

SPECIAL TEMPORARY AUTHORITY (“STA”)
TO OPERATE KJHP-LP
AT REDUCED FACILITIES

SAN BERNARDINO COMMUNITY
COLLEGE DISTRICT

MORONGO VALLEY, CALIFORNIA

KESSLER & GEHMAN ASSOCIATES, INC.
TELECOMMUNICATIONS CONSULTING ENGINEERS

20051209

Prepared by Ryan Wilhour

KGGA

507 N.W. 60th Street, Suite C
Gainesville, Florida 32607

ENGINEERING STATEMENT PREPARED BY RYAN WILLOUR OF THE FIRM
KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS
CONSULTING ENGINEERS IN CONNECTION WITH A REQUEST FOR SPECIAL
TEMPORARY AUTHORITY (“STA”) TO OPERATE THE SAN BERNARDINO
COMMUNITY COLLEGE DISTRICT (“SBCC”) STATION KJHP-LP AT REDUCED
FACILITIES RELATIVE TO THE CONSTRUCTION PERMITTED (“CP”) PARAMETERS
SPECIFIED IN FCC FILE NUMBER BPTTL-20041110ACG

The firm Kessler and Gehman Associates, Inc. has been retained by SBCC to prepare an engineering statement and STA for KJHP-LP. Specifically it is requested to make the following temporary changes relative to the CP authorization:

- Decrease the maximum effective radiated power (“ERP”) from 7.5 kW to 0.5 kW.
- Decrease the antenna effective height above ground from 19.8 m to 15 m.
- Change the broadcast antenna from a Kathrein K723147 to a Jampro JUHD-1/1 (2) DA.

No other changes are proposed.

ATTACHED FIGURES

In carrying out the engineering studies the following attached figures were prepared:

- Antenna elevation and azimuth relative field patterns (Exhibit E1)
- ERP-dBk composite graph demonstrating the CP and STA ERP for each ten degree azimuth (Exhibit E2)
- Environmental Impact/ RFR Hazard Analysis (Exhibit E3)

DISCUSSION

SBCC has a CP facility (FCC File No.: BPTTL-20041110ACG) to operate KJHP-LP with an ERP of 7.5 kW using a Kathrein K723147 directional broadcast antenna at an effective height of 19.8 meters above ground level. An existing KJHP-LP STA (FCC File No.: BLSTA-20050628AAA) requests for KJHP-LP to temporarily remain silent and expires on December 28, 2005. Approval of the instant STA will allow KJHP-LP to go back on the air with reduced facilities until the antenna manufacturer finishes building and installs the CP antenna as permitted.

SBCC plans to operate KJHP-LP at the reduced parameters, and understands that STAs expire after six months and can be extended for a maximum of six months at a time. The STA ERP will not be increased in any direction relative to the KJHP-LP construction permitted facility (see Exhibit E2). Since the temporary facility proposes no change in antenna location, a lower antenna height, and reduced ERP in all directions, no new interference will be caused to the surrounding TV market relative to the CP. SBCC understands that the service area based on the KJHP-LP CP will continue to be protected during the reduced parameter operation.

The applicant accepts full responsibility for the elimination of any objectionable interference including that caused by intermodulation to facilities in existence or authorized prior to the grant of this STA.

ENVIRONMENTAL IMPACT/RFR HAZARD ANALYSIS

An analysis has been made of the human exposure to RFR using the calculation methodology described in OET Bulletin 65, Edition, 97-01. Exhibit E3 is a RFR study demonstrating compliance within 5% of the most restrictive permissible exposure at any location 2 meters above the ground assuming worse case terrain (See Methodology). Exhibit E3 calculations were made using a frequency of 494 MHz, which is the lower edge of the proposed channel. To account for ground reflections, a coefficient of 1.6 was included in the calculations.

Pursuant to OET Bulletin 65 concerning multiple-user transmitter sites only those licensees whose transmitters produce power density levels greater than 5.0% of the exposure limit are considered significant contributors to RFR. Since the proposed operation is well within 5% of the most permissible exposure at any location 2 meters above the ground, it is not considered a significant contributor to RFR exposure. Thus, contributions to exposure from other RF sources in the vicinity of KJHP-LP were not taken into account. This request for STA complies with the FCC limits for human exposure to RF radiation and thus is excluded from further environmental processing.

A chain link fence shall encompass the KJHP-LP support structure if it is not already. The applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off in order to protect maintenance workers on the tower.

