LONG FORM APPLICATION
COMPANION DIGITAL CHANNEL
THOMAS B. DANIELS
WJNI-LP DT LPTV STATION
CH 31 - 572-578 MHZ - 10.0 KW
NORTH CHARLESTON, SOUTH CAROLINA
October 2006

EXHIBIT B

Radio Frequency Assessment

Since the proposed Channel 29 digital facility is to be co-located with an FM station and two other LPTV stations, as well as another proposed digital companion LPTV station, 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 WAZS-LP, WJNI-LP, WJNI (FM) and the proposed digital companion for WAZS-LP ("Channel 29") and utilizes the appropriate formulas contained in the OET Bulletin.[1]

The proposed Channel 31 DTV antenna system will be mounted with its center of radiation 79.2 meters (259.9 feet) above the ground and will operate with an effective radiated power of 10.0 kilowatts in the horizontal plane. As denoted in OET Bulletin #65, Supplement A, Page 31, the typical UHF antenna system has a downward radiation field of 0.1. As such, the Channel 31 DTV antenna system radio frequency radiation calculations were made based on an effective radiated power of 0.1 kilowatt. At 2.0 meters above the ground, the height of an

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1) The contribution of the FM facility was calculated using the FMModel program. A single bay EPA dipole antenna was used for calculation purposes.

average person, the proposed Channel 31 DTV antenna system will contribute 0.0002 mw/cm^2. Based on exposure limitations for a controlled environment, <0.1% of the allowable ANSI limit is reached at 2.0 meters above the ground. The antenna system will contribute 0.1% of the uncontrolled limit at 2.0 meters above the ground at the base of the tower.

The proposed Channel 29 DTV antenna system will be mounted with its center of radiation 79.2 meters (259.9 feet) above the ground and will operate with an effective radiated power of 10.0 kilowatts in the horizontal plane. As denoted in OET Bulletin #65, Supplement A, Page 31, the typical UHF antenna system has a downward radiation field of 0.1. As such, the Channel 29 DTV antenna system radio frequency radiation calculations were made based on an effective radiated power of 0.1 kilowatt. At 2.0 meters above the ground, the height of an average person, the proposed Channel 29 DTV antenna system will contribute 0.0002 mw/cm^2. Based on exposure limitations for a controlled environment, <0.1% of the allowable ANSI limit is reached at 2.0 meters above the ground. The antenna system will contribute 0.1% of the uncontrolled limit at 2.0 meters above the ground at the base of the tower.

The authorized WAZS-LP Channel 22- antenna system is mounted with its center of radiation 66.0 meters (216.5 feet) above the ground and operates with an effective radiated power of 150.0 kilowatts in the horizontal plane. As denoted in OET Bulletin #65, Supplement A, Page 31, the typical UHF antenna system has a downward radiation field of 0.1. As such, the WAZS-LP antenna system radio frequency radiation calculations were made based on an effective radiated power of 1.5 kilowatts. At 2.0 meters above the ground, the height of an average person,

the WAZS-LP antenna system will contribute 0.0076 mw/cm^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. The antenna system contributes 2.2% of the uncontrolled limit at 2.0o meters above the ground at the base of the tower.

The authorized WJNI-LP Channel 42Z antenna system is mounted with its center of radiation 83.0 meters (272.3 feet) above the ground and operates with an effective radiated power of 150.0 kilowatts in the horizontal plane. As denoted in OET Bulletin #65, Supplement A, Page 31, the typical UHF antenna system has a downward radiation field of 0.1. As such, the WJNI-LP antenna system radio frequency radiation calculations were made based on an effective radiated power of 1.5 kilowatts. At 2.0 meters above the ground, the height of an average person, the WJNI-LP antenna system will contribute 0.0047 mw/cm^2. Based on exposure limitations for a controlled environment, 0.2% of the allowable ANSI limit is reached at 2.0 meters above the ground. The antenna system contributes 1.1% of the uncontrolled limit at 2.0 meters above the ground at the base of the tower.

The WJNI (FM) antenna system is mounted with a center of radiation of 95.0 meters (311.6 feet) above the ground and operates with an effective radiated power of 6.0 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground, the height of an average person, the WJNI (FM) antenna system contributes 0.0279 mw/cm^2.[2] Based on exposure limitations for a controlled environment, 2.8% of the allowable limit is

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2) This level of field occurs at 25.0 meters out from the base of the tower and is considered worst case.

reached at 2.0 meters above the ground at the base of the tower. Based on exposure limitations for a the uncontrolled environment, 14.0% of the allowable limit is reached 2.0 meters above the ground at the base of the tower.

Combining the contributions of Channel 31, Channel 29, WAZS-LP, WJNI-LP and WJNI (FM), a total of 17.5% of the uncontrolled limit is reached 2.0 meters above the ground at the base of the tower. Since the levels for the uncontrolled environments is well below the 100% limit defined by the Commission, the proposed Channel 29 facility is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, Daniels will ensure warning signs are posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Daniels 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.