

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KDBC LICENSE, LLC., licensee of KDBC-DT, Channel 18 in El Paso, Texas, in support of its application for modification of Construction Permit BMPCDT-20080620ANT, an authorization to operate with a maximized post-transition DTV facility. The purpose of this modification is to reduce the proposed effective radiated power from 1000 kw to 413 kw. No change in transmitter site, antenna height or antenna model is proposed herein.

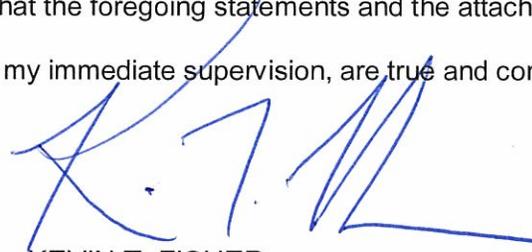
It is still intended to re-mount the licensed Dielectric directional antenna to the 120-meter level of the existing 125-meter tower on which the present KDBC-DT antenna is mounted. Exhibit B provides elevation and azimuth pattern data for the licensed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. We have determined that the proposed facility has a Longley-Rice-based, interference-free, noise-limited service population that is 99.8 percent of that which obtains from the KDBC-DT allotment facility. An interference study is included in Exhibit D, and it is important to note that the study utilized a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometer. A power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the KDBC-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

EXHIBIT A

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC has issued Antenna Structure Registration Number 1047920 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KEVIN T. FISHER

January 13, 2009

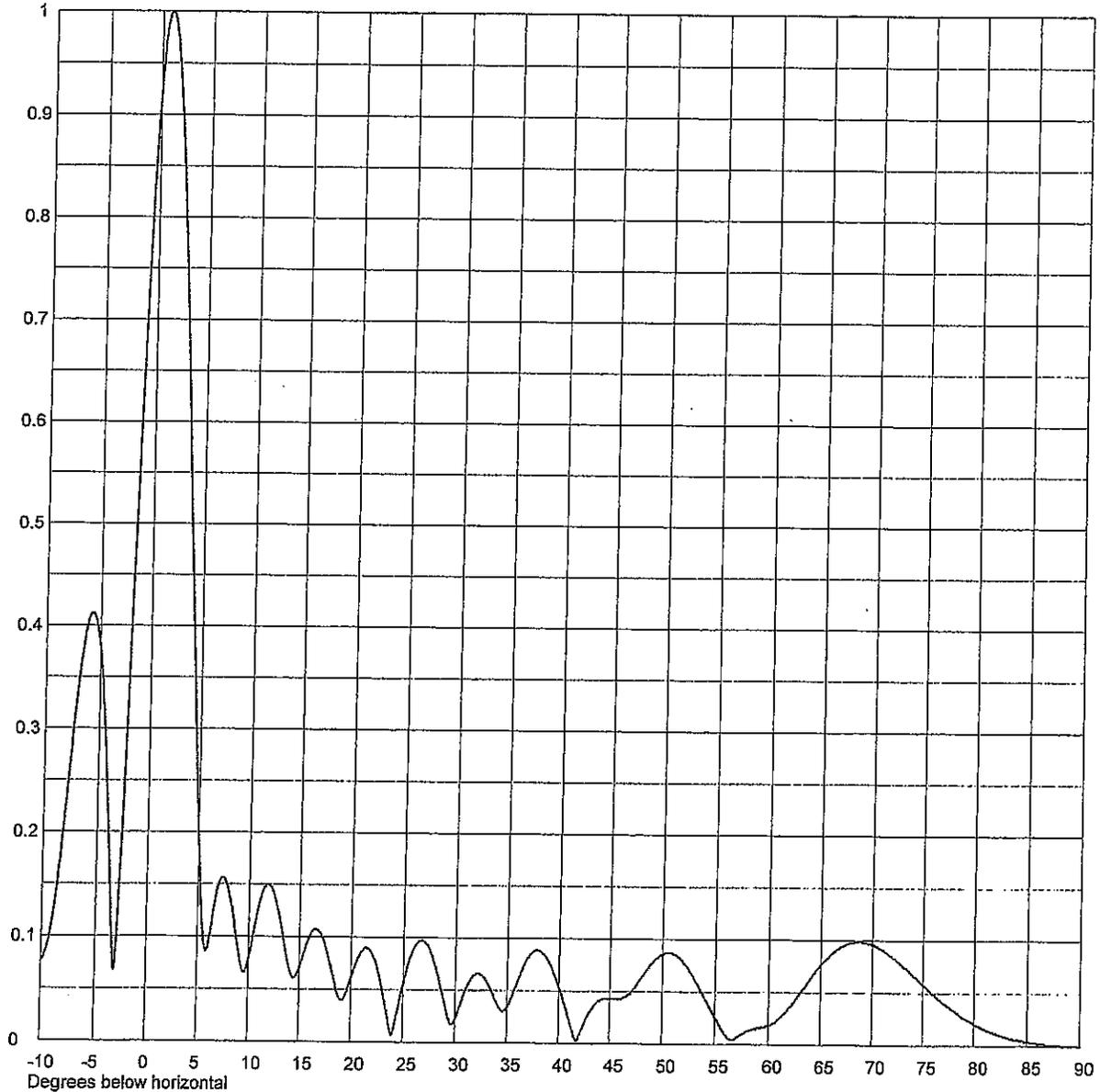
Date
Call Letters
Location
Customer
Antenna Type

