

Educational Media Foundation

Exhibit 16

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Susanville, CA

The proposed facility is to be built using a 2-bay circularly polarized full-wave spaced antenna on the same site as the following:

Status	Call	Licensee/Permittee	Channel	City	FIN
LIC	K205EK	Calvary Chapel of Twin Falls, Inc.	205D	Susanville, CA	8422
LIC	KLZN	Gary Katz	242A	Susanville, CA	162465
LIC	K257EK	John Regh	257D	Susanville, CA	151434

See Exhibit 16-A for antennas that were specified by each licensee/permittee.

As can be seen in Exhibit 16-A, the maximum theoretical RF value would be 69.40 $\mu\text{W}/\text{cm}^2$ at a distance of 3 meters from the tower, which is 34.70% of the 200 $\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 6.94% of the 1000 $\mu\text{W}/\text{cm}^2$ 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.

Exhibit 16-A
RF Analysis: K253AA.P 253D Susanville, CA

	K253AA.P	K205EK	KLZN	K257EK
Site type:	Application	FM Translator	FM station	FM Translator
Channel:	253	205	242	257
Class:	D	D	A	D
ERP:	0.17 kw	0.099 kw	1.5 kw	0.012 kw
Antenna:	DIE	SCA	JAM	JAM
	EPA Type 1	EPA Type 1	double v	double v
	2-bay	1 bay	5 bay	1-bay
	full wave	full wave	half wave	full wave
COR AGL:	12 m	12 m	11m	17 m
Polorization:	Circular	Vertical	Circular	Circular

Distance From Tower (m)	K253AA.P Facility	K205EK Facility	KLZN Facility	K257EK Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	39.4425	18.6051	0.2577	0.1942	58.50	29.25
1	41.4072	19.3474	0.2631	0.2023	61.22	30.61
2	46.0509	21.5774	0.2688	0.2275	68.12	34.06
3	46.9653	21.8838	0.2769	0.2692	69.40	34.70
4	46.0310	21.5116	0.3043	0.3204	68.17	34.08
5	44.4178	21.2624	0.3311	0.3743	66.39	33.19
6	41.2492	20.5804	0.3577	0.4306	62.62	31.31
7	36.3956	19.2463	0.3869	0.4906	56.52	28.26
8	31.5725	18.5123	0.4135	0.5503	51.05	25.52
9	25.9372	17.1814	0.4360	0.5934	44.15	22.07
10	20.3608	15.6052	0.4543	0.6319	37.05	18.53
11	15.5638	14.1652	0.4654	0.6693	30.86	15.43
12	11.5042	12.8628	0.4677	0.6995	25.53	12.77
13	8.0894	11.3456	0.4627	0.7099	20.61	10.30
14	5.4650	10.0382	0.4472	0.7156	16.67	8.33
15	3.6859	9.6311	0.4207	0.7329	14.47	7.24
16	2.3628	9.5032	0.3806	0.7505	13.00	6.50
17	1.3719	9.3235	0.3303	0.7630	11.79	5.89
18	0.6593	8.6937	0.2744	0.7626	10.39	5.20
19	0.2385	8.0567	0.2159	0.7591	9.27	4.64
20	0.0406	7.4791	0.1588	0.7528	8.43	4.22
21	0.0027	6.9462	0.1057	0.7388	7.79	3.90
22	0.0758	6.4343	0.0601	0.7217	7.29	3.65
23	0.2228	5.9727	0.0255	0.7037	6.92	3.46
24	0.4157	5.5554	0.0048	0.6852	6.66	3.33
25	0.6334	5.1775	0.0005	0.6657	6.48	3.24
26	0.8580	4.8252	0.0137	0.6458	6.34	3.17
27	1.0711	4.4824	0.0445	0.6261	6.22	3.11
28	1.2716	4.1729	0.0928	0.6066	6.14	3.07
29	1.4555	3.8928	0.1590	0.5875	6.09	3.05
30	1.6208	3.6385	0.2412	0.5685	6.07	3.03
31	1.7666	3.4073	0.3374	0.5498	6.06	3.03
32	1.8931	3.1964	0.4447	0.5317	6.07	3.03
33	2.0012	3.0035	0.5603	0.5142	6.08	3.04
34	2.0925	2.8205	0.6770	0.4973	6.09	3.04
35	2.1679	2.6531	0.7942	0.4810	6.10	3.05
36	2.2286	2.4996	0.9090	0.4653	6.10	3.05
37	2.2762	2.3585	1.0184	0.4497	6.10	3.05
38	2.3119	2.2286	1.1198	0.4344	6.09	3.05
39	2.3372	2.1088	1.2112	0.4197	6.08	3.04
40	2.3532	1.9981	1.2863	0.4057	6.04	3.02
41	2.3610	1.8956	1.3458	0.3923	5.99	3.00
42	2.3617	1.8005	1.3912	0.3795	5.93	2.97
43	2.3563	1.7122	1.4222	0.3672	5.86	2.93
44	2.3455	1.6301	1.4390	0.3555	5.77	2.89
45	2.3321	1.5552	1.4420	0.3443	5.67	2.84

