



RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

The licensee of KCVU is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KCVU antenna and will reduce power or cease operation, when necessary, to ensure protection to personnel.

As shown in Appendix A the proposed KCVU channel 17 post-transition modification facility will operate with a maximum ERP of 500 kW from an elliptically polarized directional transmitting antenna with a centerline height of 118 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere in this application, the vertical plane relative field factor is less than 0.1 at all depression angles greater than 10 degrees. The KCVU facility is predicted to produce a worst-case power density at two meters above ground level, at 31.1 meters from the tower base, of $16.341 \mu\text{W}/\text{cm}^2$, which is 4.18% of the FCC guideline value of $391.33 \mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.836% of the FCC's guideline value for "controlled" environments. 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. (See Appendix A)

Further, the applicant will continue to cooperate and coordinate with other any 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.

KCVU
Channel 17 - Paradise, CA
ERP = 500000.00 WATTS

APPENDIX A

Maximum ERP 500 kW

Polarization ----- 2 Circular
Antenna Height Above Ground - 118 meters 387.1 feet
FCC Uncontrolled RFR Limit ---- 391.33 $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 16.341 $\mu\text{W}/\text{cm}^2$
4.18% 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)	KCVU ERP (kW)	KCVU Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			0.718	257.7620			
5	1325.9	1331.0	0.170	14.4500	0.545	0.14%	No
10	657.9	668.0	0.085	3.6125	0.541	0.14%	No
15	432.9	448.2	0.028	0.3920	0.130	0.03%	No
20	318.7	339.2	0.038	0.7220	0.419	0.11%	No
25	248.8	274.5	0.009	0.0405	0.036	0.01%	No
30	200.9	232.0	0.023	0.2645	0.328	0.08%	No
35	165.7	202.2	0.013	0.0845	0.138	0.04%	No
40	138.2	180.5	0.015	0.1125	0.231	0.06%	No
45	116.0	164.0	0.040	0.8000	1.986	0.51%	No
50	97.3	151.4	0.081	3.2805	9.557	2.44%	No
55	81.2	141.6	0.000	0.0000	0.000	0.00%	No
60	67.0	133.9	0.037	0.6845	2.549	0.65%	No
65	54.1	128.0	0.039	0.7605	3.101	0.79%	No
70	42.2	123.4	0.032	0.5120	2.244	0.57%	No
75	31.1	120.1	0.084	3.5280	16.341	4.18%	No
80	20.5	117.8	0.068	2.3120	11.131	2.84%	No
85	10.1	116.4	0.022	0.2420	1.192	0.30%	No
90	0.0	116.0	0.000	0.0000	0.000	0.00%	No