20 Jun 2008

Channel 18

ELEVATION PATTERN

RMS Gain at Main Lobe	12.0 (10.79 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	10.1 (10.04 dB)	Frequency	497.00 MHz
Calculated / Measured	Calculated	Drawing #	12L120100-90



Remarks:

EXHIBIT B-1
ANTENNA ELEVATION PATTERN
PROPOSED KDBC-DT
CHANNEL 18 - EL PASO, TEXAS
[MODIFICATION OF BMPCDT-20080620ANT]
SMITH AND FISHER

Date **20 Jun 2008**

Call Letters

Channel **18**

Location

Customer

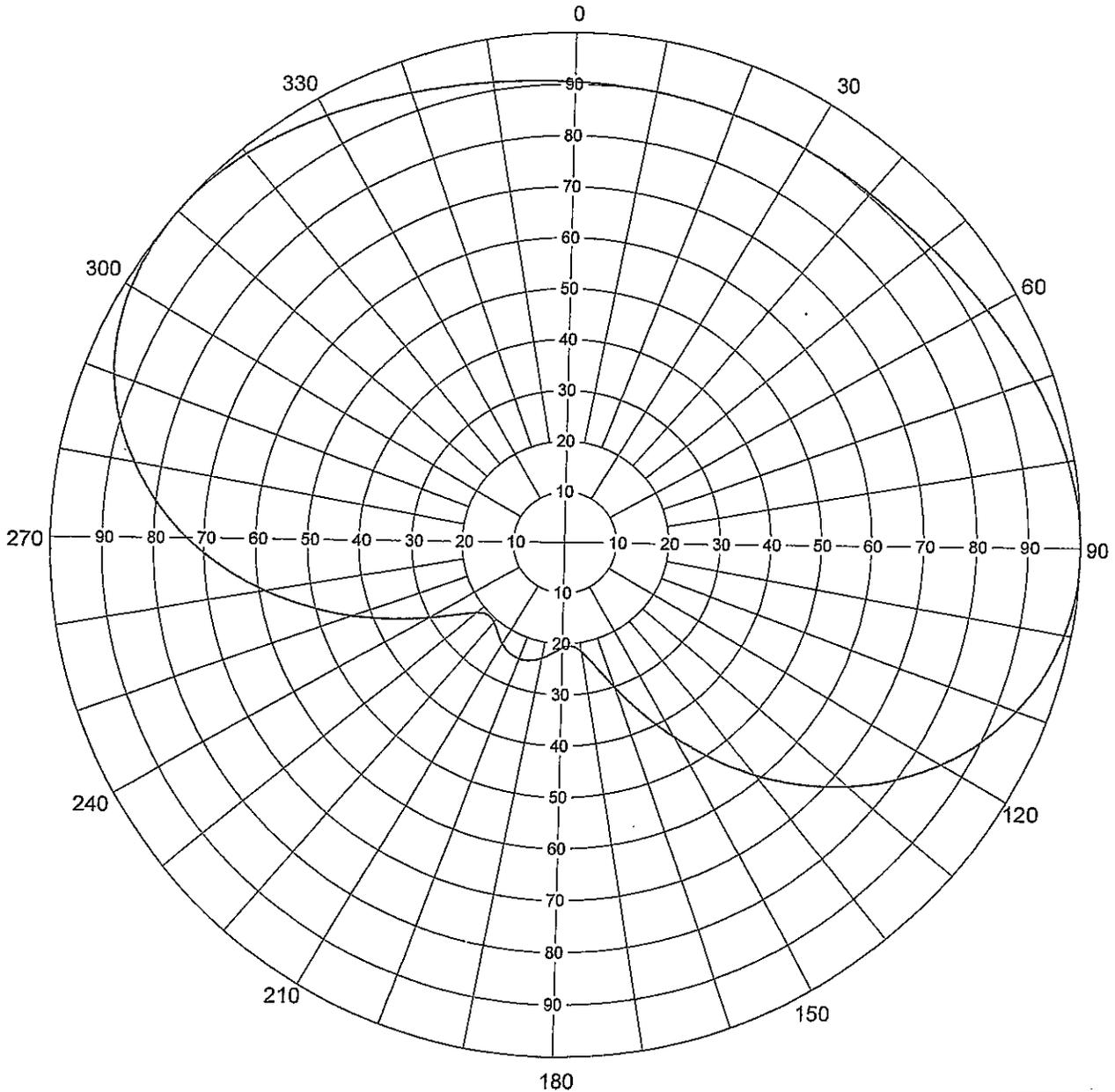
Antenna Type

AZIMUTH PATTERN

Gain
Calculated / Measured

1.70 (2.30 dB)
Calculated

Frequency **497 MHz**
Drawing # **TFU-C170**



Remarks:

EXHIBIT B-2
ANTENNA AZIMUTH PATTERN
PROPOSED KDBC-DT
CHANNEL 18 – EL PASO, TEXAS
[MODIFICATION OF BMPCDT-20080620ANT]
SMITH AND FISHER



Date **13 Jan 2009**
 Call Letters Channel **18**
 Location
 Customer
 Antenna Type **TFU-24DSC C170**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **TFU-C170**

