

Compliance with OET 65

The proposed facility has been built using an SWR seven-bay vertically polarized antenna on the same site as K257BT and KCNA. According to its license, K257BT uses vertically polarized Scala HDCA-5 antennas, so EMF has used the worst-case single-bay OET-65 “dipole/ring-stub” type antenna to calculate K257BT’s contribution to site RF Radiation. KCNA is licensed to operate with 100,000 watts ERP, but has recently requested an STA to operate with 50,000 watts pending installation of a new antenna. Currently, KCNA is operating with a 4-bay, full-wave spaced ERI “rototiller” type antenna. This exhibit is produced based on the reduced power and antenna for KCNA. EMF will fully cooperate with KCNA in their efforts to insure site compliance with RF issues once their new antenna is installed.

As can be seen in the attached analysis, when all three facilities are operational, the maximum theoretical RF value would be 283.47 uW/cm^2 at a distance of 7 meters from the tower, which is 141.7 % of the 200 uW/cm^2 permitted for public (uncontrolled) exposure, and 28.4% of the 1000 uW/cm^2 permitted for worker (controlled) exposure. These values rapidly drop off, and are below the 200 uW/cm^2 value by 15 meters from the tower.

Despite the antenna change from EMF’s original proposal, the area that exceeds the uncontrolled exposure limits is not extended. The changed antenna does create new areas in excess of 200 uW/cm^2 , but only those areas closer than 5 meters from the tower. No area is created in excess of 1000 uW/cm^2 .

In EMF’s original application, it assumed that KCNA’s efforts to erect proper fencing and signage to protect members of the public from exposure in excess of OET-65 limits were adequate. However, EMF is concerned that there may not be adequate protection. During winter months, the site can be quite difficult to access (locked gate at the base of a very muddy, rutted road). However, during the summer months, the gate is normally left open and is regularly used by the public as a hiking trail. The main road/trail bypasses the instant transmitter site and continues to the top of the mountain, while an ungated access road diverts to the site used for KJKL, KCNA, and K257BT. EMF proposes to install a gate across the access road and install appropriate signage on the gate to inform passersby of the possibility of RF Exposure in excess of the FCC’s guidelines. In this manner, EMF restates its previously stated commitment to “work with KCNA to provide for any necessary fencing and signage to prevent ‘casual’ access by members of the public (as well as signage appropriate to protect workers having ‘controlled’ access).” Though KCNA’s exact plans are unknown at this time, EMF will fully cooperate with KCNA in their efforts to ensure continued compliance with the requirements of OET 65.

EMF will further cooperate with other site users to reduce power or cease broadcasting as necessary to protect workers and others having access to the site from excessive levels of RF Radiation.

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

Exhibit 9A
RF Analysis: KJKL 204C1 Selma Oregon

	KJKL.P	KCNA	K257BT		KJKL.P	KCNA	K257BT
Site type:	Station	Station	Translator	Antenna:	SWR	ERI	Scala
Channel:	204	274	257		Dipole	Rototiller	Yagi (dipole)
Class:	C1	C	D		7-bay	4-bay	NA
ERP:	9 kw	50 kw	0.050 kw		full-wave	full-wave	full-wave
		per STA		COR AGL:	35 m	48.9 m	15.9 m

Distance From Tower (m)	KJKL.P Facility	KCNA Facility	K257BT Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	198.8224	41.91577	5.3522	246.09	123.05
1	201.8400	41.89816	5.5200	249.26	124.63
2	204.4643	41.84433	5.8886	252.20	126.10
3	206.4844	41.75134	6.2876	254.52	127.26
4	213.8699	41.6144	6.2946	261.78	130.89
5	220.2372	45.5673	6.2216	272.03	136.01
6	224.4634	51.30033	6.1271	281.89	140.95
7	220.1578	57.20635	6.1020	283.47	141.73
8	211.5014	63.22036	5.9056	280.63	140.31
9	199.3206	69.70123	5.6048	274.63	137.31
10	183.1373	76.92763	5.4252	265.49	132.75
11	163.4142	84.10566	5.2556	252.78	126.39
12	141.0034	91.10411	4.9158	237.02	118.51
13	117.1993	97.78168	4.5716	219.55	109.78
14	93.5072	103.4827	4.2497	201.24	100.62
15	70.2471	108.5028	3.9505	182.70	91.35
16	48.8803	112.7642	3.6650	165.31	82.65
17	30.3350	116.14	3.3334	149.81	74.90
18	16.1109	118.6413	3.0369	137.79	68.89
19	6.6310	120.5173	2.7842	129.93	64.97
20	1.5273	121.1856	2.7676	125.48	62.74
21	0.0013	120.595	2.7402	123.34	61.67
22	1.0046	118.7281	2.7039	122.44	61.22
23	3.4353	115.7776	2.6281	121.84	60.92
24	6.2447	112.2585	2.4791	120.98	60.49
25	8.5211	107.4986	2.3407	118.36	59.18
26	9.7009	101.6133	2.2122	113.53	56.76
27	9.6992	94.75214	2.0928	106.54	53.27
28	8.6642	87.09315	1.9778	97.74	48.87
29	6.9305	79.25594	1.8668	88.05	44.03
30	4.9065	71.02698	1.7642	77.70	38.85
31	2.9772	62.48986	1.6692	67.14	33.57
32	1.4334	53.87483	1.5811	56.89	28.44
33	0.4372	45.40459	1.4993	47.34	23.67
34	0.0208	37.2861	1.4233	38.73	19.37
35	0.1095	29.47427	1.3460	30.93	15.46
36	0.5528	22.41863	1.2738	24.25	12.12
37	1.1700	16.29894	1.2069	18.68	9.34
38	1.7945	11.16733	1.1449	14.11	7.05
39	2.2980	7.04328	1.0873	10.43	5.21
40	2.6019	3.915544	1.0337	7.55	3.78
41	2.6781	1.745185	0.9838	5.41	2.70
42	2.5698	0.4689671	0.9373	3.98	1.99
43	2.3488	5.58E-03	0.8938	3.25	1.62
44	1.9861	0.2559204	0.8527	3.09	1.55
45	1.5420	1.111103	0.8133	3.47	1.73

