

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WRQQ (FM) RADIO STATION
CH 246C2 - 97.1 MHZ - 45.0 KW
BELLE MEADE, TENNESSEE
August 2007

EXHIBIT B

Radio Frequency Assessment

This 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 stations, specifically the co-located WQQK, and utilizes the appropriate formulas contained in the Bulletin.¹

The WRQQ antenna system is mounted with its center of radiation 70.1 meters (230.0 feet) above the ground at the existing tower location and operates with an effective radiated power of 45.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WRQQ antenna is a Dielectric DCRM six bay, 0.83 wavelength spaced system (FCC/EPA Type #7). At 2.0 meters above the ground at the base of the tower, the height of an average person, the WRQQ antenna system will contribute 0.0063 mw/cm^2 .² Based on exposure limitations for a controlled environment, 0.6% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 3.2% 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 FMModel program was used to calculate the FM stations' contributions. The EPA single bay dipole was used unless otherwise noted. Any broadcast facilities within 315.0 meters of the proposed site are considered a contributor, and further, will be considered co-located for the purposes of this instant review.
 - 2) This level of field occurs at 33.0 meters out from the base of the tower and is considered worst case.

The WQQK antenna system is mounted with its center of radiation 53.1 meters (174.1 feet) above the ground at the existing tower location and operates with an effective radiated power of 3.1 kilowatts in the horizontal and vertical planes (circularly polarized). The WQQK antenna is an Electronics Research, Inc., two bay, full wavelength spaced system (FCC/EPA Type #3). At 2.0 meters above the ground at the base of the tower, the height of an average person, the WQQK antenna system will contribute 0.0114 mw/cm^2 .³ Based on exposure limitations for a controlled environment, 1.1% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 5.7% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions of WRQQ and WQQK, a total of 8.9% of the uncontrolled environment limit is reached at 2.0 meters above ground at the base of the tower. Since this level for uncontrolled environments is well below the 100% limit defined by the Commission, the WRQQ facility is believed to be in compliance with the radio frequency radiation exposure limits as is required by the Federal Communications Commission. Further, Cumulus will posted warning signs 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.

3) This level of field occurs at 34.0 meters out from the base of the tower and is considered worst case.