From: Michael Miller

To: Nimesh Sangani Date: March 31, 2021

Subject: Additional Information Request

Message:

1) When I coordinated your STA request your emission request you 1M00G1D but now it shows up as 2M00G1D. Why did you change your emission? What is the value that you're requesting? I can't see any exhibit in your application that suggest that you changed the emission.

Answer: The design was not changed, but the bandwidth calculation was corrected. The 1 MHz data flow goes through a Convolutional Encoder which doubles the data rate and doubles the bandwidth to 2MHz. So, the correct calculated bandwidth is 2 MHz.

2) During coordination of other matters NASA and NanoRacks LLC., NASA was informed the EIRP is expected to be 9 dBW. This is in excess of the requested of 8.013 dBW based on the 2W and 5 dBi gain antenna.

Answer: On March 3, our project initially told NASA the EIRP is 9 dBW. Later that day, a clarification was sent to NASA, indicating that the 9 dBW number was a simple outside estimate, that did not take into account cable and connector losses. NASA accepted this explanation.

- 3) Will the trasmitters radiate continuously once activated, until de-orbit with F9 upper stage? Answer: Yes. The period of transmitting is expected to be less than 6 hours based on the current de orbit plan.
- 4) Are you planning to have a command link? Answer: No.
- 5) Will you be able to shutdown if harmful interference is experienced to licensed users? Answer: No.