

**CH 6 TV Protection Study**

The affected Channel 6 TV station that is located within the required study distance of 177 km for FM CH 216 is as follows:

KMOHTV LI 06- 2C Dom 100.000 kW 592 M HAAT VDH  
Kingman AZ 1377M COR AMSL  
Lat= 35 01 57, Lng= 114 21 56  
Phoenix 6 Tv, Llc BLCT20020627AAL  
Fac ID# 24753, Cutoff Date= 2  
Dist.=105.3933 km, Azi=128.6°, Rev Azi=309.1°

Direct line HAAT Grade B, 47 dBu= 100.36 km & Grade A= 49.76 km

Distance from reference to Grade B = 5.04 km

Cutoff Dist from Full Service= 177

Maximum Co-located power= 67.6 kW

KMOHTV Signal Contour at Reference location = 45.3 dBu

CH. 216, U/D ratio = 28.0 dB, Maximum FM signal = 75.0 dBu , add 6 dB if within angle.

TV/FM D to U values

47.0	75.0	55.0	71.7	63.0	72.6	71.0	77.4	79.0	84.0	87.0	90.9
48.0	74.4	56.0	71.6	64.0	73.0	72.0	78.2	80.0	84.8	88.0	91.7
49.0	73.8	57.0	71.6	65.0	73.4	73.0	79.0	81.0	85.7	89.0	92.6
50.0	73.2	58.0	71.5	66.0	74.0	74.0	79.8	82.0	86.6	90.0	93.5
51.0	72.8	59.0	71.5	67.0	74.6	75.0	80.6	83.0	87.5	91.0	93.5
52.0	72.4	60.0	71.8	68.0	75.2	76.0	81.5	84.0	88.3	92.0	93.5
53.0	72.0	61.0	72.0	69.0	75.9	77.0	82.3	85.0	89.2	93.0	93.5
54.0	71.9	62.0	72.3	70.0	76.7	78.0	83.1	86.0	90.0	94.0	93.5

KVKL's minor modification proposes to operate with 44.8 kW ERP (Circular, Directional) at a COR AMSL of 1476 meters. For a worst case situation, the FM predicted interference area was calculated in reference to the CH 6 47 dBu protected contour which corresponds to the FM 75.0 dBu interference contour. The population within the FM predicted interference area was determined using a computer program that determines population by the block centroid retrieval method within a specified radius of a given set of geographical coordinates based on the 2000 Census data. Actual block population data from the US Census Bureau was also reviewed for the overlap area. From this it was determined that there is no population (zero) within the FM predicted interference area, therefore, the proposed minor modification is in full compliance with Section 73.525 of the Commisison's rules.

Page 2 of this Exhibit contains a tabulation of KMOHTV's protected 47.0 dBu contour, page 3 contains a tabulation of KVKL's 75.0 dBu interference contour, and Page 4 contains a US Census map showing the FM predicted interference area.

**CH 6 TV Protection Study**

Tabulation of KMOHTV 47 dBu protected contour

100 kW (DA)		35 01 57 / 114 21 56			1377 M COR AMSL	
KMOHTV, Phoenix 6 Tv Llc				, BLCT20020627AAL		
Azi.	AV EL	HAAT	ERP kW	dBk	Field	47-F5
280	580.6	796.4	53.2900	17.27	0.730	129.20
285	602.7	774.3	42.9025	16.32	0.655	125.70
290	625.0	752.0	33.6400	15.27	0.580	121.73
295	630.0	747.0	23.5225	13.71	0.485	116.98
300	616.7	760.3	15.2100	11.82	0.390	112.11
305	610.3	766.7	9.9225	9.97	0.315	106.89
310	632.5	744.5	5.7600	7.60	0.240	99.02
315	662.3	714.7	3.6100	5.58	0.190	92.72
320	671.7	705.3	1.9600	2.92	0.140	86.12
325	694.0	683.0	1.9600	2.92	0.140	85.35
330	725.6	651.4	1.9600	2.92	0.140	84.22
335	778.9	598.1	1.9600	2.92	0.140	82.23
340	815.0	562.0	1.9600	2.92	0.140	80.60
345	876.5	500.5	1.9600	2.92	0.140	77.08
350	998.1	378.9	1.9600	2.92	0.140	68.52
355	1047.1	329.9	1.9600	2.92	0.140	65.10

**CH 6 TV Protection Study**

Tabulation of KVKL (CP) MOD 75.0 dBu interference contour

44.8 kW (DA)      35 37 37 / 115 16 11      1476 M COR AMSL

Azi.	AV EL	HAAT	ERP kW	dBk	75-F1
070	1372.8	103.2	11.7909	10.72	14.44
075	1407.1	68.9	10.5085	10.22	11.57
080	1439.1	36.9	9.3000	9.68	8.16
085	1487.8	-11.8	7.5041	8.75	7.00
090	1559.9	-83.9	5.9007	7.71	6.59
095	1601.1	-125.1	5.8500	7.67	6.57
100	1619.3	-143.3	5.7995	7.63	6.56
105	1657.8	-181.8	5.7493	7.60	6.54
110	1653.8	-177.8	5.6992	7.56	6.53
115	1640.1	-164.1	5.6494	7.52	6.51
120	1634.1	-158.1	5.5998	7.48	6.50
125	1652.8	-176.8	5.5495	7.44	6.49
130	1659.1	-183.1	5.4995	7.40	6.47
135	1643.3	-167.3	4.4881	6.52	6.15
140	1589.2	-113.2	3.5795	5.54	5.81
145	1511.7	-35.7	2.9212	4.66	5.52
150	1437.2	38.8	2.3297	3.67	5.89
155	1361.8	114.2	1.9032	2.79	9.71
160	1288.3	187.7	1.5197	1.82	11.82
165	1258.0	218.0	1.5197	1.82	12.68
170	1226.7	249.4	1.5197	1.82	13.52
175	1201.4	274.6	1.5197	1.82	14.20
180	1167.9	308.1	1.5197	1.82	15.15
185	1129.7	346.3	1.5197	1.82	16.30
190	1086.0	390.0	1.5197	1.82	17.60
195	1051.1	424.9	1.5197	1.82	18.64
200	1022.2	453.8	1.5197	1.82	19.39
205	994.5	481.5	1.5197	1.82	19.97
210	968.4	507.6	1.5197	1.82	20.47
215	952.2	523.8	1.5197	1.82	20.79
220	940.6	535.4	1.5197	1.82	21.04
225	928.0	548.0	1.5197	1.82	21.32
230	918.1	557.9	1.5197	1.82	21.56
235	908.0	568.0	1.5197	1.82	21.80
240	897.6	578.4	1.5197	1.82	22.06
245	888.5	587.5	1.5197	1.82	22.28
250	880.2	595.8	1.5197	1.82	22.48
255	873.5	602.5	1.5197	1.82	22.65
260	868.8	607.2	1.5197	1.82	22.76

**CH 6 TV Protection Study**

US Census Map of FM predicted interference area

