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 CLASS A RESERVED CHANNEL NONCOMMERCIAL EDUCATIONAL FM BROADCAST STATION SERVING BAINBRIDGE, GEORGIA AND SURROUNDING COMMUNITIES .

ENVIRONMENTAL IMPACT

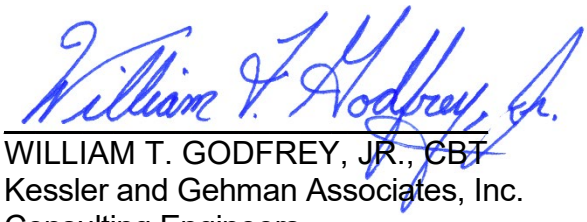
The proposed new reserved channel Noncommercial Educational FM (NCE-FM) Channel 203 (88.5 MHz) broadcast station would have no significant environmental impact as defined in §1.1307 of the FCC Rules. The proposed NCE-FM facility shall operate with a horizontally polarized ERP of 6 kW and a vertically polarized ERP of 6 kW (Circular polarization). Based on a standard 4-bay, full-wavelength spaced antenna designed for 88.5 MHz (see elevation pattern below) with an antenna height radiation center of 245 ft AGL at the proposed transmitter site (ASRN 1238872), it was determined that the maximum lobe of radiation would occur at 101.5 feet from the base of the tower (259.6 ft radial distance from the antenna center). At 101.5 feet from the base of the tower, the depression angle of the main lobe would be approximately 67° below the horizontal. At that point, the relative field would 0.323 and the power density six feet above the ground would be 0.00668 mW/cm². This equates to only 0.67% of the Maximum Permissible Exposure (MPE) limits for Occupational/Controlled Exposure and only 3.34% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). Since operation of the proposed new Channel 203 NCE-FM broadcast facility would not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground, the new Channel 203 NCE-FM broadcast facility would not be 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 — 27 October, 2021
Kessler and Gehman Associates, Inc.
Consulting Engineers