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RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

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

As shown in Appendix A the KRCG channel 29 request for a minor modification of construction permit as proposed herein will operate with a maximum ERP of 1000 kW from an elliptically polarized non-directional transmitting antenna with a centerline height of 270.4 meters above ground level (AGL). Considering the elevation pattern provided elsewhere in this submission, the vertical plane relative field factor is less than 0.100 at all depression angles greater than 8 degrees. The proposed KRCG facility is predicted to produce a worst-case power density at two meters above ground level, at 227.7 meters from the tower base, of 0.427 $\mu W/cm^2$, which is 0.11% of the FCC guideline value of 375.33 $\mu W/cm^2$ for an “uncontrolled” environment, and 0.022% of the FCC’s guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, so 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

KRCG
Channel 29 - Jefferson City MO
ERP = 1000000.00 WATTS

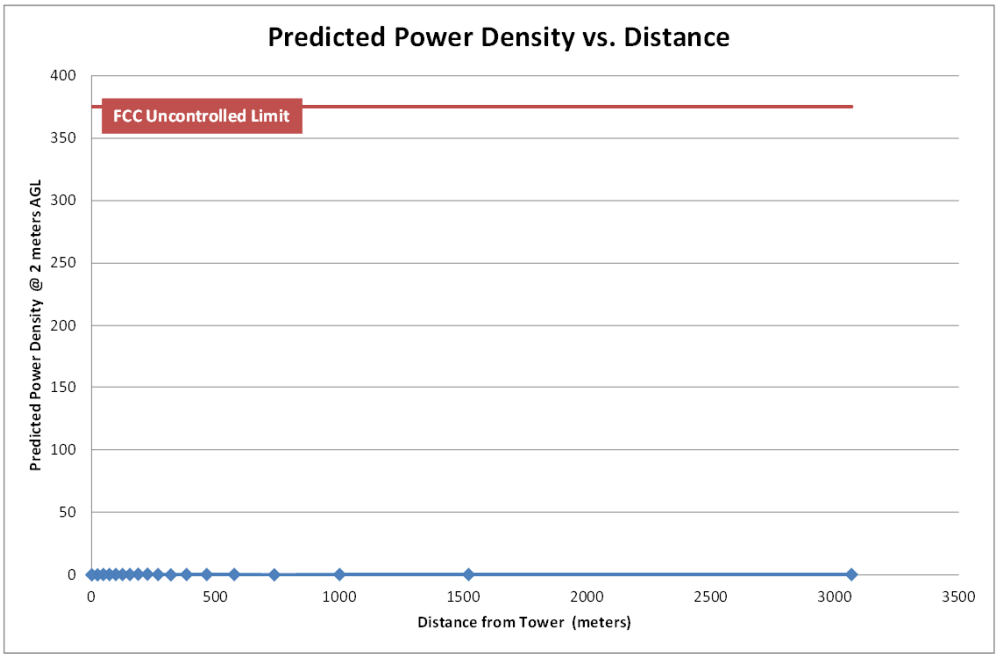
APPENDIX A

Maximum ERP 1000 kW

Polarization ----------	2	Circular		
Antenna Height Above Ground --	270.4	meters	887.1	feet
FCC Uncontrolled RFR Limit ----	375.33	µW/cm²		

Maximum Computed Power Density *0.427* µW/cm²
0.11% 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)	KRCG ERP (kW)	KRCG Calculated Power Density µW/cm²	Percent Limit	Limit Exceeded?
0			1.000	1000.0000			
5	3067.8	3079.5	0.145	21.0250	0.148	0.04%	No
10	1522.2	1545.7	0.095	9.0250	0.252	0.07%	No
15	1001.7	1037.0	0.047	2.2090	0.137	0.04%	No
20	737.4	784.7	0.020	0.4000	0.043	0.01%	No
25	575.6	635.1	0.030	0.9000	0.149	0.04%	No
30	464.9	536.8	0.033	1.0890	0.252	0.07%	No
35	383.3	467.9	0.026	0.6760	0.206	0.05%	No
40	319.9	417.6	0.010	0.1000	0.038	0.01%	No
45	268.4	379.6	0.025	0.6250	0.290	0.08%	No
50	225.2	350.4	0.028	0.7840	0.427	0.11%	No
55	187.9	327.7	0.023	0.5290	0.329	0.09%	No
60	155.0	309.9	0.012	0.1440	0.100	0.03%	No
65	125.2	296.1	0.012	0.1440	0.110	0.03%	No
70	97.7	285.6	0.013	0.1690	0.138	0.04%	No
75	71.9	277.9	0.016	0.2560	0.221	0.06%	No
80	47.3	272.5	0.009	0.0810	0.073	0.02%	No
85	23.5	269.4	0.005	0.0250	0.023	0.01%	No
90	0.0	268.4	0.000	0.0000	0.000	0.00%	No



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