

## **Environmental Protection**

The proposed facility is to be built using a 2-bay vertically polarized fullwave spaced antenna with a center of radiation of 28m above ground.

As can be seen in Exhibit 24A, the maximum theoretical RF value would be  $25.76 \mu\text{W}/\text{cm}^2$  at a distance of 15 meters from the tower, which is 12.88% of the  $200 \mu\text{W}/\text{cm}^2$  permitted for public (uncontrolled) exposure, and 2.57% 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.

WSKG Public Telecommunications Council 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.

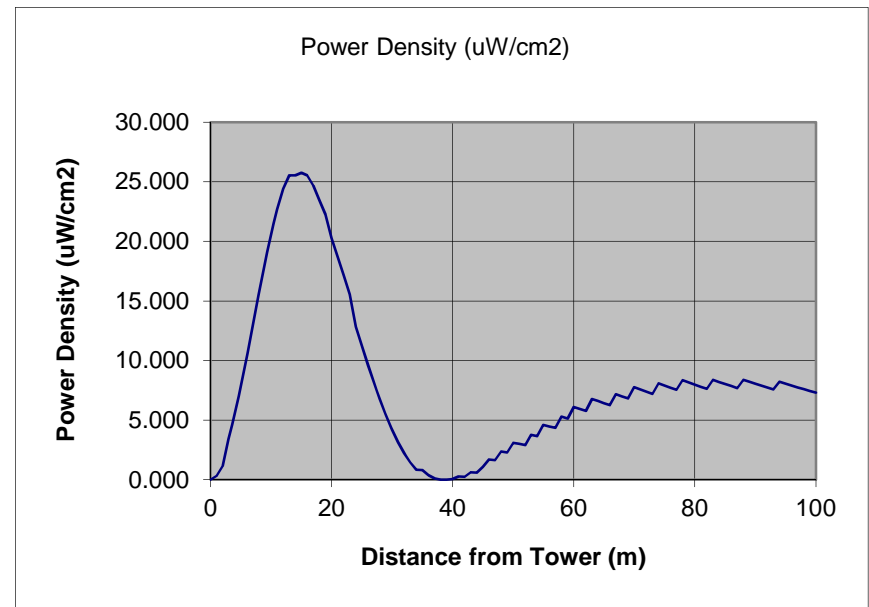
## Specific Antenna RF Power Density Calculator

Based on Equation 10 of OET-65

### Detailed Report

<b>ERP</b>	4.5 kW	% of OET-65
<b>Height above ground</b>	28.0 meters	12.9% Uncontrolled
<b>Height above head</b>	26.0 meters	2.6% Controlled
<b>Antenna Brand Shively</b>		
<b>Antenna Model 6020-2-FW</b>		

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm <sup>2</sup> )
0	90	26.0	0.001	4.5	0.000
1	88	26.0	0.038	171	0.321
2	86	26.1	0.073	328.5	1.178
3	83	26.2	0.125	562.5	3.428
4	81	26.3	0.158	711	5.422
5	79	26.5	0.19	855	7.740
6	77	26.7	0.221	994.5	10.310
7	75	26.9	0.25	1125	12.957
8	73	27.2	0.277	1246.5	15.584
9	71	27.5	0.303	1363.5	18.228
10	69	27.9	0.326	1467	20.584
11	67	28.2	0.347	1561.5	22.707
12	65	28.6	0.365	1642.5	24.419
13	63	29.1	0.379	1705.5	25.549
14	62	29.5	0.385	1732.5	25.548
15	60	30.0	0.393	1768.5	25.764
16	58	30.5	0.398	1791	25.545
17	57	31.1	0.398	1791	24.672
18	55	31.6	0.395	1777.5	23.451
19	54	32.2	0.392	1764	22.272
20	52	32.8	0.381	1714.5	20.277
21	51	33.4	0.373	1678.5	18.721
22	50	34.1	0.364	1638	17.167
23	49	34.7	0.353	1588.5	15.543
24	47	35.4	0.327	1471.5	12.837
25	46	36.1	0.312	1404	11.246