Angle	Field	ERP (kW)	ERP (dBk)
0	0.905	338.3	25.29
10	0.900	334.5	25.24
20	0.899	333.8	25.23
30	0.900	334.5	25.24
40	0.905	338.3	25.29
50	0.917	347.3	25.41
60	0.936	361.8	25.59
70	0.963	383.0	25.83
80	0.988	403.1	26.05
90	1.000	413.0	26.16
100	0.987	402.3	26.05
110	0.940	364.9	25.62
120	0.854	301.2	24.79
130	0.733	221.9	23.46
140	0.588	142.8	21.55
150	0.437	78.9	18.97
160	0.302	37.7	15.76
170	0.218	19.6	12.93
180	0.207	17.7	12.48
190	0.232	22.2	13.47
200	0.245	24.8	13.94
210	0.232	22.2	13.47
220	0.207	17.7	12.48
230	0.218	19.6	12.93
240	0.302	37.7	15.76
250	0.437	78.9	18.97
260	0.588	142.8	21.55
270	0.733	221.9	23.46
280	0.854	301.2	24.79
290	0.940	364.9	25.62
300	0.987	402.3	26.05
310	1.000	413.0	26.16
320	0.988	403.1	26.05
330	0.963	383.0	25.83
340	0.936	361.8	25.59
350	0.917	347.3	25.41

Maxima

Angle	Field	ERP (kW)	ERP (dBk)
0	0.905	338.3	25.29
91	1.000	413.0	26.16
200	0.245	24.8	13.94
309	1.000	413.0	26.16

