

**Engineering Statement  
In Support of an  
Application for a Construction Permit  
KPLD(FM), Channel 266C  
Kanab, Utah**

**General**

The instant petition seeks to reduce the ERP of KPLD(FM) from 100 kW to 79 kW in order to facilitate the modification of KPKK(FM) in a contingent application. This application will only change KPLD's ERP. It will not change antenna location or height. The instant application also calls for KPLD to agree to §73.215 spacing.

**Exhibits Explained**

Exhibit E, Figure 1 is a channel spacing study for the proposed application (and current licensed) site. It shows short spacing to one facilities: KPKK(FM), Amargosa Valley, Nevada. KPKK, in a contingent application, is upgrading to channel 266C, modifying its tower location and height, and accepting §73.215 spacing.

Exhibit E, Figure 2 is a terrain/contour study showing the HAAT, the elevation above mean sea level along each radial (5-degree increments), the ERP along each radial, and the distances (in kilometers) to the 70 dBu and 60 dBu contours. These values are used to prepare the coverage map shown in Exhibit E, Figure 3. This map shows 100% coverage of the community of license by the F(50,50) 70 dBu contour.

Exhibit E, Figure 4 is a map showing that no prohibitive contour overlap will exist between KPLD and KPKK.

Exhibit E, Figure 5 is a vertical sketch, showing all the pertinent elevations for the proposed KPLD tower and antenna.

### **Human Exposure to Radiofrequency Radiation**

KPLD currently operates with a Jampro 10-bay Rototiller antenna. This was the antenna used to determine the levels of radiofrequency radiation two meters above ground. The proposed facility (KPLD) will radiate 79 kW (horizontal and vertical) at an AGL of 85 meters. Using the “FMModel” program, the results in Exhibit E, Figure 6 were obtained. This study shows that the proposed facility does not pose a human exposure issue.

### **Proposed Site (No Exhibits)**

During operation, the facility will produce no chemical or significant thermal pollution, and no ionizing radiation will be generated. Areas of high intensity radiofrequency fields will be confined to the immediate area of the transmitting antenna, far above the ground and away from any human and wildlife population.

The area is not officially designated as a wilderness area or wildlife preserve and is not pending consideration. The area has no significant value in American history, architecture, archaeology, or culture, which is listed in the Register of Historic Places, and it is not eligible for listing. It is not recognized either nationally or locally for special scenic or recreational value. The licensee (Marathon Media Group, LLC) proposes to leave KPLD on its existing tower.

### **Conclusion**

This statement/application has been prepared for the licensee by utilizing the latest available information, cross-checked with the Federal Communications Commission and other sources. Therefore, it is submitted that the proposed is in compliance with the Commission’s Rules and Regulations and other sources. Therefore, it is submitted that the engineering data compiled and demonstrated herein for the proposed is in compliance

with Commission's Rules and Regulations at the time of this application's filing date.

We welcome the opportunity to discuss with the staff of the Federal Communications Commission the engineering data contained in this application. Should any questions arise concerning the information, please contact Reynolds Technical Associates.

The following pages are exhibits prepared and assembled in support of the proposed.

Lee S. Reynolds  
Reynolds Technical Associates  
12585 Old Highway 280 East, Suite 102  
Chelsea, Alabama 35043  
(205) 618-2020

**Statement of the Consultants**

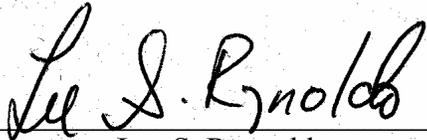
The instant engineering statement was prepared for Marathon Media Group, LLC and supports an application for a construction permit of KPLD(FM), Kanab, Utah. It was developed by Reynolds Technical Associates (“RTA”) and may not be used for purposes other than submission to the Commission by the licensee.

It may not be reproduced in its entirety, or in part, by anyone (other than from the Commission) without the written consent of RTA.

It is prepared for the licensee under contractual agreement, and its certification by RTA is used accordingly. If the licensee fails in its contractual obligation, RTA reserves the right to withdraw its certification.

