



RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

The licensee of KOMO-TV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KOMO-TV antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

The proposed KOMO-TV channel 30 modification of CP facility will operate with a maximum ERP of 915 kW from an elliptically polarized non-directional transmitting antenna with a centerline height of 163 meters above ground level (AGL). Considering the vertical plane relative field of the substitute antenna, as shown herein, the KOMO-TV facility is predicted to produce a worst-case power density at two meters above ground level of $2.239 \mu\text{W}/\text{cm}^2$, which is 0.610% of the FCC guideline value of $367.33 \mu\text{W}/\text{cm}^2$ for an “uncontrolled” environment, and 0.122% of the FCC’s guideline value for “controlled” environments. See Appendix A.

Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal’s power density contribution is considered insignificant. Further, the applicant will continue to coordinate with all other site users and reduce power or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission’s Rules.

KOMO-TV
Channel 30 - Seattle, WA
ERP = 915000.00 WATTS

APPENDIX A

Maximum ERP 915 kW

Polarization ----- 2 Circular
 Antenna Height Above Ground - 163 meters 534.8 feet
 FCC Uncontrolled RFR Limit ---- 367.3 $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 2.239 $\mu\text{W}/\text{cm}^2$
 0.61% of limit

Angle Below Horizontal (degrees)	<Point X> Horiz Distance from tower to 2 m AGL (meters)	Slant Distance from antenna to Point X (meters)	Vertical Pattern (REL. FIELD)	KOMO-TV ERP (kW)	KOMO-TV Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			0.990	896.7915			
5	1840.2	1847.3	0.146	19.5041	0.382	0.10%	No
10	913.1	927.2	0.067	4.1074	0.319	0.09%	No
15	600.9	622.1	0.059	3.1851	0.550	0.15%	No
20	442.3	470.7	0.055	2.7679	0.834	0.23%	No
25	345.3	381.0	0.047	2.0212	0.930	0.25%	No
30	278.9	322.0	0.033	0.9964	0.642	0.17%	No
35	229.9	280.7	0.012	0.1318	0.112	0.03%	No
40	191.9	250.5	0.035	1.1209	1.193	0.32%	No
45	161.0	227.7	0.038	1.3213	1.702	0.46%	No
50	135.1	210.2	0.030	0.8235	1.245	0.34%	No
55	112.7	196.5	0.020	0.3660	0.633	0.17%	No
60	93.0	185.9	0.034	1.0577	2.044	0.56%	No
65	75.1	177.6	0.034	1.0577	2.239	0.61%	No
70	58.6	171.3	0.028	0.7174	1.632	0.44%	No
75	43.1	166.7	0.030	0.8235	1.980	0.54%	No
80	28.4	163.5	0.028	0.7174	1.793	0.49%	No
85	14.1	161.6	0.019	0.3303	0.845	0.23%	No
90	0.0	161.0	0.000	0.0000	0.000	0.00%	No

