

MINOR CHANGE APPLICATION
TO CORRECT COORDINATES
ABERCROMBIE BROADCASTING COMPANY
WKZD AM RADIO STATION
1310 kHz - 0.033/1.0 kW - ND2
PRICEVILLE, ALABAMA
September 2010

EXHIBIT #3

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 stations and utilizes the appropriate formulas contained in the OET Bulletin.¹

At the WKZD frequency of 1310 kHz, the tower is 90.0° (0.25 λ) in electrical height. The tower is fenced at a minimum distance of 1.0 meter (3.3 feet) from the radiating structure. Based on the guidelines of the OET bulletin, at the WKZD licensed power of 1.0 kilowatt, calculations indicate that 80.0 V/m and 0.700 A/m will be present at the fence perimeter. Since the WKZD frequency is below 1340 kHz, the calculations for the controlled and uncontrolled environments are the same. These values represent 13.0% of the electric field limit of 614 V/m and 42.9% of the magnetic field limit of 1.63 A/m. In this case, the magnetic field contribution of 42.9% for an uncontrolled environment is considered as the worst case contribution.

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.

Co-located with WKZD is the proposed FM translator W287AD. The proposed W287AD antenna system will be mounted with its center of radiation 55.0 meters (180.4 feet) above the ground at the tower location and will operate with an effective radiated power of 0.250 kilowatt (250 watts) in the horizontal and vertical planes. At 2.0 meters above the ground at the base of the tower, the height of an average person, the proposed W287AD antenna system will contribute 0.0036 mw/cm^2 .² Based on exposure limitations for a controlled environment, 0.4% of the allowable ANSI limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 1.8% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contribution of WKZD and W287AD, a total of 44.7% is reached at the the fence perimeter. Since this level is far below the 100% limit defined by the Commission, the corrected WKZD facility is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, ABC will post warning signs at the tower base warning of potential radio frequency radiation hazards at the site. In addition, ABC 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.

2) This level occurs at 14.0 meters out from the base of the tower and is considered worst case.