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 full-wave 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 0.135 $\mu W/cm^2$ at a distance of 40 meters from the tower, which is 0.1% 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 $\mu W/cm^2$ 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	96.0 meters	0.1%	Uncontrolled
Height above head	94.0 meters	0.0%	Controlled
Antenna Brand	**Jampro**		
Antenna Model	**JLCP-2**		

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm2)
0	90	94.0	0.1	25	0.009
10	84	94.5	0.18	45	0.030
20	78	96.1	0.314	78.5	0.089
30	72	98.7	0.314	78.5	0.085
40	**67**	**102.2**	**0.411**	**102.75**	**0.135**
50	62	106.5	0.411	102.75	0.124
60	57	111.5	0.445	111.25	0.133
70	53	117.2	0.445	111.25	0.120
80	50	123.4	0.445	111.25	0.109
90	46	130.1	0.308	77	0.047
100	43	137.2	0.308	77	0.042