

K267BH North Las Vegas, Nevada
Facility Id: 48349

Displacement Exhibit

Licensed translator K267BH is becoming “displaced” by the modification of 1st adjacent channel KPKK Amargosa Valley, Nevada. The Commission has granted a construction permit (BPH-20090427ABY) to KPKK, which would receive prohibited 1st adjacent channel interference from the existing K267BH facility. Furthermore, the Commission has already dismissed a recent K267BH application for this very reason with respect to KPKK’s CP. As summarized below, K267BH cannot even be modified to even 1 watt ERP, on any adjacent or I.F. channel without causing prohibited interference to other facilities. In light of the impending displacement, the applicant respectfully requests that the Commission grant the proposed modification of K267BH, which would be a minor change in all aspects with the exception of the proposed use of the closest available I.F. channel, Channel 215.

Summary of prohibited interference conflicts at the current K267BH site at **1-watt ERP**, considering all adjacent and I.F. channels:

Co-Channel (267): 1st adjacent interference contour overlap caused to KPKK (CP), prohibited overlap of 38 km.

1st Adjacent Channels (266, 268): Co-channel interference contour overlap caused to KPKK (CP), prohibited overlap of 41 km. Co-channel interference contour overlap caused to NEW translator application (BNPFT-20030314BIR) Henderson, Nevada, prohibited overlap of 35 km.

2nd Adjacent Channels (265, 269): 1st adjacent interference contour overlap caused to KPKK (CP), prohibited overlap of 38 km. Co-channel interference contour overlap caused to NEW translator applications (BNPFT-20030310BIT, BNPFT-20030317LLU, BNPFT-20030313AXG) prohibited overlap of as much as 18 km. 1st adjacent interference contour overlap caused to KWID, prohibited overlap of 43 km.

3rd Adjacent Channels (264, 270): 1st adjacent interference contour overlap caused to KKJJ, prohibited overlap of 42 km. Co-channel interference contour overlap caused to KWID, prohibited overlap of 53 km.

I.F.-Channels (213): Co-channel interference contour overlap caused to KSOS, prohibited overlap of 54 km. **(214):** 1st adjacent interference contour overlap caused to KSOS, prohibited overlap of 43 km.

Therefore, even at 1-watt ERP from the existing K267BH facility antenna site, there would be at least 18 km and as much as 54 km prohibited contour overlap when considering all adjacent and I.F. channels that would conform to a “minor change.” K267BH is facing displacement by KPKK and no minor change remedy is available.

