

Minor Change Application
Joy Christian Ministries
FM Translator Station W259DK
Channel 257 – 99.3MHz, 0.25 kW
Valley Head, Alabama
July, 2022

EXHIBIT C

Radio Frequency Radiation Study

This radio frequency radiation study is being conducted to determine whether this proposal is in compliance with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study utilizes the appropriate formulas contained in the OET Bulletin.

The proposed translator's antenna will be mounted with its center of radiation 85.0 meters (278.9 feet) above the ground at the tower location and will operate with an effective radiated power of 0.25 kilowatt in the vertical and horizontal planes (circularly polarized). At 2.0 meters above the ground at the base on the tower, the proposed new translator's antenna will contribute 0.0015 mw/cm². Based on exposure limitations for a controlled environment, 0.2% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 0.8% of the ANSI limit is reached at 2.0 meters above the ground at the tower base.

Since this level for uncontrolled environments is below the 5.0% limit defined by the Commission in § 1.1307(b)(3)(i) of the rules, and because the level of signal is delivered 23.0 meters from the base of the tower and is considered a worst case scenario, it is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, Joy Christian Ministries will ensure warning signs are posted in the vicinity of the tower and at the gated access point warning of potential radio frequency radiation hazards at the site. In addition, Joy Christian Ministries will reduce the power of the proposed 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.