

**REPLACEMENT DIGITAL TELEVISION TRANSLATOR**  
**GRIFFIN LICENSING, LLC**  
**NEW FILL-IN DIGITAL TV TRANSLATOR**  
**CH 30 - 566-572 MHZ - 1.0 KW**  
**CANEY, KANSAS**  
**August 2011**

**EXHIBIT C**

**Radio Frequency Assessment**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. §1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997 ("Bulletin"), regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study considers all nearby facilities, specifically the co-located KEOJ, and utilizes the appropriate formulas contained in the OET Bulletin.

The proposed Channel 30 digital fill-in translator antenna system will be mounted with its center of radiation 104.6 meters (343.0 feet) above ground and will operate with an effective radiated power of 1.0 kilowatt in the horizontal plane. At 2.0 meters above the ground at the base of the tower, the proposed fill-in antenna system will contribute 0.0013 mw/cm<sup>2</sup>. Based on exposure limitations for a controlled environment, 0.1% of the allowable ANSI limit is reached at 2.0 meters above the ground. For the uncontrolled environment, 0.3% of the limit is reached at 2.0 meters above the ground.

The authorized KEOJ antenna system is mounted with its center of radiation 101.0 meters (331.4 feet) above the ground at the tower location and operates with an effective radiated power of 1.0 kilowatt in the horizontal and vertical planes (circularly polarized). At 2.0 meters above

the ground at the base of the tower, the height of an average person, the KEOJ antenna system contributes  $0.0246 \text{ mw/cm}^2$ .<sup>1</sup> Based on exposure limitations for a controlled environment, 2.5% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 12.3% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions for the new digital fill-in translator and KEOJ, a total of 12.6% of the uncontrolled limit is reached 2.0 meters above the ground at the base of the tower. Since this contribution is below the ANSI limit, it is believed that this proposal is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Therefore, the proposed fill-in translator is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, Griffin will post warning signs in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Griffin will reduce the power of the facility or cease operation, in cooperation and coordination with other site users, as necessary, to protect persons having access to the site, structure or antenna from radio frequency radiation in excess of FCC guidelines.

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1) This level of field occurs at 27.0 meters out from the base of the tower and is considered worst case.