

Environmental Protection Act

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments)

The facility is located at the apex of a hill in unoccupied mountainous terrain. The closest rise in terrain is 10 km northeast of the site. The closest residence is 1.1 km southeast of the site, at an elevation 100 meters lower than the base of the tower. There are other significant emitters of radio frequency energy in the area. The transmitter and tower site are enclosed with a locked fence. The site is located on a private communications site. Access to the site is available only to authorized technical and maintenance personnel by the unimproved private road.

The proposed directional antenna will be side-mounted on a 80 ft self supporting tower on Bald Butte. The proposed station will operate at 0.35 Kw circularly polarized using a single-bay FM broadcast antenna with a center of radiation at 21.3 m AGL.

Page three graph 1 of this Exhibit is a printout from the Commission's FM Model for Windows software for the licensee's FM antenna with 0.35 kW ERP at 21.3 m AGL. As shown, at ground level RF exposure will be less than 14 $\mu\text{W}/\text{cm}^2$, or 7% of the general population/uncontrolled exposure limit of 200 $\mu\text{W}/\text{cm}^2$ and 1.4% of the occupational/controlled exposure limit of 1,000 $\mu\text{W}/\text{cm}^2$ for FM broadcast frequencies.

On the adjacent tower is KRLF's side-mounted single bay non-directional antenna with 0.42 kW V only at 13 m AGL. Page three graph 2 of this Exhibit is a printout from the Commission's FM Model for Windows software for KRLF's FM antenna with 0.42 kW V only ERP at 13 m AGL. As shown, at ground level RF exposure will be less than 24 $\mu\text{W}/\text{cm}^2$, or 12% of the general population/uncontrolled exposure limit of 200 $\mu\text{W}/\text{cm}^2$ and 2.4% of the occupational/controlled exposure limit of 1,000 $\mu\text{W}/\text{cm}^2$ for FM broadcast frequencies.

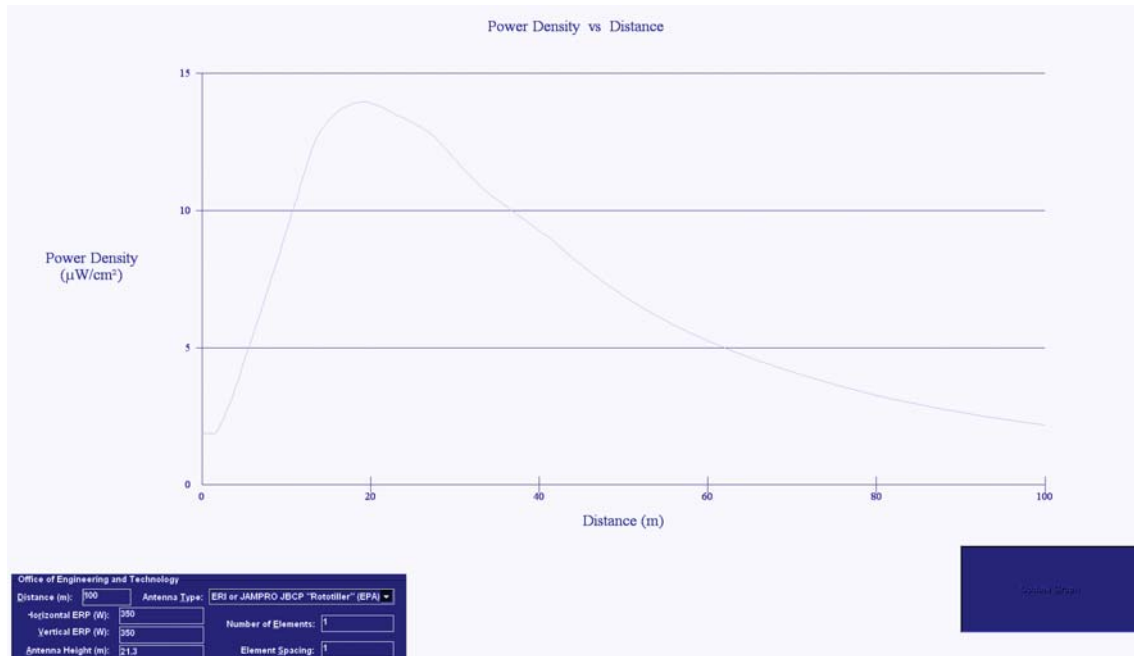
By adding the exposure results for all of the stations at and near the site, the total exposure can be determined. Even though the maximum exposure from all of the stations probably will never be this high in any one spot, this figure is used as a worst-case maximum. The total of the general population/uncontrolled exposure values is 19% and the total of the occupational/controlled exposure values is 3.8%.

This shows compliance with the MPE requirements in the frequency ranges in use at this site, as regards to occupational exposure at or near ground levels. Because of the large margin of safety, the applicant does not believe that on-site measurements of the radio frequency power density are necessary.

The applicant is cognizant of its responsibility to protect those workers whose duties require that they be in the vicinity of the antenna from exposure to radio frequency fields in excess of those outlined above. To that end, signage is posted at the site warning all workers of the potential for harmful exposure and directing them to contact the responsible person at the proposed broadcast station. That person will ascertain whether the worker will be in areas where there is an exposure hazard, and if so, arrange to shut down the transmitter.

For these reasons, the applicant believes that a Commission grant of this application would not have a significant environmental effect.

Graph #1 - PROPOSED-FM



Graph #2 - KRLF-FM

