EXHIBIT E

ENGINEERING STATEMENT
RE REQUEST FOR SPECIAL TEMPORARY AUTHORITY
FOR EARLY DTV OPERATION ON
POST-TRANSITION CHANNEL
KETA-DT, OKLAHOMA CITY, OKLAHOMA
CHANNEL 13 50 KW ERP 465 METERS HAAT

JANUARY 2009

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 30th day of January, 2009.

Notary Public

My Commission Expires: 2/28/2013

Introduction

This engineering statement has been prepared on behalf of Oklahoma Educational Television Authority ("KETA"), licensee of TV station KETA(TV), Oklahoma City, Oklahoma, as part of its request for Special Temporary Authority ("STA") to initiate early operation of its post-transition DTV station at approximately [1:00 PM CST] on February 17, 2009 its authorized power. At present, KETA-DT operates on DTV Channel 32 (578-584 MHz) with 1000 kW effective radiated power ("ERP") directional and 463.5 meters antenna height above average terrain ("HAAT").

Station KETA-DT has been allotted its current analog Channel 13 (210-216 MHz) for its permanent, post-transition digital TV operation and been authorized to construct a facility (FCC File No. BMPEDT-20080620ABQ) with 50 kW non-directional ERP and 465 meters HAAT. KETA-DT desires to operate these facilities as authorized by the construction permit. It is shown herein in this request that early DTV commencement by KETA-DT protects all pre-transition analog and digital operations. The final phase of construction for the Channel 13 DTV facilities can be carried out only after analog Channel 13 goes permanently silent. This filing is in accordance with Paragraphs 121 through 123 of the Third Periodic Review.[1]

Antenna Site

There is no change in the proposed antenna site. The authorized DTV Channel 13 antenna is top-mounted on the tower (Exhibit E-1) with its center of radiation at 820 meters above ground level. The antenna site is located at 7401 North Kelley Avenue, Oklahoma City, Oklahoma. The antenna structure registration number is 1010943.

[1] "In the Matter of Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television", MB Docket No. 07-91, Report & Order (FCC 07-228), Released December 31, 2007.

The geographic coordinates of the existing tower are as follows:

North Latitude: 35° 32' 58"

West Longitude: 97° 29' 50"

NAD-27

The following data shows the pertinent information concerning the proposed reduced-power operation.

Power Data

STA Transmitter Output	7.31 kW	8.64 dBk
Combiner Loss/Efficiency	97.7%	0.1 dB
Transmission Line Efficiency/Loss	72.9%	1.37 dB
Input Power to Antenna	5.21 kW	7.17 dBk
Antenna Power Gain	9.6	9.82 dB
Effective Radiated Power	50 kW	16.99 dBk

Antenna Data

Antenna:	Harris, TAB-12H (or equivalent) with 0.75 degrees electrical beamtilt. The vertical plane pattern and other exhibits required by Section 73.625(c) are included herein as Exhibit E-2.
Transmission Line:	595 meters (1950 ft) of MYAT, Type 601-001, 6-1/8" coaxial, 50 ohm line (or equivalent)

Elevation Data

Vertical dimension for Channel 13 antenna (including lightning protection)	23.8 meters 78.0 feet
Elevation of the site above mean sea level:	353.6 meters 1160 feet
Elevation of the top of existing supporting structure above ground including appurtenances	480.5 meters 1576 feet
Elevation of the top of supporting structure above mean sea level including appurtenances	834.1 meters 2737 feet

Height of Channel 13 antenna radiation center meters above ground	466.4 meters 1530 feet
Height of Channel 13 antenna radiation center above mean sea level	820.0 meters 2690 feet
Height of Channel 13 antenna radiation center above average terrain	465.0 meters 1526 feet

Effective Radiated Power

The ERP authorized for DTV Channel 13 operation is 50 kW non-directional at 465 meters HAAT. Station KETA-DT is proposing to operate its DTV facility with a non-directional ERP of 50 kW non-directional at the same height. This power and height will ensure that the STA operation does not extend the predicted 36 dBu F(50,90) noise-limited contour in any direction beyond that authorized in the outstanding construction permit. The attached map (Exhibit E-3) shows the computed F(50,90) 43 dBu and 36 dBu contours predicted according to Section 73.625(b) of the Commission's rules based on the DTV facilities authorized in the current outstanding construction permit and are identical to the STA herein requested.

Principal Community Coverage

The Commission requires DTV stations to place a stronger signal over the principal community. The proposed STA operation of Station KETA-DT Channel 13 places a predicted 43 dBu contour over the community of license as shown in Exhibit E-3.

Topographic Data

The average elevation data of the eight cardinal radials from 3.2 to 16.1 kilometers, are based on the NGDC 3-second computerized terrain database.

Contour Data

Utilizing the formula in Section 73.625(b)(2) for the effective heights shown on the attached tabulation, the depression angle A_h, for each azimuth has been calculated. The maximum radiation

value has been used to calculate ERP where the vertical radiation pattern at these angles is greater than 90% of the maximum.

