

**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 1023077). No further environmental review is required.

**2) Human exposure to excess levels of radiofrequency radiation.**

The proposed facility is to be built using an 8-bay vertically polarized full-wave spaced antenna on the same site as the following:

<b>Status</b>	<b>Call</b>	<b>Licensee/Permittee</b>	<b>Channel</b>	<b>City</b>	<b>FIN</b>
Lic	KZRD	NRG LICENSE SUB, LLC	230C1	Dodge City, KS	13010

See Exhibit 22-A for antennas that were specified by each licensee/permittee.

As can be seen in Exhibit 22A, the maximum theoretical RF value would be 69.91  $\mu\text{W}/\text{cm}^2$  at a distance of 36 meters from the tower, which is 34.96% of the 200  $\mu\text{W}/\text{cm}^2$  permitted for public (uncontrolled) exposure, and 6.99% 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.

RF Analysis: Dodge City, KS

<b>KAIG</b>	<b>KZRD</b>
<b>210</b>	<b>230</b>
<b>C1</b>	<b>C1</b>
<b>KAIG</b>	<b>KZRD</b>
<b>Site type:</b> Application	License
<b>Channel:</b> 210	230
<b>Class:</b> C1	C1
<b>ERP:</b> 100 kw	100 kw
<b>Antenna:</b> ERI	Jampro
	Dipole
	8-bay
	10-bay
	full wave
<b>COR AGL:</b> 208 m	242 m
<b>Polarization:</b> Vertical	Circular

Distance From Tower (m)	KAIG Facility	KZRD Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	62.5507	46.9130	62.55	31.28
1	62.7178	47.0384	62.72	31.36
2	62.8823	47.1617	62.88	31.44
3	63.0439	47.2829	63.04	31.52
4	63.2025	47.4019	63.20	31.60
5	63.3580	47.5185	63.36	31.68
6	63.5102	47.6327	63.51	31.76
7	63.6588	47.7441	63.66	31.83
8	63.8035	47.8526	63.80	31.90
9	63.9439	47.9579	63.94	31.97
10	64.0796	48.0597	64.08	32.04
11	64.2103	48.1577	64.21	32.11
12	64.3354	48.2516	64.34	32.17
13	64.4545	48.3409	64.45	32.23
14	64.5669	48.4252	64.57	32.28
15	64.6721	48.5041	64.67	32.34
16	64.7694	48.5770	64.77	32.38
17	64.8582	48.6436	64.86	32.43
18	64.9376	48.7032	64.94	32.47
19	65.2910	48.9682	65.29	32.65
20	65.7037	49.2778	65.70	32.85
21	66.1050	49.5788	66.11	33.05
22	66.4938	49.8704	66.49	33.25
23	66.8689	50.1517	66.87	33.43
24	67.2291	50.4219	67.23	33.61
25	67.5733	50.6800	67.57	33.79
26	67.9001	50.9251	67.90	33.95
27	68.2083	51.1563	68.21	34.10
28	68.4965	51.3724	68.50	34.25
29	68.7634	51.5725	68.76	34.38
30	69.0074	51.7556	69.01	34.50
31	69.2273	51.9205	69.23	34.61
32	69.4214	52.0661	69.42	34.71
33	69.5885	52.1913	69.59	34.79
34	69.7268	52.2951	69.73	34.86
35	69.8350	52.3763	69.84	34.92
<b>36</b>	<b>69.9116</b>	<b>52.4337</b>	<b>69.91</b>	<b>34.96</b>
37	69.8382	52.3787	69.84	34.92
38	69.4894	52.1170	69.49	34.74
39	69.1088	51.8316	69.11	34.55
40	68.6957	51.5218	68.70	34.35
41	68.2490	51.1868	68.25	34.12
42	67.7680	50.8260	67.77	33.88
43	67.2520	50.4390	67.25	33.63
44	66.7001	50.0251	66.70	33.35
45	66.1118	49.5838	66.11	33.06

Distance From Tower (m)	KAIG Facility	KZRD Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	65.4865	49.1149	65.49	32.74
47	64.8238	48.6178	64.82	32.41
48	64.1232	48.0924	64.12	32.06
49	63.3845	47.5384	63.38	31.69
50	62.6076	46.9557	62.61	31.30
51	61.7923	46.3442	61.79	30.90
52	60.9387	45.7040	60.94	30.47
53	60.0470	45.0353	60.05	30.02
54	59.1175	44.3381	59.12	29.56
55	58.1505	43.6129	58.15	29.08
56	57.1383	42.8537	57.14	28.57
57	56.0677	42.0508	56.07	28.03
58	54.9631	41.2223	54.96	27.48
59	53.8254	40.3690	53.83	26.91
60	52.6558	39.4919	52.66	26.33
61	51.4556	38.5917	51.46	25.73
62	50.2261	37.6696	50.23	25.11
63	48.9690	36.7268	48.97	24.48
64	47.6859	35.7644	47.69	23.84
65	46.3786	34.7839	46.38	23.19
66	45.0490	33.7867	45.05	22.52
67	43.6991	32.7743	43.70	21.85
68	42.3312	31.7484	42.33	21.17
69	40.9475	30.7106	40.95	20.47
70	39.5504	29.6628	39.55	19.78
71	38.1422	28.6067	38.14	19.07
72	36.7257	27.5443	36.73	18.36
73	35.3033	26.4775	35.30	17.65
74	33.8778	25.4084	33.88	16.94
75	32.4520	24.3390	32.45	16.23
76	31.0449	23.2836	31.04	15.52
77	29.6788	22.2591	29.68	14.84
78	28.3156	21.2367	28.32	14.16
79	26.9580	20.2185	26.96	13.48
80	25.6091	19.2068	25.61	12.80
81	24.2718	18.2039	24.27	12.14
82	22.9490	17.2117	22.95	11.47
83	21.6435	16.2326	21.64	10.82
84	20.3582	15.2686	20.36	10.18
85	19.0959	14.3219	19.10	9.55
86	17.8592	13.3944	17.86	8.93
87	16.6508	12.4881	16.65	8.33
88	15.4732	11.6049	15.47	7.74
89	14.3288	10.7466	14.33	7.16
90	13.2198	9.9149	13.22	6.61
91	12.1484	9.1113	12.15	6.07
92	11.1166	8.3374	11.12	5.56
93	10.1260	7.5945	10.13	5.06
94	9.1785	6.8839	9.18	4.59
95	8.2754	6.2066	8.28	4.14
96	7.4180	5.5635	7.42	3.71
97	6.6072	4.9554	6.61	3.30
98	5.8275	4.3706	5.83	2.91
99	5.1003	3.8252	5.10	2.55
100	4.4255	3.3192	4.43	2.21