Educational Media Foundation
5700 West Oaks Boulevard
Rocklin, CA 95765

Human exposure to excess levels of radiofrequency radiation

The proposed facility is to be built using a 2-bay circularly polarized half-waved spaced 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 0.022 µW/cm^2 at a distance of 80 meters from the tower which is 0.00% 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 µW/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

ERP	0.25	kW	% of OET-65
Height above ground	130.0	meters	0.0% Uncontrolled
Height above head	128.0	meters	0.0% Controlled
Antenna Brand	**SWR**		
Antenna Model	**FMEC2 .5**		

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm2)
0	90	128.0	0.001	0.25	0.000
10	86	128.4	0.006	1.5	0.000
20	81	129.6	0.006	1.5	0.000
30	77	131.5	0.039	9.75	0.001
40	73	134.1	0.039	9.75	0.001
50	69	137.4	0.115	28.75	0.006
60	65	141.4	0.115	28.75	0.006
70	61	145.9	0.115	28.75	0.005
80	**58**	**150.9**	**0.244**	**61**	**0.022**
90	55	156.5	0.244	61	0.020
100	52	162.4	0.244	61	0.019