CERTIFICATION

I, Ryan Wilhour, am an associate of Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and have been working in the field of radio and television broadcast consulting since 1996. I am a graduate of the University of Florida with a Bachelor of Science degree in electrical engineering. The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge. Executed on December 9, 2005.

The logo for Kessler and Gehman Associates, Inc. (KGA) features the letters 'KGA' in a stylized, serif font. The letters are white with a thin black outline and are centered over a thick, solid gray horizontal bar.

Ryan Wilhour

A handwritten signature in blue ink that reads 'Ryan Wilhour'. The signature is written in a cursive, flowing style.

Consulting Engineer

KJHP-LP

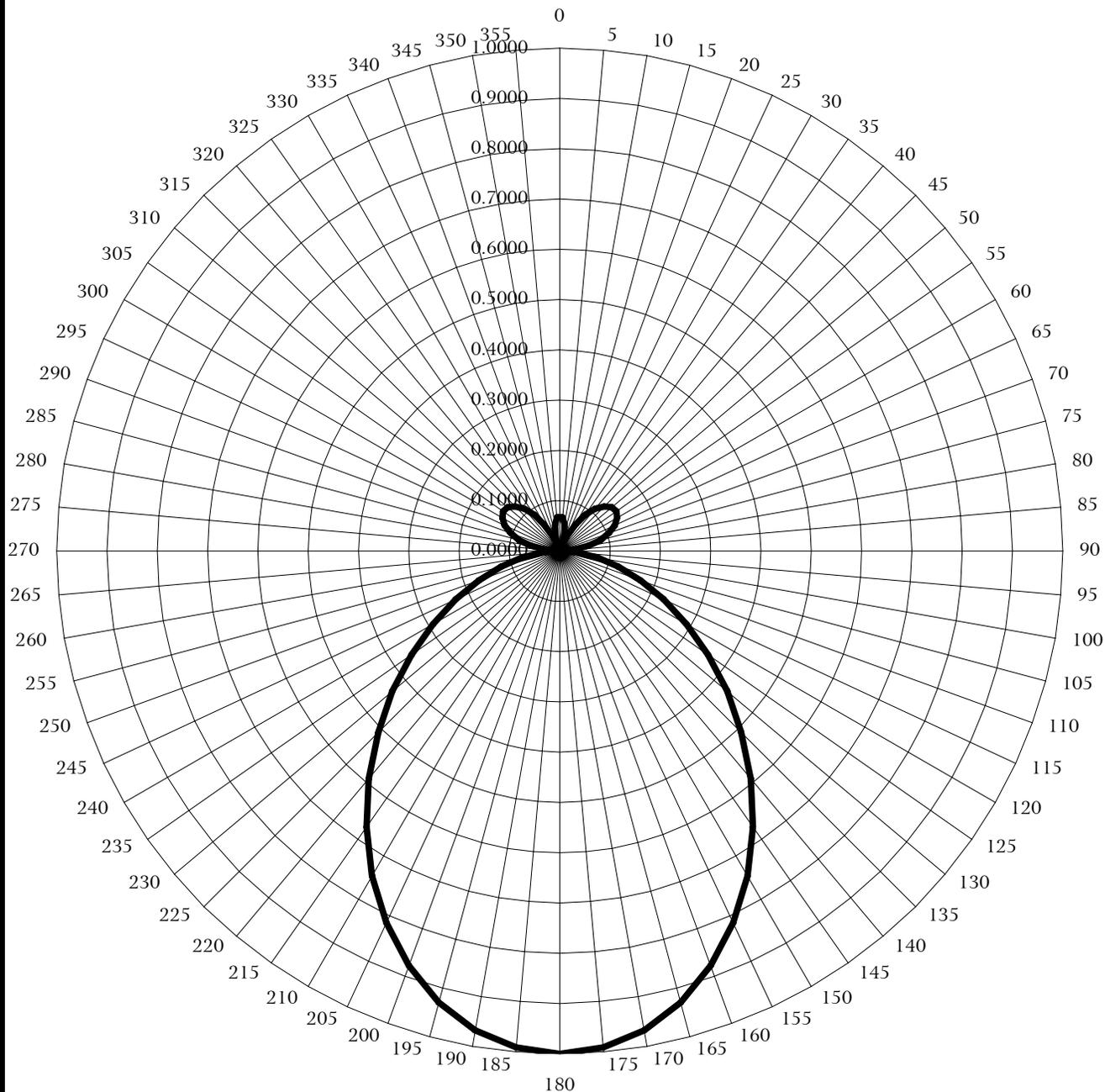
MORONGO VALLEY, CALIFORNIA

TABULATION OF RELATIVE FIELD FOR PROPOSED DIRECTIONAL ANTENNA

