

TELECOMMUNICATIONS ENGINEERING
GRAY FRIERSON HAERTIG & ASSOC.
4646 S.W. COUNCIL CREST DRIVE
PORTLAND, OREGON 97239
503-282-2989 (Office)
503-807-2989 (Cell)

ELECTRONIC MAIL
gfh@haertig.com

17 November 2020

Prepared for Community Radio Project, Inc.

GROUND LEVEL AMBIENT RADIOFREQUENCY ELECTROMAGNETIC FIELDS
KICO-FM, RICO, 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.

KICO operates at 0.2 kilowatts, horizontally polarized, using a Shively 6602 antenna mounted on a pipe mast extending above the roof of a two-story commercial building. This antenna consists of a single horizontally polarized radiating.

The area of closest approach to the antenna are the second story areas of the building to which the antenna is attached and to the building immediately adjacent to the north. The radiation center of the antenna is 7 meters above the second floor floor level of the building to which it is attached and 10 meters above the second floor floor level of the building adjacent.

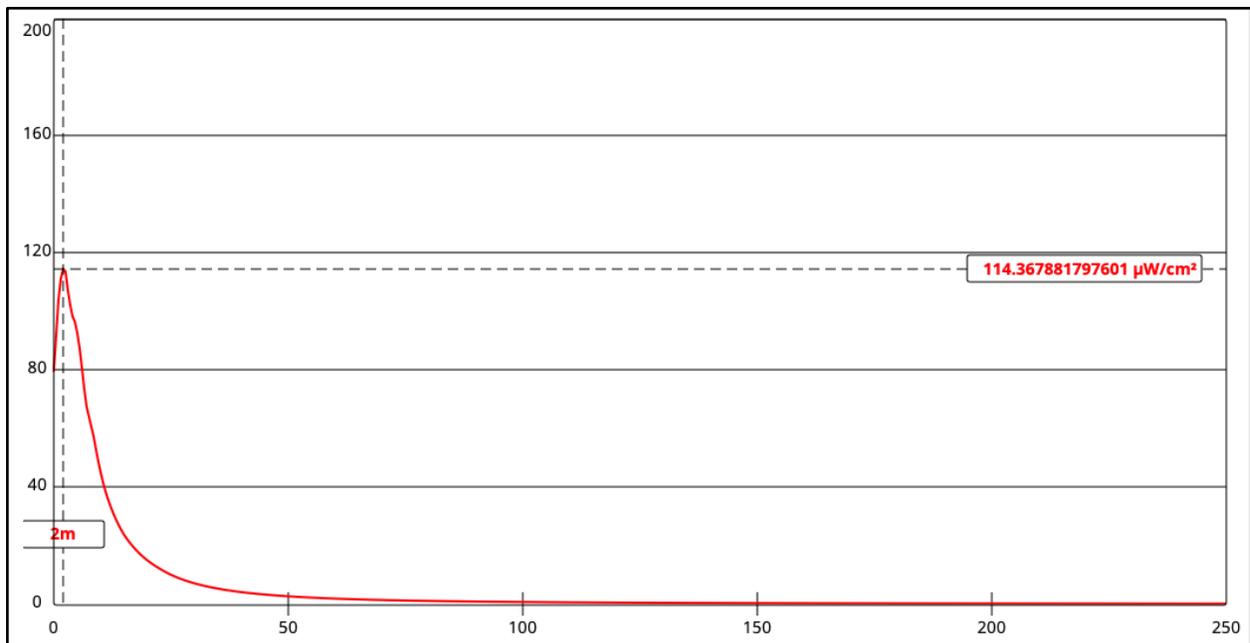
There are no other significant emitters of radiofrequency energy in the immediate vicinity.

The commission's FM model program was used to predict the ground level radiofrequency power density. The elevation pattern data EPA Type 1 (Ring-Stub or other) was selected in the program and then an antenna height of 7 meters and horizontally polarized power of 200 Watts 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 114.4 $\mu\text{W}/\text{cm}^2$. This corresponds to 57.2% of the general public/uncontrolled MPE standard at the KICO operating frequency.

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



Signs have been installed at access points to the roofs of the two buildings warning workers that the General Public/Uncontrolled Exposure standards may be exceeded on the roofs.

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;

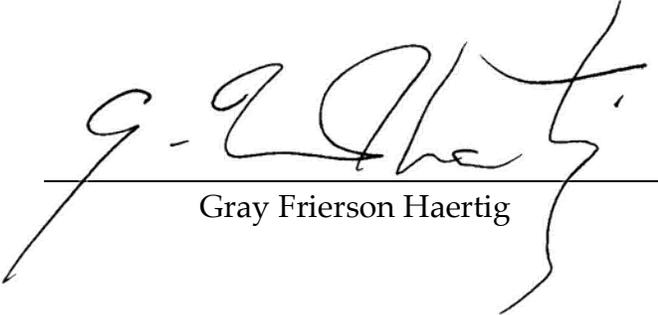
This report has been prepared by myself;

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 17th day of November 2020.



Gray Frierson Haertig