Table I provides the distances along the eight cardinal radials to the predicted F(50,90) 43 dBu and 36 dBu contours, the average elevations, and the effective antenna heights. The distances along each radial to the limits of F(50,90) 43 dBu and 36 dBu contours were determined as specified in Section 73.625(b) by reference to the propagation data for Channels 7-13, as published by the Commission in Figures 10 and 10a, Section 73.699 of its rules.

Interference Protection

The requested STA operation adequately protects all pre-transition analog stations if these stations are operating after February 17, 2009 as well as all pre- and post-transition DTV stations. All affected stations are listed in Table II.

Population Coverage

The population coverage of the proposed STA operation is identical relative to the operation authorized in the outstanding construction permit.

Other Stations

There is one directional AM station located within 3.2 km of the existing KETA-TV tower site. WKY(AM) 930 KHz is located approximately 1.7 km away. There will be no change to the tower structure, antenna or vertical transmission line. Therefore, Section 73.1692(d) concerning modification does not apply because there will be no change in the electrical length at 930 KHz. There are no FM stations and there will be no NTSC stations (after transition) and one other full-service DTV facility within 100 meters.

Longley-Rice Predicted Service

As with its operation authorized in the outstanding construction permit, KETA-DT DTV Channel 13 will remain in compliance with radio frequency field ("RFF") safety guidelines, FAA requirements, and environmental statutes.

The total "worst-case" post-transition RFF contribution by KETA-DT two meters above the ground near the base of the KETA-DT tower is no more than 1.0% of the FCC guidelines for an uncontrolled environment and no more than 0.2% of the FCC guidelines for a controlled environment. A similar RFF contribution will result for the operation by KWTV-DT which will also be diplexed into the same antenna.

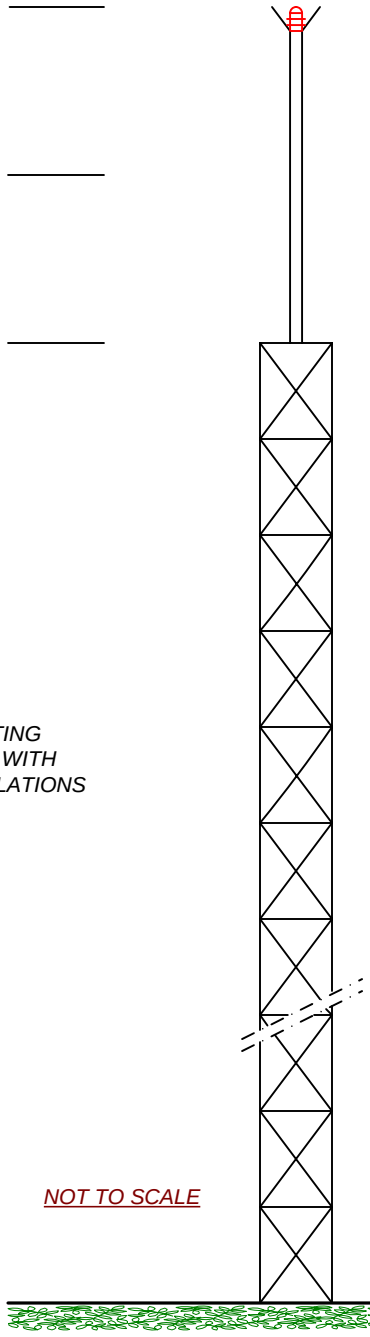
Authorized personnel and rigging contractors will be alerted to the potential zone of high field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

ABOVE GROUND | **ABOVE MEAN SEA LEVEL**

480.5 METERS (1576') — 834.1 METERS (2737')

C/R 466.4 METERS (1530') — 820.0 METERS (2690') C/R

450.0 METERS (1476') — 803.6 METERS (2636')



TOWER REGISTRATION
No. 1010943

PAINTING AND LIGHTING
ARE IN ACCORDANCE WITH
F.C.C. RULES AND REGULATIONS

NOT TO SCALE

0.0 METERS — 353.6 METERS (1160')

EXHIBIT E-1
VERTICAL SKETCH
FOR THE PROPOSED
PRE-TRANSITION DTV OPERATION OF
KETA-DT, OKLAHOMA CITY, OKLAHOMA
ON EXISTING MULTI-USE TOWER
JANUARY 2009

COHEN, DIPPELL AND EVERIST, P.C. Consulting Engineers Washington, D.C.

