

AMEND BPED-20100524AHP  
CENTRAL FLORIDA EDUCATIONAL FOUNDATION, INC.  
WPOZ RADIO STATION  
CH 202C0 - 88.3 MHZ - 100.0 KW DA  
UNION PARK, FLORIDA  
May 2010

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 considers all nearby contributing stations, specifically radio stations WHTQ and WWKA and TV stations WRDQ-DT and WFTV-DT, and utilizes the appropriate formulas contained in the OET Bulletin.<sup>5</sup>

The proposed WPOZ antenna system will be mounted with its center of radiation 390.1 meters (1,280 feet) above the ground at the tower location and will operate 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 WPOZ antenna system will contribute  $0.0267 \text{ mw/cm}^2$ .<sup>6</sup> Based on exposure limitations for a controlled environment, 2.7% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 13.4% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

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- 5) The contribution of the FM station was calculated with the FMModel program. The EPA dipole antenna was used for calculations unless otherwise noted.
- 6) This level of contribution occurs at 104.0 meters out from the tower and is considered worst case.



The authorized WHTQ antenna system is mounted with its center of radiation 444.0 meters (1,456.7 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 WHTQ antenna system contributes  $0.0206 \text{ mw/cm}^2$ .<sup>7</sup> Based on exposure limitations for a controlled environment, 2.1% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 10.3% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

The authorized WWKA antenna system is mounted with its center of radiation 444.0 meters (1,456.7 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 WWKA antenna system contributes  $0.0206 \text{ mw/cm}^2$ .<sup>8</sup> Based on exposure limitations for a controlled environment, 2.1% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 10.3% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

The authorized WRDQ-DT, Channel 27, antenna system is mounted with its center of radiation 492.0 meters (1,614.2 feet) above the ground at the tower location and operates with an effective radiated power of 1,000 kilowatts in the horizontal plane. At 2.0 meters above the

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7) This level of contribution occurs at 119.0 meters out from the tower and is considered worst case.

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ground at the base of the tower, the height of an average person, the WRDQ-DT antenna system contributes  $0.0557 \text{ mw/cm}^2$ . Based on exposure limitations for a controlled environment, 3.0% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 15.2% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

The WFTV-DT, Channel 39, antenna system is mounted with its center of radiation 484.0 meters (1,588 feet) above the ground at the tower location and operates with an effective radiated power of 1,000 kilowatts in the horizontal plane. At 2.0 meters above the ground at the base of the tower, the height of an average person, the WFTV-DT antenna system contributes  $0.0575 \text{ mw/cm}^2$ . Based on exposure limitations for a controlled environment, 2.8% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 13.9% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions of WPOZ, WHTQ, WWKA, WRDQ-DT and WFTV-DT, the total contributions for the uncontrolled environment will be 63.1% of the limit. Since this level for uncontrolled environments is below the 100% limit defined by the Commission, the proposed WPOZ facility is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, CFEF will post warning signs in the vicinity of the tower warning of potential radio frequency radiation

hazards at the site. In addition, CFEF 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.