<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>	<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>
N000°E	0.072	N180°E	1.000
N010°E	0.053	N190°E	0.968
N020°E	0.013	N200°E	0.878
N030°E	0.061	N210°E	0.746
N040°E	0.110	N220°E	0.591
N050°E	0.135	N230°E	0.434
N060°E	0.132	N240°E	0.291
N070°E	0.104	N250°E	0.171
N080°E	0.059	N260°E	0.075
N090°E	0.000	N270°E	0.000
N100°E	0.075	N280°E	0.059
N110°E	0.171	N290°E	0.104
N120°E	0.291	N300°E	0.132
N130°E	0.434	N310°E	0.135
N140°E	0.591	N320°E	0.110
N150°E	0.746	N330°E	0.061
N160°E	0.878	N340°E	0.013
N170°E	0.968	N350°E	0.053

JAMPRO - JUHD-1/1 (2) DA

RELATIVE FIELD AZIMUTH PATTERN



JAMPRO - JUHD-1/1 (2) DA, DIRECTIONAL ANTENNA
ORIENTED WITH BEAM MAXIMA AT 180°
MAXIMUM ANTENNA GAIN: 15.85x / 12.00 dBd

KESSLER & GEHMAN

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**KJHP-LP STA
MORONGO VALLEY, CA**

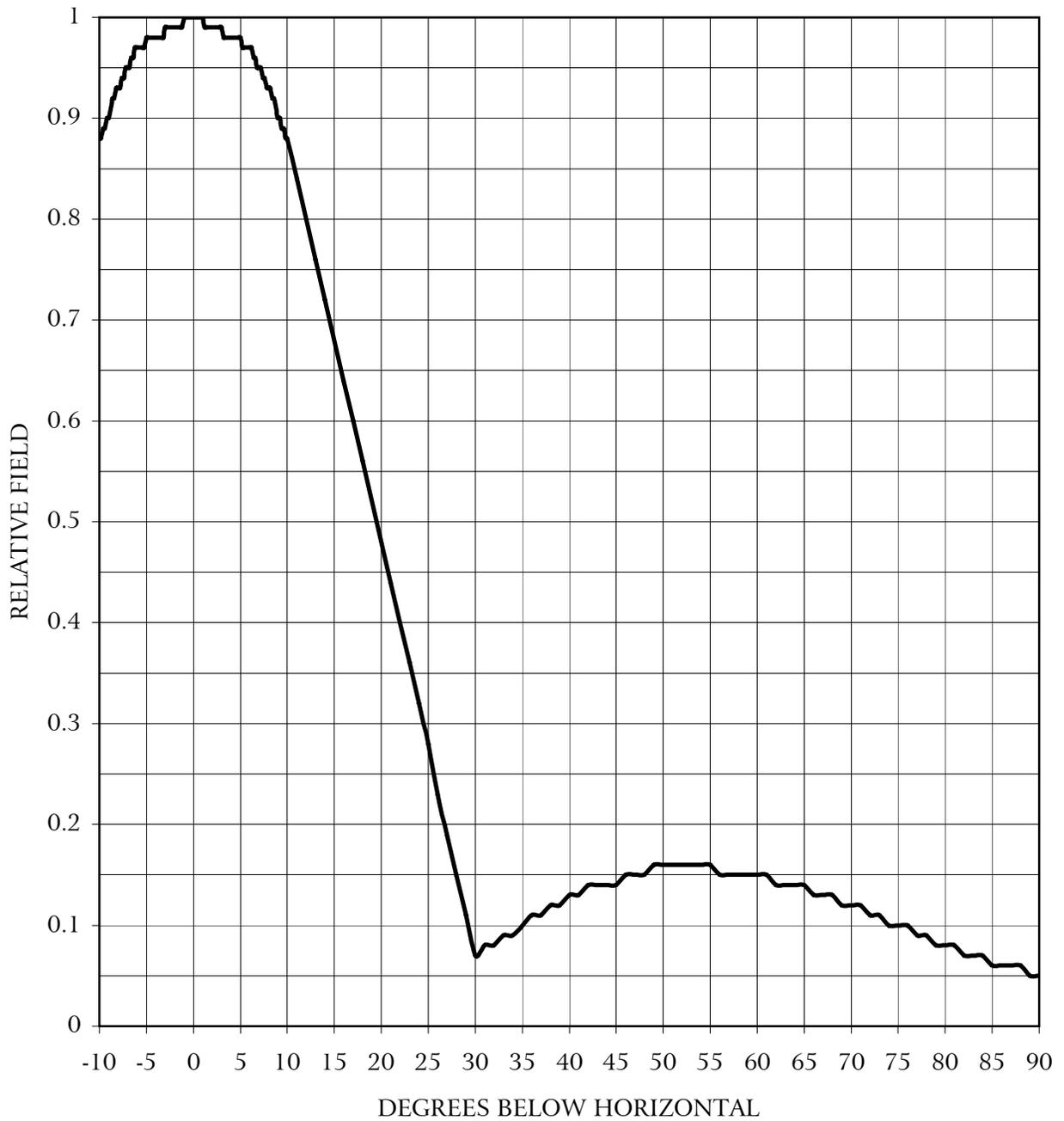
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EXHIBIT E1B