Minima

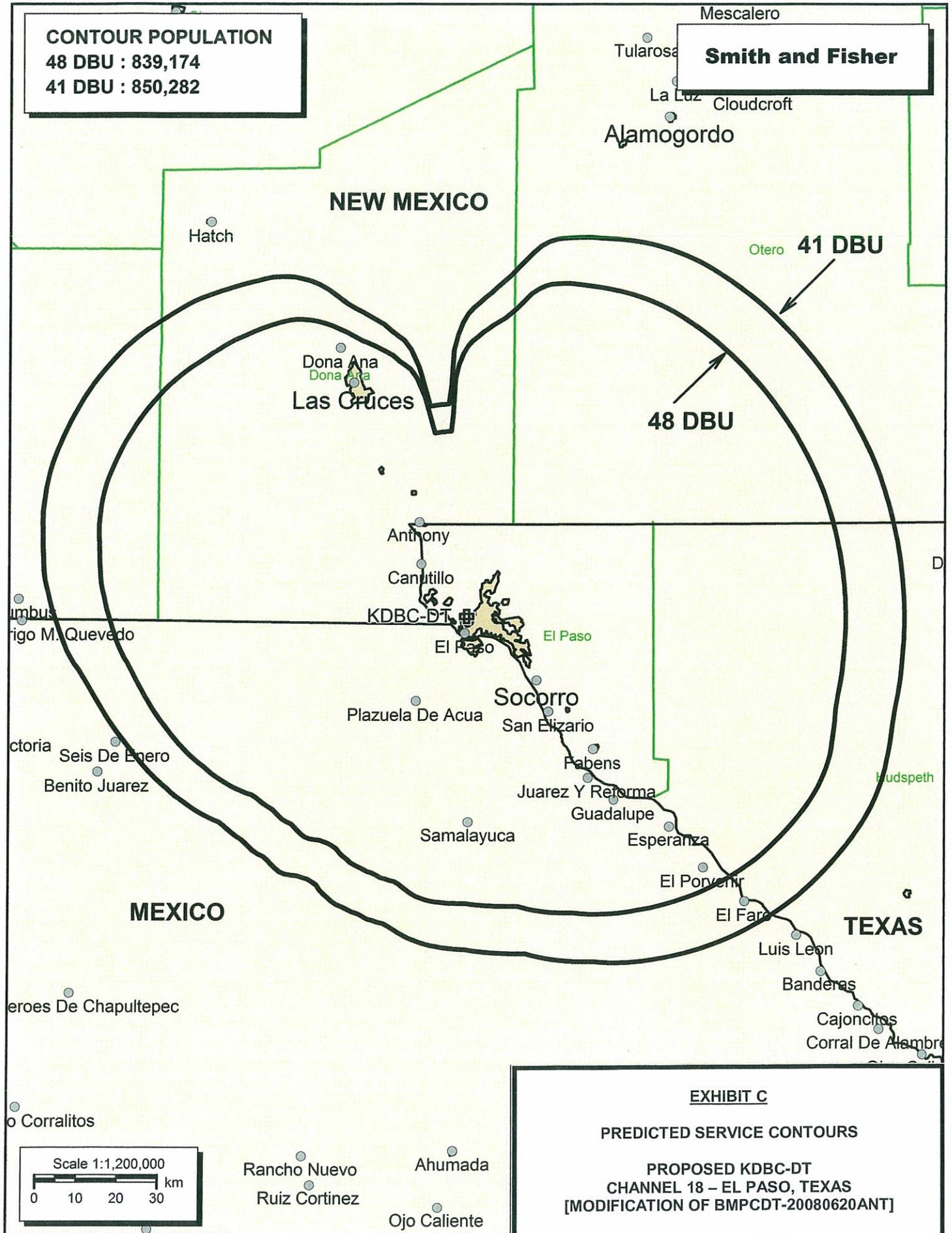
Angle	Field	ERP (kW)	ERP (dBk)
20	0.899	333.8	25.23
176	0.204	17.2	12.35
224	0.204	17.2	12.35

Remarks:

EXHIBIT B-3
ANTENNA RELATIVE FIELD VALUES
PROPOSED KDBC-DT
CHANNEL 18 – EL PASO, TEXAS
[MODIFICATION OF BMPCDT-20080620ANT]
 SMITH AND FISHER

CONTOUR POPULATION
48 DBU : 839,174
41 DBU : 850,282

Smith and Fisher



INTERFERENCE STUDY
PROPOSED KDBC-DT
CHANNEL 18 – EL PASO, TEXAS
[MODIFICATION OF BMPCDT-20080620ANT]

The instant application specifies an ERP of 413 kw (directional) at 467 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various post-transition digital television facilities as they will exist on or before February 17, 2009, the date by which all stations must operate with the parameters recently adopted in the Commission's DTV Table of Allotments.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe III" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed KDBC-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed KDBC-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted KDBC-DT facility) to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed KDBC-DT facility does not cause significant (0.5%) interference within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

EXHIBIT D-2

INTERFERENCE STUDY SUMMARY

PROPOSED KDBC-DT
CHANNEL 18 – EL PASO, TEXAS
[MODIFICATION OF BMPCDT-20080620ANT]

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From KDBC-DT*</u>	<u>%</u>
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[NO STATIONS AFFECTED]

*Above that caused by the allotment facility.

POWER DENSITY CALCULATION

PROPOSED KDBC-DT
CHANNEL 18 – EL PASO, TEXAS
[MODIFICATION OF BMPCDT-20080620ANT]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this El Paso facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 413 kw, an antenna radiation center 120 meters above ground, and based on a standard Dielectric 12-bay antenna elevation pattern, maximum power density two meters above ground of 0.0087 mw/cm^2 is calculated to occur 48 meters north-northeast of the base of the tower. Since this is only 2.6 percent of the 0.33 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 18 (494-500 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.