

MINOR CHANGE APPLICATION
CONNOISSEUR MEDIA OF ERIE, LLC
WRKT RADIO STATION
CH 285B1 - 104.9 MHZ - 4.5 KW
NORTH EAST, PENNSYLVANIA
May 2011

EXHIBIT C

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 contributing stations, specifically the co-located WRTS and WMCE, and utilizes the appropriate formulas contained in the OET Bulletin.¹

The proposed WRKT antenna system will be mounted with its center of radiation 70.0 meters (2229.7 feet) above the ground at the tower location and will operate with an effective radiated power of 4.5 kilowatts in the horizontal and vertical planes (circularly polarized). The proposed WRKT antenna will be a five bay full wavelength spaced ERI rototiller style system (FCC/EPA Type #3). At 2.0 meters, the height of an average person, above the ground at the base of the tower, the WRKT antenna system will contribute 0.0050 mw/cm².² Based on exposure limitations for a controlled environment, 0.5% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 2.5% 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 were calculated with the FMModel program. The EPA single bay dipole antenna was used for calculations unless otherwise noted.
 - 2) This level of contribution occurs at 24.0 meters out from the tower and is considered worst case.

The authorized WRTS antenna system is mounted with its center of radiation 70.0 meters (229.7 feet) above the ground at the tower location and operates with an effective radiated power of 50.0 kilowatts in the horizontal and vertical planes (circularly polarized). The authorized WRTS antenna is a five bay full wavelength spaced ERI rototiller style system (FCC/EPA Type #3).³ At 2.0 meters, the height of an average person, above the ground at the base of the tower, the WRTS antenna system contributes 0.0546 mw/cm².⁴ Based on exposure limitations for a controlled environment, 5.5% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 27.3% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

The authorized WMCE antenna system is mounted with its center of radiation 61.0 meters (200.0 feet) above the ground at the tower location and operates with an effective radiated power of 0.750 kilowatt in the horizontal and vertical planes (circularly polarized). The authorized WMCE antenna is a two bay full wavelength spaced ERI rototiller style system (FCC/EPA Type #3). At 2.0 meters, the height of an average person, above the ground at the base of the tower, the WMCE antenna system contributes 0.0021 mw/cm².⁵ Based on exposure limitations for a controlled environment, 0.2% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 1.1% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

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- 3) Based on information contained in the last WRTS license renewal application (BRH-20060330ANL)
 - 4) This level of contribution occurs at 24.0 meters out from the tower and is considered worst case.
 - 5) This level of contribution occurs at 40.0 meters out from the tower and is considered worst case.

Combining the contributions of WRKT, WRTS and WMCE, a total of 30.9% of the limit for uncontrolled environments is reached at 2.0 meters above the ground at the base of the tower. Since this level for uncontrolled environments is below the 100% limit defined by the Commission, the proposed WRKT facility is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, CME will post warning signs in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, CME will reduce the power of the proposed 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.