ELEVATION PATTERN

JAMPRO - JUHD-1/1 (2) DA

Beam Tilt 0.0 deg
Frequency 497.0 MHz



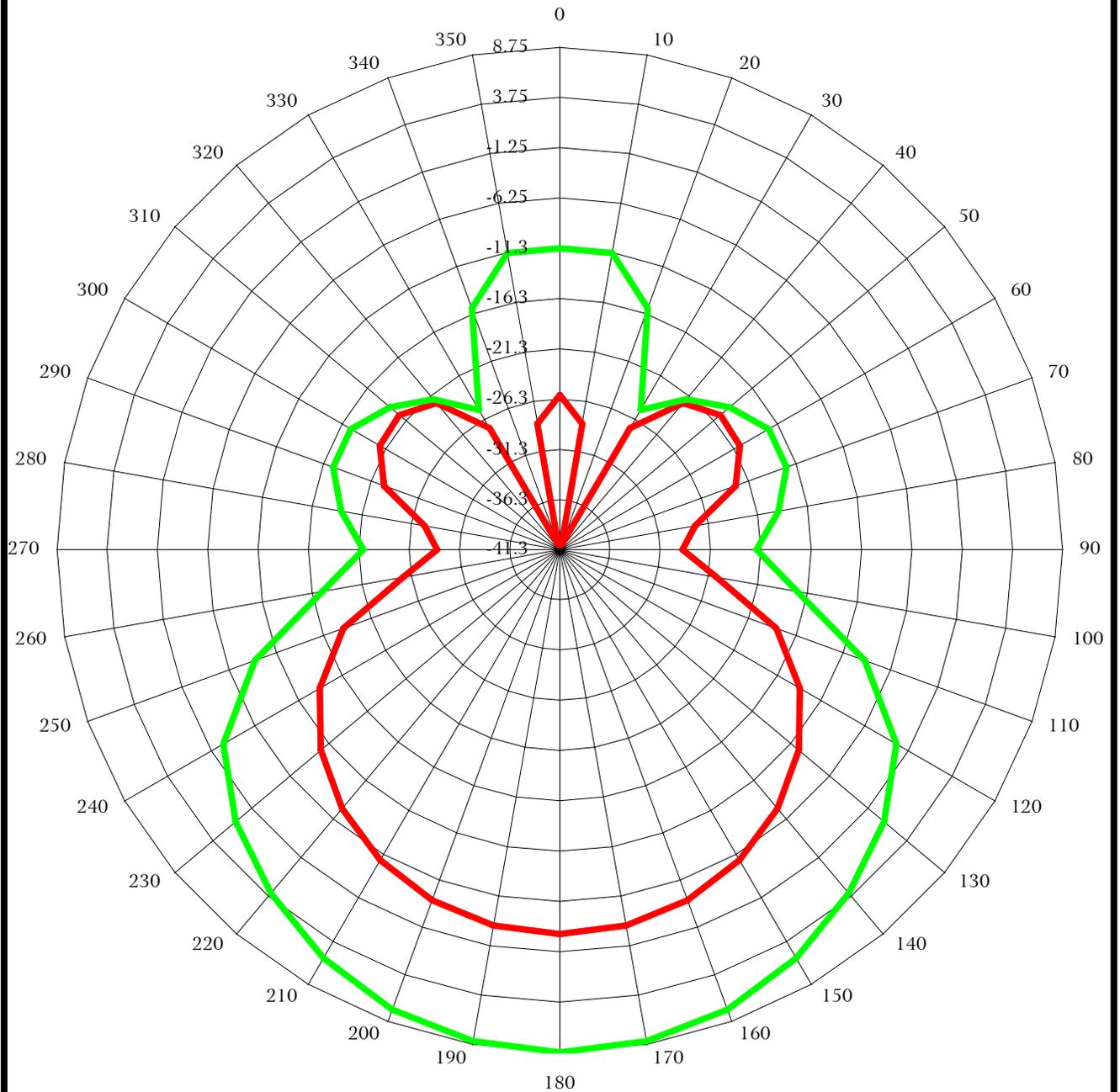
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**KJHP-LP STA
MORONGO VALLEY, CA**

