

Comprehensive Engineering Exhibit

WMTX(FM), Facility ID No: 23078

August 24, 2010

This application seeks a change in antenna location for WMTX(FM). The proposed antenna is to be a shared use facility located 467 meters above ground level upon a tower identified by registration number 1057473. The maximum effective radiated power is to be 100 kilowatts, and the effective radiated power is to be 96 kilowatts.

From this location WFUS will be fully spaced to all other facilities, applications, and allocations, except WHYI-FM. Processing in accordance with Section 73.215 is requested. Below is a map demonstrating that no prohibited contour overlap will occur between the proposed facility and the "Class Maximum" facility of WHYI-FM. Please see Figure 1 below.

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is to be a Dielectric "FMV" 8 bay, antenna, with a spacing of 0.89 wavelengths at the stations frequency of operation, mounted 467 meters above ground. For purposes of this analysis the FM Model program being used has been set to calculate values for a "worst case" element of a "Ring Stub" EPA type 1, 8- bay, 0.89 wave spaced, antenna mounted with its center of radiation height of 467 meters, and operating with an effective radiated power of 100.0 Kilowatts in both the horizontal and vertical planes. At 2 meters above the surface, at 196 meters from the base of the tower, this proposal will contribute worst case, 0.97 microwatts per square centimeter, or 0.10 percent of the allowable ANSI limit for controlled exposure, and 0.50 percent of the allowable limit for uncontrolled exposure. This figure is less than 5 percent of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 1.

