

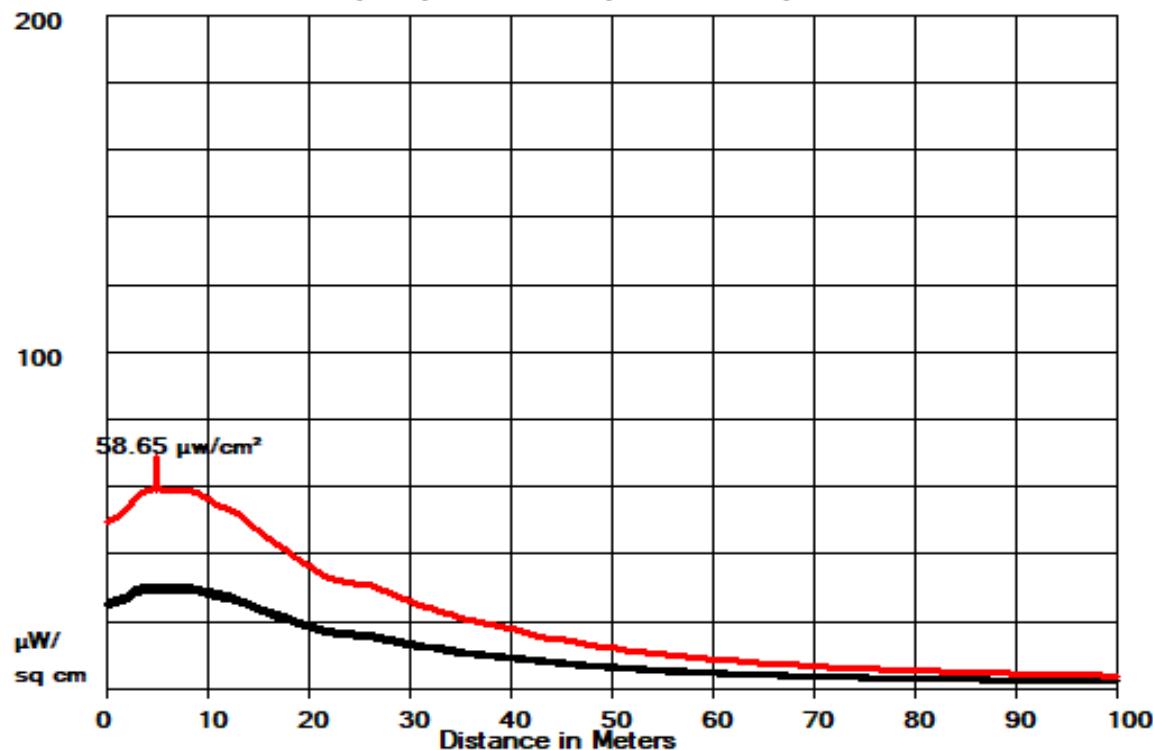
RF Safety Exhibit -W298DD,

The proposed antenna will be diplexed into the existing WVTX Shively 6832 model antenna, mounted at a height above ground of 22.7 meters above ground. The area is uncontrolled.

When the head height distance if 20.7 meters above ground is used, we see that existing WVTX produces $29.9 \mu\text{W}/\text{cm}^2$ (or 14.95%) at a point 5 meters from the tower base. The proposed translator produces $28.7 \mu\text{W}/\text{cm}^2$ (or 14.35%) and a similar point. Together, these two stations produce a total of $58.65 \mu\text{W}/\text{cm}^2$, which is 29.3 percent of the maximum for the uncontrolled area.

The applicant will reduce power or terminate transmissions to protect workers or the public when required. (See the attached graph below.)

Graph top-line is a composite of multiple antennas



HORZ. DISTANCE FROM RADIATOR(S) vs POWER DENSITY (Microwatt/Square cm)
Dist (Meters) Total ($\mu\text{W}/\text{cm}^2$) Percent of Max(1000) *

Dist (Meters)	Total ($\mu\text{W}/\text{cm}^2$)	Percent of Max(1000) *
0	48.726	4.9
1	50.364	5.0
2	52.726	5.3
3	56.566	5.7
4	58.182	5.8
5	58.647	5.9
6	58.459	5.8
7	58.134	5.8
8	58.191	5.8
9	57.583	5.8
10	55.883	5.6
11	54.206	5.4
12	52.902	5.3
13	51.473	5.1
14	49.019	4.9
15	46.547	4.7
16	44.226	4.4
17	42.118	4.2
18	40.098	4.0
19	38.067	3.8
20	35.935	3.6
21	33.953	3.4
22	32.111	3.2
23	31.376	3.1
24	30.986	3.1
25	30.536	3.1

Dist (Meters)	PD (H)	PD (V)	Total ($\mu\text{W}/\text{cm}^2$)
26		30.035	3.0
27		29.252	2.9
28		27.919	2.8
29		26.661	2.7
30		25.474	2.5
31		24.354	2.4
32		23.297	2.3
33		22.349	2.2
34		21.481	2.1
35		20.658	2.1
36		19.876	2.0
37		19.133	1.9
38		18.428	1.8
39		17.758	1.8
40		17.12	1.7
41		16.404	1.6
42		15.717	1.6
43		15.07	1.5
44		14.461	1.4
45		13.885	1.4
46		13.342	1.3
47		12.829	1.3
48		12.344	1.2
49		11.885	1.2
50		11.449	1.1
51		11.037	1.1
52		10.647	1.1
53		10.277	1.0
54		9.925	1.0
55		9.591	1.0
56		9.273	0.9
57		8.97	0.9
58		8.682	0.9
59		8.406	0.8
60		8.144	0.8
61		7.893	0.8
62		7.653	0.8
63		7.424	0.7
64		7.205	0.7
65		6.995	0.7
66		6.794	0.7
67		6.601	0.7
68		6.416	0.6
69		6.239	0.6
70		6.072	0.6
71		5.923	0.6
72		5.78	0.6
73		5.641	0.6
74		5.507	0.6
75		5.378	0.5
76		5.253	0.5
77		5.132	0.5

Dist (Meters)	PD (H)	PD (V)	Total (μ W/cm ²)
78		5.016	0.5
79		4.903	0.5
80		4.794	0.5
81		4.688	0.5
82		4.586	0.5
83		4.487	0.4
84		4.391	0.4
85		4.298	0.4
86		4.208	0.4
87		4.121	0.4
88		4.037	0.4
89		3.955	0.4
90		3.875	0.4
91		3.798	0.4
92		3.723	0.4
93		3.65	0.4
94		3.579	0.4
95		3.51	0.4
96		3.444	0.3
97		3.379	0.3
98		3.316	0.3
99		3.254	0.3
100		3.194	0.3

* Note: since the area is uncontrolled the reader should multiple the percent maximum by 5.