

**Explanation and Public Interest Statement**

HNS License Sub, LLC (“Hughes”) is seeking pre-grant special temporary authority (“STA”) for period of 60 days beginning on November 1, 2011, to operate the antennas proposed in its pending application in File No. SES-LIC-20111021-01243 (“License Application”) for testing purposes. In the License Application, Hughes seeks a blanket license to operate eleven 6.3 meter Vertex antennas and four 8.1 meter GDSATCOM antennas which will comprise the gateway network for the Jupiter 107W Ka-band fixed-satellite service space station that Hughes’s parent company will launch and place into operation in 2012.

The testing proposed here will be done one antenna at a time – in other words, there will not be more than one of the fifteen proposed antennas in operation at any given time. All testing is expected to be done using either the AMC-15 satellite at 105° W.L. or the AMC-16 satellite at 85° W.L. If capacity on one of these satellites is not available to Hughes at the time a particular antenna is to be tested, Hughes could conduct the tests using Intelsat’s Galaxy 28 satellite at 89° W.L. All three of these satellites are proposed as points of communication in the License Application. Hughes emphasizes, however, that as none of the three satellites identified for the testing includes the 28.6-29.1 GHz and 18.8-19.3 GHz bands, Hughes does not request authority in this STA request to conduct test transmissions/reception in these bands.

Operations of the 6.3 meter Vertex and 8.1 meter GDSATCOM antennas under the requested STA will be as proposed in the above-referenced License Application, and all testing will be done at power levels consistent with Section 25.138 of the Commission’s rules. As noted, all three potential space stations for testing operations are proposed in the License Application as points of communication for the new antennas. Hughes incorporates the technical showings from the License Application into this submission.

Good cause exists for the grant of the requested STA. The fifteen antennas proposed in the License Application will comprise the gateway network for the new high-capacity Jupiter 107W satellite upon its launch next year. It is important that Hughes ensure that the earth station antennas are functional and operationally prepared to be integrated with the space station as soon as the satellite is available for in-orbit testing. In addition, operation will allow the generation of measured antenna patterns for each antenna type, and thus expedite Hughes’s ability to comply with the data submission requirements in Sections 25.138(d) and (e) of the Commission’s rules. Finally, there is an important logistical and cost element here for Hughes as well. Installation of the first of the fifteen antennas is nearing completion, and the installation/operations crew has only limited time within which to test the antenna to complete its installation process before having to move to their next installation assignment. With fifteen sites, if the testing were not able to be done before the crew departs a site, it is uncertain when the next opportunity would be available before the antenna was required to commence regular operation with Hughes Network Systems LLC Jupiter 107W satellite following its 2012 launch. Bringing a crew back for testing would be an added expense.

For the foregoing reasons, Hughes respectfully requests a 60-day special temporary authority commencing November 1, 2011 to enable it to operate, one antenna at a time for testing purposes, the fifteen new antennas it proposes in the License Application. Operations would be with AMC-15 at the 105° W.L. orbital location, AMC-16 at the 85° W.L. orbital location or Galaxy 28 at the 89° W.L. orbital location, and would be limited to the 28.35-28.6/29.25-30 GHz band (Earth-to-space) and 18.3-18.3 GHz/19.7-20.2 GHz bands (space-to-Earth).