

**MINOR CHANGE APPLICATION/  
CORRECTION OF COORDINATES  
CUMULUS LICENSING, LLC  
WMNX (FM) RADIO STATION  
CH 247C1 - 97.3 MHZ - 100.0 KW  
WILMINGTON, NORTH CAROLINA  
August 2008**

**EXHIBIT A**

**Radio Frequency Assessment**

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 stations, specifically co-located WGNI, and utilizes the appropriate formulas contained in the Bulletin.<sup>1</sup>

The proposed/existing WMNX antenna system is mounted with its center of radiation 257.0 meters (843.2 feet) above the ground at the tower location and operates with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the base of the tower, the height of an average person, the WMNX antenna system will contribute  $0.0618 \text{ mw/cm}^2$ .<sup>2</sup> Based on exposure limitations for a controlled environment, 6.2% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 30.9% 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 69.0 meters out from the base of the tower and is considered worst case.

The proposed/existing WGNI antenna system is mounted with its center of radiation 287.0 meters (941.6 feet) above the ground at the tower location and operates with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the base of the tower, the height of an average person, the WGNI antenna system will contribute  $0.0495 \text{ mw/cm}^2$ .<sup>3</sup> Based on exposure limitations for a controlled environment, 5.0% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 24.8% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions of the WMNX and WGNI, a total of 55.7% of the limit is reached 2.0 meters above the ground at the base of the tower. Since the contribution level for the tower site is below the 100% limit defined by the Commission, the WMNX antenna system is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, Cumulus will post 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.

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3) This level of field occurs at 77.0 meters out from the base of the tower and is considered worst case.