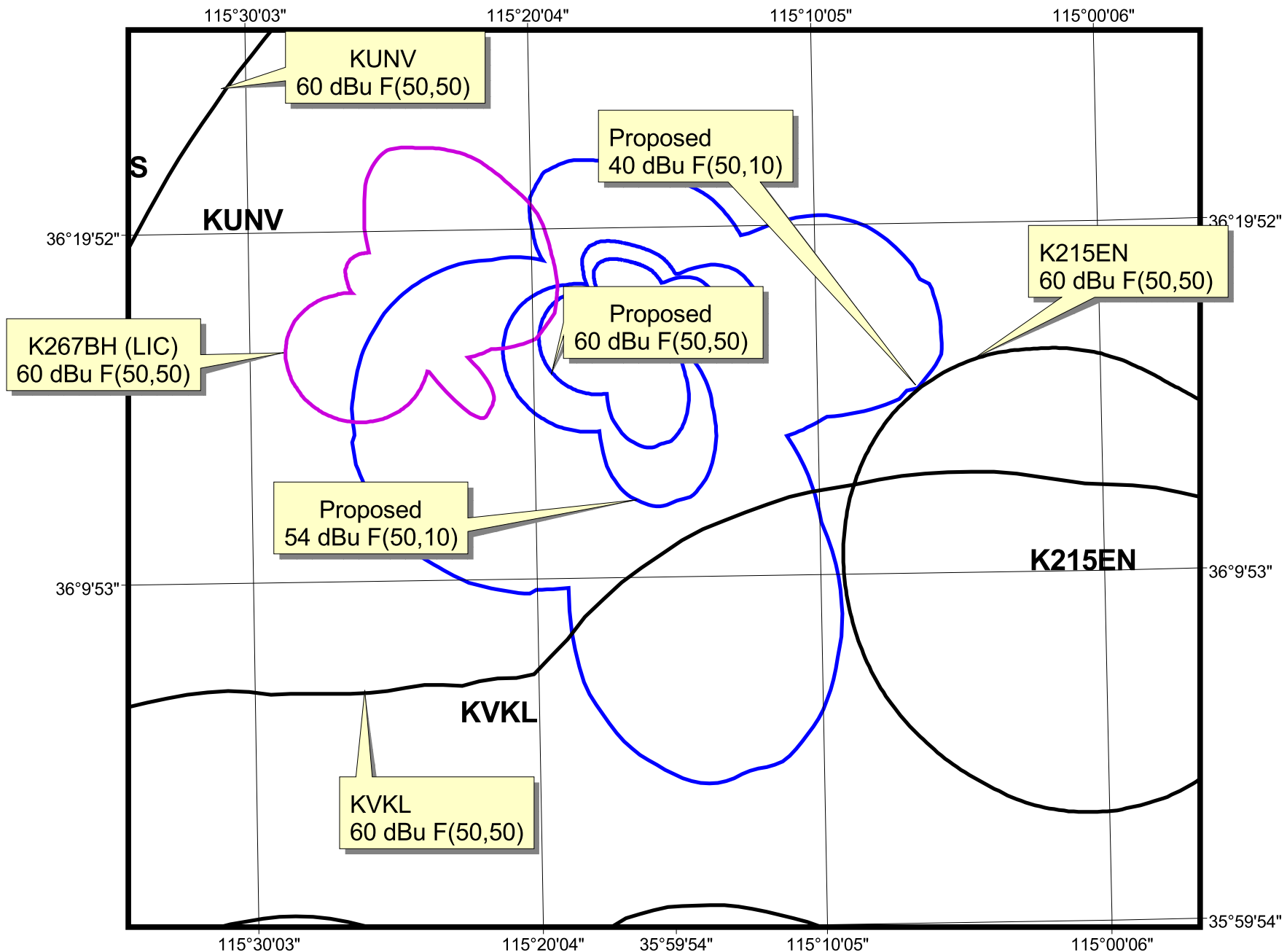


Figure 1



K267BH, PAHRUMP, NV : MINOR CHANGE TO LICENSED FACILITY
 Minor change showing, and contour protection

Table 1**K267BH Minor Change to Licensed Facility September 26, 2009****Channel Study**

Chan	Class	Call Letters	Type	Status	City	State	Country	Owner	Distance (km)	Bearing TO (deg)	Req. Dist. (km)	Clearance (km)	
213	C	KSOS	FM	LIC	LAS VEGAS	NV	US	FAITH COMMUNICATIONS CORPORA	40.4	142.2	86.9	-46.5	(see note)
215	D	K215EN	FX	LIC	HENDERSON	NV	US	CALVARY CHAPEL OF TWIN FALLS, II	28.5	116.7	26.9	1.5	
216	C1	KVKL	FM	CP MOD	LAS VEGAS	NV	US	SOUTHERN NEVADA EDUCATIONAL I	74.2	179.5	69.6	4.5	
216	C3	KVKL	FM	LIC	LAS VEGAS	NV	US	SOUTHERN NEVADA EDUCATIONAL I	74.3	179.2	52.2	22.0	
218	C1	KUNV	FM	LIC	LAS VEGAS	NV	US	UNIVERSITY SYSTEM OF HIGHER EL	40.4	142.2	64.4	-24.0	(see note)

Note: (with respect to KSOS) 2nd adjacent KSOS has a field strength of 80.0 dBu F(50,50) at the proposed K267BH site. Therefore K267BH's interfering contour is the 120.0 dBu F(50,10) contour. K267BH's 120.0 dBu F(50,10) contour extends a horizontal distance of 61 meters from the antenna. The proposed 120 dBu interfering contour will not reach ground level because not even the 111 dBu contour will reach within 10 meters of ground level. The proposed interference area does not encompass any structures, buildings, or population. Therefore this proposal is compliant with the allowance of Rule 74.1204(d).

