

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

In the Matter of)	
)	
HNS License Sub, LLC)	File No. SES-MOD-20201204-01308
)	Call Sign E170153
Modification of Application for Gateway)	
Earth Station)	
)	
)	

COMMENTS OF VERIZON¹

To help meet the increasing consumer demand for wireless services, Verizon has invested significant resources in the 27.5-28.35 GHz band to deploy 5G Ultra Wideband in cities and other high-density areas across the country. As the Commission has recognized, these efforts to further the development of 5G and other innovative wireless technologies are vital to “ensure continued American leadership in wireless broadband, which represents a critical component of economic growth, job creation, public safety, and global competitiveness.”²

HNS License Sub, LLC (“Hughes”) seeks authorization to modify its Fixed Satellite Service (“FSS”) gateway earth station in Quincy, Washington, which communicates with Hughes’ geostationary orbit satellite in the 27.5-28.35 GHz band.³ For its Quincy earth station, Hughes seeks authorization for the following modifications: (i) “antenna site changes to new

¹ The Verizon companies participating in this proceeding are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

² Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services*, 32 FCC Red 10988, ¶ 1 (2017) (“*Spectrum Frontiers Second R&O*”).

³ See HNS License Sub, LLC, Application to Modify Quincy Jupiter 3 Gateway, File No. SES-MOD-20201204-01308 (filed Dec. 4, 2020) (“Hughes Application”). In conjunction with this Application, Hughes has submitted applications to modify four other gateway earth stations licensed to operate in Cheyenne, Wyoming, Bismarck, North Dakota, Simi Valley, California, and Lindon, Utah.

location coordinates”; (ii) “antenna height increases”; (iii) “reduced power and equivalent isotropically radiated power density levels”; and (iv) “a minor antenna size reduction from 10 to 9.2 m.”⁴ Consistent with its obligations under Part 101 and Section 25.136 of the Commission’s rules to coordinate with Upper Microwave Flexible Use Service (“UMFUS”) licensees, Hughes provided Verizon a Prior Coordination Notice before filing its Application.⁵

In its Application, Hughes uses clear sky EIRP levels to calculate the PFD contour of its Quincy earth station for purposes of Section 25.136.⁶ However, in its recent guidance on siting methodologies for earth stations operating in bands shared with UMFUS, the International Bureau states that “[d]emonstrations should take into account worst case input power density and not just input power density during clear sky conditions.”⁷ This requirement is important because taking into account worst-case input power density ensures that UMFUS providers can more predictably identify areas of possible interference. While Hughes claims “the earth station is licensed for clear sky EIRP levels pursuant to Section 25.204(e) of the Commission’s rules,”⁸ that Section states only that transmitting earth stations may exceed authorized levels during periods of rain fade. The Commission should thus require Hughes to supplement its Application with computation of the contour that accounts for worst-case input power density.

⁴ See *id.*, Ex. 1 at 1.

⁵ See *id.*, Ex. 1 at 4; see also 47 C.F.R. §§ 101.103(d), 25.136(a)(4).

⁶ See Hughes Application, Attach. B at 1-2.

⁷ Public Notice, *International Bureau Issues Guidance on Siting Methodologies for Earth Stations Seeking to Operate in the 24.75-25.25 GHz, 27.5-28.35 GHz, 37.5-40 GHz, 47.2-48.2 GHz, and 50.4-51.4 GHz Frequency Bands to Demonstrate Compliance with Section 25.136*, 35 FCC Rcd 6347 at 3 (2020).

⁸ Hughes Application, Attach. B at 2.

Respectfully submitted,

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