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-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 less than .1µW/cm^2 at all distances within 100 meters from the tower, which is less than 0.001% 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	0.12	kW	% of OET-65
Height above ground	255.0	meters	0.0% Uncontrolled
Height above head	253.0	meters	0.0% Controlled
Antenna Brand	**Nicom**		
Antenna Model	**BKG77-2HW**		

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm2)
0	90	253.0	0.009	1.08	0.000
10	88	253.2	0.009	1.08	0.000
20	85	253.8	0.009	1.08	0.000
30	83	254.8	0.009	1.08	0.000
40	81	256.1	0.009	1.08	0.000
50	79	257.9	0.007	0.84	0.000
60	77	260.0	0.007	0.84	0.000
70	75	262.5	0.007	0.84	0.000
80	72	265.3	0.007	0.84	0.000
90	70	268.5	0.007	0.84	0.000
100	68	272.0	0.061	7.32	0.000