Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

EchoStar Satellite Operating Corporation

Application for Modification of License for the EchoStar 6 Satellite to Extend Termination Date

File No. SAT-MOD-20140623-00074

Call Sign S2232

To: Commissioners Wheeler, Clyburn, Rosenworcel, Pai, and O'Rielly

Reply in Support of Application for Review

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INTRODUCTION

The *Order and Authorization*¹ under review enables EchoStar to warehouse extremely valuable spectrum until January 2019. It is undisputed that EchoStar has never offered service using EchoStar 6 in the nearly 26 months that EchoStar 6 has been allowed to operate at 96.2° W.L. Instead, EchoStar parked its aging EchoStar 6 satellite in that orbital slot to warehouse spectrum and to foreclose new entry into the U.S. market for satellite services. The Bureau acted contrary to the public interest in foreclosing that new entry in favor of an incumbent operator who is warehousing the spectrum. The harm to U.S. consumers from the Bureau's action is all the worse given the Commission's failure over the past ten years to lift the freeze on new applications for DBS service, which has likewise prevented new entry.

Moreover, in granting the license extension, the Bureau overlooked EchoStar 6's history of operational problems and false statements to the Commission regarding those operational problems. Spectrum Five has shown — and EchoStar has conceded — that EchoStar 6 operated with excessive power levels and a mispointed antenna in violation of the terms of its license and the Special Temporary Authority ("STA") that first authorized EchoStar 6 to operate at 96.2° W.L. EchoStar has also stated that EchoStar 6's highly inclined orbit is causing "daily EIRP variations" — a violation of 47 C.F.R. § 25.280(b)(1)'s requirement that satellites operating in inclined orbit maintain a "stationary," not variable, "antenna pattern." The Bureau found that these problems had been remedied, but had no *evidence* before it to support that conclusion — just EchoStar's say so — because EchoStar refused to submit any facts to support its assertions, and the Bureau refused to insist that EchoStar provide that evidence.

¹ Order and Authorization, *EchoStar Satellite Corporation*, File Nos. SAT-MOD-20140623-00074, DA 15-507 (May 5, 2015) ("*Order and Authorization*").

EchoStar's opposition ignores all of this. Most notably, EchoStar still provides *no data* to support its assertions that it has remedied EchoStar 6's operational problems. Instead, the bulk and focus of the opposition is EchoStar's incorrect assertion that Spectrum Five lacks standing. The Bureau, however, did not rule that Spectrum Five lacks standing — even though EchoStar urged it to do so. EchoStar is also wrong in claiming that Spectrum Five's showing that it is aggrieved by the *Order and Authorization* — a requirement for an application for review — is based on new arguments and evidence. Spectrum Five is relying on the same showing it made to the Bureau, and EchoStar's attacks on that showing fare no better now than they did before.

ARGUMENT

I. THE BUREAU'S FINDINGS THAT ECHOSTAR 6'S EXCESSIVE POWER LEVELS AND MISPOINTED ANTENNA HAD BEEN REMEDIED AND THAT ECHOSTAR 6 WOULD MAINTAIN A STATIONARY SPACECRAFT ANTENNA PATTERN WERE ARBITRARY AND CAPRICIOUS

Spectrum Five showed (at 8-18) that EchoStar was operating EchoStar 6 at power levels that were *three times* those allowed by its license and STA, that EchoStar 6 had a mispointed antenna in violation of its license and STA, and that EchoStar had made statements indicating EchoStar 6 was violating § 25.280(b)(1)'s requirement that satellites in an inclined orbit maintain a stationary antenna pattern in order to avoid causing harmful interference. EchoStar cannot and does not contest those facts.

Spectrum Five further showed that the Bureau found EchoStar "has taken sufficient steps to rectify the problems identified by Spectrum Five," *Order and Authorization* ¶¶ 6-7, based solely on EchoStar's naked assertions, unsupported by data — and that the Bureau provided no explanation for its decision not to require EchoStar to provide the necessary data to assess its assertions. The Bureau therefore violated clear administrative law principles, because an agency

may not rely on naked assertions "without ascertaining the[ir] accuracy," *District Hosp.*Partners, L.P. v. Burwell, 786 F.3d 46, 57 (D.C. Cir. 2015) (quoting New Orleans v. SEC, 969

F.2d 1163, 1167 (D.C. Cir. 1992)), and must "respond in a reasoned manner" to Spectrum Five's argument that further investigation was necessary, *Reytblatt v. NRC*, 105 F.3d 715, 722 (D.C. Cir. 1997).

