



Federal Communications Commission
Washington, D.C. 20554

May 6, 2021

Ms. Patricia Cooper
SpaceX Services, Inc.
1155 F Street, N.W.
Washington, DC 20004
Email: Patricia.Cooper@spacex.com

Re: Gateway Earth Station: SpaceX Services, Inc.
IBFS File No. SES-LIC-20201021-01160, Call Sign: E202178

Dear Ms. Cooper:

On October 21, 2020, SpaceX Services, Inc. (SpaceX) filed the above referenced application for a gateway earth station to operate in Mandale, NC. The application must demonstrate compliance with rules concerning compatibility with Upper Microwave Flexible Use Service (UMFUS) operations.¹ We request that SpaceX submit the following information to clarify or supplement its initial showing for this application:

- 1) In accordance with 47 CFR § 25.136(a)(4)(ii), for the portion of the analysis that contains plots of the proposed PFD contour, please identify the county boundaries on each plot, and include a map legend inlay with a distance/mileage scale for measuring the relative size of the proposed contour.
- 2) In accordance with 47 CFR § 25.136(a)(4)(ii), specify whether and to what extent SpaceX is using a "clear sky power" value. SpaceX's demonstration should take into account worst case input power density in addition to input power density during clear sky conditions. If relying on clear sky conditions, please explain why that assumption is appropriate for this specific circumstance and location.
- 3) In accordance with 47 CFR § 25.136(a)(4)(iii), SpaceX is requested to certify that the earth station's PFD contour will not cross any roads classified as "Other Freeways and Expressways or Other Principal Arterials," based on more than a simple visual inspection using Google-Earth software. If SpaceX plans to rely on terrain, clutter and/or shielding installation to comply with requirements of these rules, SpaceX should provide details and analysis about these method(s) and mitigating effects, and how it will ensure compliance with the rules.
- 4) In accordance with 47 CFR § 25.136(a)(4)(iv), please clarify why there is a difference in the "height above ground level" value in the Comsearch Coordination Report, as compared to the

¹ 47 CFR § 25.136. *See also* 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, Public Notice, Report No. SPB-281, DA 20-631 (June 16, 2020).

"height above ground level" value reflected in the application. If this is an error in the Comsearch Coordination Report, please rerun the analysis and re-coordinate with the affected parties, if necessary. For any errors, please correct/amend the application accordingly.

Please submit the requested information within **30 days** of the date of this letter.

Sincerely,

Kerry E. Murray

Kerry E. Murray
Deputy Chief, Satellite Division
International Bureau