Note: (with respect to KUNV) 3rd adjacent KUNV has a field strength of 71.0 dBu F(50,50) at the proposed K267BH site. Therefore K267BH's interfering contour is the 111.0 dBu F(50,10) contour. K267BH's 111.0 dBu F(50,10) contour extends a horizontal distance of 61 meters from the antenna. The proposed 111 dBu interfering contour does not fall any lower than 13 meters above ground level [see attached profile]. The proposed interference area does not encompass any structures, buildings, or population. Therefore this proposal is compliant with the allowance of Rule 74.1204(d).

SCALA YA7-FML

COR (AGL) = 70 meters

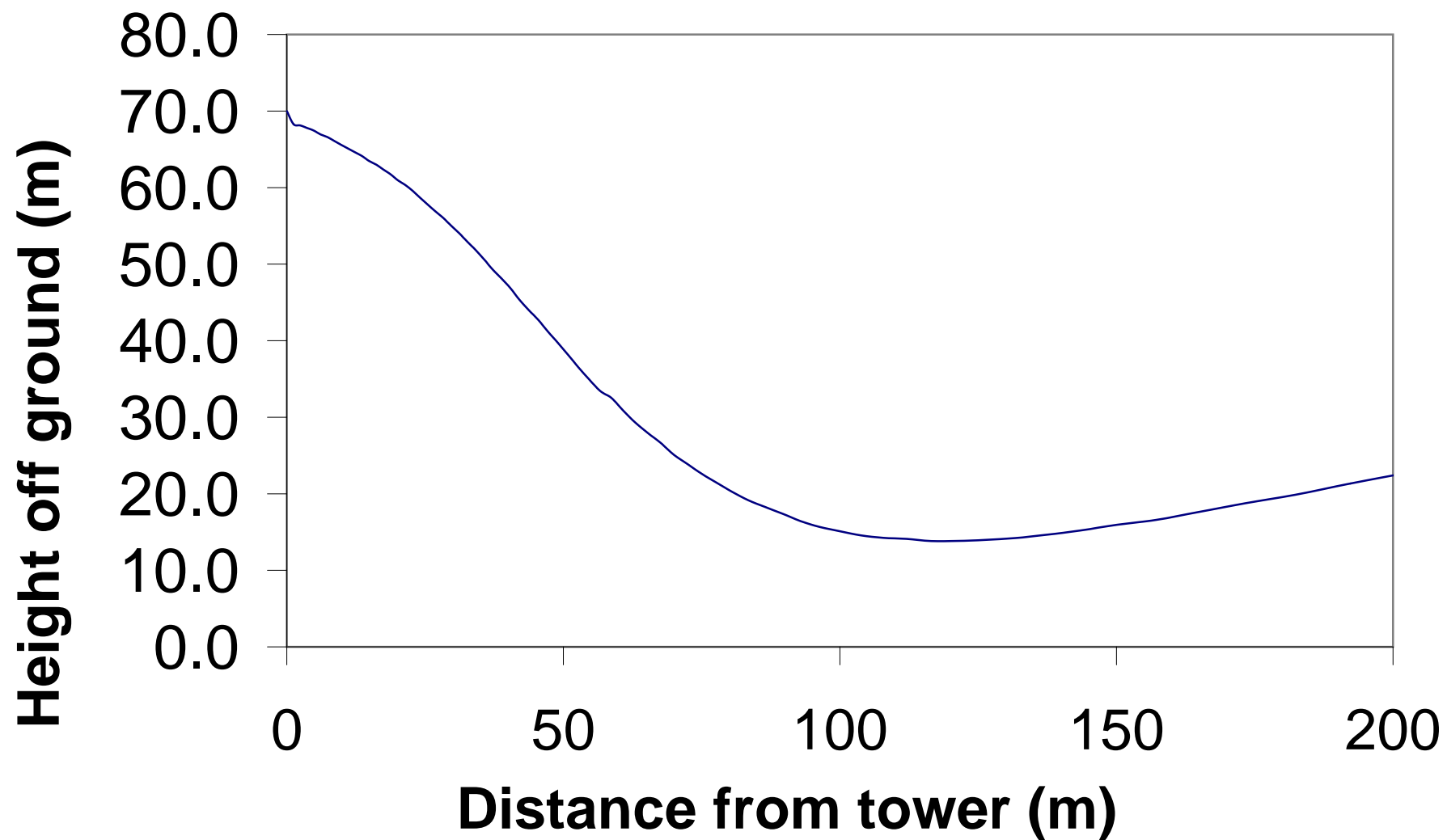
ERP = 75 watts

Interfering contour = 111 dBu F(50,10)

