



SatCom Law LLC  
1317 F St. NW, Suite 400  
Washington, D.C. 20004  
T 202.599.0975  
www.satcomlaw.com

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**FILED ELECTRONICALLY**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re: Application to Extend the NSS-10 License Term  
Call Sign S2415, File No. SAT-MOD-20191108-00129**

Dear Ms. Dortch:

SES Americom, Inc. (“SES”), by its attorney and pursuant to Section 1.65 of the Commission’s rules, 47 C.F.R. § 1.65, hereby supplements the record relating to the above-referenced application to extend the license term of the C-band NSS-10 satellite located at 37.45° W.L. (the “Application”). Specifically, SES provides corrected and additional information herein to support the requested waiver of Commission requirements to vent all pressure vessels and submits further justification for the requested term of the license extension.

Venting of helium tanks: The Application seeks any necessary waiver of Section 25.283(c) of the Commission’s rules in connection with the residual helium that will remain onboard the spacecraft at end of life. See Application, Narrative at 2-4. The Application explains that the valves connected to the helium tanks were permanently closed following transfer orbit insertion, making it impossible to relieve the residual pressure in the tanks. *Id.*, Annex at 2. However, the remaining pressure in the tanks is well below the measured rupture pressure, the tanks are designed to leak before burst, and there are panels surrounding the helium tanks that protect them from thermal changes and external debris. *Id.*

The Application incorrectly stated that the spacecraft has only two helium tanks. *Id.* In fact, there are three helium tanks on the satellite, and they are interconnected. Information regarding the residual helium in the tanks is as follows:

Tank	Volume (l)	Pressure (bar)	Temp. (deg C)	Helium mass (g)
Helium 1	51.6	57	19	485
Helium 2	51.6	57	19	485
Helium 3	51.6	57	19	485

Given these facts, granting any required waiver of Section 25.283(c) is fully consistent with Commission precedent. See *id.*, Narrative at 3-4.

License extension request: The Application seeks extension of the NSS-10 license by eight years and nine months to January 6, 2029. *Id.* at 1-2. Grant of the requested extended license term will serve the public interest by promoting efficient use of spectrum and orbital resources to meet customer demand and by minimizing unnecessary administrative burdens.

As discussed in the Application, SES estimates that NSS-10 has sufficient fuel to permit continued operations through the requested extension period and to raise the satellite to a disposal orbit altitude consistent with Commission requirements. *Id.*, Narrative at 2 & Annex at 3. Extending the license term will ensure that SES can maintain service to NSS-10 customers during this period.

SES emphasizes that it is committed to protecting the integrity of the geostationary orbit, and that its ability to safely and effectively complete orbit-raising maneuvers is the determining factor in any decision regarding when to retire a satellite. The length of time remaining in a satellite's license term is not considered in this analysis. Accordingly, SES will retire NSS-10 in advance of the requested extended license expiration date if an unexpected change in circumstances suggests that an early retirement is needed to achieve compliance with the satellite's orbital debris mitigation plan.

Extending the license term of NSS-10 as requested will also facilitate continued use of the spacecraft for service to Brazil. SES's authority to serve the Brazilian market expires on the same day the satellite's Commission license term ends, April 6, 2020, and historically Brazil has allowed only a single extension of a market access grant. Changes in Brazilian law may alter that limitation, but whether the revised provision applies to previously granted authorizations has not been definitively determined. Granting the requested license extension will ensure that SES can extend its Brazilian service rights through the end of NSS-10's expected useful life without being required to seek a new Brazilian authorization.

SES requests that the Commission update the record regarding the Application to incorporate the additional information provided herein. Please contact the undersigned if you have any questions.

Respectfully submitted,

*/s/ Karis A. Hastings*

Karis A. Hastings  
Counsel for SES Americom, Inc.  
[karis@satcomlaw.com](mailto:karis@satcomlaw.com)

cc: Jay Whaley, IB Satellite Division  
Kathryn Medley, IB Satellite Division  
Jennifer Balatan, IB Satellite Division