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11 November 2020

Prepared for Community Radio Project, Inc.

GROUND LEVEL AMBIENT RADIOFREQUENCY ELECTROMAGNETIC FIELDS
KSJD-FM, CORTEZ, COLORADO

This office performed an analysis to determine whether the facilities proposed herein conform to the regulations regarding human exposure to radiofrequency electromagnetic fields, as outlined in office of engineering and technology bulletin 65, edition 97-01.

KSJD operates at 1.2 kilowatts, circularly polarized, using a Shively 6813-2 antenna mounted at the 27-meter level of the antenna support structure. This antenna consists of 2 circularly polarized radiating elements at one wavelength spacing.

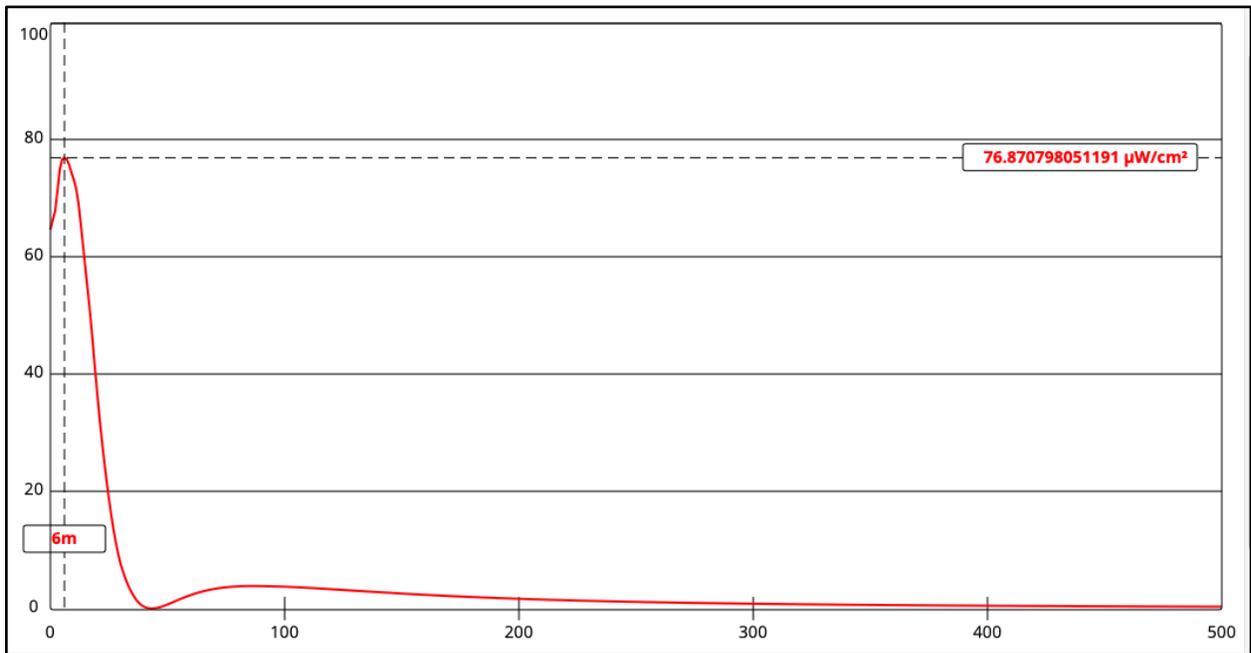
The proposed site is located on a large, flat mesa and there are no significant rises in terrain within several hundred meters of the proposed antenna. The point of closest approach to the antenna is directly beneath it.

There are no other significant emitters of radiofrequency energy in the immediate vicinity.

The commission's FM model program was used to predict the ground level radiofrequency power density. The elevation pattern data for the Shively 6800 series of antenna was selected in the program and then an antenna height of 27 meters and horizontally and vertically polarized powers of 1.2 kilowatts were entered into the program. Attached is the graphical output produced by the program showing the ground level radiofrequency power density in microwatts per centimeter squared as a function of distance from the antenna support structure.

The point of highest radiofrequency power density occurs 6 meters from the tower base and is equal to 76.9 $\mu\text{W}/\text{cm}^2$. This corresponds to 38.5% of the general public/uncontrolled MPE standard at the KSJD operating frequency.

The applicant believes that the operation of KSJD conforms to the MPE standards outlined in 47CFR1.1310 as regards Human Exposure to Radiofrequency Electromagnetic Fields.



I, Gray Frierson Haertig, hereby affirm that;

I am principal and senior engineer of Gray Frierson Haertig & Assoc.;

GFH&A have been retained by the Community Radio Project, Inc, to prepare this report;

I have a special interest and expertise in evaluating radiofrequency electromagnetic fields and compliance with applicable standards;

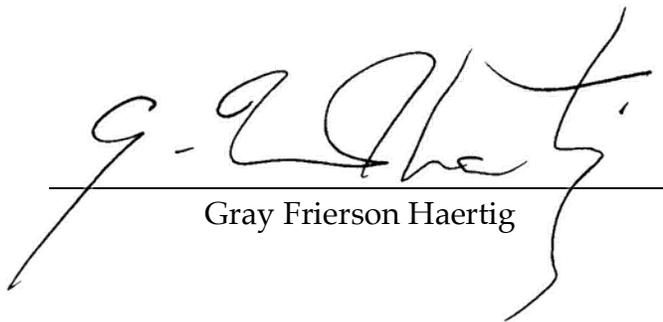
This report has been prepared by myself;

All assertions made here-in and not attributed to others are correct to the best of my knowledge and correctly reflect the facts of the matter;

I am a Broadcast Engineer of 54 years' experience;

And my credentials are a matter of record with the Commission.

Respectfully submitted this 11th day of November 2020.



Gray Frierson Haertig