Distance From Tower (m)	K253AA.P Facility	K205EK Facility	KLZN Facility	K257EK Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	2.3215	1.4907	1.4319	0.3335	5.58	2.79
47	2.3071	1.4301	1.4097	0.3227	5.47	2.73
48	2.2894	1.3730	1.3753	0.3113	5.35	2.67
49	2.2689	1.3193	1.3311	0.3004	5.22	2.61
50	2.2459	1.2685	1.2784	0.2900	5.08	2.54
51	2.2210	1.2206	1.2186	0.2802	4.94	2.47
52	2.1943	1.1753	1.1529	0.2708	4.79	2.40
53	2.1663	1.1325	1.0827	0.2618	4.64	2.32
54	2.1370	1.0919	1.0093	0.2533	4.49	2.25
55	2.1069	1.0534	0.9337	0.2452	4.34	2.17
56	2.0760	1.0169	0.8571	0.2375	4.19	2.09
57	2.0447	0.9822	0.7805	0.2301	4.04	2.02
58	2.0129	0.9492	0.7045	0.2230	3.89	1.94
59	1.9808	0.9179	0.6302	0.2163	3.75	1.87
60	1.9487	0.8881	0.5584	0.2098	3.60	1.80
61	1.9165	0.8596	0.4898	0.2036	3.47	1.73
62	1.8843	0.8325	0.4247	0.1977	3.34	1.67
63	1.8523	0.8067	0.3636	0.1920	3.21	1.61
64	1.8206	0.7820	0.3069	0.1864	3.10	1.55
65	1.7890	0.7584	0.2549	0.1808	2.98	1.49
66	1.7578	0.7359	0.2076	0.1754	2.88	1.44
67	1.7270	0.7144	0.1652	0.1703	2.78	1.39
68	1.6965	0.6937	0.1278	0.1653	2.68	1.34
69	1.6652	0.6743	0.0953	0.1606	2.60	1.30
70	1.6344	0.6557	0.0678	0.1561	2.51	1.26
71	1.6041	0.6379	0.0452	0.1518	2.44	1.22
72	1.5744	0.6208	0.0273	0.1476	2.37	1.19
73	1.5452	0.6043	0.0141	0.1436	2.31	1.15
74	1.5166	0.5885	0.0053	0.1398	2.25	1.13
75	1.4886	0.5733	0.0007	0.1361	2.20	1.10
76	1.4611	0.5587	0.0003	0.1326	2.15	1.08
77	1.4342	0.5446	0.0037	0.1292	2.11	1.06
78	1.4078	0.5311	0.0107	0.1259	2.08	1.04
79	1.3820	0.5180	0.0211	0.1228	2.04	1.02
80	1.3568	0.5054	0.0347	0.1197	2.02	1.01
81	1.3321	0.4933	0.0512	0.1168	1.99	1.00
82	1.3080	0.4816	0.0705	0.1140	1.97	0.99
83	1.2843	0.4703	0.0922	0.1112	1.96	0.98
84	1.2612	0.4594	0.1162	0.1086	1.95	0.97
85	1.2387	0.4488	0.1423	0.1061	1.94	0.97
86	1.2166	0.4387	0.1702	0.1036	1.93	0.96
87	1.1950	0.4288	0.1998	0.1012	1.92	0.96
88	1.1739	0.4193	0.2309	0.0990	1.92	0.96
89	1.1533	0.4101	0.2633	0.0967	1.92	0.96
90	1.1331	0.4012	0.2968	0.0946	1.93	0.96
91	1.1134	0.3926	0.3309	0.0925	1.93	0.96
92	1.0942	0.3842	0.3652	0.0905	1.93	0.97
93	1.0754	0.3762	0.3999	0.0886	1.94	0.97
94	1.0570	0.3683	0.4350	0.0867	1.95	0.97
95	1.0390	0.3607	0.4704	0.0849	1.96	0.98
96	1.0214	0.3534	0.5059	0.0831	1.96	0.98
97	1.0042	0.3462	0.5414	0.0815	1.97	0.99
98	0.9875	0.3393	0.5768	0.0800	1.98	0.99
99	0.9710	0.3326	0.6121	0.0785	1.99	1.00
100	0.9550	0.3261	0.6471	0.0771	2.01	1.00