RADIO FREQUENCY RADIATION REVIEW
RADIO LICENSE HOLDING CBC, LLC
WZPW (FM) RADIO STATION
PEORIA, ILLINOIS
February 2015

TECHNICAL EXHIBIT

RADIO FREQUENCY RADIATION REVIEW
RADIO LICENSE HOLDING CBC, LLC
WZPW (FM) RADIO STATION
PEORIA, ILLINOIS
February 2015

Radio Frequency Radiation Assessment

This Technical Statement was prepared on behalf of Radio License Holding CBC, LLC, ("RLH-CBC"), licensee of FM station WZPW, Channel 222B1, Peoria, Illinois. RLH has requested Special Temporary Authority to operate WZPW at reduced power from an existing structure which is separate from their licensed site due to failure of their main antenna. As such, an analysis of the radio frequency levels at the site has been undertaken.

The WZPW antenna system will be mounted with its center of radiation 50 meters (164 feet) above the ground at the tower location and will operate with an effective radiated power of 0.52 kilowatt (520 watts) 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 WZPW antenna system will contribute 0.0091 mw/cm^2.[1] Based on exposure limitations for a controlled environment, less than 1.0% of the allowable ANSI limit of 1.0 mw/cm^2 is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 4.6% of the ANSI limit of 0.2 mw/cm^2 is reached at 2.0 meters above the ground at the base of the tower.

Co-located on this tower is W257AE. The W257AE antenna system is mounted with its center of radiation 30 meters (98 feet) above the ground at the tower location and operates with an effective radiated power of 0.05 kilowatt (50 watts) 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

---

1) This level occurs at 13 meters out from the base of the tower and is considered worst case.

average person, the W257AE antenna system contributes 0.0026 mw/cm^2.[2] Based on exposure limitations for a controlled environment, less than 1.0% of the allowable ANSI limit of 1.0 mw/cm^2 is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 1.3% of the ANSI limit of 0.2 mw/cm^2 is reached at 2.0 meters above the ground at the base of the tower.

Co-located on this tower is WPNL-LP. The WPNL-LP antenna system is mounted with its center of radiation 40 meters (131 feet) above the ground at the tower location and operates with an effective radiated power of 0.04 kilowatt (400 watts) in the horizontal plane. At 2.0 meters above the ground at the base of the tower, the height of an average person, the WPNL-LP antenna system contributes 0.00026 mw/cm^2.[3] Based on exposure limitations for a controlled environment, less than 1.0% of the allowable ANSI limit of 1.0 mw/cm^2 is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, less than 1% of the ANSI limit of 0.2 mw/cm^2 is reached at 2.0 meters above the ground at the base of the tower.

---

2) This level occurs at 7.5 meters out from the base of the tower and is considered worst case.

3) This level occurs at 22 meters out from the base of the tower and is considered worst case.

Combining the contribution of the proposed WZPW STA antenna system and both W278AE and WPNL-LP less than 7% of the ANSI limit is reached at the base of the tower. Since this level for an uncontrolled environment is less than the limit defined by the Commission, the proposed WZPW STA is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, RLH-CBC will verify that warning signs have been posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, RLH-CBC 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.