The information in this application is compiled from the most recent Commission and outside data. RTA is not responsible for errors resulting from incorrect data or unpublished rule and procedure changes.

For RTA:

  
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Lee S. Reynolds

June 23<sup>rd</sup>, 2004

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**Engineering Statement  
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**KPLD(FM), Kanab, Utah  
Channel 266C**

**Channel 266C Channel Spacing Study**

REFERENCE		DISPLAY DATES
37 17 45 N	CLASS = C	DATA 06-22-04
112 50 34 W	Current Spacings	SEARCH 06-23-04
----- Channel 266 - 101.1 MHz -----		

Call	Channel	Location	Dist	Azi	FCC	Margin
<b>Community of Kanab</b>			<b>UT</b>	<b>39.41</b>	<b>134.4</b>	
Reference Coordinates:						
North Latitude: 37-02-51						
West Longitude: 112-31-32						
<b>KPLD</b>	<b>LIC 266C</b>	<b>Kanab</b>	<b>UT</b>	<b>0.00</b>	<b>0.0</b>	<b>290.0 -290.00</b>
<b>RDEL</b>	<b>DEL 266C</b>	<b>Kanab</b>	<b>UT</b>	<b>0.00</b>	<b>0.0</b>	<b>290.0 -290.00</b>
Of no concern: Licensed coordinates of KPLD						
<b>RADD</b>	<b>ADD 265C</b>	<b>Moapa</b>	<b>NV</b>	<b>153.59</b>	<b>251.5</b>	<b>241.0 -87.41</b>
Of no concern: Proposed allocation coordinates for KPLD in MM Docket 01-135. That proceeding has since been dismissed.						
<b>KPKK.A</b>	<b>LIC 266C</b>	<b>Amargosa Valley</b>	<b>NV</b>	<b>287.43</b>	<b>255.8</b>	<b>290.0 -2.57</b>
Of concern: Protection afforded under §73.215.						
<b>KRRK</b>	<b>LIC-Z 266C0</b>	<b>Lake Havasu City</b>	<b>AZ</b>	<b>327.97</b>	<b>202.1</b>	<b>281.0 46.97</b>