Distance From Tower (m)	KJKL.P Facility	KCNA Facility	K257BT Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	1.0803	2.457009	0.7764	4.31	2.16
47	0.6586	4.178443	0.7419	5.58	2.79
48	0.3221	6.162849	0.7096	7.19	3.60
49	0.0999	8.301996	0.6792	9.08	4.54
50	0.0043	10.48176	0.6507	11.14	5.57
51	0.0309	12.62483	0.6238	13.28	6.64
52	0.1593	14.65599	0.5986	15.41	7.71
53	0.3601	16.51287	0.5748	17.45	8.72
54	0.6018	18.14617	0.5523	19.30	9.65
55	0.8541	19.51937	0.5311	20.90	10.45
56	1.0903	20.60808	0.5110	22.21	11.10
57	1.2896	21.39912	0.4921	23.18	11.59
58	1.4375	21.88944	0.4741	23.80	11.90
59	1.5261	22.12141	0.4571	24.10	12.05
60	1.5532	22.08409	0.4420	24.08	12.04
61	1.5210	21.78113	0.4281	23.73	11.87
62	1.4358	21.23539	0.4149	23.09	11.54
63	1.3097	20.47362	0.4023	22.19	11.09
64	1.1539	19.52524	0.3902	21.07	10.53
65	0.9805	18.42128	0.3786	19.78	9.89
66	0.8006	17.19339	0.3676	18.36	9.18
67	0.6247	15.87301	0.3570	16.85	8.43
68	0.4613	14.49064	0.3469	15.30	7.65
69	0.3174	13.07523	0.3371	13.73	6.86
70	0.1979	11.64608	0.3278	12.17	6.09
71	0.1058	10.20366	0.3189	10.63	5.31
72	0.0426	8.813686	0.3103	9.17	4.58
73	0.0080	7.494083	0.3020	7.80	3.90
74	0.0006	6.25978	0.2941	6.55	3.28
75	0.0177	5.122793	0.2864	5.43	2.71
76	0.0562	4.092353	0.2791	4.43	2.21
77	0.1120	3.175062	0.2720	3.56	1.78
78	0.1812	2.375093	0.2652	2.82	1.41
79	0.2597	1.694404	0.2587	2.21	1.11
80	0.3436	1.132972	0.2523	1.73	0.86
81	0.4293	0.6890185	0.2462	1.36	0.68
82	0.5135	0.3592536	0.2404	1.11	0.56
83	0.5935	0.1391002	0.2347	0.97	0.48
84	0.6668	2.29E-02	0.2292	0.92	0.46
85	0.7318	4.21E-03	0.2239	0.96	0.48
86	0.7870	7.61E-02	0.2188	1.08	0.54
87	0.8314	0.2317276	0.2139	1.28	0.64
88	0.8647	0.4637179	0.2091	1.54	0.77
89	0.8865	0.7644758	0.2045	1.86	0.93
90	0.8973	1.126222	0.2000	2.22	1.11
91	0.8973	1.541132	0.1957	2.63	1.32
92	0.8872	2.001443	0.1916	3.08	1.54
93	0.8680	2.499544	0.1877	3.56	1.78
94	0.8406	3.028051	0.1838	4.05	2.03
95	0.8060	3.579878	0.1801	4.57	2.28
96	0.7654	4.148279	0.1764	5.09	2.55
97	0.7193	4.726897	0.1729	5.62	2.81
98	0.6695	5.309793	0.1695	6.15	3.07
99	0.6171	5.891467	0.1662	6.67	3.34
100	0.5631	6.466869	0.1629	7.19	3.60