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EXHIBIT E1C

ERP - DBK CP - VS - STA



* THE GREEN LINE INDICATES THE PEAK ERP OF THE CP FACILITY.

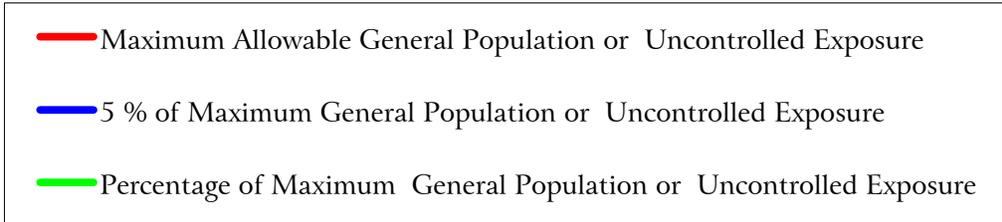
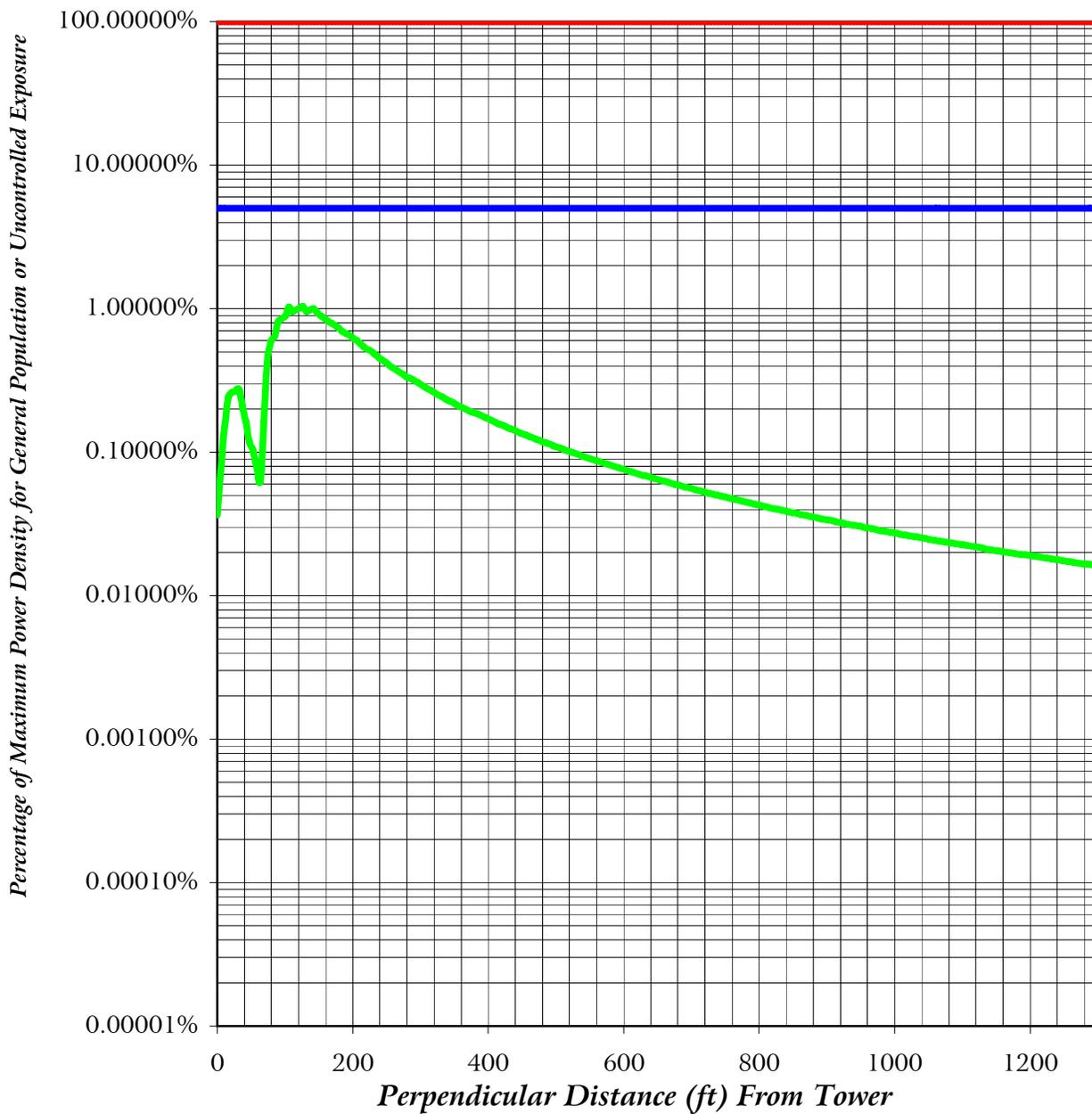
* THE RED LINE INDICATES THE PEAK ERP OF THE STA FACILITY.

