NEW FM APPLICATION
SOUTHEASTERN OHIO BROADCASTING SYSTEM, INC.
NEW FM STATION
CH 279A - 103.7 MHZ - 2.4 KW (DA)
PHILO, OHIO
October 2009

EXHIBIT C

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. As the proposed New FM antenna is being mounted on a tower with a TV station, it was not possible to use the worksheets to verify that the proposed New FM facility is in compliance with the Commission's radio frequency exposure limits. This study considers all nearby stations, specifically the co-owned, co-located WHIZ-TV, and utilizes the appropriate formulas contained in the OET Bulletin.[1]

The proposed New FM antenna system is to be mounted with its center of radiation 135.9 meters (446.0 feet) above ground at the tower location and will operate with an effective radiated power of 2.4 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 New FM antenna system will contribute 0.0054 mw/cm^2.[2] Based on exposure limitations for a controlled

---

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.

2) This level of field occurs at 36.0 meters out from the base of the tower and is considered worst case.

environment, 0.5% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 2.7% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower.

The authorized WHIZ-TV (digital) Channel 40 antenna system is authorized with its center of radiation 145.0 meters (475.0) above the ground at the tower location and will operate with an effective radiated power of 620 kilowatts in the horizontal plane. As denoted in OET Bulletin #65, Supplement A, page 31, the typical UHF antenna system has a downward radiated field of 0.1. As such, the calculations of the WHIZ-TV antenna are based on a power of 6.2 kilowatts. At 2.0 meters above the ground at the base of the tower, the height of an average person, the WHIZ-TV antenna system will contribute 0.0041 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 at the base of the tower. For uncontrolled environments, 1.0% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions of the New FM and WHIZ-TV, a total of 3.7% of the limit for an uncontrolled environments is reached at 2.0 meters above the ground at the base of the tower. Since this contribution level is less than the ANSI limits, it is believed the proposed New FM facility is in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. SEOBS will also insure that warning signs have been posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the

site. In addition, SEOBS 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.