

**ENGINEERING TECHNICAL STATEMENT PREPARED BY WILLIAM T. GODFREY, JR., TECHNICAL CONSULTANT WITH THE FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS CONSULTING ENGINEERS IN CONNECTION WITH A MINOR MODIFICATION OF CONSTRUCTION PERMIT APPLICATION FOR THE SOUTH CAROLINA EDUCATIONAL TELEVISION COMMISSION'S WSCIC-FM CHANNEL 207, NON-COMMERCIAL EDUCATIONAL FM BROADCAST FACILITY (FILE NO. 0000013486).**

## **DETAILS**

The original plan for the antenna location was based on tower drawings provided by the owner station, WCSC-TV. When actual installation work began for the WITV-DT Channel 7 construction permit (-0000013486), it was discovered there was an error in the tower mapped location of two microwave antennas. To accommodate this error, SCETV must lower the WITV-DT antenna from the licensed authorized antenna height radiation center of 560 m AGL (1,837.4 ft) to the new antenna height radiation center of 558.9 m AGL (1,833.6 ft). This will result in a decrease of only 1.1 m. No other changes are requested. SCETV filed an STA (File No. 0000016402) requesting temporary authorization to operate at the correct antenna height and it was granted on October 26, 2016. SCETV will withdraw the STA as soon as the FCC issues a CP for the corrected antenna height requested herein and the license application is filed.

## **ENVIRONMENTAL IMPACT**

The WITV-DT Channel 7 facility will have no significant environmental impact as defined in §1.1307 of the FCC Rules. The DTV transmitter, transmission line and antenna system will produce an ERP of 20.0 kW (circular polarization). Assuming the maximum lobe of radiation were oriented toward the base of the tower, the proposed WITV-DT facility's power density six feet above the ground would be 0.0043 mW/cm<sup>2</sup>. That would equate to only 0.43% of the Maximum Permissible Exposure ("MPE") limits for Occupational/Controlled

Exposure and only 2.15% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute ("ANSI"). Since operation of the WITV-DT facility will not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground, the proposed facility is not considered a "significant contributor" to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for in this analysis. It is safe to conclude that the emissions would be insignificant and well within the maximum allowable requirements.

If other antennas are placed on the tower in the future, the licensee will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from the electromagnetic radiation emanating from the antenna. It is also understood that additional antennas on the support structure could increase the overall RF exposure levels and it is the responsibility of each licensee to ensure that the total RF exposure resulting from the operation of all antennas on the support structure do not exceed the MPE level at any point on the ground.

### **Certification**

This technical statement was prepared by William T. Godfrey, Jr., Engineering Associate with the firm Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida, and has been working with the firm in the field of radio and television broadcast consulting since 1998. Mr. Godfrey was a graduate from the University of North Florida and a Distinguished Military Graduate from the University of Florida. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.

A handwritten signature in blue ink that reads 'William T. Godfrey, Jr.' is written over a horizontal line.  
WILLIAM T. GODFREY, JR., CBT  
Engineering Associate

27 October, 2016