

**EXHIBIT 44**  
**RF COMPLIANCE STATEMENT**  
**KTAJ-DT 1000 KW 321 M AGL CH. 21**  
**ST. JOSEPH, MISSOURI**  
**OCTOBER, 2004**

The applicant, Trinity Broadcasting Network (Trinity), requests authority to modify the permitted facility of Digital TV station KTAJ-DT, Channel 21, St. Joseph, MO. Specifically, the applicant proposes to change the location, ERP and antenna height. As discussed in detail below, the new facility complies with the Commission's safety standards for human exposure to radio-frequency (RF) energy and therefore remains categorically excluded from environmental processing under Section 1.1306.

The new facilities specified for KTAJ-DT involve a maximum ERP of 1000 kW at an antenna height of 321 meters AGL. The antenna is an Andrew Model ATW16H3-HSC3-21S pylon that will be tower mounted on the top of a candelabra tower at 321 meters above ground level. No significant access by the public is possible near the base of the antenna supporting structure. The antenna radiated field was evaluated using the elevation pattern data supplied by the manufacturer, attached as Exhibit 41, with calculations made in accordance with FCC and ANSI methods. It was assumed that the antenna emissions are undistorted by the tower mounting and that the RF signals are projected uniformly around the tower.

KTAJ-DT contributes a portion of the RF exposure at the multi-user site or any location nearby, from a multiplicity of users. From the antenna vertical field pattern in Exhibit 40 it can be seen that the relative field does not exceed 10% for any angle greater

than 17 degrees below the horizontal plane. An analysis of the station based on the proposed operating facilities, and a maximum of 10% relative field at ground level, was conducted.

The maximum ground level R.F. exposure value was calculated, based on ERP, height and vertical antenna pattern 10% minimum field, and does not exceed  $3.42 \text{ uW/cm}^2$  (microwatts per square centimeter). Lesser exposure levels occur from this facility at greater distances from the antenna and in areas of more suppressed vertical field (steeper depression angles). The proposed KTAJ-DT operation contributes far less than 5% of the FCC adopted exposure guideline for uncontrolled environments which is  $343 \text{ uW/cm}^2$ . Since the estimated "worst case" contribution for the facility is less than 5% of the uncontrolled limit, the applicant is not required to further evaluate the antenna location with respect to other RF contributors.

The above calculation demonstrates that the maximum permissible guideline for uncontrolled ground level exposure (public limit) is not reached at any ground level location. Moreover, direct access to the antenna supporting structure is controlled by fencing, locked gates, and warning signs and is not available to the public.

Controlled (occupational) exposure will not exceed the FCC adopted guidelines at the base of the tower and for a limited distance above ground level for the purpose of tower climbing. A consideration of the various users of the multi-user tower suggests that the controlled exposure limit will be reached at various elevations on the tower, near various other antennas, before the KTAJ-DT antenna is reached.

It has been demonstrated that the proposal complies with the occupational exposure

guideline at any ground-level location. At higher elevations on the antenna structure, however, workers will be protected from excessive exposure to RF fields in accordance with the methods recommended in *OET Bulletin No. 65, Version 97-01*. Trinity will also adopt a work policy for coordinating with other site users. Preventive steps for avoiding excessive exposure may include scheduling work while the facility operates at reduced power or is shut down.

Prepared by

**Lohnes and Culver**

8309 Cherry Lane  
Laurel, MD 20707  
301-776-4488

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