

From: Ryan Martineau

To: Doug Young

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Subject: Request for Info - File # 0449-EX-CN-2017

Message:

In the SpaceCap I had sent originally, I had not counted for passive loss in the maximum and minimum output power and PFD. The passive loss is 2.2 dB, the antenna gain toward the ground as it is transmitting is 0 dB (-2.7 dB from the max gain point) and the orbit has been modified to be >450 km, resulting in an additional 1 dB of range loss. The resulting total PFD with these losses is -152.01 dBW/m²/4kHz, negating the need to reduce power per the NASA recommendation. The minimum power density is about -168 dBW/m²/4kHz. I assume I will need to resubmit the SpaceCap to reflect the new orbit?