MINOR CHANGE APPLICATION
SUNCOAST RADIO, INC
W227AV FM TRANSLATOR STATION
CH 227D - 93.3 MHZ - 0.25 KW
CHIEFLAND, FLORIDA
March 2013

EXHIBIT D

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 utilizes the appropriate formulas contained in the OET Bulletin.[1]

The proposed W227AV antenna system will be mounted with its center of radiation 80.8 meters (265 feet) above the ground at the tower location and will operate with an effective radiated power of 0.25 kilowatt (250 watts) in the horizontal and vertical plane (circularly polarized). At 2.0 meters above the ground at the base of the tower, the height of an average person, the proposed W227AV antenna system will contribute 0.00162 mw/cm^2.[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.

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1) The contributions of the FM stations were calculated with the FM Model program. The EPA single bay dipole antenna was used for calculations unless otherwise noted.

2) This level occurs at 20.0 meters out from the base of the tower and is considered worst case.

The co-located WNDN (FM) antenna system is mounted with its center of radiation 96.7 meters (317 feet) above the ground at the tower location and operates with an effective radiated power of 6.0 kilowatts in the horizontal and vertical plane (circularly polarized). The WNDN antenna is a Shively 6813-4, four bay full wave spaced antenna (EPA Type 5). At 2.0 meters above the ground at the base of the tower, the height of an average person, the WNDN antenna system contributes 0.0033 mw/cm^2.[3] 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, 1.7% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

WLQH (AM) is co-located with the proposed W227AV facility. The WLQH antenna tower structure is 116° in electrical height. Access to the tower base is not closer than 1.0 meter. By reference to Figure 2 of OET 65-A, a tower radiating 0.78 kilowatt will deliver 145.9 V/m (electric field) or 0.486 A/m (magnetic field). Since WLQH operates on 940 kHz, the controlled and uncontrolled environment limits are the same. These figures represent 23.8% of the electric field limit of 614 V/m or 29.8% of the magnetic field limit of 1.630 A/m. Since the magnetic field is the greater of the two contributions, it is considered as a worst case contributor.

Combining the uncontrolled contribution of the proposed W227AV, WNDN, and WLQH, a total of less than 32% of the allowed level of signal is delivered to the base of the tower. Since this is significantly less than the 100% level, the proposed W227AV facility is

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3) This level occurs at 43.0 meters out from the base of the tower and is considered worst case.

believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, Suncoast will post warning signs in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Suncoast 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.