Educational Media Foundation
5700 West Oaks Boulevard
Rocklin, CA 95765

Environmental Protection

There are two main factors that need to be addressed in order to make sure that the environment around a proposed facility is protected.

1- Significant affects to the environment.

EMF's proposed facility will be constructed on an existing tower (tower ID 1011020) and will cause no adverse effects to the surrounding environment at the site.

2- Human exposure to excess levels of radiofrequency radiation.

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

As can be seen in Exhibit 3-A, the maximum theoretical RF value would be 9.83uW/cm^2 at a distance of 30 meters from the tower, which is 4.9% of the 200 uW/cm^2 permitted for public (uncontrolled) exposure, and 1.0% of the 1000 uW/cm^2 permitted for worker (controlled) exposure.

Therefore, the proposed facility complies with the requirements of OET 65.

EMF will fully cooperate with other future 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 3-A / Detailed Report

ERP	1.038	kW	% of OET-65	
Height above ground	30.0	meters	4.9%	Uncontrolled
Height above head	28.0	meters	1.0%	Controlled
Antenna Brand	**Nicom**			
Antenna Model	**BKG-77/1**			

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm2)
0	90	28.0	0.104	107.95	0.478
10	70	29.7	0.239	248.08	2.240
20	54	34.4	0.538	558.44	8.475
30	43	41.0	0.691	717.26	9.830
40	35	48.8	0.818	849.08	9.731
50	29	57.3	0.918	952.88	8.897
60	25	66.2	0.918	952.88	6.664
70	22	75.4	0.918	952.88	5.140
80	19	84.8	0.982	1019.3	4.654
90	17	94.3	0.982	1019.3	3.763
100	16	103.8	0.982	1019.3	3.100