



RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

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

As shown in Appendix A the KTUL channel 14 facility as proposed herein will operate with a maximum ERP of 1000 kW from an elliptically polarized directional transmitting antenna with a centerline height of 567 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere in this submission, the vertical plane relative field factor is less than 0.100 at all depression angles greater than 9 degrees. The proposed KTUL channel 14 facility is predicted to produce a worst-case power density at two meters above ground level, at 326.2 meters from the tower base, of $0.098 \mu\text{W}/\text{cm}^2$, which is 0.03% of the FCC guideline value of $315.33 \mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.006% 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. Further, the Applicant will continue to cooperate/coordinate with other site users and reduce power and/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.

KTUL

Channel 14, Tulsa, Oklahoma

ERP = 1000000.00 WATTS

APPENDIX A

Maximum ERP 1000 kW

Polarization ----- 2 Circular
Antenna Height Above Ground -- 567 meters 1860.2 feet
FCC Uncontrolled RFR Limit ---- 315.33 $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 0.098 $\mu\text{W}/\text{cm}^2$
0.03% 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)	KTUL ERP (kW)	KTUL Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			0.618	381.9240			
5	6458.0	6482.6	0.141	19.8810	0.032	0.01%	No
10	3204.3	3253.7	0.087	7.5690	0.048	0.02%	No
15	2108.6	2183.0	0.038	1.4440	0.020	0.01%	No
20	1552.3	1651.9	0.055	3.0250	0.074	0.02%	No
25	1211.6	1336.9	0.028	0.7840	0.029	0.01%	No
30	978.6	1130.0	0.011	0.1210	0.006	0.00%	No
35	806.9	985.0	0.018	0.3240	0.022	0.01%	No
40	673.3	879.0	0.016	0.2560	0.022	0.01%	No
45	565.0	799.0	0.010	0.1000	0.010	0.00%	No
50	474.1	737.6	0.027	0.7290	0.090	0.03%	No
55	395.6	689.7	0.018	0.3240	0.045	0.01%	No
60	326.2	652.4	0.025	0.6250	0.098	0.03%	No
65	263.5	623.4	0.012	0.1440	0.025	0.01%	No
70	205.6	601.3	0.018	0.3240	0.060	0.02%	No
75	151.4	584.9	0.017	0.2890	0.056	0.02%	No
80	99.6	573.7	0.004	0.0160	0.003	0.00%	No
85	49.4	567.2	0.004	0.0160	0.003	0.00%	No
90	0.0	565.0	0.000	0.0000	0.000	0.00%	No

