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By Electronic Filing

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

**Re: New Skies Satellites B.V., Application to Modify the Terms of Market Access for NSS-7, File No. SAT-MPL-20120215-00017 (Call Sign S2463)
Intelsat License LLC, Application to Operate Certain Ku-Band Frequencies on NSS-7, File No. SAT-RPL-20120216-00018 (Call Sign S2854)**

Dear Ms. Dortch:

New Skies Satellites B.V. (doing business as "SES"), by its attorney, hereby provides the attached supplement regarding the residual oxidizer onboard the NSS-7 spacecraft. These materials are provided pursuant to paragraph 7 of the grant of the above-referenced SES application and paragraph 4 of the grant of the above-referenced Intelsat application.

Please address any questions regarding this matter to the undersigned.

Respectfully submitted,

/s/ Karis A. Hastings

Karis A. Hastings

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cc: Stephen Duall
Kathryn Medley
Karl Kensinger

SUPPLEMENT

Background: This supplement is provided pursuant to the terms of paragraph 7 of the attachment to the grant of the SES application to modify the Commission's Permitted Space Station List to reflect relocation of the NSS-7 spacecraft to 20° W.L.¹ That paragraph addressed the SES request for any necessary waiver of Sections 25.114(d)(14)(ii) and 25.283(c) of the Commission's rules given the inability to vent the satellite's oxidizer tanks at the spacecraft's end of life. The Commission granted the waiver but stated that:

This waiver is conditioned upon New Skies confirming the accuracy or correcting, within 10 calendar days of the date of this grant, information previously provided concerning volumes, temperatures, and pressures of the oxidizer tanks, and providing a list of the chemicals and the masses thereof that will be retained in the tanks at end-of-life. Such confirmation or correction and additional information must be supported by an engineering certification executed in the form specified in Section 1.16 of the Commission's rules.²

The following information was provided in the NSS-7 Modification regarding the residual oxidizer on the spacecraft:

As with all Lockheed A2100 series spacecraft, the oxidizer tanks on NSS-7 were sealed using pyrotechnic valves at the end of transfer orbit and therefore cannot be vented at spacecraft end-of-life. This is a design feature of the Lockheed A2100 series spacecraft that cannot now be changed or remedied. Information regarding the residual oxidizer in the tanks is as follows:

Tank	Tank Volume [l]	Pressure [bar]	Temp. [deg C]	Oxidizer Mass [kg]
Ox 1	327.48	258.82	22.05	12.36
Ox 2	327.48	258.82	21.64	12.36

The oxidizer tanks are well shielded, and the residual pressure in the tanks will be well below their maximum rating.³

Supplemental Information: SES hereby provides additional information regarding the oxidizer tank contents to clarify the above data and respond to the questions in the NSS-7 Modification grant.

¹ The supplement is also being filed in compliance with the requirements in paragraph 4 of the attachment to the grant of Intelsat's application to operate certain Ku-band frequencies on NSS-7 at 20° W.L.. See Intelsat License LLC, File No. SAT-RPL-20120216-00018 (the "NSS-7 License Application"), grant-stamped May 25, 2012, Attachment to Grant at 1-2, ¶ 4.

² New Skies Satellites B.V., File No. SAT-MPL-20120215-00017 (the "NSS-7 Modification"), grant-stamped May 25, 2012, Attachment to Grant at 3, ¶ 7. Substantially the same language appears in paragraph 4 of the grant of the NSS-7 License Application.

³ NSS-7 Modification, Technical Appendix at 76.

The NSS-7 spacecraft has two oxidizer tanks of equal size joined by a connecting line. Prior to launch, the tanks were loaded with oxidizer for use in the transfer orbit maneuvers. Specifically, the tanks contained oxidizer, in this case N_2O_4 or dinitrogen tetroxide, as well as helium gas to act as a pressurant. Following the completion of the transfer orbit maneuvers, the tanks were permanently sealed. Accordingly, the oxidizer and helium gas that were not expelled from the tanks during the transfer orbit maneuvers remain in the tanks and cannot be vented at end of life.

The oxidizer tanks are equipped with a pressure transducer to measure the tank pressure. However, there is no mechanism that allows measurement of the mass of the remaining oxidizer and helium in the tanks. Instead, the mass information regarding the residual contents of the tanks is based on calculations performed by Lockheed Martin after the completion of transfer orbit. These calculations relied on estimation of the amounts of oxidizer and pressurant expelled from the tanks as the transfer orbit maneuvers were performed. Accordingly, there is a significant degree of uncertainty regarding the mass data for the residual contents of the tanks.

With this background, SES responds to the specific items set forth in paragraph 7.

1. Confirmation or correction of the information previously provided concerning volumes, temperatures, and pressures of the oxidizer tanks:

SES confirms that the information regarding volumes, temperatures, and pressures of the oxidizer tanks that was included in the NSS-7 Modification application is correct to the best of our knowledge, information and belief. The tank volume data reflects the spacecraft specifications, the temperature data was measured by sensors on the tanks, and the pressure data was measured by the pressure transducer. The tanks have different temperatures because of where each tank is situated on the spacecraft. However, because the tanks are joined, the pressure in each tank is the same.

2. List of the chemicals and the masses thereof that will be retained in the tanks at end-of-life:

As discussed above, the chemicals remaining in the oxidizer tanks are dinitrogen tetroxide (N_2O_4) and helium (He). The calculations performed by Lockheed Martin following completion of transfer orbit indicate that the total mass of the dinitrogen tetroxide remaining in the two joined oxidizer tanks is 24.7 kg, and the total mass of the helium remaining in the two joined tanks is 1.4 kg.⁴ As noted previously, there is significant uncertainty with respect to the mass data and no way to measure the mass of the residual contents of the oxidizer tanks.

⁴ In the information previously provided as part of the NSS-7 Modification, SES reported only the mass of the oxidizer (not the inert helium), and assumed equal division of the oxidizer mass between the two tanks. However, because the tanks are joined by a line, the contents can migrate between the tanks based on factors such as temperature. Therefore the contents may not be equally divided between the two tanks. Accordingly, SES is reporting here the combined mass of the chemicals in the two oxidizer tanks.

DECLARATION

I, Pascal Wauthier, hereby certify under penalty of perjury under the laws of the United States of America that I am the technically qualified person responsible for preparation of the technical information contained in the foregoing exhibit and that I either prepared or reviewed the technical information contained in the exhibit and that it is true and correct to the best of my knowledge, information and belief.

/s/ Pascal Wauthier_____

Vice President, Flight Operations

for New Skies Satellites B.V.

Dated: June 4, 2012