

Compliance with OET 65

Educational Media Foundation (“EMF”) desires to show that the proposed FM translator will not significantly affect the RFR at the collocation site set forth in this application.

According to OET 65, “Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit. The applicant or licensee then shares responsibility for compliance in any accessible area or areas within this 5% “contour” where the appropriate limits are found to be exceeded.”

As can be seen in Exhibit 16-A, an FM translator operating at 0.25 kw, operating at an above ground height of 18 meters and using the identical antenna that EMF uses in its translator facilities, does not exceed the 5% threshold at any point. The maximum contribution to RF on the site for this facility would be 9.6650 uW/cm^2 at a distance of 10 meters from the tower, which is 4.83% of the uncontrolled (public) exposure limit.

The proposed facility will have a lower RF contribution since it is either lower in power or has a higher above ground level.

Therefore, because the proposed facility will not cause an RF field that is equal to or greater than 5% of the 200 uW/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 16-A
RF Analysis

Proposed

Site type:

Channel:

Class: D

ERP: 0.25 kw

Antenna: SWR FMEC

double-v

2-bay

full wave

COR AGL: 18 m

Polarization: Circular

Distance From Tower (m)	Proposed Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	3.6091	3.61	1.80
1	3.7504	3.75	1.88
2	4.1410	4.14	2.07
3	4.8638	4.86	2.43
4	5.7063	5.71	2.85
5	6.5796	6.58	3.29
6	7.4555	7.46	3.73
7	8.2839	8.28	4.14
8	9.0493	9.05	4.52
9	9.5102	9.51	4.76
10	9.6650	9.67	4.83
11	9.6447	9.64	4.82
12	9.4394	9.44	4.72
13	8.9604	8.96	4.48
14	8.2297	8.23	4.11
15	7.4141	7.41	3.71
16	6.7192	6.72	3.36
17	5.9764	5.98	2.99
18	5.2017	5.20	2.60
19	4.3851	4.39	2.19
20	3.6179	3.62	1.81
21	2.9165	2.92	1.46
22	2.2797	2.28	1.14
23	1.7239	1.72	0.86
24	1.2596	1.26	0.63
25	0.8818	0.88	0.44
26	0.5833	0.58	0.29
27	0.3563	0.36	0.18
28	0.1930	0.19	0.10
29	0.0847	0.08	0.04
30	0.0231	0.02	0.01
31	0.0005	0.00	0.00
32	0.0098	0.01	0.00
33	0.0448	0.04	0.02
34	0.0998	0.10	0.05
35	0.1702	0.17	0.09
36	0.2518	0.25	0.13
37	0.3412	0.34	0.17
38	0.4355	0.44	0.22
39	0.5320	0.53	0.27
40	0.6282	0.63	0.31
41	0.7233	0.72	0.36
42	0.8160	0.82	0.41
43	0.9055	0.91	0.45
44	0.9910	0.99	0.50
45	1.0722	1.07	0.54

Distance From Tower (m)	Proposed Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	1.1486	1.15	0.57
47	1.2201	1.22	0.61
48	1.2866	1.29	0.64
49	1.3481	1.35	0.67
50	1.4008	1.40	0.70
51	1.4453	1.45	0.72
52	1.4850	1.48	0.74
53	1.5200	1.52	0.76
54	1.5507	1.55	0.78
55	1.5773	1.58	0.79
56	1.6001	1.60	0.80
57	1.6193	1.62	0.81
58	1.6352	1.64	0.82
59	1.6480	1.65	0.82
60	1.6579	1.66	0.83
61	1.6652	1.67	0.83
62	1.6701	1.67	0.84
63	1.6728	1.67	0.84
64	1.6734	1.67	0.84
65	1.6722	1.67	0.84
66	1.6693	1.67	0.83
67	1.6648	1.66	0.83
68	1.6560	1.66	0.83
69	1.6455	1.65	0.82
70	1.6339	1.63	0.82
71	1.6214	1.62	0.81
72	1.6082	1.61	0.80
73	1.5942	1.59	0.80
74	1.5797	1.58	0.79
75	1.5646	1.56	0.78
76	1.5491	1.55	0.77
77	1.5332	1.53	0.77
78	1.5169	1.52	0.76
79	1.5004	1.50	0.75
80	1.4837	1.48	0.74
81	1.4668	1.47	0.73
82	1.4498	1.45	0.72
83	1.4326	1.43	0.72
84	1.4155	1.42	0.71
85	1.3983	1.40	0.70
86	1.3811	1.38	0.69
87	1.3639	1.36	0.68
88	1.3468	1.35	0.67
89	1.3297	1.33	0.66
90	1.3127	1.31	0.66
91	1.2959	1.30	0.65
92	1.2791	1.28	0.64
93	1.2625	1.26	0.63
94	1.2460	1.25	0.62
95	1.2297	1.23	0.61
96	1.2135	1.21	0.61
97	1.1975	1.20	0.60
98	1.1817	1.18	0.59
99	1.1661	1.17	0.58
100	1.1506	1.15	0.58