

NONIONIZING RADIATION COMPLIANCE
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WWST Corporation, LLC
Wooster, OH

The WQKT facilities will continue to fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. This application is strictly a coordinate correction and proposes no changes in the existing licensed facilities. This existing tower also acts as the antenna for WKVX(AM).

The WQKT facilities employ a Harris FMXH-6AE, six bay circularly polarized non-directional antenna that is mounted at the 107 meter level on the existing 114.9 meter tower and operates with a maximum effective radiated power of 52 kilowatts. The power density levels at two meters above ground level for the WQKT facilities were calculated using the FCC's "FM Model" computer program. The results of these calculations are shown in the attached figure. This figure shows that the worst case predicted power density at two meters above ground level for these facilities is $21.5 \mu\text{W}/\text{cm}^2$, which will occur at a horizontal distance of 33.6 meters from the base of this tower. Since the permitted power density in the FM band is $200 \mu\text{W}/\text{cm}^2$, this amounts to only 10.8% of the permitted level for uncontrolled exposure. Thus, in order to adequately protect members of the general public from excessive power densities that result from the combined operation of WQKT and WKVX from this tower, it is necessary to restrict access to any area around this tower where the power density levels generated by WKVX exceed 89.2% of the permitted level for uncontrolled exposure.

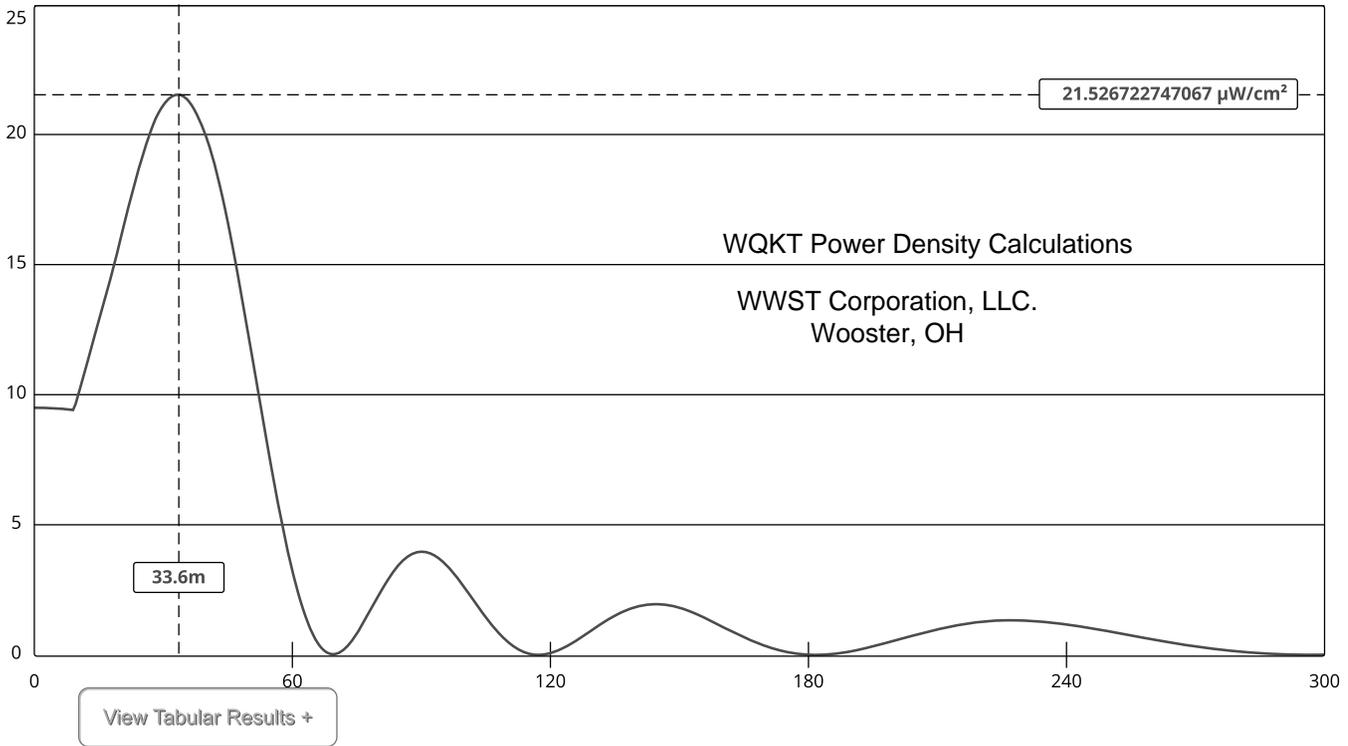
The tower as used for the WKVX antenna system is 132.5 degrees (0.368 wavelengths) in electrical height. Assuming the full 1.0 kilowatts of power into this tower and interpolating the values contained in Tables 2 and 3, found on Pages 4 and 5 of Supplement A to FCC OET Bulletin No. 65, reveals that this area is limited to a distance of no more than 1.5 meters from the tower base. This tower is presently surrounded by an appropriately marked fence to restrict general public access to areas near its base. At the closest point, the fence is located 3.4 meters from the base of this tower. Since the total power density levels outside the fence surrounding this tower will be below the

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maximum permitted level for uncontrolled exposure, the continued combined operation of WQKT and WKVX from this tower will not result in general public exposure to levels of nonionizing radiation that are in excess of the permitted level for uncontrolled exposure.

WQKT, in conjunction with WKVX, will take appropriate steps to insure that workers that must be inside the fenced area or on this tower will not be exposed to levels of nonionizing radiation that are in excess of the permitted level for controlled exposure. These steps will include a reduction in power by WKVX when work becomes necessary in areas within the tower fence where the WKVX power density exceeds the permitted level and the cessation of operation by WKVX and the cessation of operation or a reduction in power, as appropriate, by WQKT when work becomes necessary in areas on this tower where the WQKT power density levels are in excess of the permitted level for controlled exposure.

Because this is an existing tower, there are no physical modifications proposed to this tower in the attached application, and this site will continue to fully comply with the FCC standard regarding human exposure to nonionizing radiation, it isn't necessary to undertake any further environmental studies or submit an environmental assessment for these proposed modifications.



Channel Selection	Channel 283 (104.5 MHz) ▾		
Antenna Type +	EPA Type 3: Opposed U Dipole ▾		
Height (m)	107	Distance (m)	300
ERP-H (W)	52000	ERP-V (W)	52000
Num of Elements	6	λ	1
Num of Points	500	Apply	