RF HAZARD STATEMENT

PROPOSED FM TRANSLATOR STATION
DURHAM, NORTH CAROLINA
CHANNEL 283

With respect to the potential for human exposure to radio frequency (RF) energy, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01)* indicate that the proposal will not result in human exposure to RF energy at ground level in excess of FCC standards. The calculation of RF energy at 2-m above ground was made using the following formula from the OET-65 document:

$$S = \frac{(33.4)F^2P}{R^2}$$

where, S = power density in $\mu W/cm^2$, F = relative field factor at the angle to the calculation point, P = the total effective radiated power relative to a dipole in watts, and R = distance from the antenna radiation center to the calculation point in meters. Based on the conservative assumption of a relative field factor of 1.0 with a total effective radiated power of 380 watts, and an antenna radiation center height above ground of 130 m, the calculated power density will not exceed 0.775 $\mu W/cm^2$. Therefore, the calculated RF exposure at 2 m above ground will not exceed 0.39% of the FCC limit of 200 $\mu W/cm^2$ for general population / uncontrolled environments.

The transmitter site shall be restricted from access. In the event that personnel are required to climb the tower structure, the proposed FM translator transmissions shall be reduced or terminated as necessary to prevent RF exposure above the FCC recommended limits.

* Federal Communications Commission OET Bulletin No. 65, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (Edition 97-01, August 1997).