

### **Human exposure to excess levels of radiofrequency radiation**

The proposed facility is to be built using a 1-bay vertically polarized antenna.

According to OET 65, "Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit. The applicant or licensee then shares responsibility for compliance in any accessible area or areas within this 5% "contour" where the appropriate limits are found to be exceeded."

As can be seen in Exhibit 17-A, the proposed facility's maximum contribution to RF on the site is  $0.033\mu\text{W}/\text{cm}^2$  at a distance of 90 meters from the tower, which is less than 0.01% of the uncontrolled (public) exposure limit.

Therefore, because the proposed facility will not cause an RF field that is equal to or greater than 5% of the  $200\mu\text{W}/\text{cm}^2$  limit for uncontrolled exposure at any point, the proposed facility complies with the requirements of OET 65.

EMF will fully cooperate with other site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

## Specific Antenna RF Power Density Calculator

Based on Equation 10 of OET-65  
Exhibit 17-A / Detailed Report

<b>ERP</b>	0.13 kW	% of OET-65
<b>Height above ground</b>	149.0 meters	0.0% Uncontrolled
<b>Height above head</b>	147.0 meters	0.0% Controlled
<b>Antenna Brand Scala</b>		
<b>Antenna Model FMVMP</b>		

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm2)
0	90	147.0	0.025	3.25	0.000
10	86	147.3	0.067	8.71	0.001
20	82	148.4	0.067	8.71	0.001
30	78	150.0	0.176	22.88	0.006
40	75	152.3	0.176	22.88	0.006
50	71	155.3	0.176	22.88	0.006
60	68	158.8	0.315	40.95	0.017
70	65	162.8	0.315	40.95	0.016
80	61	167.4	0.315	40.95	0.015
90	59	172.4	0.472	61.36	0.033
100	56	177.8	0.472	61.36	0.031

