



March 8, 2024

By Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
45 L Street, N.E.
Washington, D.C. 20554

Re: Retirement of Ciel 2 Satellite (Market Access Granted to Earth Station E050029)

Dear Ms. Dortch:

Northern Americas Satellites Ventures, Inc. ("SES") hereby advises the Commission that it has placed its Ciel 2 spacecraft, which was granted U.S. market access via earth station call sign E050029, into a disposal orbit and asks that the Commission close the ICFS account for this spacecraft.

Deorbit maneuvers commenced on January 27, 2024, and final commands were sent on February 1, 2024. The disposal orbit has a perigee altitude of approximately 330 km above the geostationary arc and an apogee altitude of approximately 380 km above the geostationary arc. The inclination is approximately 0.53 degrees.

The disposal orbit complies with the IADC formula calculated using the measured solar radiation coefficient (Cr) of 1.32 for the spacecraft, which is $303.5 \text{ km} = 36021 \text{ km} + (1000 \times 1.32 \times 134.6/2593) = 36,089.5 \text{ km}$, or 303.5 km above the geostationary arc altitude of 35,786 km. However, the perigee altitude is lower than the levels discussed in SES's 2008 submission in support of EchoStar's application seeking authority to add Ciel 2 to its earth station license. In that submission, SES calculated that using a "worst case" Cr of 2, the altitude needed to comply with the IADC formula would be 338.8 km above the geostationary arc, and SES stated it would raise the spacecraft to 350 km above the geostationary arc. *See* File No. SES-MFS-20080926-01242, Attachment D to the Narrative.

Consistent with this commitment, SES targeted 350 km above the geostationary arc for Ciel 2's disposal altitude but was prevented from achieving that altitude due to factors beyond SES's control. Specifically, during measures taken to complete orbit raising, circularize the orbit, and vent the propellant and oxidizer tanks on board Ciel 2, unexpected thruster issues arose and kept SES from reaching the targeted altitude. Despite these issues, Ciel 2 was disposed of well above the geostationary arc, and the satellite was fully passivated – the fuel and oxidizer tanks were vented, the batteries were discharged, and all equipment including telemetry transmitters were switched off.

In light of the satellite's retirement, SES requests that the Commission terminate the Ciel 2 market access authorization in the ICFS database.

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Please address any questions regarding this matter to the undersigned.

Respectfully submitted,

By: /s/ Daniel C. H. Mah

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