. CONCLUSION

For the foregoing reasons, EchoStar urges the Bureau to reconsider and set aside the Order, and in so doing, find that EchoStar met the CDR milestone for its 86.5° W.L. authorization and modify the authorization to allow EchoStar to operate EchoStar 8 at 86.5° W.L., either by finding that the substitution of EchoStar 8 at 86.5° W.L. meets the authorization's diligence requirements or by granting a waiver of the milestones for good cause shown.

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**Operating Corporation** 

August 25, 2011

## DECLARATION OF DARREN HAMILTON

I, Darren Hamilton, hereby declare under penalty of perjury under the laws o United

States that I have read the foregoing Petition for Reconsideration and it is true and co to the best of my information, knowledge, and belief.

Executed on August 25,

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