The practical consequence of the Bureau's failure to demand that EchoStar provide data to support its assertions — particularly after EchoStar's prior data-free assertions about EchoStar 6 were proven false — is that it has failed to fulfill its duty to ensure that satellites do not cause harmful interference to the detriment of the public interest.² The only interference analysis before the Bureau assumed that EchoStar 6 would operate consistent with the terms of its license.³ Once that was shown not to be true, the Bureau had no basis to determine EchoStar 6 would not cause harmful interference while at 96.2° W.L. Given EchoStar 6's operational problems, it was especially important for the Bureau to ascertain whether this aging satellite had technical problems that would prevent it from complying with the terms of its license, avoiding harmful interference, and providing service in the public interest. *See* Spectrum Five Br. 12 n.12 (citing 47 C.F.R. § 25.156(a)).⁴

² See 47 C.F.R. § 25.156(a) ("Applications for a radio station authorization, or for modification or renewal of an authorization, will be granted if . . . the Commission finds that the applicant is legally, technically, and otherwise qualified, that the proposed facilities and operations comply with all applicable rules, regulations, and policies, and that the grant of the application will serve the public interest, convenience and necessity.").

³ EchoStar's ability to coordinate with nearby satellites at this tweener location demonstrates that DBS service from tweener orbital locations is feasible, notwithstanding EchoStar's (and DIRECTV's) prior efforts to claim that a Spectrum Five satellite at a different tweener location raised insurmountable interference issues.

⁴ The Bureau also needed to determine whether EchoStar's violations were willful because licenses may be revoked for willful violations of Commission rules. *See* 47 C.F.R. § 25.160(c). Here, EchoStar had an incentive to willfully violate the STA by mispointing the antenna. The United Kingdom was using the satellite to claim that it had brought into use the BERMUDASAT-1 filing. That filing described a satellite with an antenna pointed toward the United States; the STA, however, required that EchoStar 6 point the antenna toward the Atlantic Ocean.

EchoStar's one-paragraph response (at 5-6) does nothing to rehabilitate the Bureau's decision. EchoStar claims that it "submitted measurement data and additional evidence demonstrating its compliance with the FCC's power level, antenna pointing, and antenna pattern requirements." *Id.* However, Spectrum Five previously showed (at 11-12 & n.34) that the two filings EchoStar cites do no such thing, and EchoStar provides no response to that showing.

The November 20, 2014 letter EchoStar cited nakedly asserts that, on September 10, 2014, EchoStar reduced EchoStar 6's power levels; on October 1, 2014, EchoStar repointed EchoStar 6's antenna; and, on October 1, 2014, EchoStar conducted test measurements. The letter includes no data whatsoever, nor does it ever mention EchoStar 6's purported compliance with the requirement in § 25.280 that satellites in inclined orbit maintain a steady antenna pattern.

The bulk of the December 17, 2014 letter EchoStar cites repeats the same unsupported assertions as the November 20, 2014 letter. The *only* measurement data in the December 17 letter — and the only semblance of measurement data that EchoStar has ever submitted⁷ — state the "ranges" of EIRP values (that is, power levels) EchoStar purports to have measured at three test locations. However, EchoStar does not say *when* or *how* the measurements were taken,

⁵ Letter from Jennifer A. Manner, EchoStar Satellite Operating Corp., to Marlene H. Dortch, Secretary, FCC, at 3, IBFS File Nos. SAT-MOD-20130227-00026 *et al.* (Nov. 20, 2014).

⁶ EchoStar's letter includes an August 15, 2014 PowerPoint presentation made to the Bureau. That presentation contains no data showing that the problems with EchoStar 6 had been remedied. Indeed, the presentation was made before EchoStar even acknowledged the problems existed and was based on "predicted EIRP" rather than actual data from measurements. *See* Declaration of Derek de Bastos ¶¶ 5-6, EchoStar Satellite Operating Corporation, IBFS File Nos. SAT-MOD-20140623-00074 *et al.* (Sept. 29, 2014) (indicating that no measurements were taken prior to "meetings with the International Bureau staff in August 2014").

⁷ The three figures at the end of the December 17, 2014 letter relate to whether EchoStar had turned on EchoStar 6's transponders, not the satellite's power levels, antenna pointing, or ability to maintain a constant antenna pattern. Moreover, these figures are not measurement data taken from the ground but rather are readings from the satellite's instruments. *See* Letter from Scott H. Angstreich, Kellogg, Huber, Hansen, Todd, Evans & Figel, P.L.L.C., to Marlene H. Dortch, Secretary, FCC at 2 n.4, IBFS File Nos. SAT-MOD-20130227-00026 *et al.* (Jan. 5, 2015).

instead obliquely stating "[m]ultiple measurements were made and the results were dependent on the time of day, test configuration, and the particular antenna used." EchoStar did not even say whether these "ranges" reflected measurements taken before or after October 1, 2014, when EchoStar purports to have remedied the problems. These "ranges" therefore provide no support for the Bureau's finding that the problems had been remedied. To the contrary, EchoStar's long-standing refusal to provide the actual measurement data in its possession should have been a bright red flag to the Bureau that something was amiss, 9 yet the Bureau did not insist that EchoStar turn over the data and did not even explain why it did not do so.