**Engineering Statement  
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**KPLD(FM), Kanab, Utah  
Channel 266C**

**KPLD Terrain/Contour Study**

**Reference Coordinates:**

**North Latitude: 37-17-45**

**West Longitude: 112-50-34**

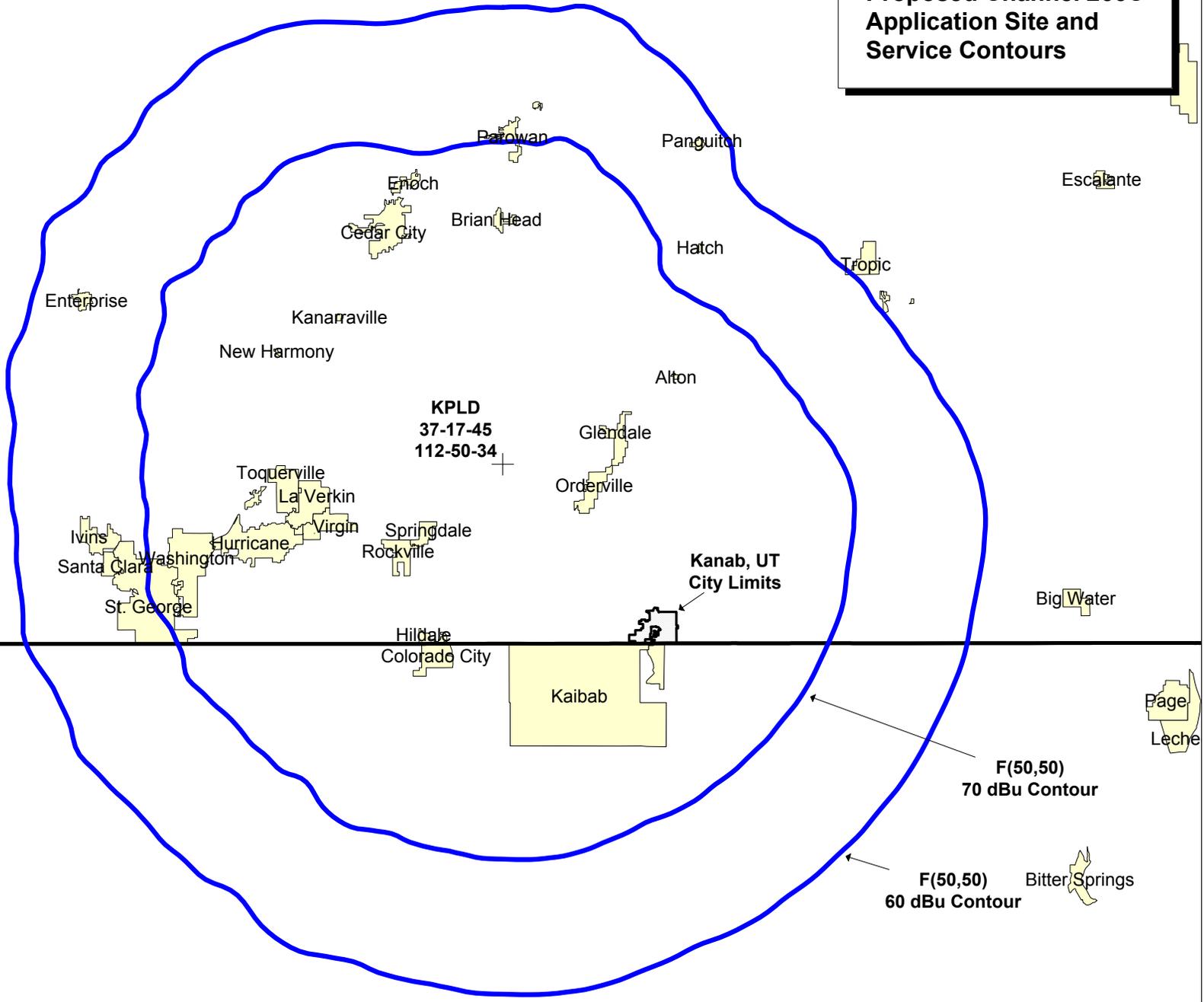
Azimuth °T.	ERP = 79 kW	FM - 2-6 Tables	ERP (dBk)	F(50-50)	F(50-50)
	Ave. Elev. 3 to 16 km	Effective Antenna Height		Distance to 70 dBu Contour	Distance to 60 dBu Contour
	Meters AMSL	Meters AAT		km	km
0	2051.5	484.5	18.976	58.8	83.5
5	2050.9	485.1	18.976	58.9	83.5
10	2026.1	509.9	18.976	60.4	85.0
15	2044.2	491.8	18.976	59.3	83.9
20	2095.8	440.2	18.976	56.2	80.3
25	2124.9	411.1	18.976	54.6	78.1
30	2173.1	362.9	18.976	51.9	74.6
35	2207.9	328.1	18.976	49.8	72.1
40	2272.7	263.3	18.976	45.5	67.0
45	2277.2	258.8	18.976	45.2	66.7
50	2257.1	278.9	18.976	46.5	68.3
55	2225.5	310.5	18.976	48.6	70.8
60	2207.9	328.1	18.976	49.8	72.1
65	2182.1	353.9	18.976	51.4	74.0
70	2157.6	378.4	18.976	52.8	75.7
75	2128.2	407.8	18.976	54.4	77.9
80	2092.1	443.9	18.976	56.4	80.6
85	2039.4	496.6	18.976	59.6	84.2
90	1992.5	543.5	18.976	62.5	86.9
95	1947.5	588.5	18.976	64.7	89.0
100	1926.7	609.3	18.976	65.5	89.8
105	1915.0	621.0	18.976	66.0	90.2
110	1886.0	650.0	18.976	67.0	91.3
115	1861.7	674.3	18.976	67.9	92.2
120	1849.4	686.6	18.976	68.4	92.6
125	1829.2	706.8	18.976	69.1	93.4
130	1817.1	718.9	18.976	69.5	93.8
135	1805.6	730.4	18.976	69.9	94.3
140	1799.6	736.4	18.976	70.1	94.5
145	1791.3	744.7	18.976	70.4	94.8
150	1774.9	761.1	18.976	70.9	95.4
155	1778.2	757.8	18.976	70.8	95.3

