

Radiofrequency Radiation Calculation

Translator W261AX

Channel 261D – 100.1 MHz

0.250 kW ERP – 567.2 m COR AMSL

Pittsburgh, Pennsylvania

December 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 Shively 6014-4/3 panel antenna system will be mounted with its center of radiation 206 meters above the ground and will operate with an effective radiated power of 0.099 kilowatts in both the horizontal and vertical plane (circularly polarized). This is a “worst case” antenna. At two meters, the height of an average person, above the ground at the base of the tower, this proposal will contribute, worst case, 0.15589 microwatts/sq. centimeter or 0.0779% of the allowable ANSI limit. Because this contribution is less than 5%, it is not necessary to calculate the contributions of the other broadcast stations 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 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.