

NONIONIZING RADIATION COMPLIANCE

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Positive Alternative Radio, Inc.
Winston-Salem, NC

The WXRI facilities will continue to fully comply with the current FCC Standard with regard to human exposure to nonionizing radiation. These facilities employ a Dielectric DCR-C6-DA, six bay circularly polarized directional antenna that is mounted at the 91.4 meter level on an existing 100.6 meter tower and will continue to operate with an effective radiated power of 50 kilowatts. This tower presently serves as part of the directional antenna system for WSGH(AM) - Lewisville, North Carolina, which presently operates on 1040 kHz with 9.1 kilowatts day and 182 watts at night. Concurrently with the filing of the attached application, however, WSGH is filing an application for a construction permit to modify its operating facilities to 1.1 kilowatt nondirectional and operate only during daytime hours.

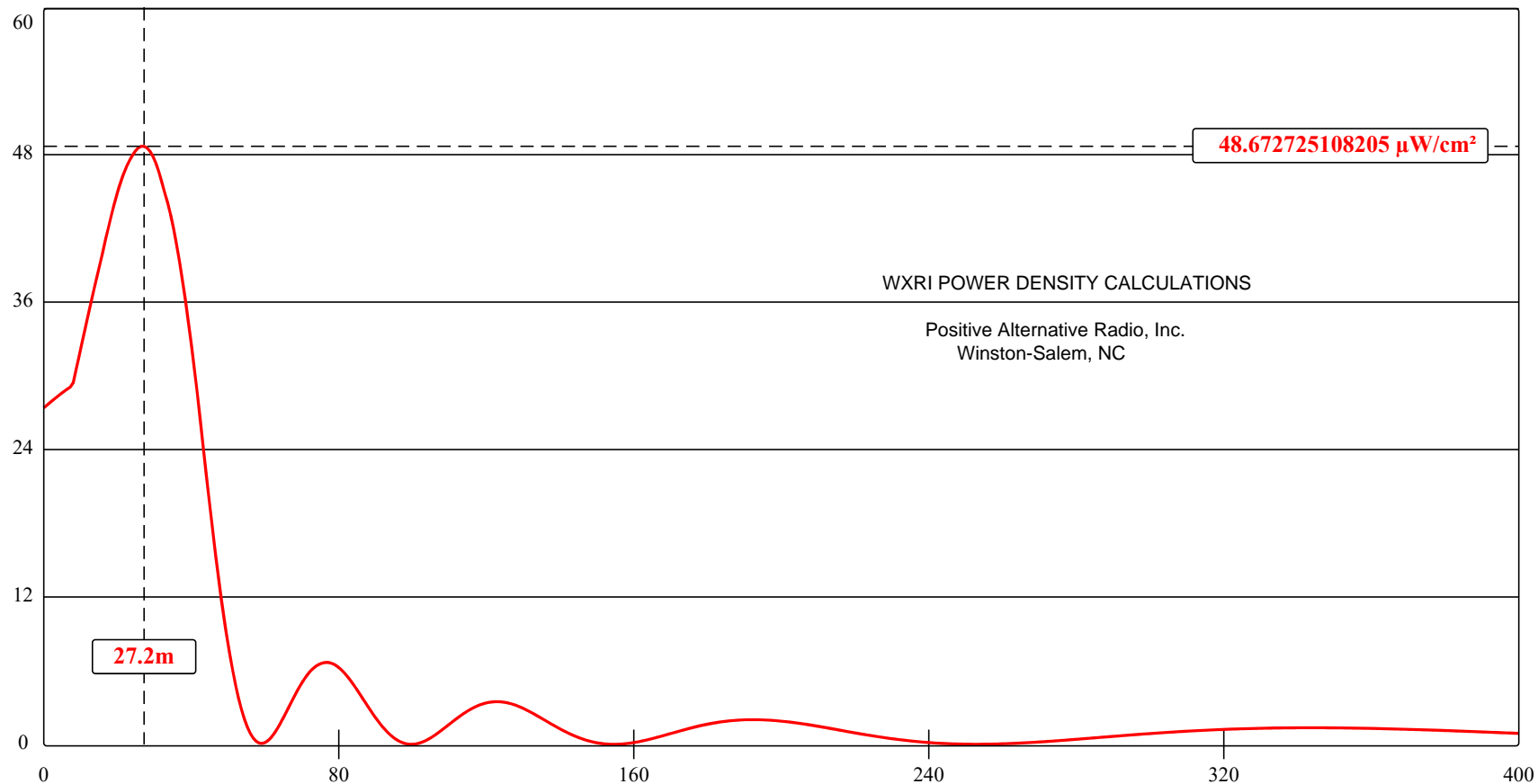
The power density levels at two meters above ground level for the WXRI facilities were calculated using the FCC's "FM Model" computer program. The results of these calculations are shown in the attached figure. This figure shows that the maximum predicted power density at two meters above ground level for these facilities will be $48.7 \mu\text{W}/\text{cm}^2$, which will occur at a horizontal distance of 27.2 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 24.4% 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 WXRI and WSGH on this tower, it is necessary to restrict access to any area around this tower where the power density levels generated by WSGH exceed 75.6% of the permitted level for uncontrolled exposure.

This tower has an electrical height of 123.3 degrees (0.343 wavelengths) on 1040 kHz. Assuming 1.1 kilowatt 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 it is necessary to restrict general public access to any area within 1.1 meters of the base of this tower, where the predicted power density levels for the

proposed WSGH facilities will be predicted to exceed 75.6% of the permitted level for uncontrolled exposure to nonionizing radiation. This tower is presently surrounded by an appropriately marked fence to restrict general public access to the area near the tower base. At the closest point, this fence is located 2.1 meters from the tower base. Since the total power density levels outside this fence will be below the maximum permitted level for uncontrolled exposure, the continued combined operation of WXRI and WSGH on 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.

WXRI, in conjunction with WSGH will take appropriate steps to insure that workers that must be 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 the cessation of operation or a reduction in power, as appropriate, by WXRI when work becomes necessary in areas on this tower where the power density levels are in excess of the permitted level for controlled exposure.

Because this is an existing facility and there are no physical modifications proposed in the attached application, and it will 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.



[View Tabular Results +](#)

Channel Selection	Channel 217 (91.3 MHz) ▾		
Antenna Type +	EPA Type 4: Two-Piece Spiral ▾		
Height (m)	<input type="text" value="91.4"/>	Distance (m)	<input type="text" value="400"/>
ERP-H (W)	<input type="text" value="50000"/>	ERP-V (W)	<input type="text" value="50000"/>
Num of Elements	<input type="text" value="6"/>	λ	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	