

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

SpaceX Services, Inc. (“SpaceX Services”), pursuant to Section 25.120 of the Commission’s rules, hereby requests Special Temporary Authority (“STA”) to operate its gateway earth station for up to 60 days to communicate with the Starlink non-geostationary orbit (“NGSO”) satellite system operated by its sister company, Space Exploration Holdings, LLC (“SpaceX”). SpaceX Services currently has an application pending for one Ka-band gateway earth station, located in Nemaha, NE.¹ It would operate the earth station under the requested STA with the technical characteristics set forth in the associated pending application. The only frequencies used for these operations during the time the STA is in effect would be in the 27.5-29.1 GHz and 29.5-30.0 GHz (uplink) and 17.8-18.6 GHz and 18.8-19.3 GHz (downlink) bands.

The requested STA would permit SpaceX Services to communicate with Starlink satellites to test its gateway earth station both to confirm its operational status and to evaluate the overall performance of the Starlink network of space stations and earth stations. Such testing will ensure that these critical facilities have been fully tested and integrated into the Starlink system and are fully prepared to support commercial launch later this year. Accordingly, the STA will serve the public interest by supporting the preparation of an integral component of an NGSO satellite system that can bring high capacity, low latency broadband service to underserved and unserved areas of the country.

SpaceX Services will operate on a non-interference basis. As set forth in the underlying earth station application, this gateway will protect terrestrial and space systems in shared spectrum bands. Specifically, it will observe the applicable equivalent power flux-density (“EPFD”) limits set forth in Article 22 and Resolution 76 of the ITU Radio Regulations and the applicable power flux-density (“PFD”) limits set forth in the Commission’s rules and Article 21 of the ITU Radio Regulations, which the Commission has found sufficient to protect GSO systems and terrestrial systems, respectively, against harmful interference. In addition, SpaceX Services has completed frequency coordination for the proposed earth station site, providing additional assurance that it can operate on a non-interference basis. In the extremely unlikely event that harmful interference should occur due to transmissions to or from its earth station, SpaceX Services will take all reasonable steps to eliminate the interference. Should an issue arise, SpaceX Services can be reached at satellite-operators-pager@spacex.com, which links to the pagers of appropriate technical personnel 24/7.

¹ The IBFS file number for the earth station application is SES-LIC-20200417-00422.