

From: Chris Cook

To: Hung Le

Date: May 19, 2021

Subject: Request for Info - File # 0676-EX-ST-2021

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Message:

Please provide the following:

1. Based on the earth station location, please provide a 2 degrees interference calculation to demonstrate the proposed moon-bounce communication will not cause unacceptable interference to adjacent geostationary-satellites that are located 2 degrees away at orbital location.

- The system is designed such that transmission will be automatically disabled when the earth station antenna is pointed within +/- 2 Degrees of the geosynchronous satellite orbital arc. This will prevent any possible interference with existing satellites.

2. The signal returning to Earth will be weak enough to be below the noise floor, What is the strength level of the reflected signal from the moon?

- The return signal will be incredibly weak and is well below the noise floor. We calculate the reflected signal to be -201 dBm/Hz or -138.34 dBm for the full 2 mhz.