

APPLICATION FOR STATION LICENSE
LEIGHTON ENTERPRISES, INC.
KYCK (FM) RADIO STATION
CH 246C1 - 97.1 MHZ - 100.0 KW
CROOKSTON, MINNESOTA
March 2006

TECHNICAL STATEMENT

This Technical Statement was prepared on behalf of Leighton Enterprises, Inc. ("LE"), licensee of radio station KYCK, Channel 246C1, Crookston, Minnesota. LE also holds a permit correcting the coordinates and height data of the licensed KYCK facility (BPH-20051116AAQ). This instant application seeks a license to cover the outstanding permit. Attached, as Exhibit A, is a calculation of the transmitter power output for the KYCK system.

There are two special operating condition or restriction noted on the permit. The first notes that LE specified the use of a FCC/EPA Type #3 antenna to demonstrate compliance with the Commissions radio frequency radiation conditions. As indicated in this instant application, the KYCK antenna system is a Harris/ERI rototiller style system. As such, this condition has been met.¹

1) In BPH-20051116AAQ, the actual number of bays for the KYCK antenna was not specified. A single bay antenna was assumed for a worst case analysis calculation of RF levels at the base of the tower. The number of bays used will actually reduce the RF levels at the base of the tower. Using the Commission's FMMODEL program, the Harris/ERI eight bay antenna mounted at 111.3 meters above the ground contributes 0.0326 mw/cm² at 30 meters out from the base of the tower (worst case). This represents 3.3% of the limit for controlled environments and 16.3% of the limit for uncontrolled environments. The levels specified in BPH-20051116AAQ, assuming a one bay antenna, were 0.1244 mw/cm² or 12.4% of the controlled environment and 62.2% of the uncontrolled environment. Thus a substantial reduction occurs, as a result of the utilization of an eight bay antenna.

The second condition notes that LE must reduce power of the facility, in coordination with other users of the site, to allow tower access. LE herein restates that it will, in cooperation with other tower users, reduce the power of KYCK or cease operation, as necessary, to insure that persons having access to the tower will not be exposed to radio frequency electromagnetic fields in excess of the FCC's guidelines. Based on the foregoing, it is believed that the conditions on the KYCK permit has been satisfied.