26	45	36.8	0.294	1323	9.609
27	44	37.5	0.276	1242	8.149
28	43	38.2	0.256	1152	6.747
29	42	38.9	0.234	1053	5.425
30	41	39.7	0.21	945	4.206
31	40	40.5	0.185	832.5	3.142
32	39	41.2	0.159	715.5	2.235
33	38	42.0	0.131	589.5	1.461
34	37	42.8	0.102	459	0.854
35	37	43.6	0.102	459	0.823
36	36	44.4	0.071	319.5	0.384
37	35	45.2	0.039	175.5	0.112
38	34	46.0	0.005	22.5	0.002
39	34	46.9	0.005	22.5	0.002
40	33	47.7	0.029	130.5	0.056
41	32	48.5	0.065	292.5	0.269
42	32	49.4	0.065	292.5	0.260
43	31	50.2	0.102	459	0.619
44	31	51.1	0.102	459	0.599
45	30	52.0	0.139	625.5	1.075
46	29	52.8	0.178	801	1.706
47	29	53.7	0.178	801	1.651
48	28	54.6	0.217	976.5	2.375
49	28	55.5	0.217	976.5	2.300
50	27	56.4	0.256	1152	3.101
51	27	57.2	0.256	1152	3.006
52	27	58.1	0.256	1152	2.914
53	26	59.0	0.296	1332	3.779
54	26	59.9	0.296	1332	3.666
55	25	60.8	0.337	1516.5	4.612
56	25	61.7	0.337	1516.5	4.478
57	25	62.6	0.337	1516.5	4.349
58	24	63.6	0.377	1696.5	5.288
59	24	64.5	0.377	1696.5	5.139
60	23	65.4	0.417	1876.5	6.112
61	23	66.3	0.417	1876.5	5.944
62	23	67.2	0.417	1876.5	5.782
63	22	68.2	0.458	2061	6.787

64	22	69.1	0.458	2061	6.607
65	22	70.0	0.458	2061	6.433
66	22	70.9	0.458	2061	6.265
67	21	71.9	0.497	2236.5	7.188
68	21	72.8	0.497	2236.5	7.005
69	21	73.7	0.497	2236.5	6.828
70	20	74.7	0.537	2416.5	7.773
71	20	75.6	0.537	2416.5	7.581
72	20	76.6	0.537	2416.5	7.396
73	20	77.5	0.537	2416.5	7.218
74	19	78.4	0.576	2592	8.106
75	19	79.4	0.576	2592	7.914
76	19	80.3	0.576	2592	7.729
77	19	81.3	0.576	2592	7.550
78	18	82.2	0.613	2758.5	8.355
79	18	83.2	0.613	2758.5	8.165
80	18	84.1	0.613	2758.5	7.982
81	18	85.1	0.613	2758.5	7.804
82	18	86.0	0.613	2758.5	7.632
83	17	87.0	0.65	2925	8.394
84	17	87.9	0.65	2925	8.213
85	17	88.9	0.65	2925	8.037
86	17	89.8	0.65	2925	7.867
87	17	90.8	0.65	2925	7.702
88	16	91.8	0.686	3087	8.400
89	16	92.7	0.686	3087	8.227
90	16	93.7	0.686	3087	8.060
91	16	94.6	0.686	3087	7.897
92	16	95.6	0.686	3087	7.739
93	16	96.6	0.686	3087	7.585
94	15	97.5	0.721	3244.5	8.214
95	15	98.5	0.721	3244.5	8.054
96	15	99.5	0.721	3244.5	7.899
97	15	100.4	0.721	3244.5	7.747
98	15	101.4	0.721	3244.5	7.600
99	15	102.4	0.721	3244.5	7.457
100	15	103.3	0.721	3244.5	7.318