CORRECTION OF COORDINATES APPLICATION
KIX BROADCASTING, INC.
WGKX RADIO STATION
CH 290C - 105.9 MHZ - 100.0 KW
MEMPHIS, TENNESSEE
February 2004

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 co-located FM stations WQOX, WRVR-FM, WSRR-FM and WJZN (CP) and analog TV station WKNO-TV, as well as the authorized WKNO-DT and a pending application for a new TV station on Channel 56 ("Channel 56"), and utilizes the appropriate formulas contained in the OET Bulletin.[1]

The WGKX six bay antenna system is mounted with its center of radiation 290.9 meters (954.4 feet) above the ground at the existing tower location and operates with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WGKX antenna is an ERI rototiller series antenna (FCC/EPA Type #3). At two meters, the height of an average person, above the ground at the base of the tower, the WGKX antenna

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1) The FMModel Program was used for all calculations for the FM station contributions. The EPA single bay dipole antenna was used, unless otherwise noted.

system contributes 0.0054 mw.[2] Based on exposure limitations for a controlled environment,

2) This level of field occurs at 92.8 meters out from the base of the tower and is considered worst case.

0.5% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 2.7% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The authorized WJZN antenna system will be mounted with its center of radiation 175.3 meters (575.0 feet) above the ground at the existing tower location and will operate with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WJZN antenna is a Shively Labs Model 6810 (FCC/EPA Type #6). At two meters, the height of an average person, above the ground at the base of the tower, the WJZN antenna system will contribute 0.0474 mw.[3] Based on exposure limitations for a controlled environment, 4.7% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 23.7% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The authorized WKNO-DT Channel 29 antenna system will be mounted with its center of radiation 311.0 meters (1,020.6 feet) above the ground at the existing tower location and will operate with an effective radiated power of 835 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 WKNO-DT antenna system radio frequency radiation calculations were made based on an effective radiated power of 8.35 kilowatts. At two meters,

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3) This level of field occurs at 179.2 meters out from the base of the tower and is considered worst case.

the height of an average person, above the ground at the base of the tower, the WKNO-DT antenna system will contribute 0.0018 mw. Based on exposure limitations for a controlled environment, 0.1% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 0.5% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The authorized WKNO-TV Channel 10 antenna system is mounted with its center of radiation 312.3 meters (1,024.7 feet) above the ground at the existing tower location and operates with an effective radiated power of 316 kilowatts in the horizontal plane. As denoted in OET Bulletin #65, Supplement A, Page 29, the typical VHF antenna system has a downward radiation field of 0.2. As such, the WKNO-TV antenna system radio frequency radiation calculations were made based on an effective radiated power of 12.64 kilowatts. At two meters, the height of an average person, above the ground at the base of the tower, the WKNO-TV antenna system contributes 0.0026 mw. Based on exposure limitations for a controlled environment, 0.3% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 1.3% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The proposed new Channel 56 DTV antenna system will be mounted with its center of radiation 296.9 meters (974.1 feet) above the ground at the existing tower location and will operate with an effective radiated power of 65.0 kilowatts in the horizontal plane. At two meters,

the height of an average person, above the ground at the base of the tower, the Channel 56 antenna system will contribute 0.0155 mw. Based on exposure limitations for a controlled environment, 0.6% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 3.2% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The authorized WSRR-FM seven bay antenna system is mounted with its center of radiation 256.0 meters (840.0 feet) above the ground at the existing tower location and operates with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WSRR-FM antenna is a Shively Labs Model 6814 (FCC/EPA Type #6). At two meters, the height of an average person, above the ground at the base of the tower, the WSRR-FM antenna system contributes 0.0047 mw.[4] Based on exposure limitations for a controlled environment, 0.5% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 2.4% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The WQOX six bay antenna system is mounted with its center of radiation 121.9 meters (400.0 feet) above the ground at the existing tower location and operates with an effective radiated power of 30.0 kilowatts in the horizontal and vertical planes (circularly polarized). At two meters, the height of an average person, above the ground at the base of the tower, the

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4) This level of field occurs at 80.0 meters out from the base of the tower and is considered worst case.

WQOX antenna system contributes 0.0800 mw.[5] Based on exposure limitations for a controlled

5) This level of field occurs at 20.8 meters out from the base of the tower and is considered worst case.

environment, 8.0% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 40.0% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The WRVR-FM eight bay antenna system is mounted with its center of radiation 219.9 meters (721.4 feet) above the ground at the existing tower location and operates with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WRVR-FM antenna is an ERI rototiller series antenna (FCC/EPA Type #3). At two meters, the height of an average person, above the ground at the base of the tower, the WRVR-FM antenna system contributes 0.0082 mw.[6] Based on exposure limitations for a controlled environment, 0.8% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 4.1% of the ANSI limit is reached at two meters above the ground at the base of the tower.

Combining the contributions of WGKX, WJZN, WKNO-DT, WKNO-TV, Channel 56, WSRR-FM, WQOX and WRVR-FM, a total of 77.9% of the limit is reached at two 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 WGKX facility is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, KBI will insure that warning signs in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, KBI will

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6) This level of field occurs at 59.2 meters out from the base of the tower and is considered worst case.

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. Based on the above factors, this proposal is categorically excluded from environmental processing pursuant to §1.1306 of the Commission's rules.