

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
HNS License Sub, LLC)	File Nos. SES-MOD-20201204-01305
)	SES-MOD-20201204-01306
Applications for Modification of Gateway Earth)	SES-MOD-20201204-01308
Station Licenses)	SES-MOD-20201204-01309
)	SES-MOD-20201204-01310
)	
)	Call Signs E170153, E170163, E170164,
)	E170165 & E170169

HUGHES OPPOSITION AND RESPONSE TO VERIZON

I. INTRODUCTION

Pursuant to 47 C.F.R. § 25.154(c), HNS License Sub, LLC (with its affiliates, “Hughes”) submits this opposition and response to Verizon’s petitions, comments, and informal objection (collectively, “Verizon’s Objections”)¹ regarding the above-captioned applications (“Applications”) for modifications of five gateway earth stations licensed in Cheyenne, WY, Bismarck, ND, Lindon, UT, Simi Valley, CA, and Quincy, WA, for communications with the EchoStar XXIV (also known as “Jupiter 3”) satellite in Ka- and Q/V-band spectrum, including the 27.5-28.35 GHz (“28 GHz”) band. Verizon’s Objections provide no basis to delay Commission grant of the Applications and should be rejected on the merits. Accordingly, the

¹ See Verizon Petition in Response to Application for Modification, IBFS File No. SES-MOD-20201204-01309 (June 21, 2021) (“Verizon Lindon Petition”); Verizon Petition in Response to Application for Modification, IBFS File No. SES-MOD-20201204-01310 (June 21, 2021) (“Verizon Bismarck Petition”); Comments of Verizon, IBFS File No. SES-MOD-20201204-01308 (June 21, 2021) (“Verizon Comments”); Letter from Daudeline Meme, Vice President & Associate General Counsel, Verizon, to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SES-MOD-20201204-01305 *et al.* (June 25, 2021) (“Verizon Informal Objection”).

Commission should expeditiously authorize Hughes' proposed minor modifications, including antenna site changes, reduced power levels, and other minor changes in antenna height and size.

II. THE PROPOSED MODIFICATIONS SERVE THE PUBLIC INTEREST WITHOUT ANY ADVERSE IMPACT

As the Applications demonstrate, the proposed modifications serve the public interest by ensuring optimal operations of earth station facilities that are integral components of the overall EchoStar XXIV satellite network, thus enabling Hughes to provide higher-speed (*i.e.*, 100/20 Mbps), higher-capacity broadband services to its 1.5 million plus customers in North, Central, and South America.² In addition, the proposed modifications will facilitate deployment of additional high-speed, high-capacity broadband services, which will be key to meeting unprecedented consumer demand as the COVID-19 pandemic continues to impact broadband usage for years to come.³ Furthermore, ensuring successful launch and operations of the EchoStar XXIV satellite network will bolster Hughes' disaster relief efforts and capabilities, particularly where terrestrial networks are unavailable.⁴

Notably, Verizon does not dispute any of these public interest benefits. Rather, Verizon focuses on hypothetical interference to its fifth generation operations in the 28 GHz band, but offers no evidence of any existing or planned upper microwave flexible use ("UMFU") facilities that could be impacted.⁵ Indeed, Verizon acknowledges that it received prior coordination notice

² See Applications, Exhibit 1 (Description of Proposed Modification) at 2.

³ See *id.* at 3.

⁴ See *id.* at 2.

⁵ See Verizon Lindon Petition at 1-4; Verizon Bismarck Petition at 1-4; Verizon Comments at 1-2; Verizon Informal Objection at 1-3.

of the proposed modifications,⁶ but neglects to mention its failure to respond and its obligation to coordinate in good faith under the Commission's rules.⁷

Specifically, the Part 101 coordination rules require that a “[r]esponse to [coordination] notification should be made as quickly as possible, even if no technical problems are anticipated.”⁸ The coordination rules further require that “[a]ny response to notification indicating potential interference *must specify the technical details* and must be provided to the applicant, in writing, within the 30-day notification period.”⁹ Additionally, “[i]f no response to notification is received within 30 days, the applicant will be deemed to have made reasonable efforts to coordinate and may file its application without a response.”¹⁰

By ignoring its own obligation to coordinate in good faith, Verizon seeks to avoid disclosing the technical details that could allow the parties to coordinate successfully, thus bypassing coordination requirements designed to strike a fair balance between the interests of applicants and potentially affected licensees. Consequently, any interference risks to Verizon's unspecified UMFU facilities near the proposed gateway sites are theoretical at best and should be rejected as pure speculation.

⁶ See Verizon Lindon Petition at 2; Verizon Bismarck Petition at 2; Verizon Comments at 2.

⁷ See 47 C.F.R. § 101.103(d)(2)(iv); see also *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014, ¶ 54 (2016) (“We expect that UMFUS licensees *will cooperate in good faith* in the coordination process and only raise objections if there is a legitimate concern”) (emphasis added).

⁸ 47 C.F.R. § 101.103(d)(2)(iv).

⁹ *Id.* (emphasis added).