Continued on the next page

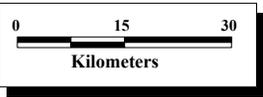
Exhibit E, Figure 2

ERP = 79 kW		FM - 2-6 Tables		F(50-50)	F(50-50)
Azimuth	Ave. Elev.	Effective	ERP	Distance to	Distance to
°T.	3 to 16 km	Antenna Height	(dBk)	70 dBu Contour	60 dBu Contour
	Meters AMSL	Meters AAT		km	km
160	1774.7	761.3	18.976	70.9	95.4
165	1754.2	781.8	18.976	71.6	96.2
170	1729.0	807.0	18.976	72.4	97.1
175	1726.8	809.2	18.976	72.4	97.1
180	1736.2	799.8	18.976	72.1	96.8
185	1748.7	787.3	18.976	71.8	96.4
190	1761.6	774.4	18.976	71.4	95.9
195	1775.3	760.7	18.976	70.9	95.4
200	1768.8	767.2	18.976	71.1	95.6
205	1748.7	787.3	18.976	71.8	96.4
210	1816.6	719.4	18.976	69.5	93.9
215	1832.5	703.5	18.976	69.0	93.3
220	1837.1	698.9	18.976	68.8	93.1
225	1846.8	689.2	18.976	68.5	92.7
230	1837.7	698.3	18.976	68.8	93.1
235	1810.1	725.9	18.976	69.8	94.1
240	1850.8	685.2	18.976	68.3	92.6
245	1854.6	681.4	18.976	68.2	92.4
250	1823.4	712.6	18.976	69.3	93.6
255	1874.7	661.3	18.976	67.5	91.7
260	1898.1	637.9	18.976	66.6	90.8
265	1909.3	626.7	18.976	66.2	90.4
270	1910.0	626.0	18.976	66.1	90.4
275	1925.1	610.9	18.976	65.6	89.8
280	1866.6	669.4	18.976	67.8	92.0
285	1883.9	652.1	18.976	67.1	91.4
290	1880.7	655.3	18.976	67.2	91.5
295	1850.6	685.4	18.976	68.3	92.6
300	1840.8	695.2	18.976	68.7	93.0
305	1890.7	645.3	18.976	66.9	91.1
310	1905.0	631.0	18.976	66.3	90.6
315	1870.5	665.5	18.976	67.6	91.9
320	1881.0	655.0	18.976	67.2	91.5
325	1866.6	669.4	18.976	67.8	92.0
330	1906.7	629.3	18.976	66.3	90.5
335	1950.3	585.7	18.976	64.6	88.9
340	2008.6	527.4	18.976	61.5	86.0
345	2052.2	483.8	18.976	58.8	83.4
350	2056.8	479.2	18.976	58.5	83.1
355	2053.6	482.4	18.976	58.7	83.3

