

Radiofrequency Radiation Calculation

Translator W232DU

Channel 232D – 94.3 MHz

0.250 kW ERP (DA) – 562.3 m COR AMSL

Clarkesville, Georgia

March 2020

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 1-bay (full wave spaced) PSI FMT-1A-6DB antenna system will be mounted with its center of radiation 19.8 meters above the ground and will operate with an effective radiated power of 0.250 kilowatts in both the horizontal and vertical plane (circularly polarized). The PSI FMT-1A-6DB is an “Opposed-V” (EPA Type 2) antenna and qualifies for “best case” RFR treatment. At two meters, the height of an average person, above the ground at the base of the tower, this proposal will contribute, best case, 3.69 microwatts/sq. centimeter or 1.85% of the allowable ANSI limit. Other areas near the tower were examined and it was found that the maximum radiofrequency radiation contribution is 7.3% of the allowable ANSI limit at 18 meters from the tower.

The only nearby broadcast station is Translator W299AT located 10 meters away. W299AT utilizes a 2-bay Shively 6812C-2 antenna (EPA Type 1) that qualifies as a “best case” antenna. W299AT operates at a height of 21 meters AGL with an ERP of 0.250 kW. At two meters, the height of an average person above the ground at the point of the greatest contribution of this proposal, W299AT contributes, best case, 26.17 microwatts/sq. centimeter or 13.1% of the

allowable ANSI limit. Adding the contribution of 7.3% of this proposal to the contribution of 13.1% of W299AT gives a total contribution of 20.4%.

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 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.