From: Noah Cherry

To: Nimesh Sangani
Date: November 29, 2021

Subject: Additional Information Request

Message:

Items a-f address the determination of EPFD at the GSO arc. Items d and g appear redundant (g is worded differently), with g apparently seeking a response regarding the full visible GSO arc independent of the response to d. This data is provided using the Honeywell antenna pattern, for each elevation angle (minimum, and center of pass). Please see the below also submitted via attachment.

		At minimum Elevation		At center of pass	
		4 kHz	40 kHz	4 kHz	40 kHz
a.	a maximum input power spectral density (dBW/40kHz and dBW/4kHz) for earth station,	-21.24	-11.24	-21.24	-11.24
b.	the minimum separation angle between the O3b orbit and the GSO arc (degrees),	12.3	12.3	15.8	15.8
c.	the off-axis gain (dBi) (32−25log(θ) transmitting from earth station),	4.752372214	4.752372214	2.033572826	2.033572826
d.	the off-axis EIRP density towards the GSO (dBW/40kHz and dBW/4kHz),	-16.48762779	-6.487627786	-19.20642717	-9.206427174
e.	the minimum elevation angle from earth station FIXED site/location to the GSO orbit/ satellite,	10	10	34.8	34.8
f.	the spreading loss	163.4	163.4	162.4	162.4
g.	the maximum EIRP density (dBW/40kHz and dBW/4kHz) radiated towards a victim GSO satellite at any point on the GSO arc (which will result at very low power and would not cause interference to GSO satellite)	-16.03	-6.03	-24.22	-14.22