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 1062272), therefore it should have no adverse effect on the surrounding environment.

2) Human exposure to excess levels of radiofrequency radiation.

The proposed facility is to be built using a 12-bay circularly polarized full-wave spaced antenna.

As can be seen in Exhibit 34-A, the maximum theoretical RF value would be 5.57 $\mu W/cm^2$ at a distance of 37 meters from the tower, which is 2.79% of the 200 $\mu W/cm^2$ permitted for public (uncontrolled) exposure, and 0.56% of the 1000 $\mu W/cm^2$ permitted for worker (controlled) exposure.

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.

Exhibit 34-A
RF Analysis: KLVA Maricopa AZ

KLVA.P
Site type: Proposed
Channel: 210
Class: C3
ERP: 12.7kw
Antenna: ERI
EPA Type 3
12 bay
full wave
COR AGL: 167.00
Polorization: circular

Distance From Tower (m)	KLVA.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	3.5937	3.59	1.80
1	3.5935	3.59	1.80
2	3.5931	3.59	1.80
3	3.5925	3.59	1.80
4	3.5915	3.59	1.80
5	3.5901	3.59	1.80
6	3.5883	3.59	1.79
7	3.5861	3.59	1.79
8	3.5832	3.58	1.79
9	3.5797	3.58	1.79
10	3.5754	3.58	1.79
11	3.5703	3.57	1.79
12	3.5641	3.56	1.78
13	3.5568	3.56	1.78
14	3.5481	3.55	1.77
15	3.5928	3.59	1.80
16	3.7230	3.72	1.86
17	3.8529	3.85	1.93
18	3.9819	3.98	1.99
19	**4.1097**	**4.11**	**2.05**
20	4.2356	4.24	2.12
21	4.3590	4.36	2.18
22	4.4794	4.48	2.24
23	4.5959	4.60	2.30
24	4.7080	4.71	2.35
25	4.8148	4.81	2.41
26	4.9155	4.92	2.46
27	5.0093	5.01	2.50
28	5.0955	5.10	2.55
29	5.1731	5.17	2.59
30	5.2555	5.26	2.63
31	5.3393	5.34	2.67
32	5.4119	5.41	2.71
33	5.4724	5.47	2.74
34	5.5197	5.52	2.76
35	5.5530	5.55	2.78
36	5.5714	5.57	2.79
37	**5.5741**	**5.57**	**2.79**
38	5.5603	5.56	2.78
39	5.5295	5.53	2.76
40	5.4812	5.48	2.74
41	5.4150	5.41	2.71
42	5.3307	5.33	2.67
43	5.2283	5.23	2.61
44	5.1079	5.11	2.55
45	4.9678	4.97	2.48

Distance From Tower (m)	KLVA.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	4.8048	4.80	2.40
47	4.6263	4.63	2.31
48	4.4330	4.43	2.22
49	4.2264	4.23	2.11
50	4.0076	4.01	2.00
51	3.7782	3.78	1.89
52	3.5401	3.54	1.77
53	3.2949	3.29	1.65
54	3.0448	3.04	1.52
55	2.7918	2.79	1.40
56	2.5382	2.54	1.27
57	2.2862	2.29	1.14
58	2.0381	2.04	1.02
59	1.7961	1.80	0.90
60	1.5626	1.56	0.78
61	1.3401	1.34	0.67
62	1.1313	1.13	0.57
63	0.9363	0.94	0.47
64	0.7569	0.76	0.38
65	0.5945	0.59	0.30
66	0.4505	0.45	0.23
67	0.3259	0.33	0.16
68	0.2214	0.22	0.11
69	0.1372	0.14	0.07
70	0.0735	0.07	0.04
71	0.0299	0.03	0.01
72	0.0059	0.01	0.00
73	0.0003	0.00	0.00
74	0.0120	0.01	0.01
75	0.0394	0.04	0.02
76	0.0807	0.08	0.04
77	0.1338	0.13	0.07
78	0.1967	0.20	0.10
79	0.2675	0.27	0.13
80	0.3435	0.34	0.17
81	0.4225	0.42	0.21
82	0.5019	0.50	0.25
83	0.5795	0.58	0.29
84	0.6530	0.65	0.33
85	0.7205	0.72	0.36
86	0.7800	0.78	0.39
87	0.8302	0.83	0.42
88	0.8696	0.87	0.43
89	0.8973	0.90	0.45
90	0.9128	0.91	0.46
91	0.9157	0.92	0.46
92	0.9061	0.91	0.45
93	0.8845	0.88	0.44
94	0.8515	0.85	0.43
95	0.8082	0.81	0.40
96	0.7559	0.76	0.38
97	0.6969	0.70	0.35
98	0.6324	0.63	0.32
99	0.5635	0.56	0.28
100	0.4921	0.49	0.25