

EXHIBIT 14

RADIO FREQUENCY EXPOUSRE STUDY

Radio Ponder will have two sources of RF at this site. One source is the AM station KLAR and the other source is the proposed Low Power Digital TV station.

KLAR is a Class D station operating on 1300 kHz with daytime ERP of 1.0 kW. This station utilizes a quarter wavelength vertical transmitting antenna. Access to the transmitting antenna is controlled by a fence that is 4.5 meters from the base of the tower. This distance is 3.5 meters greater than the required 1-meter distance as specified in OET 65, therefore the AM existing site is in compliance with OET 65 and CFR 47 Section 1.1306 for general population /uncontrolled exposure limits.

This amendment application for an increase in the ERP from 0.3 kW to 3.0kW does contribute more than 5% of the total limit for general population/ uncontrolled therefore additional study was warranted to ensure that this proposal would comply with OET 65 and CFR 47 Section 1.1307 (b) (3).

Formula (7) Section II OET 65:

$$S = \frac{(2.56) (1.64) (1000) (6000) (1.000)^2}{(4) (3.14) (5300)^2}$$

$$S = 0.0714 \text{ } \mu\text{W}/\text{cm}^2 \quad 7.14 \% \text{ of Controlled Exposure allowed}$$
$$S = 0.0714 \text{ } \mu\text{W}/\text{cm}^2 \quad 35.70 \% \text{ of Uncontrolled Exposure allowed}$$

Maximum General Population/Uncontrolled exposure allowable for VHF TV is 200 $\mu\text{W}/\text{cm}^2$

OET 65 Appendix A Table 1 (B) Limits for General Population/Uncontrolled Exposure:

Freq range (MHz)	E (V/m)	H (A/m)	S (mW/m)	Time (minutes)
0.3 – 1.34	614	1.63	(100)*	30

*Plane-wave equivalent power density

OET 65 Figure 2 MININEC AM Model for 1 kW, 0.25 wavelength tower GRAPH:

When plotted for the fence distance, 4.6 meters, the E field value is 15 V/m and the H field value is 0.17 A/m.

(E) 15 V/m is 2% of the maximum 614 V/m allowed for General Population/Uncontrolled

(H) 0.17 A/m is 10 % of the maximum 1.63 A/m allowed for General Population/Uncontrolled

Furthermore, calculating the power density using the values from Figure 2 Graph and applying:

$$Pd = (0.1) (E) (H) \text{ mW}/\text{cm}^2$$

Thus;

$$Pd = (0.1) (15) (0.17) = 0.225 \text{ mW}/\text{cm}^2$$

This value is .225% of the allowable maximum for General Population/Uncontrolled Exposure.

$$\text{Total RFE } 35.7\% + 0.225\% = 36\%$$

Based on these values this site is in compliance with OET 65 and CFR 47 Section 1.1306 and 1.1307.

Applicant will cease operations of both stations when personnel are required to work on the antenna system of either station or less than 4.5 meters of the AM tower.