RF HAZARD STATEMENT
APPLICATION FOR CONSTRUCTION PERMIT
CLASS A STATION KRNS-CD
RENO, NEVADA
CHANNEL 18 15 KW (MAX-DA)

With respect to the potential for human exposure to radio frequency (RF) energy, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF energy at ground level in excess of FCC standards. Power density calculations were conducted at 2-m above ground[1] based on the following conservative assumptions, with the following results:

Call Sign	Channel	Total ERP (kW)[2]	Distance (m)	Relative Field Factor[3]	FCC Limit[4] (mW/cm^2)	Percentage of Limit
KRNS-CD	18	18.75	21	0.1	0.331	4.3%

As indicated above, the exposure to RF energy at 2-m above ground level will not exceed 4.3% of the FCC limit for general population / uncontrolled exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF energy and it is categorically excluded from environmental processing.

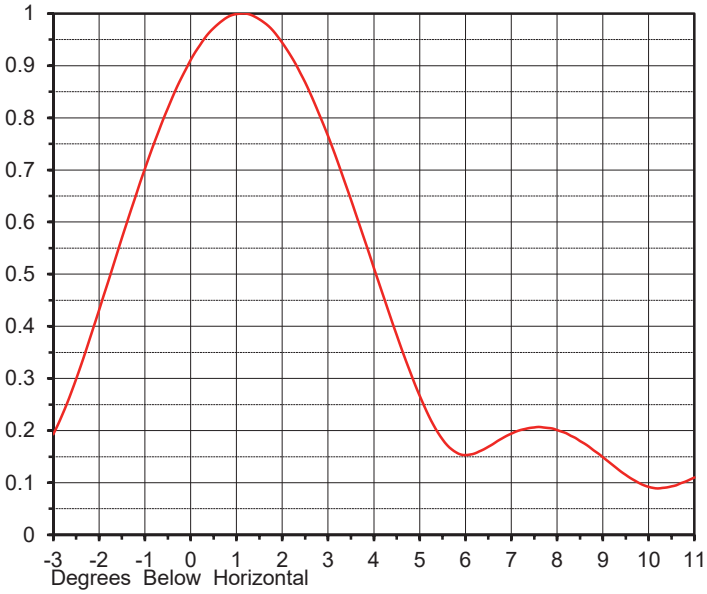
Public access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures are taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure.

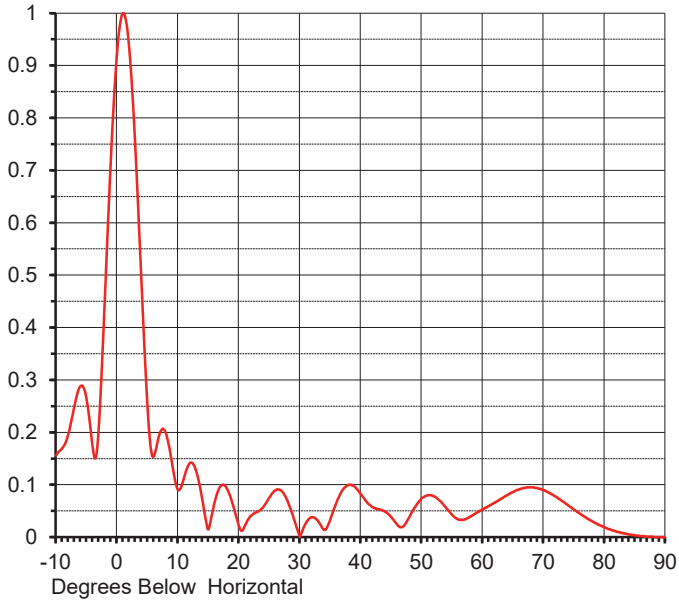
[1] The radiation center is located 23 m above ground level.
[2] Horizontally polarized ERP 15 kW, Vertically polarized ERP 3.75 kW.
3 This is a conservative assumption for the maximum relative field at steep downward angles. See attached vertical relative field pattern.
4 For general population/uncontrolled environments

ELEVATION PATTERN

Proposal No.	**C-70720**
Date	**6-May-17**
Call Letters	**KRNS**
Channel	**18**
Frequency	**497 MHz**
Antenna Type	**TLP-12/VP-R C160**

RMS Directivity at Main Lobe	**12.5 (10.97 dB)**	Beam Tilt	**1.00 deg**
RMS Directivity at Horizontal	**10.7 (10.29 dB)**	Pattern Number	**12L125100**
	Calculated		





Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.156	10.0	0.090	30.0	0.000	50.0	0.074	70.0	0.090
-9.0	0.170	11.0	0.114	31.0	0.027	51.0	0.080	71.0	0.084
-8.0	0.197	12.0	0.142	32.0	0.038	52.0	0.078	72.0	0.077
-7.0	0.250	13.0	0.125	33.0	0.030	53.0	0.069	73.0	0.069
-6.0	0.288	14.0	0.070	34.0	0.014	54.0	0.056	74.0	0.061
-5.0	0.262	15.0	0.015	35.0	0.034	55.0	0.042	75.0	0.052
-4.0	0.171	16.0	0.066	36.0	0.066	56.0	0.034	76.0	0.044
-3.0	0.211	17.0	0.097	37.0	0.090	57.0	0.034	77.0	0.037
-2.0	0.459	18.0	0.093	38.0	0.100	58.0	0.039	78.0	0.030
-1.0	0.727	19.0	0.062	39.0	0.096	59.0	0.046	79.0	0.024
0.0	0.926	20.0	0.021	40.0	0.082	60.0	0.053	80.0	0.019
1.0	1.000	21.0	0.022	41.0	0.067	61.0	0.059	81.0	0.014
2.0	0.931	22.0	0.041	42.0	0.057	62.0	0.066	82.0	0.010
3.0	0.742	23.0	0.048	43.0	0.053	63.0	0.073	83.0	0.008
4.0	0.486	24.0	0.058	44.0	0.048	64.0	0.080	84.0	0.005
5.0	0.247	25.0	0.076	45.0	0.038	65.0	0.086	85.0	0.003
6.0	0.154	26.0	0.089	46.0	0.023	66.0	0.091	86.0	0.002
7.0	0.198	27.0	0.088	47.0	0.021	67.0	0.094	87.0	0.001
8.0	0.198	28.0	0.068	48.0	0.039	68.0	0.095	88.0	0.000
9.0	0.142	29.0	0.035	49.0	0.059	69.0	0.093	89.0	0.000
								90.0	0.000