TECHNICAL TESTS PERFORMED AS SPECIFIED BY SPECIAL OPERATING CONDITION #4 OF CONSTRUCTION PERMIT BMPED-20100901AAY FOR RADIO STATION KGRJ, CHAMBERLAIN, SD

On July 7, 2011, measurements were performed at the tower site 1.5 miles north of I-90, Exit 265 at Chamberlain, South Dakota where transmission facilities were being tested for radio station KGRJ as specified on FCC construction permit BMPED-20100901AAY, grant date of September 15, 2010.

In preparation for these tests, a spectrum analyzer, IFR Model 1200S, with frequency calibration traceable to the NBS, was used. A sample antenna was affixed to the RF input port (antenna connector) and readings were taken at a point approximately 1 mile from the transmitter site. The transmitter was set for 6.75KW output power as measured on the front panel meter and which had been confirmed to be accurate with a Bird Through Line wattmeter. This is the operating power necessary to make the ERP of 21.5 kilowatts designated on the construction permit. The sample RF signal was attenuated to allow adjustment of the signal on the display so a minimum of 90 db of scale range was usable. The following values were observed in compliance testing for rules set in 47 CFR, Sections 73.317(b), (c), and (d):

(b): energy in the region between and inclusive of 120 Khz to 240Khz removed from the carrier was measured at maximum of 60 db down from carrier tip. Rules specify 25 minimum.

(c) energy in the region above 240 Khz and up to and including 600Khz was measured at a maximum of 65 db down from carrier tip Rules specify this to be 35 db minimum.

(d) energy above 600 Khz removed from the carrier was measured at 90 db down from the main carrier, this was at the second harmonic of 179.80 Mhz.

Thus, all rules of 47 CFR, Sections 73.317 (b), (c), and (d) are being met.

Respectfully submitted:

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