

## **Exhibit E-7**

This exhibit has been included to demonstrate that the transmitter power output produces the authorized effective radiated power. The authorized effective radiated power for the facility is 4.2 kW. With the particular antenna model, an ERL LPX-2E, an antenna input power of 4.21 kW is required since the gain of this antenna is 0.9971. The transmission line consists of 370 feet of Andrew HJ7-50A 1 5/8" nominal diameter air dielectric coaxial cable. The efficiency for this length of cable, based on the manufacturer's data, is 0.844. This results in a required power of 4.99 kW or 6.98 dBk at the output of the notch filters. The two filters have an insertion loss of 0.05 dB total, which therefore requires a transmitter power output of 7.03 dBk, or 5.05 kW, which according to the provisions of Section 73.212 of the Commission's Rules, rounds to 5.1 kW. It is therefore respectfully submitted that the transmitter power output produces the authorized effective radiated power.