



## WIIT Exhibit 7

The specified transmitter power output produces the authorized effective radiated power. Working backwards from the specified antenna to the transmitter, this exhibit will provide the basis for this statement.

The antenna utilized is an SWR Model # FMEC single bay antenna. The specified antenna has a power gain of 0.441 as specified by the manufacturer. The antenna input power to achieve the authorized effective radiated power of 3 Watts is 7 Watts.

The transmission line utilized by this facility consists of 317 feet of Andrew LDF4-50A. For this length of line total line loss is -2.11756dB and the fractional efficiency is 0.614107 based on frequency. Also included in the transmission line system is a Polyphasor IS-50NX-C0 Insertion Loss -0.1dB and a fractional efficiency of 0.977237. This therefore results in an input power and a transmitter power output to the transmission line of 12 Watts.

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