EchoStar's argument (at 5) that Spectrum Five "cites no FCC rule, precedent, or policy requiring denial of satellite operating authority under similar circumstances" also misses the mark. The Bureau erred by violating the basic tenets of administrative law that an agency must base its decision on record evidence as opposed to unsupported assertions, and must respond to arguments in a reasoned manner rather than conclusorily rejecting them. *See District Hosp.*, 786 F.3d at 57; *Reytblatt*, 105 F.3d at 722. That precedent was prominently cited (at 9-10) in Spectrum Five's brief. In all events, EchoStar can find no comfort in "FCC rule[s]" given its admissions that it has violated the terms of its license and STA.

Finally, EchoStar attempts (at 6 n.18) to delay review of the Bureau's erroneous *Order* and *Authorization*. It claims that the Bureau must first be given an opportunity to pass on issues

⁸ Letter from Jennifer A. Manner, Vice President, Regulatory Affairs, EchoStar Satellite Operating Corp., to Marlene H. Dortch, Secretary, FCC, at 4, IBFS File Nos. SAT-MOD-20140623-00074 *et al.* (Dec. 17, 2014). Without further detail regarding these measurements, one cannot know whether the "ranges" are fairly representative of EchoStar 6's actual power levels. For example, EchoStar could have taken the measurements at times when EchoStar 6's inclination cycle delivers lower power levels in the United States (and higher power levels in Latin America and the Caribbean). The cherry-picked "ranges" would then reflect only the "best case" scenario for EchoStar 6

⁹ See International Union, UAW v. NLRB, 459 F.2d 1329, 1336, 1338 (D.C. Cir. 1972) ("[W]hen a party has relevant evidence within his control which he fails to produce, that failure gives rise to an inference that the evidence is unfavorable to him.").

regarding EchoStar 6's operational problems. The Bureau not only had the opportunity to pass on this issue, but it actually decided the issue. *See Order and Authorization* \P 6 ("We find that ESOC has taken sufficient steps to rectify the problems identified by Spectrum Five."). The patent flaws in that finding are thus ripe for review by the Commission.¹⁰

II. THE BUREAU'S FINDING THAT GRANTING THE SATELLITE MODIFICATION APPLICATION WAS IN THE PUBLIC INTEREST WAS ARBITRARY AND CAPRICIOUS

Spectrum Five demonstrated (at 18-23) that the Bureau's public interest finding was arbitrary and capricious because the record evidence showed that EchoStar was warehousing valuable spectrum and had no serious plans to provide service from the dying EchoStar 6 satellite. EchoStar's two-paragraph rebuttal (at 6) fails to show otherwise.

First, EchoStar does not contest Spectrum Five's showing that EchoStar 6 has never provided or even offered service in the 26 months it has been at (or near) 96.2° W.L.; that EchoStar has never even activated 31 of the satellite's 32 transponders; or that the single activated transponder has been activated only intermittently. Nor does EchoStar contest Spectrum Five's showing that EchoStar 6's highly inclined orbit forecloses its ability to provide "direct-to-home" service and that EchoStar 6 is incapable of competing with newer satellites that can offer Internet service because EchoStar 6's license prevents it from providing two-way communications to ships. Finally, EchoStar provides no explanation for why — if EchoStar

¹⁰ It is irrelevant that Spectrum Five has raised similar issues in a separate challenge to the Modification Order — a challenge that has been fully briefed for nine months with no action by the Bureau or the Commission. *See* Spectrum Five Pet. for Reconsideration and Request for Referral of the Petition to the Full Commission, *EchoStar Satellite Operating Corporation; Request for Modification of Authorization to Move EchoStar 6 to, and Operate It at, 96.2° W.L.*, IBFS File Nos. SAT-MOD-20140623-00074 *et al.* (Sept. 10, 2014). Indeed, in the decision underlying the Modification Order, the Bureau stated that it would address EchoStar 6's operation problems in this license extension proceeding, and the Bureau did so, albeit in a manner that violates basic principles of administrative law. *See* Modification Order ¶ 19.