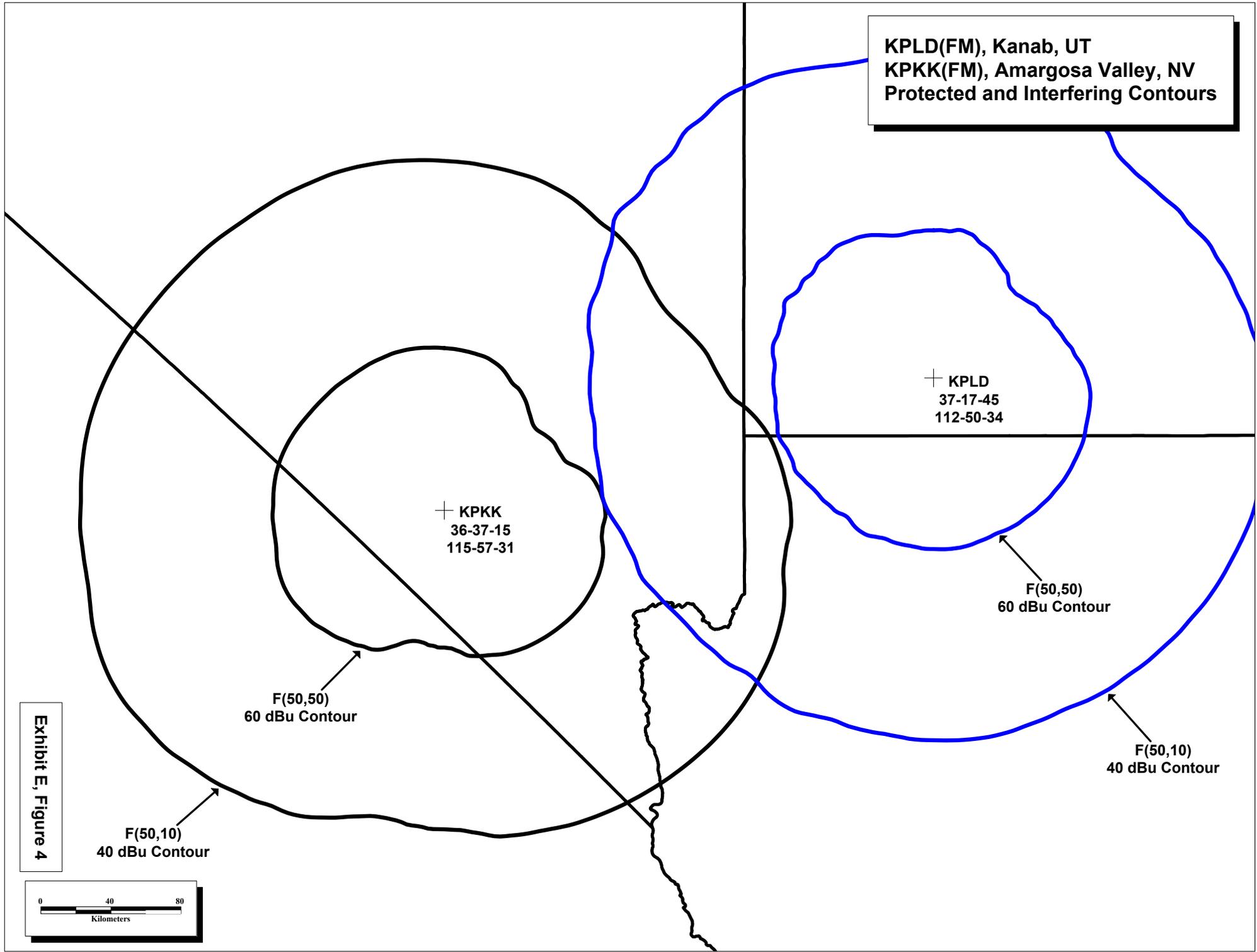
**KPLD(FM), Kanab, UT  
Proposed Channel 266C  
Application Site and  
Service Contours**



