From: Perry Jones

To: Leann Nguyen
Date: April 25, 2017

Subject: Request for Info - File # 0089-EX-CN-2017

Message:

Applicant: Vertex Communications Corporation
File Number: 0089-EX-CN-2017
Correspondence Reference Number: 36222
Date of Original Email: 03/27/2017
Please submit the following information as soon as possible

- Antenna gain with any applicable power split:
* Our transmit source consist of a 500ft tower with a 3.5m parabolic dish located at the base pointing straight up in zenith striking a flat 3'x5' panel (ref as "Fly Swatter"). It is located 490ft above in a fixed azimuth with an adjustable Elevation angle. I've listed the 3.5m antenna and fly swatter gain values below. The values were computed using the Grasp analysis software.

Frequency (GHz)	3.5m Antenna Gain (dBi)	Fly Swatter Gain (dBi)
3.4	39.2	17
4.2	41.3	20.6
4.5	42.1	21.8
4.8	42.8	23
5.85	44.7	26.1
7.71	47.4	30
7.9	47.6	30.3
8.4	48.2	31.1
10.7	50.5	33.8
13.25	52.5	35.5
14	53.1	35.8
14.8	53.6	36.1
17.3	55	36.6
21.2	56.9	37.1

- Antenna pointing/alignment:
* 3.5m dish at base of tower is fixed in AZ and El pointing to straight zenith. The "Fly Swatter" is a fixed azimuth angle pointing approx. 85 degrees East with an adjustable elevation angle of -5 to +5 degrees. We typically operate at an angle of -1.8 degrees.

- Anticipated duty cycle of testing operations
* 8-10hrs daily when in operation; all test are done using a CW signal, no modulation, mostly on a 5 day work week.

The items indicated above must be submitted before processing can continue on the above referenced application.

Failure to provide the requested information within 30 days of 03/27/2017
may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.