¹⁰ *Id.*

III. NO ADDITIONAL ANALYSIS IS REQUIRED TO DEMONSTRATE COMPATIBILITY WITH 28 GHZ UMFU OPERATIONS

Contrary to Verizon’s baseless claim,¹¹ Hughes properly submitted power flux density (“PFD”) contours for its proposed gateway operations based upon assumed input power density levels during clear-sky conditions,¹² consistent with 47 C.F.R. § 25.136 and International Bureau (“IB”) guidance.¹³ In misstating the Commission’s requirements for calculating PFD contours, Verizon crucially omits IB guidance permitting “reli[ance] on clear-sky conditions, [provided that] the applicant should explain with detail why that assumption is appropriate for the specific circumstances and location.”¹⁴ As Hughes explained in its Application filings, PFD contours for the proposed gateway operations were generated using ITU-R P.618’s recommended propagation model to account for clear, cloudy, and rainy weather conditions to determine the percentage of time that the proposed operations will remain within 1 dB of clear-sky power levels.¹⁵ Accordingly, Hughes submitted PFD contours accounting for local weather conditions and reflecting high probabilities of clear-sky conditions, ranging from 96.42% to 98.71%, for its proposed 28 GHz gateway operations.¹⁶ Unsatisfied with these high probabilities, Verizon suggests that a minimum probability of 99.999% would be sufficient justification for assuming

¹¹ See Verizon Lindon Petition at 3; Verizon Bismarck Petition at 3; Verizon Comments at 2; Verizon Informal Objection at 2-3.

¹² See Applications, Attachment B (UMFUS Compatibility Showing).

¹³ See *International Bureau Issues Guidance on Siting Methodologies for Earth Stations*, Public Notice, 35 FCC Rcd 6347, 6349 (IB 2020).

¹⁴ *Id.*

¹⁵ See Letter from Jennifer Manner & Donna Wang, Hughes, to Paul Blais, FCC, IBFS File Nos. SES-MOD-20201204-01305 *et al.*, at 2 (Mar. 29, 2021); Applications, Attachment B (UMFUS Compatibility Showing) at 2.

¹⁶ See *id.*

clear-sky power levels, but fails to cite any Commission rule or guidance that requires such an unrealistically high probability.¹⁷

In any event, requiring additional PFD contours to account for rare non-clear sky conditions at the proposed sites would be pointless. Such additional PFD contours would merely show slightly larger contour areas than those on file. Moreover, any additional interference risks may be fully addressed through previously adopted license conditions requiring: (i) “corrective action to mitigate interference ... if the actual PFD, at ten meters above ground level, exceeds - 77.6 dBm/m²/MHz anywhere outside the contour specified in the application,”¹⁸ and (ii) “immediate corrective action upon receipt of any complaint of actual interference occurring in the portions of roads that lie inside the corresponding pfd contour.”¹⁹ Thus, Verizon’s request for additional PFD contours should be rejected as superfluous and contrary to the Commission’s rules and guidance.

IV. VERIZON’S PROPOSED LICENSE CONDITIONS ARE EXCESSIVE AND CONTRARY TO COMMISSION PRECEDENT

In view of the license conditions noted above, the Commission should reject Verizon’s proposed conditions as excessive and contrary to Commission precedent. Specifically, for the proposed sites in Bismarck and Lindon (where the PFD contours show some overlap of a major road), Verizon’s proposed conditions requiring both operations on a secondary unprotected, non-interference basis and interference mitigation upon complaints of interference are unduly

¹⁷ See Verizon Informal Objection at 2.

¹⁸ See, e.g., Hughes, Radio Station Authorization, Call Sign E170153, IBFS File No. SES-LIC-20170807-00878 (Mar. 5, 2020) (adopting No. 55251 under Section H (Special and General Provisions) for Quincy gateway).

¹⁹ See, e.g., Hughes, Radio Station Authorization, Call Sign E170169, File No. SES-LIC-20170807-00894 (May 15, 2020) (adopting No. 900592 under Section H (Special and General Provisions) for Bismarck gateway).

restrictive, as such conditions would broadly require interference protection even with respect to substantial portions of PFD contour areas that do not overlap any major road.²⁰ More importantly, Verizon’s proposed conditions are contrary to Section 25.136(a)’s provisions allowing for earth station operations “without providing interference protection to [UMFU] stations,”²¹ as well as the Commission’s practice of adopting less restrictive conditions for Hughes’ currently licensed gateway operations in Bismarck and other sites, despite some PFD contour overlap of a major road.²²

V. CONCLUSION

For the foregoing reasons, the Commission should reject Verizon’s baseless objections and proposed license conditions. Accordingly, the Commission should expeditiously grant the Applications, subject to previously adopted license conditions consistent with Commission rules and precedent. Such conditions are more than sufficient to address any interference concerns.

Respectfully submitted,

HNS LICENSE SUB, LLC

By: /s/ Jennifer A. Manner
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July 1, 2021

²⁰ See Verizon Lindon Petition at 4; Verizon Bismarck Petition at 4.

²¹ 47 C.F.R. § 25.136(a).

²² See *supra* note 19.

CERTIFICATE OF SERVICE

I hereby certify that, on this 1st day of July 2021, a copy of the foregoing Opposition and Response was served by electronic mail upon:

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