

REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION
MTD, INC.
KIDX (FM) RADIO STATION
RUIDOSO, NEW MEXICO
December 2009

Radio Frequency Radiation 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. As the proposed KIDX STA antenna is being mounted on a relatively short tower, which is located in a defacto tower farm with other facilities, it was not possible to use the worksheets to verify that the proposed KIDX STA facility is in compliance with the Commission's radio frequency exposure limits. This study utilizes the appropriate formulas contained in the OET Bulletin.¹

It is noted that the licensed and proposed KIDX STA site is located at the Buck Mountain Communications Site located in the Lincoln National Forest. The site is the location of several towers located at the top of Buck Mountain. The site is accessed by driving on a switchback road. The distance from the last hard surface road to the site is approximately 4.0 kilometers (2.5 miles) by road, but is 0.8 kilometer (0.49 mile) from the closest point of public access. At the base of the access road, there is a locked gate preventing access to the site by the general public. If not on the road, access beyond the gate is not feasible due to foliage and the nature of the terrain from the gate up to the tower site. Access to the site requires a permit from the U.S.

1) The contributions of the FM facilities were calculated using the FMModel program. A single bay EPA dipole antenna was used for calculation purposes, unless otherwise indicated.

Forest Service and a key which is only available from the Forest Service. Therefore, only authorized technicians or persons trained in RF environments are allowed access beyond the gated point. Therefore, the contribution for uncontrolled exposure will be calculated at the closest point at the gated access point, which is the closest the public can get to the site.² Controlled exposure will be calculated at the base of the KIDX tower.

The proposed KIDX STA antenna system is to be mounted with its center of radiation 13.7 meters (45.0 feet) above the ground at the tower location and will operate with an effective radiated power of 0.92 kilowatt in the horizontal and vertical planes (circularly polarized). The proposed KIDX antenna is a Nicom BKG-77 two bay full wavelength system (FCC/EPA Type #1). At 2.0 meters above the ground at the base of the tower, the height of an average person, the KIDX STA antenna system in the controlled environment will contribute 0.2670 mw/cm^2 .³ This represents a contributions of 26.7% of the allowable limit, which is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, at a distance 0.8 kilometer (0.49 mile) from the base of the tower at the gated access point, the KIDX STA antenna will contribute 0.00009 mw/cm^2 , which is less than 0.1 % of the ANSI limit for uncontrolled environments.

Since this level for both the controlled and uncontrolled environments is less than the limit defined by the Commission, this proposal is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission.

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- 2) This point is near the basin of the Ski Apache ski area. The gated access point is located a short distance away, but is slightly further than the Ski Apache basin.
- 3) This level of field occurs at 3.0 meters out from the base of the tower and is considered worst case.

MTD will post warning signs have been posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, MTD will reduce the power of the 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.