¹¹ The fact that EchoStar 6 has never provided any service at 96.2° exposes the hollow nature of EchoStar's arguments (at 2) that denial of the license extension would "allow[] scarce spectral resources and valuable satellite assets to go unused," "adversely impact[] existing satellite operations," and "depriv[e] consumers of potential new services."

were truly intending to provide service — it failed to notice on its own that the only active transponder was operating at three times the permissible power level and that the satellite's antenna was mispointed. Neither of the two apparent explanations are helpful to EchoStar: either it was negligent in not even testing a satellite that it had just moved to another orbital location or it had known of the problems but failed to remedy them.¹²

To this day, the most that EchoStar can say regarding its plans to offer service is a single, carefully crafted statement that EchoStar "has been working with a *potential* customer . . . to deliver an IP-based video service to maritime mobile terminals" and, at some unspecified time, "expects to commence testing." EchoStar Br. 6 (emphases added). This statement is eerily similar to the statement that EchoStar made 15 months ago — that it was "holding ongoing negotiations with potential commercial partners for the provision of new services to the maritime market." The fact that EchoStar can say nothing more concrete about any service it could actually offer to a "potential" customer 15 months later — and has provided no service at all in 26 months — confirms that EchoStar is warehousing spectrum. Moreover, to the extent that this purported "IP-based video service" would require two-way communications — and EchoStar does not claim that it is a one-way service — EchoStar cannot provide it under the terms of EchoStar 6's license. If In all events, EchoStar's inchoate plans to provide service to some ship

¹² It is not surprising that EchoStar is warehousing spectrum at this orbital location. EchoStar is similarly involved in the warehousing of reverse band spectrum at 103° W.L. where its partner, SES, has parked a satellite for years without providing service using those reverse band frequencies; that spectrum has been leased back to EchoStar as part of a vague "development agreement." EchoStar, Form 10-K/A (Amendment No. 1) (Apr. 29, 2014), *available at* http://www.sec.gov/Archives/edgar/data/1415404/000104746914004362/a2219819z10-ka.htm.

¹³ Letter from Jennifer A. Manner, EchoStar Satellite Operating Corp., to Marlene H. Dortch, Secretary, FCC, at 3, IBFS File Nos. SAT-STA-20140113-00004 *et al.* (Mar. 31, 2014).

¹⁴ See Spectrum Five Br. 20.

passing through the Bermuda Triangle provides no basis to conclude that a license extension until January 2019 serves the public interest.¹⁵

III. SPECTRUM FIVE HAS STANDING TO SUBMIT AN APPLICATION FOR REVIEW

Spectrum Five showed (at 23-25) that it was aggrieved by the *Order and Authorization* in three ways: (1) EchoStar has not shown that, given EchoStar 6's highly inclined orbit, it can operate without causing harmful interference to the satellite authorized by Spectrum Five's preexisting reverse-band license; (2) the license extension allows EchoStar 6 to operate less than 1° away from Spectrum Five's in-development reverse-band satellite, causing potential investors to fear that the Commission will give EchoStar's satellite priority; and (3) Spectrum Five intends to apply for a DBS license once the Commission's DBS freeze is lifted, but such a license would interfere with EchoStar 6's license allowing it to operate in the 12.2-12.7 GHz DBS band.

EchoStar erroneously argues (at 3-4) that 47 C.F.R. § 1.115(c) prohibits the Commission from addressing these arguments because the Bureau "has been afforded no opportunity to pass" on them. Spectrum Five specifically argued in filings to the Bureau that its previously licensed reverse-band satellite at 95.15° W.L. would cause interference with EchoStar 6's uplink transmissions which "could result in a loss of satellite control" for EchoStar 6, thereby requiring Spectrum Five to alter its operations, and that "the continued presence of EchoStar 6 at (or near) 96.2° W.L. materially hinders Spectrum Five's ability to use its reverse-band license and launch its planned dual-band satellite, as well as to apply for any necessary future licenses for that

¹⁵ EchoStar states that the Bureau and Commission have already rejected this argument when it granted the STA. However, since those decisions were issued, it has become even more apparent that EchoStar intends to warehouse this valuable satellite spectrum, as evidenced by EchoStar's failure to offer any service from 96.2° W.L., or even to activate more than a single (of 32) transponder on EchoStar 6.

satellite."¹⁶ Notably, the Bureau declined to find that Spectrum Five lacked standing, despite EchoStar urging the Bureau to do so.¹⁷

EchoStar's substantive challenges to Spectrum Five's standing fare no better than they did before. Notably, EchoStar challenges only two of Spectrum Five's grounds for standing — that Spectrum Five's reverse-band satellite will cause interference with EchoStar 6's uplink transmissions and that the license modification harms Spectrum Five's fundraising efforts by deterring investors who are concerned the Commission will give priority to EchoStar 6 (even though Spectrum Five's reverse-band license should have priority). EchoStar does not challenge Spectrum Five's other basis for standing — that Spectrum Five will be precluded from operating a dual-band satellite because its DBS transmissions would interfere with EchoStar 6's operations (two nearby DBS licensees could not coexist). This unchallenged ground for standing is sufficient to establish that Spectrum Five is aggrieved by the *Order and Authorization*.

