

From: Andrew Farnsworth

To: Behnam Ghaffari

Date: March 13, 2018

Subject: FCC File No. 0428-EX-ST-2018

Message:

Hello!

I am SORRY for so much back and forth! I am a biologist, as you can probably tell . . .

So I understand the effective radiated power, the calculation you suggest with our metrics is as follows:

Transmit Power + Antenna Gain = ERP

25 KW + 20 db = ERP

$25 \text{ KW} = 10^{\log(25\text{KW} \cdot 1000)} = 74 \text{ db}$

74 db + 20 db = ERP

94 db = ERP

$10^{(94/10)} = 10^{9.4} = 2511886431.510 \text{ watts} = \text{ERP}$

ERP = 2.51 GW (GigaWatts)