Angle below horizontal	Relative Field	Minimum Height of Interfering Contour (m)	Distance from Tower (m)
1	1.000	67.0	4010.3
2	0.998	64.0	2004.5
3	0.996	61.1	1335.7
4	0.992	58.2	1001.0
5	0.988	55.3	800.1
6	0.984	52.4	666.0
7	0.978	49.6	570.1
8	0.971	46.9	498.1
9	0.963	44.2	442.0
10	0.956	41.6	397.0
11	0.948	39.0	360.1
12	0.935	36.7	329.3
13	0.925	34.4	303.2
14	0.914	32.1	280.8
15	0.901	30.1	261.2
16	0.890	28.0	244.1
17	0.876	26.1	229.0
18	0.861	24.4	215.4
19	0.846	22.8	203.3
20	0.831	21.3	192.3
21	0.817	19.9	182.4
22	0.799	18.8	173.3
23	0.783	17.6	164.9
24	0.767	16.6	157.2
25	0.747	15.9	150.1
26	0.730	15.2	143.5
27	0.712	14.7	137.4
28	0.694	14.2	131.7
29	0.675	14.0	126.3
30	0.656	13.8	121.2
31	0.637	13.8	116.5
32	0.616	14.1	112.0
33	0.598	14.2	107.8
34	0.579	14.6	103.8
35	0.559	15.1	100.0
36	0.540	15.7	96.3
37	0.520	16.4	92.9
38	0.499	17.4	89.6
39	0.480	18.3	86.4
40	0.462	19.2	83.4
41	0.443	20.2	80.5
42	0.424	21.4	77.7
43	0.406	22.6	75.1
44	0.388	23.9	72.5
45	0.371	25.1	70.0

Angle below horizontal	Relative Field	Minimum Height of Interfering Contour (m)	Distance from Tower (m)
46	0.352	26.6	67.6
47	0.336	27.9	65.3
48	0.320	29.3	63.0
49	0.303	30.8	60.9
50	0.286	32.5	58.7
51	0.275	33.4	56.7
52	0.260	34.9	54.7
53	0.245	36.5	52.7
54	0.230	38.1	50.9
55	0.216	39.7	49.0
56	0.203	41.2	47.2
57	0.190	42.7	45.5
58	0.179	44.0	43.7
59	0.168	45.3	42.1
60	0.156	46.9	40.4
61	0.146	48.1	38.8
62	0.137	49.3	37.2
63	0.127	50.6	35.7
64	0.118	51.8	34.1
65	0.110	52.9	32.6
66	0.102	54.0	31.2
67	0.095	55.0	29.7
68	0.088	56.0	28.3
69	0.082	56.9	26.9
70	0.076	57.8	25.5
71	0.070	58.7	24.1
72	0.064	59.6	22.7
73	0.059	60.3	21.4
74	0.055	60.9	20.1
75	0.050	61.7	18.8
76	0.046	62.4	17.5
77	0.042	63.0	16.2
78	0.039	63.5	14.9
79	0.035	64.1	13.6
80	0.032	64.6	12.3
81	0.029	65.1	11.1
82	0.026	65.6	9.8
83	0.023	66.1	8.6
84	0.020	66.6	7.4
85	0.018	66.9	6.1
86	0.015	67.4	4.9
87	0.013	67.8	3.7
88	0.011	68.1	2.4
89	0.010	68.3	1.2
90	0.010	70.0	0.0

111 dBu Elevation Profile



Radiofrequency Electromagnetic Exposure Analysis

Source	Height AGL(m)	Antenna type	Bays	Horizontal ERP (kw)	Vertical ERP (kw)	Power Density $\mu\text{W}/\text{cm}^2$ at 2 meters AGL				
						within 10 meters distance	% controlled environment limit (1000 $\mu\text{W}/\text{cm}^2$)	Max. PD	% uncontrolled environment limit (200 $\mu\text{W}/\text{cm}^2$)	Distance to maximum PD (m)
PROPOSED	70	SCALA YA7FML-1	1	0.000	0.075	0.001	0.000	0.06	0.00	118
						0.001	0.000	0.06	0.00	118

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

Calculations made using Equation 10 from OET Bulletin 65 and elevation pattern provided by antenna manufacturer