

TELECOMMUNICATIONS ENGINEERING  
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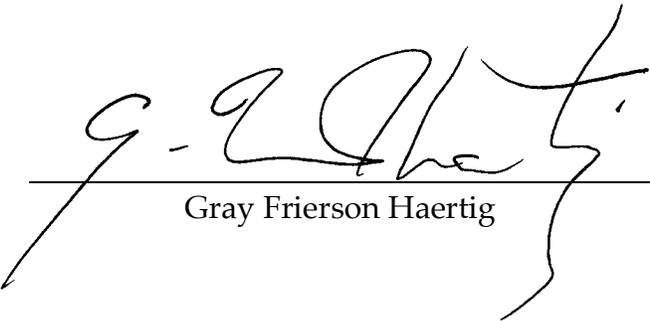
ELECTRONIC MAIL  
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29 April 2021  
Prepared for KUTE, Inc.  
KUUT, Farmington, New Mexico

Compliance with the provisions of 47CFR1.1310 as regards human exposure to radiofrequency fields was demonstrated in BMPED-20070614AEK (attached).

There have been no subsequent changes which might affect compliance.

Respectfully submitted this 29<sup>th</sup> day of April, 2021.



Gray Frierson Haertig

An engineering analysis was performed to ascertain whether the facilities proposed herein meet the requirements as regards human exposure to radiofrequency electromagnetic fields spelled out in 47CFR1.1310.

The applicant proposes to operate at 1.35 kw ERP, vertically polarized, using a Shively 6513-5 antenna mounted on an existing antenna support structure at the 89-meter level. This antenna consists of 5 vertically polarized radiating elements at 1 wavelength spacing.

The antenna is to be located in generally flat terrain. There are no significant rises in terrain within several hundred meters. The point of closest approach to the proposed antenna is directly beneath it.

The commission's FMMODEL software program was used to predict the radiofrequency electromagnetic power density in a plane 2 meters above ground level as a function of the distance from the antenna support structure. A copy of the graphical output of this program is attached. Communications with the manufacturer indicates that the elevation pattern data for the shively 6800 series antennas that is incorporated into FMMODEL may be used with the Shively 6500 series antennas.

The point of highest radiofrequency power density occurs at a distance of 34.4 meters from the base of the tower and is equal to  $0.41 \text{ uw/cm}^2$ . This represents 0.205% of the general public/uncontrolled MPE standard spelled out in 47CFR1.1310.

Because this is less than 5% of the applicable exposure standard, the applicant is not required to participate in any remediative actions that might be required if it were later found that the MPE standard is exceeded in the vicinity due to the emissions others, nor is it necessary to include the applicant's contribution to the aggregate electromagnetic power density in determining compliance by other licensees.

The applicant believes that the proposed facilities are in compliance with the provisions of 47CFR1.1310 and that environmental processing of the instant application is not warranted.

Shively 6513-5  
5 Elements, 1 Wavelength Spacing  
1.35 KW at 89 Meters AGL  
Vertical Polarization Only

