

RF COMPLIANCE EXHIBIT

January 2, 2024

The proposed WTPM-LD facility will comply with the FCC Rules concerning human exposure to radio frequency (RF) energy. The calculation of RF energy at 2-m above ground was made under the procedures of OET Bulletin No. 65. The formula employed is as follows:

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

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.

The proposed antenna will be mounted with radiation center at a height of 56.8 meters on an existing tower structure. The power density at 2 meters above ground level at the base of the tower, based on a "worst-case" vertical relative field value of 0.092 for any depression angle greater than 30° below horizon, a total ERP of 19.5 kW (Epol) and an antenna center of radiation height above ground level of 56.8 meters, the calculated power density at two meters above ground level at the base of the tower is 1.8 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$), or 0.5 % of the Commission's recommended limit applicable to uncontrolled exposure areas, $371.3 \mu\text{W}/\text{cm}^2$, for channel 28. Since the total RF exposure will not exceed 5 % of the FCC limits for uncontrolled environments, the proposal is believed to be in compliance with the FCC limits for human exposure to RF radiation, and since the antenna will be mounted on an existing, registered tower, ASRN 1010367, there will be no adverse environmental impact by this proposal.

The applicant will verify that access to the tower site is restricted, and that the site is appropriately marked with RFR warning signs. In addition, if workers or other authorized personnel need to enter the restricted area or climb the tower, appropriate measures will be taken to assure workers safety with respect to radio frequency radiation exposure. Such procedures include scheduling the work when station WTPM-LD is shut down.



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