

RF HAZARD STATEMENT
LPFM STATION WZEA-LP
ORMOND BEACH, FLORIDA
CHANNEL 296

The proposed LPFM antenna will be side-mounted on the existing Tower No 1 (southeast tower) in the WNDB(AM) antenna array. This tower is employed for the WNDB daytime non-directional antenna and in the WNDB nighttime directional antenna. The antenna will be located 59 m above ground level with a height above mean sea level of 68 m AMSL. A maximum effective radiated power (ERP) of 22 watts using a circularly polarized transmitting antenna has been assumed for calculation purposes.

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:

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

where, S = power density in $\mu\text{W}/\text{cm}^2$, 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 44 watts, and an antenna radiation center height above ground of 59 m, the calculated power density will not exceed $0.45 \mu\text{W}/\text{cm}^2$. Therefore, the calculated RF exposure at 2 m above ground will not exceed 0.23% of the FCC limit of $200 \mu\text{W}/\text{cm}^2$ for general population / uncontrolled environments. Therefore, the proposal complies with the FCC limits for human exposure to RF energy and it is categorically excluded from environmental processing.

The applicant, in coordination with any other users of the transmission facility, shall reduce power or cease operation as necessary to protect persons having access to the tower or antenna from RF energy in excess of the FCC guidelines.

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