

Environmental Impact

The proposed K10QW-D Channel 13 digital television translator facility will have no significant environmental impact as defined in §1.1307 of the FCC Rules. The transmitter, transmission line and antenna system will produce an ERP of 300 W. It was determined that the maximum lobe of radiation from the base of the tower will occur at approximately 23.3 feet from the base of the tower (27.2-foot radial distance from the antenna center). At approximately 23.3 feet from the base of the tower, the depression angle of the main lobe will be 31° below the horizontal. At that point, the relative field is 0.646 and the power density six feet above the ground will be 0.0609 mW/cm² which equates to 6.1% of the Maximum Permissible Exposure (“MPE”) limits for Occupational/Controlled Exposure and 30.5% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (“ANSI”). Since the operation of the proposed K10QW-D Channel 13 digital television translator facility will exceed 5.0% of the MPE limit for General Population/Uncontrolled Exposure at various points on the ground, the proposed facility is considered a “contributor” to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, all antennas on the support structure must be analyzed and a composite study is required to demonstrate that the total power density of all antennas on the tower will not exceed 100% of the MPE allowable.

The only other broadcast antenna that will be mounted on the proposed K10QW-D Channel 13 support structure is UA’s K269AD FM translator antenna. The K269AD FM translator facility has no significant environmental impact at the new site as defined in §1.1307 of the FCC Rules. The FM transmitter, transmission line and antenna system produce an ERP of 50 Watts. It was determined that the maximum lobe of radiation from the base of the tower will occur at approximately 13.5 feet from the base of the tower (18.7-foot radial distance from the antenna center). At approximately 13.5 feet from the base of the tower, the depression angle of the main lobe will be 44.0° below the horizontal. At that point, the relative field is 0.666 and the power density six feet above the ground will be 0.1139 mW/cm² which equates

to 11.4% of the MPE limits for Occupational/Controlled Exposure and 56.9% of the MPE limits for General Population/Uncontrolled Exposure authorized by ANSI.

In conclusion, the proposed K10QW-D Channel 13 digital television translator facility is predicted to cause 6.1% of the MPE limits for Occupational/Controlled Exposure and 30.5% of the MPE limits for General Population/Uncontrolled Exposure. The K269AD FM translator facility is predicted to cause 11.4% of the MPE limits for Occupational/Controlled Exposure and 56.9% of the MPE limits for General Population/Uncontrolled Exposure. Therefore, the worst-case combined exposure from all facilities on the support structure is predicted to be 17.5% of the MPE limits for Occupational/Controlled Exposure and 87.4% of the MPE limits for General Population/Uncontrolled Exposure. Accordingly, the combined predicted exposure from all broadcast facilities on the structure will result in exposure levels below the allowable exposure threshold authorized by ANSI and the FCC. It is therefore safe to conclude that the emissions will be insignificant and 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 maximum permissible exposure 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. William was a graduate from the University of North Florida and also a

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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.

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