



April 25, 2019

*By Electronic Filing*

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington DC 20554

Re: Written *Ex Parte* Presentation  
Space Exploration Holdings, LLC, IBFS File Nos. SAT-MOD-20181108-00083 and SAT-STA-20190405-00023  
SpaceX Services, Inc., IBFS File Nos. SES-STA-20190410-00513, SES-STA-20190410-00514, SES-STA-20190410-00515, SES-STA-20190410-00516, SES-STA-20190410-00517, SES-STA-20190410-00518, SES-STA-20190410-00519

Dear Ms. Dortch:

EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (together with their affiliates, “EchoStar”), and Intelsat License LLC (“Intelsat”) hereby submit this written *ex parte* presentation in response to developments in the above-referenced proceedings concerning the SpaceX modification application (the “SpaceX Modification”) and related requests for special temporary authority (“STA Requests”) filed by Space Exploration Holdings, LLC and its sister company, SpaceX Services (collectively “SpaceX”).<sup>1</sup> On March 5, 2019 EchoStar and Intelsat filed a reply<sup>2</sup> to SpaceX’s Further Consolidated Opposition to Petition and Response to Comments.<sup>3</sup> EchoStar and Intelsat hereby incorporate the Reply by reference, reiterate the concerns articulated therein, and urge the Commission to deny the STA Requests.

Specifically, EchoStar and Intelsat remain concerned about SpaceX’s request for a waiver of Section 25.146(c) of the Federal Communications Commission’s (the “Commission”) rules, which requires non-geostationary orbit (“NGSO”) constellation operators to receive a “favorable” or “qualified favorable” finding by the International Telecommunication Union (“ITU”) Radiocommunication Bureau regarding

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<sup>1</sup> See, e.g., *Space Exploration Holdings, LLC Application for Modification of Authorization for the SpaceX NGSO Satellite System*, IBFS File No. SAT-MOD-20181108-00083 (filed Nov. 8, 2018); *SpaceX Services, Request for Special Temporary Authority*, IBFS File No. SES-STA-20190410-00513 et al. (filed Apr. 5, 2019).

<sup>2</sup> Reply of EchoStar Satellite Operating Corporation, Hughes Network Systems, LLC, and Intelsat License LLC, IBFS File No. SAT-MOD-20181108-00083 (Mar. 5, 2019) (“Reply”).

<sup>3</sup> Further Consolidated Opposition to Petition and Response to Comments of Space Exploration Holdings, LLC, IBFS File No. SAT-MOD-20181108-00083 (Feb. 21, 2019) (“SpaceX Opposition”).

compliance with applicable ITU equivalent power flux density (“EPFD”) limits.<sup>4</sup> In the Commission’s 2017 NGSO Rulemaking, the Commission eliminated the requirement that NGSO applicants provide demonstration of EPFD compliance as part of their Commission application, instead relying on the applicant obtaining a “favorable” or “qualified favorable” finding from the ITU prior to commencement of service.<sup>5</sup> SpaceX’s waiver request to avoid meeting this requirement is centered on the alleged length of the ITU review process and is based on nothing more than SpaceX’s convenience.

When other operators noted their concerns about SpaceX’s ITU EPFD compliance waiver request, SpaceX asserted they were “fret[ting].”<sup>6</sup> However, EchoStar and Intelsat reiterate their very real concerns about the precedent that would be set if SpaceX’s waiver request were granted. As stated in the Reply, SpaceX’s attempted circumvention of the ITU EPFD compliance certification would pose a serious threat to the geostationary orbit (“GSO”) operating environment: “Such a grant would leave the Commission, and potentially affected operators, without conclusive and verifiable evidence that the proposed system is compliant with the Commission’s EPFD rules, essentially undermining the rule itself and the protection it is meant to provide. It would also create a precedent permitting other NGSO FSS systems to circumvent the ITU Radio Regulation Article 22 assessment requirement, creating an unpredictable interference risk to the GSO arc in the future.”<sup>7</sup> By eliminating its requirement of a technical demonstration for EPFD compliance in 2017, the Commission left ITU EPFD compliance certification as the only source of independent, conclusive, and verifiable evidence that proposed operations would comply with Commission rules. Granting SpaceX its request for waiver of the EPFD compliance requirement would essentially undermine the Commission’s rule and the protection it affords to GSO operators.

To date, the concerns on this important issue have been unaddressed. SpaceX’s STA Requests purport to incorporate the operational characteristics of the SpaceX Modification, yet provide no additional discussion of the issue of compliance with the ITU’s EPFD limits.<sup>8</sup> If grant of the STA Requests results in SpaceX satellites being deployed and operating in accordance with the SpaceX Modification, the SpaceX Modification will be, in effect, granted. Such action would not address our very real concerns

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<sup>4</sup> 47 C.F.R. § 25.146(c).

<sup>5</sup> See *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 7809, ¶ 41 (2017).

<sup>6</sup> SpaceX Opposition at 17.

<sup>7</sup> Reply at 3-4.

<sup>8</sup> Moreover, EchoStar and Intelsat note the general paucity of information in the SpaceX Requests. For example, SpaceX fails to provide such basic information as the number of satellites being launched and their altitude, making it very difficult for the Commission and interested parties to evaluate what, if any, technical concerns may exist. See SpaceX Requests.

on this issue. Therefore, EchoStar and Intelsat respectfully request that the Commission deny the STA Requests and allow the review of the SpaceX Modification to proceed on its own merits.

Respectfully submitted,

*/s/ Jennifer A. Manner*

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