

**MINOR CHANGE APPLICATION**  
**EMMIS AUSTIN RADIO BROADCASTING COMPANY, L.P.**  
**NEW AUXILIARY FM ANTENNA**  
**KROX-FM RADIO STATION**  
**CH 268C2 - 101.5 MHZ - 12.5 KW**  
**BUDA, TEXAS**  
**March 2012**

**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. This study utilizes the appropriate formulas contained in the OET Bulletin.<sup>1</sup>

The proposed KROX-FM auxiliary tower site is located at the Austin, Texas tower farm. There are numerous towers at this location which support numerous broadcast antennas. This location is, therefore, considered a tower farm.

The proposed KROX-FM auxiliary antenna system will be mounted with its center of radiation 209.7 meters (688.0 feet) above the ground at the tower location and will operate with an effective radiated power of 12.5 kilowatts in the horizontal and vertical planes (circularly polarized).<sup>2</sup> The proposed KROX-FM auxiliary antenna will be a Shively Labs 6810 three bay half wavelength style antenna system (EPA/FCC Type #6). At 2.0 meters above the ground at

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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) The KROX-FM main antenna is located on the same tower and would presumably be de-energized when the proposed auxiliary is operational. The KROX-FM main operates with 12.5 kilowatts effective radiated power.

the base of the tower, the height of an average person, the proposed KROX-FM auxiliary antenna system will contribute  $0.0007 \text{ mw/cm}^2$ .<sup>3</sup> Based on exposure limitations for a controlled environment, <0.1% of the allowable ANSI 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 this level for controlled and uncontrolled environments is less than the 5% limit defined by the Commission {§1.1307(b)(3)(i)}, the proposed KROX-FM facility is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, Emmis has posted warning signs in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Emmis 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 occurs at 607.6 meters out from the base of the tower and is considered worst case.