

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING LLC**  
**WRKI (FM) RADIO STATION**  
**CH 236B - 95.1 MHZ - 29.5 KW**  
**BROOKFIELD, CONNECTICUT**  
**August 2008**

**EXHIBIT B**

**Radio Frequency Assessment**

Due to the co-location of WRKI with AM station WINE, the RF worksheets associated with FCC Form 301 could not be used to certify compliance with the radio frequency radiation rules. A study has been made to determine whether this proposal 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, specifically co-located station WINE, and utilizes the appropriate formulas contained in the OET Bulletin.<sup>1</sup>

The proposed WRKI antenna is to be mounted 146.9 meters (481.8 feet ) above the ground and will operate with an effective radiated power of 29.5 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters, the height of an average person, above the ground at the base of the tower, the WRKI antenna system will contribute  $0.0565 \text{ mw/cm}^2$ .<sup>2</sup> Based on exposure limitations for a controlled environment, 5.7% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 28.3% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

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- 1) The contributions of the FM stations are calculated with the FMModel program. The EPA dipole antenna was used for calculations unless otherwise noted.
  - 2) This level of contribution occurs at 39.0 meters out from the tower and is considered worst case.

The WINE AM radiator on which the WRKI antenna is, and will be continue to be, installed is, electrically, 170.3° in height at 940 kHz and operates with a power of 0.68 kilowatt. No one can get closer than 3.0 meters from the tower. By reference to Figure 2 of OET 65-A, the WINE tower will deliver 79.2 V/m (Electric Field) or 0.067 A/m (Magnetic Field). Since WINE operates on a frequency below 1340 kHz, the contribution levels for controlled and uncontrolled environments are the same. For both the controlled and uncontrolled environments, the electrical field contribution is 12.9% and the magnetic field contribution is 4.1%. Since the electrical field contribution is the greatest, it will be used as a worst case contribution.

Combining the contributions of WRKI and WINE, a total of 41.2% of the uncontrolled limit is reached 2.0 meters above the roof. Since the contribution level for the tower site is below the 100% limit defined by the Commission, the proposed minor change for WRKI is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, Cumulus will insure that warning signs are posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Cumulus 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.