EchoStar's attacks on Spectrum Five's other two grounds for standing lacks merit.

Spectrum Five's reverse-band satellite is not "purely theoretical," as EchoStar claims (at 4). The Commission has granted Spectrum Five a license for that satellite. Spectrum Five has made submissions showing its compliance with the three development milestones that have passed. EchoStar also erroneously states (at 4) that the D.C. Circuit has rejected these grounds for standing. The D.C. Circuit ruled only that the separate harm presented in that appeal — the United Kingdom procuring international rights to operate at 96.2° pursuant to the

¹⁶ Letter from Scott H. Angstreich, Kellogg, Huber, Hansen, Todd, Evans & Figel, P.L.L.C., to Marlene H. Dortch, Secretary, FCC at 4-5, IBFS File Nos. SAT-MOD-20130227-00026 *et al.* (Aug. 6, 2014) (internal quotation marks omitted).

¹⁷ See, e.g., Letter from Jaime Londono, EchoStar, to Marlene H. Dortch, Secretary, FCC at 3, IBFS File Nos. SAT-MOD-20130227-00026 *et al.* (July 30, 2014).

¹⁸ See Contract between Spectrum Five, LLC and Space Systems/Loral, Inc., IBFS File Nos. SAT-LOA-20090807-00084 *et al.* (Aug. 30, 2012); Letter from David Wilson, Chairman & CEO, Spectrum Five, LLC, to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SAT-LOA-20090807-00084 *et al.* (Sept. 2, 2014).

BERMUDASAT-1 filing — was not redressable.¹⁹ The D.C. Circuit did not address the grounds for standing that are presented here. The Commission also did not address these two grounds for standing in the *STA Affirmance*.²⁰

Nor is EchoStar's commitment to accept such interference a sufficient guarantee that Spectrum Five will not be required to alter the operations of its reverse-band satellite. As Spectrum Five explained (at 24-25), the Commission may attempt to alter Spectrum Five's license to prevent such interference because the interference will cause EchoStar to lose control of EchoStar 6. EchoStar does not dispute that such interference is certain to occur, nor does it provide any explanation how it intends to maintain control of EchoStar 6 in light of such interference. There is therefore a sufficient likelihood that the *Order and Authorization* could result in the Commission attempting to alter Spectrum Five's reverse-band license.²¹

CONCLUSION

The Commission should deny EchoStar's applications for a license extension.

¹⁹ Spectrum Five LLC v. FCC, 758 F.3d 254, 264-65 (D.C. Cir. 2014).

²⁰ See Memorandum Opinion and Order, EchoStar Satellite Operating Company; Application for Special Temporary Authority Related to Moving the EchoStar 6 Satellite from the 77° W.L. Orbital Location to the 96.2° W.L. Orbital Location, and to Operate at the 96.2° W.L. Orbital Location, 28 FCC Rcd 10412, ¶ 17 (2013); Order and Authorization, EchoStar Satellite Operating Company; Application for Special Temporary Authority Related to Moving the EchoStar 6 Satellite from 77° W.L. Orbital Location to the 96.2° W.L. Orbital Location, and to Operate at the 96.2° W.L. Orbital Location, 28 FCC Rcd 4229, ¶¶ 11-16 (Int'l Bur. 2013) (addressing grounds for standing relating to ITU priority rights but not with respect to interference with Spectrum Five's reverse-band license).

²¹ EchoStar argues (at 2) that Spectrum Five does not have standing because it "lacks the requisite affidavit from a qualified radio engineer to support its harmful interference claim." It appears that EchoStar is referring to 47 C.F.R. § 1.106(e). That provision, however, plainly applies to petitions for reconsideration and has no application to the pending application for review. *See also* Letter from Scott H. Angstreich, Kellogg, Huber, Hansen, Todd, Evans & Figel, P.L.L.C., to Marlene H. Dortch, Secretary, FCC at 4, IBFS File Nos. SAT-MOD-20130227-00026 *et al.* (Nov. 7, 2014).

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Scott H. Angstreich, hereby certify that a true and correct copy of the foregoing document was served on the following by First-Class U.S. Mail, postage prepaid, on June 29, 2015.

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