

ENGINEERING STATEMENT - ANTENNA REPLACEMENT

The WDBK(FM) antenna was recently replaced. The former antenna was a four-bay full-wave spaced circularly-polarized antenna. The replacement antenna is a two-bay $\frac{3}{4}$ -wave spaced circularly-polarized antenna. The replacement antenna center of radiation height is the same as the former antenna. There is no change in location. There is no change in effective radiated power in either the vertical or horizontal polarization planes. The antenna pattern remains non-directional. The replacement of a non-directional antenna with one of the same or different number of bays while maintaining the same center of radiation is permitted without a construction permit pursuant to 47 CFR §73.1690(c)(1).

As a result of a reduction in the power gain of the antenna, a commensurate increase in transmitter power output is required to achieve the licensed 100 watts of effective radiated power in the vertical and horizontal polarization planes as detailed in the exhibit entitled *Transmitter Power Output* included in the instant application. The transmitter power output is the only licensed parameter being altered via the instant application. After adjusting transmitter power output, program tests at the authorized ERP of 100 watts commenced as permitted by §73.1690(c)(1).