HUMAN EXPOSURE TO RADIOFREQUENCY ELECTROMAGNETIC FIELDS COMPLIANCE STATEMENT PREPARED BY WILLIAM T. GODFEY, JR. OF THE FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS CONSULTING ENGINEERS IN CONNECTION WITH AN APPLICATION FOR A NEW DIGITAL POST-AUCTION AUXILIARY CONSTRUCTION PEMIT FOR WJXT-DT.

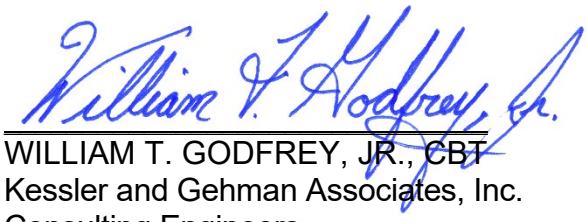
ENVIRONMENTAL IMPACT

The proposed WJXT-DT Channel 18 post-auction auxiliary facility will have no significant environmental impact as defined in §1.1307 of the FCC Rules. The digital transmitter, transmission line and antenna system shall produce a horizontally polarized ERP of 1,000 kW and vertically polarized ERP of 300 kW (Elliptically Polarized). It was determined that the maximum lobe of radiation will occur at approximately 503.2 feet from the base of the tower (817.3 ft radial distance from the antenna center). At 503.2 feet from the base of the tower, the depression angle of the main lobe will be approximately 52° below the horizontal. At that point, the relative field is 0.154 and the power density six feet above the ground will be 0.01660 mW/cm². This equates to only 1.0% of the Maximum Permissible Exposure (MPE) limits for Occupational/Controlled Exposure and only 5.0% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). Since operation of the proposed WJXT-DT Channel 18 post-auction auxiliary 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 WJXT-DT Channel 18 post-auction auxiliary 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.



WILLIAM T. GODFREY, JR., CBT — 22 September, 2020
Kessler and Gehman Associates, Inc.
Consulting Engineers