

Radiofrequency Radiation Calculation
Translator K254AM
Channel 254D – 98.7 MHz
0.250 kW ERP – 314.1 m COR AMSL
Fort Smith, Arkansas
April 2021

This radiofrequency radiation study is being conducted to determine whether this proposal is in compliance with OET Bulletin Number 65, dated August 1997, regarding human exposure to radiofrequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations and utilizes the appropriate formulas contained in the OET Bulletin.

The 3-bay 0.75 wave spaced PSI FMLB-3 antenna will be mounted with its center of radiation 145.0 meters above the ground and will operate with an effective radiated power of 0.250 kilowatts in both the horizontal and vertical plane (horizontally polarized). The PSI FMLB-3 is an opposed “V” dipole (EPA Type 2) antenna and qualifies for best case radiofrequency radiation analysis. At two meters, the height of an average person, above the ground at the base of the tower, this proposal will contribute, best case, 0.00636 microwatts/sq. centimeter or 0.00318% of the allowable ANSI limit. Other areas near the tower were examined and it was found that the maximum radiofrequency radiation contribution is 0.0% of the allowable ANSI limit at all points within 100 meters from the tower. Because this level is less than 5% of the ANSI limit, it is not necessary to calculate the contributions of co-located and nearby broadcast facilities at this multi-user site.

Since this level is below the maximum contribution of 100% defined in the aforementioned bulletin, this proposal is believed to be in compliance with OET Bulletin Number 65 as is required by the Federal Communications Commission. All calculations were made in the uncontrolled mode.

Further, the applicant will post warning signs in the vicinity of the tower warning of potential radiofrequency radiation hazards at the site. In addition, the applicant will reduce

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the power of the proposed facility or cease operation, as necessary, to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.