FCC Form 312 – STA Castle Rock, CO Earth Station E060382 Attachment September 2011

Explanation and Public Interest Statement

HNS License Sub, LLC ("Hughes") is seeking special temporary authority ("STA") for period of 30 days beginning on September 26, 2011, to operate for telemetry, tracking, and command ("TT&C") testing purposes the new 9.2 meter GDSATCOM transmit/receive Earth station antenna it has applied to add to its license for Call Sign E060382 at Castle Rock, Colorado. See File No. SES-MFS-20110912-01065 ("Modification Application"). Hughes also requests temporary authority to operate the three associated 1.8 meter beacon uplink earth station antennas proposed for beam pointing purposes in the Modification Application – two in North Las Vegas, NV and one in Brownsville, TX – as part of the TT&C tests. The 9.2 meter TT&C earth station antenna and the three Prodelin 1.8 meter beacon uplink antennas will be used with Hughes's Jupiter 107W satellite upon the spacecraft's launch in 2012. The temporary authority requested here proposes operation for TT&C testing purposes with Intelsat's Galaxy 28 satellite at 89° W.L. If capacity on Galaxy 28 is not available to Hughes, Hughes would conduct the tests using either the AMC-15 satellite at 105° W.L. or the AMC-16 satellite at 85° W.L. Under the requested STA, no traffic would be carried on these space stations other than test signals.

Operations of the 9.2 meter GDSATCOM antenna and the three 1.8 meter Prodelin antennas under the requested STA will be as proposed in the above-referenced Modification Application, and all testing is expected to be done at power levels consistent with Section 25.138 of the Commission's rules. All three potential space stations for testing operations are proposed in the Modification Application as points of communication for the new antennas on Hughes's license for Call Sign E060382. Hughes incorporates the technical showings from the Modification Application into this submission.

Good cause exists for the grant of the requested STA. As Hughes's Castle Rock, Colorado earth station is one of two earth station sites that will provide TT&C operations for Jupiter 107W 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 launched. Hughes is filing concurrently a request for similar temporary authority to test its proposed new GDSATCOM 9.2 meter TT&C

¹ Hughes notes, with respect to the 1.8 meter antennas, that there is a possibility that during the testing, Hughes will need to increase the power levels of the beacon stations briefly to levels above those proposed in the Modification Application. Hughes will not operate beyond the proposed levels in any way without having completed coordination of those operations with all potentially affected satellite operators, and recognizes that all operations under this proposed STA are on a non-harmful interference/non-protected basis.

earth station antenna at Fillmore, California (File No. SES-MFS-20110912-01066) under Call Sign E060383.

For the foregoing reasons, Hughes respectfully requests special temporary authority to enable it to operate the new Castle Rock, Colorado 9.2 meter transmit/receive earth station and the proposed new 1.8 meter earth station antennas at North Las Vegas, Nevada and Brownsville, Texas proposed in the pending Modification Application with Galaxy 28 at the 89° W.L. orbital location, AMC-15, at the 105° W.L. orbital location, or AMC-16 at the 85° W.L. orbital location for a period of 30 days beginning on September 26, 2011.