

**MINOR CHANGE APPLICATION/  
CITY OF LICENSE CHANGE  
CUMULUS LICENSING LLC  
KNRQ (FM) RADIO STATION  
CH 250C3 - 97.9 MHZ - 0.94 KW  
TUALATIN, OREGON  
January 2007**

**EXHIBIT B**

**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. As the proposed KNRQ site is used by many Portland area FM and TV stations, it was not possible to use the worksheets to verify that the proposed KNRQ facility is in compliance with the Commission's radio frequency exposure limits. The study utilizes the appropriate formulas contained in the OET Bulletin.<sup>1</sup>

The proposed KNRQ antenna system is mounted with its center of radiation 219.0 meters (719.0 feet) above the ground at the tower location and will operate with an effective radiated power of 0.94 kilowatt 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 KNRQ antenna system will contribute 0.0008 mw/cm<sup>2</sup>.<sup>2</sup> Based on exposure limitations for a controlled

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- 1) The contributions of the FM facilities were calculated using the FMModel program. A single bay EPA dipole antenna was used for calculation purposes. In cases where the number of bays of the antenna was known, this data was used in the FMModel program.
  - 2) This level of field occurs at 59.0 meters out from the base of the tower and is considered worst case.

environment, 0.08% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 0.4% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Since the contribution level for the KNRQ antenna system is less than 0.49% of the limits for controlled and uncontrolled environments, it is believed the KNRQ facility is in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. If needed, Cumulus will take measurements around the tower site, before and after it energizes its antenna, to show that the addition of KNRQ does not cause the site to exceed the RF limits. Cumulus will also insure that warning signs have been 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.