

ENGINEERING EXHIBIT
APPLICATION FOR
CONSTRUCTION PERMIT
TELEVISION TRANSLATOR STATION K35EI
MOHAVE COUNTY BOARD OF SUPERVISORS
DOLAN SPRINGS, ARIZONA
CH 35- 1.38 KW (MAX-DA) 1321 METERS AMSL

ENGINEERING STATEMENT

The Engineering Exhibit, of which this statement is part, was prepared in accordance with the Rules of the Federal Communications Commission (FCC) and pursuant to the provisions of Section III of FCC Form 346 on behalf of the Mohave County Board of Supervisors (hereinafter Mohave) in support of an application for a construction permit to modify the facilities of television translator station K35EI, Dolan Springs, Arizona.

K35EI is licensed for operation on channel 35 with maximum peak visual effective radiated power (ERP) of 1.38 kilowatts (kW) and antenna radiation center height above mean sea level (AMSL) of 1321 meters. Mohave proposes to modify the K35EI operation to specify operation with minus 10 kilohertz frequency offset. No other changes are proposed to the K35EI transmitter location, ERP, antenna and antenna radiation center height AMSL. No change in the existing overall supporting structure height is proposed.

Therefore, notification of the Federal Aviation Administration is not required and has not been made. The overall height above ground level of the existing K35EI supporting structure is 15 meters, and does not require registration with the FCC.

The proposed modification of the K35EI facilities will not have a significant environmental impact. The existing K35EI transmitter site is a multiple-user site located in a rural, sparsely populated area. Neither workers nor the general public will be exposed to electromagnetic field strengths exceeding the maximum permissible exposure (MPE) levels set forth in Section 1.1310 of the FCC Rules. At a reference point two meters above ground level (AGL) at the base of the supporting structure, the calculated exposure arising from the K35EI operation proposed herein is predicted to be 0.0019 milliwatt per square centimeter (mW/cm^2) or 0.5 percent of the MPE level for general public/uncontrolled exposures of $0.40 \text{ mW}/\text{cm}^2$ at 596 MHz, the lower edge of channel 35. The foregoing calculation assumes a vertical plane relative field factor of 0.10 at steep depression angles for the proposed K35EI antenna, a ground reflection coefficient of 1.6, and an aural ERP equal to 10 percent of the maximum peak visual ERP. Since the proposed K35EI channel 35 operation will contribute less than 5.0 percent of the MPE for general

population/uncontrolled exposure at any location on the ground at the multiple-user site, K35EI is not considered a “significant contributor” to the RF exposure environment pursuant to *OET Bulletin 65, Edition 97-01*. Thus, contributions to exposure from other sources in the vicinity of the K35EI site were not taken into account in this analysis.

With respect to occupational exposures, Mohave and the other licensees at the existing site will employ procedures to assure that workers on the tower in the vicinity of energized antennas are not exposed to levels in excess of the FCC MPE’s for Occupational/Controlled exposure.

Other environmental concerns do not apply in this case as K35EI proposes no changes to the existing antenna and supporting structure. Use of an existing supporting structure is considered environmentally desirable, and this proposal is believed to be categorically excluded from environmental processing pursuant to Section 1.1306 of the FCC Rules.