

## ENVIRONMENTAL IMPACT STATEMENT

The proposed modification has been analyzed with respect to OET Bulletin 65 Edition 97-01 entitled *Evaluating Compliance With FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields* (OET65).

The instant application proposes an antenna side-mounted on an existing tower at a center of radiation 219.2 meters above ground level, operating with an effective radiated power (ERP) of 281 kW on RF channel 23 (527 MHz channel center). Using OET 65 Supplement A equation (2) with a relative field factor “F” of 0.1, the proposed facility yields a worst-case power density two meters above ground level of  $1.99 \mu\text{W}/\text{cm}^2$ . This equates to only 0.57% of the maximum-permissible uncontrolled (general population) exposure limit of  $351.3 \mu\text{W}/\text{cm}^2$  at this frequency per OET65 Appendix A, Table 1 (B).

There are two other broadcast facilities at the WNJS location, WNJS-FM and WSJT-LD . Both operate with antenna heights comparable to WNJS, but with much lower effective radiated power which, as will be demonstrated below, yield a negligible power density at ground level.

WNJS-FM operates on channel 201 (88.1 MHz) with an effective radiated power of 81 watts combined horizontal and vertical at an antenna height of 279 meters. The WNJS-FM antenna is a slant-polarized dipole. Using the Commission’s *FM Model*, a worst-case power density of  $0.033 \mu\text{W}/\text{cm}^2$  is predicted, which represents only 0.017% of the uncontrolled exposure limit of  $200 \mu\text{W}/\text{cm}^2$ .

WSJT-LD operates at 3 kilowatts ERP on VHF channel 10, with an antenna height of 265.1 meters. Using OET 65 Supplement A equation (2) with a relative field factor “F” of 0.2, a power density of  $0.058 \mu\text{W}/\text{cm}^2$  is predicted. This represents 0.029% of the uncontrolled exposure limit of  $200 \mu\text{W}/\text{cm}^2$ , which, as in the case of WNJS-FM, is a negligible amount.

Other emitters at the WNJS tower facility include stations operating under Part 22 paging, radiotelephone, and cellular radiotelephone, Part 24 personal communication services, Part 74 broadcast auxiliary, Part 90 land mobile radio, Part 97 amateur radio, and Part 101 microwave. Unlike the broadcast stations, these non-broadcast transmitters, most of which are categorically excluded from routine evaluation, contribute a negligible amount to the total power density at or near ground level by virtue of their high antenna heights and low power levels. In summary, the combined power density of all emitters is well below the maximum permissible exposure limit for even uncontrolled access.

The proposed facility will have no other significant environmental impact. The tower structure is existing and is duly registered (ASR 1045125). The overall height above ground will not be increased via the addition of the side-mounted antenna. The entire facility including the base of the antenna structure is enclosed by a locked perimeter fence with access restricted to only authorized personnel. The antenna structure is posted with appropriate radiofrequency radiation warning signs. The antenna location is not in a sensitive environmental area. The proposed facility does not require further environmental analysis under 47 CFR §1.1307 and is therefore excluded from environmental processing under 47 CFR §1.1306.