**Exhibit E, Figure 3**



**KPLD(FM), Kanab, UT  
KPKK(FM), Amargosa Valley, NV  
Protected and Interfering Contours**



+ KPKK  
36-37-15  
115-57-31

+ KPLD  
37-17-45  
112-50-34

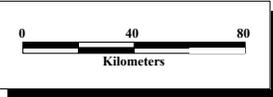
F(50,50)  
60 dBu Contour

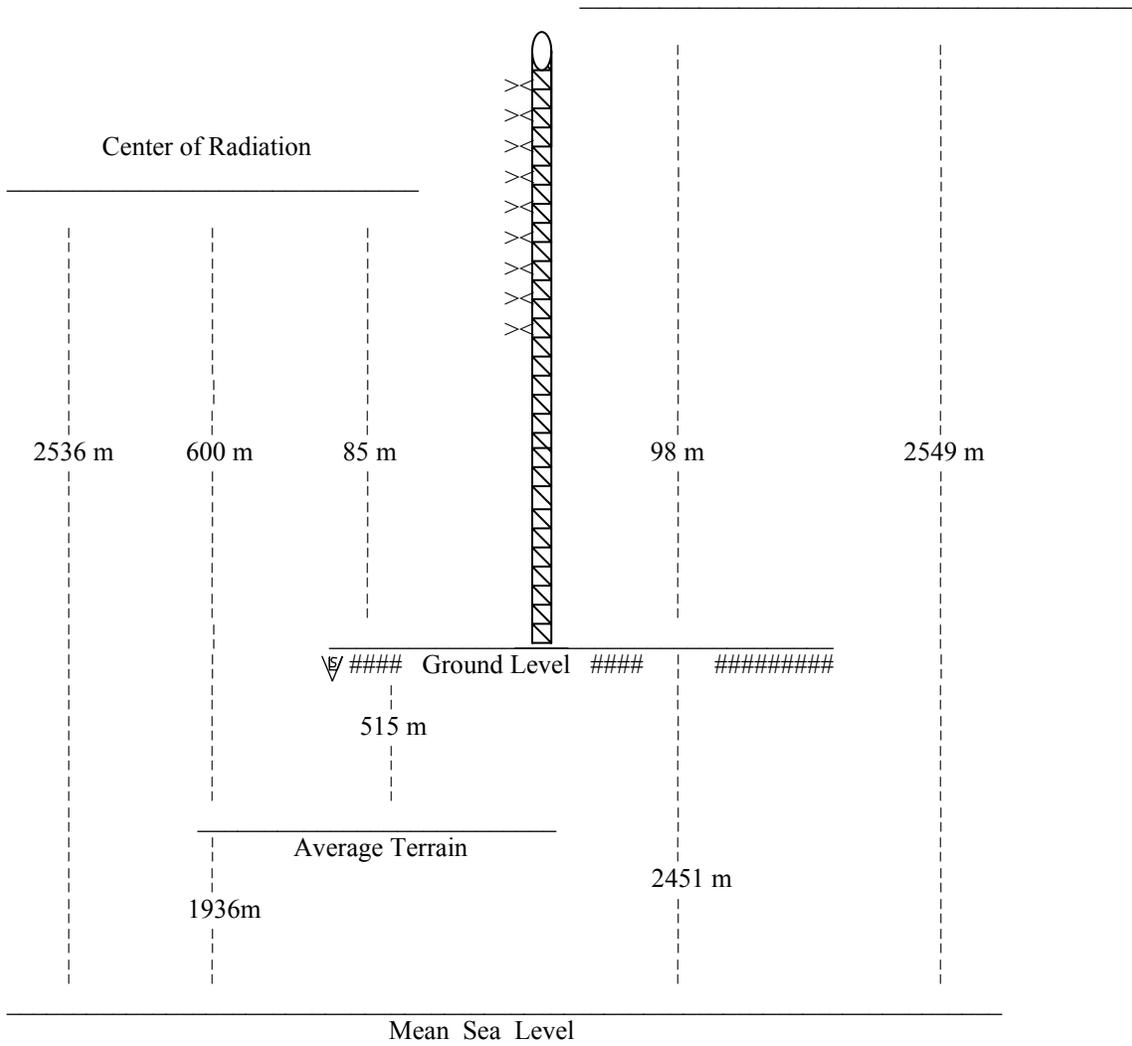
F(50,50)  
60 dBu Contour

F(50,10)  
40 dBu Contour

