

**MINOR CHANGE APPLICATION**  
**GLEISER COMMUNICATIONS, LLC**  
**KRWR (FM) RADIO STATION**  
**CH 221C3 -92.1 MHZ - 9.8 kW**  
**TYLER, TEXAS**  
**January 2016**

**EXHIBIT B**

**Radio Frequency Assessment**

A study has been made to determine whether this station is in compliance with 47 C.F.R. §1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997 ("Bulletin"), regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations and uses the appropriate formulas contained in the OET Bulletin.<sup>1</sup>

The KRWR antenna is mounted with its center of radiation 119.0 meters (390 feet) above the ground at the tower location and operates with an effective radiated power of 9.8 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the fence perimeter, the KRWR antenna contributes 0.0288  $\text{mw}/\text{cm}^2$ .<sup>2</sup> Based on exposure limitations for a controlled environment, 2.9% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 14.4% of the ANSI limit is reached at 2.0 meters above the ground at the fence perimeter.

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- 1) The contributions of the FM stations were calculated with the FMModel program. The EPA single bay dipole antenna was used for calculations unless otherwise noted.
  - 2) This level of signal falls 31.5 meters from the base of the tower and is assumed as a worst case scenario.

AM station KYZS, 1490 kHz, Texas<sup>3</sup> is co-located with KRWR. The KYZS antenna is 218.1° in height at 1490 kHz. Access to the tower base is limited at a distance not closer than 7.7 meters. By reference to Figure 2 of OET 65-A, a tower radiating 1.0 kilowatt will deliver 35.7 V/m (Electric Field) or .009 A/m (Magnetic Field). Since the KYZS frequency is above 1340 kHz, the calculations for the controlled and uncontrolled environments are different. The electric RF level results in a contribution of 5.8% of the controlled electric field limit of 614 V/m maximum and 6.5% of the uncontrolled electric field limit of 553.0 V/m. The magnetic RF level results in a contribution of 0.6% of the controlled magnetic field limit of 1.63 A/m maximum and 0.6% of the uncontrolled magnetic field limit of 1.47 A/m. In this case, the electric field contribution of 6.5% for an uncontrolled environment is considered as the worst case contribution.

FM translator K239CB<sup>4</sup> is also co-located with KRWR. The K239CB antenna is mounted with its center of radiation 108.0 meters (354 feet) above the ground at the tower location and operates with an effective radiated power of 0.25 kilowatt in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the fence perimeter, the K239CB antenna contributes 0.0009 mw/cm<sup>2</sup>.<sup>5</sup> Based on exposure limitations for a controlled environment, less than 1% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, less than 1% of the ANSI limit is reached at 2.0 meters above the ground at the fence perimeter.

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- 3) An application to correct the coordinates of KYZS is being filed simultaneously with this application.
  - 4) An application to correct the coordinates of K239CB is being filed simultaneously with this application.
  - 5) See Footnote #2, supra.

Combining the contributions of KRWR, KYZS, and K239CB a total less than 22% of the FCC's limit for uncontrolled exposure is reached at the base of the tower. Since this level of signal is significantly less than the maximum for uncontrolled environments, as specified by the Commission, it is believed that KRWR is in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Gleiser will insure that warning signs have been posted in the vicinity of the tower and at the fence perimeter warning of potential radio frequency radiation hazards at the site. In addition, Gleiser will reduce the power of the facility or cease operation in cooperation and coordination with other tower users, as necessary, to protect persons having access to the site, tower, or antenna from radio frequency radiation in excess of FCC guidelines.