KJHP-LP
MORONGO VALLEY, CALIFORNIA

AZIMUTH	<u>CP</u> ERP-DBK	<u>STA</u> ERP-DBK	DIFFERENCE DB*
0	-11.249	-25.864	14.614
10	-11.249	-28.525	17.275
20	-15.686	-40.731	25.045
30	-25.229	-27.304	2.075
40	-21.707	-22.182	0.475
50	-19.208	-20.404	1.195
60	-17.270	-20.599	3.329
70	-17.270	-22.670	5.400
80	-19.208	-27.593	8.385
90	-21.707	-29.031	7.324
100	-17.270	-25.509	8.239
110	-8.971	-18.350	9.380
120	-2.622	-13.732	11.110
130	0.792	-10.261	11.052
140	3.398	-7.579	10.977
150	5.653	-5.556	11.208
160	7.441	-4.140	11.581
170	8.396	-3.293	11.689
180	8.751	-3.010	11.761
190	8.396	-3.293	11.689
200	7.441	-4.140	11.581
210	5.653	-5.556	11.208
220	3.398	-7.579	10.977
230	0.792	-10.261	11.052
240	-2.622	-13.732	11.110
250	-8.971	-18.350	9.380
260	-17.270	-25.509	8.239
270	-21.707	-29.031	7.324
280	-19.208	-27.593	8.385
290	-17.270	-22.670	5.400
300	-17.270	-20.599	3.329
310	-19.208	-20.404	1.195
320	-21.707	-22.182	0.475
330	-25.229	-27.304	2.075
340	-15.686	-40.731	25.045
350	-11.249	-28.525	17.275

* DIFFERENCE = (CP ERP - STA ERP)

FAR FIELD EXPOSURE TO RF EMISSIONS



METHODOLOGY AND EXPLANATION OF
ENVIRONMENTAL IMPACT / RADIO FREQUENCY RADIATION
HAZARD ANALYSIS

A theoretical analysis has been conducted of the human exposure to radio frequency radiation (“RFR”) using the calculation methodology described in *OET Bulletin 65, Edition 97-01*. The RFR analysis is conducted pursuant to the following methodology:

Terrain¹ extraction is compiled from the proposed tower site to radial lengths of 0.25 miles in 0.001 mile increments for 360 radials. The power density is calculated for each terrain point at 6 feet above ground level using the elevation and azimuth pattern of the proposed broadcast antenna. The power density calculations are conducted using the lower edge of the proposed channel frequency. To account for ground reflections, a coefficient of 1.6 was included in the calculation.

The resulting cylindrical polar analysis is then summarized into a coordinate plane graph using the following methodology:

Starting from the origin the maximum calculated RFR value is determined among the 360 degree radials for each 0.001 mile increment, the value is then converted into a percentage of the maximum allowable general population or uncontrolled exposure and plotted as a function of perpendicular distance from the tower.

¹ Terrain extraction is based upon a 3 arc second point spacing terrain database.