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Prepared for the University of Utah
KUEU, Logan Utah

RADIOFREQUENCY FIELDS

An engineering analysis was performed to determine whether the facilities proposed herein comply with the Maximum Permissible Exposure standards outlined in 47CFR1.1310 as regards human exposure to radiofrequency electromagnetic fields and whether environmental processing would be required.

The applicant proposes to operate at 1.4 kilowatts, horizontally polarized, using a Kathrein K52 34 17 antenna mounted at the 26-meter level of a 30-meter tower. This is a horizontally polarized, panel-style antenna comprised of a single radiating level.

The antenna support structure is mounted at the apex of a local promontory. Though located in a fenced and locked compound, areas outside of the fence are accessible to the general public. There are no other significant emitters of radiofrequency energy in the immediate vicinity.

The Commission's FMModel computer software was used to calculate the radiofrequency electromagnetic power density in a plane 2 meters AGL as a function of the distance from the antenna support structure. The "Ring and Stub or Other" elevation pattern data was selected. A copy of the graphical output of this program is attached.

The highest power density occurs at a point 13.5 meters from the base of the tower and is equal to 22.5 μW/cm^2. This represents 11.3% of the general public/uncontrolled MPE standard.

Appropriate signs will be installed at the base of the tower warning workers and others that the maximum permissible exposure standard may be exceeded at locations on the tower.

The applicant believes that the facilities proposed herein conform to the MPE standards outlined in 47CFR1.1310 and that environmental processing is not warranted.