

NEW TV TRANSLATOR APPLICATION
OKLAHOMA BROADCAST ASSOCIATES, LLC
NEW DIGITAL TV TRANSLATOR STATION
CH 35 - 596-602 MHZ - 0.250 KW
LAMONT, OKLAHOMA
September 2009

EXHIBIT B

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 co-located KJTH, and utilizes the appropriate formulas contained in the OET Bulletin.¹

The proposed new TV translator Channel 35 antenna system will be mounted with its center of radiation 61.0 meters (200.0 feet) above the ground and will operate with an effective radiated power of 0.250 kilowatts in the horizontal plane. At 2.0 meters, the height of an average person, above the ground, the proposed TV translator antenna system will contribute 0.0010 mw/cm². 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 uncontrolled environments, 0.2% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower.

The authorized KJTH antenna system is mounted with its center of radiation 287.0 meters (941.6 feet) above the ground and operates with an effective radiated power of 100.0 kilowatts in

1) The contribution of the FM facility was calculated using the FMModel program. A single bay EPA dipole antenna was used for calculation purposes.

the horizontal and vertical planes (circularly polarized). At 2.0 meters, the height of an average person, above the ground, the KJTH antenna system contributes 0.0495 mw/cm^2 .² Based on exposure limitations for a controlled environment, 5.0% of the allowable ANSI limit is reached at 2.0 meters above the ground. For uncontrolled environments, 24.8% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions of the proposed TV translator and KJTH, a total of 25.0% of the limit for uncontrolled environments is reached at 2.0 meters above the ground at base of the tower. Since the levels for uncontrolled environments are well below the limits, the proposed facility is believed to be in compliance with the Commission's exposure guidelines. OBA will ensure warning signs are posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, OBA 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.

2) This level of field occurs at a distance of 77.0 meters out from the base of the tower and is considered worst case.