F(50,10)  
40 dBu Contour

**Exhibit E, Figure 4**





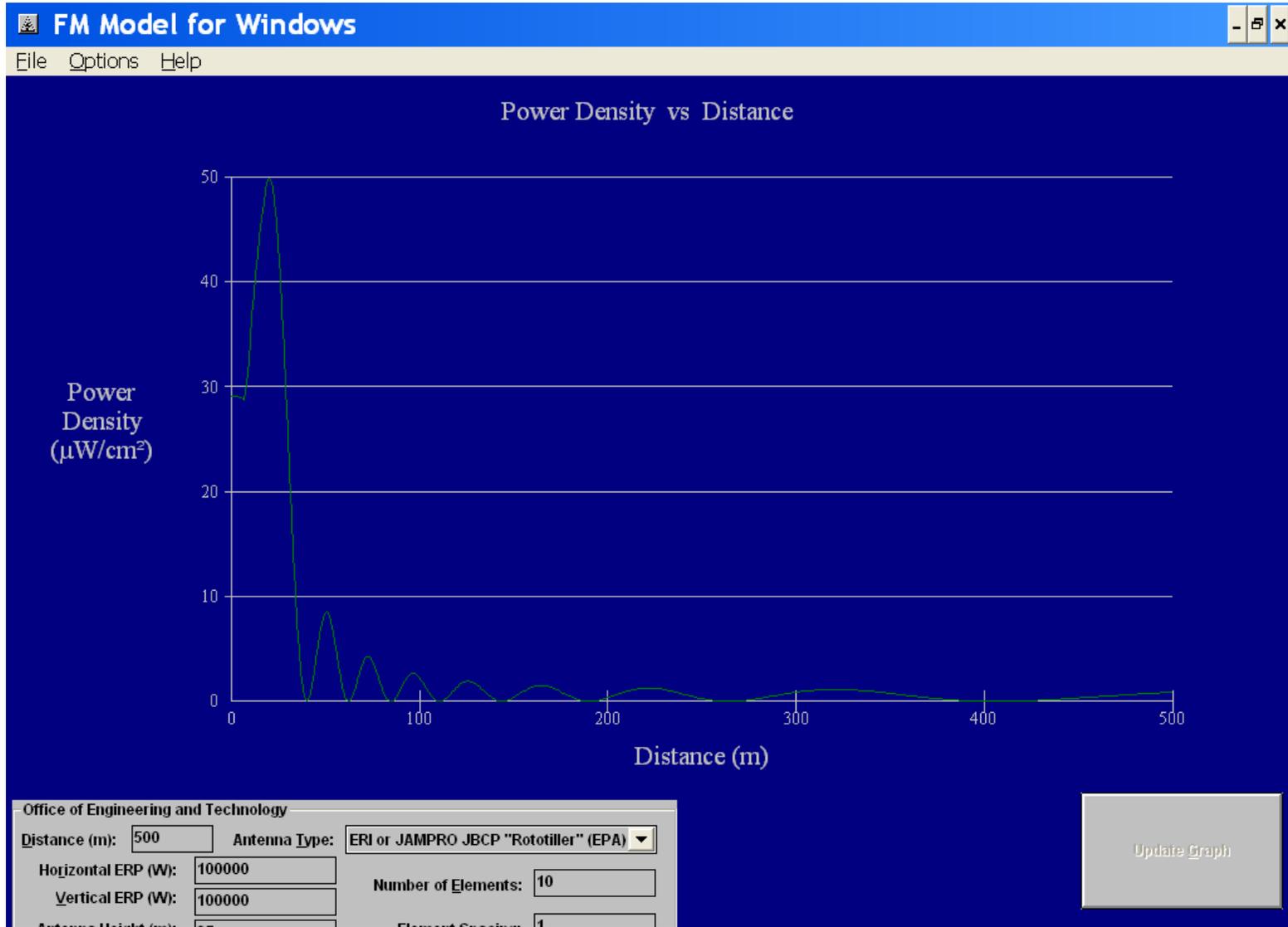
Proposed Location - 37° 17' 45" N. Lat. 112° 50' 34" W. Long. [NAD 27]

NOT DRAWN TO SCALE

Proposed antenna - 10 element

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**KPLD Human Exposure to Radiofrequency Radiation Study**



**Exhibit E, Figure 6**