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

KETA-DT, OKLAHOMA CITY, OKLAHOMA

SPECIFICATION SUMMARY FOR FCC FILING DATA

Proposal No. D 11666 Date 3-20-86

Customer OETA

Prepared for Station KETA Channel 13

Location Oklahoma City, OK

Type TAB-12H Batwing Antenna

ELECTRICAL SPECIFICATIONS	VALUE	DB	REMARKS
Number of sections. (Bays)	12		
Vertical power gain, main lobe. (RMS gain)	9.60	9.82	
Vertical power gain, horizontal	8.58	9.33	
Horizontal gain, main lobe			Omnidirectional
Maximum overall gain	9.60	9.82	
Horizontal plane maximum gain			Omnidirectional
Horizontal plane minimum gain			Omnidirectional
Circularity		$\pm$ 2dB	
Peak Visual Power Rating Including 20% Aural Power	50KW	16.99 dBK	
Electrical beam tilt	$-.75^{o}$		
Vertical Pattern Drawing No.			030786-1
Horizontal Pattern Drawing No.			
MECHANICAL SPECIFICATIONS			
Overall height of antenna (Including lightning protector)	78.0 ft.		
Radiator center height above antenna base	37.7 ft.		
Input Connection	Single 6 1/8" 50 Ohm EIA		
Moment M	142,000 ft. lbs.		Based on 50 lb.
Horizontal Shear S	4,500 lbs.		EIA wind
Weight W (CALCULATED)*	10,500 lbs.		

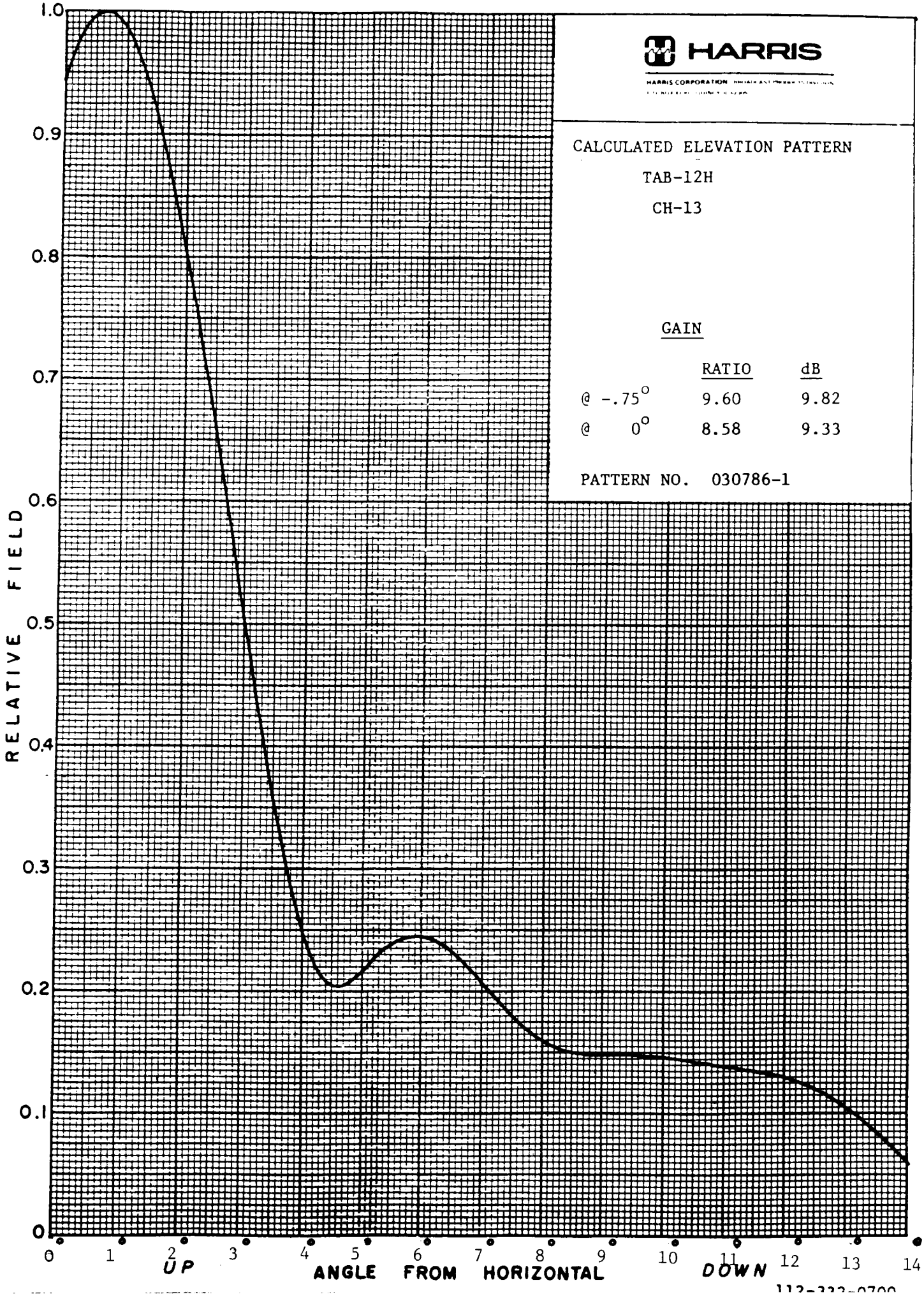
* ACTUAL WEIGHT MAY VARY AND WILL BE SUPPLIED BY HARRIS PRIOR TO SHIPMENT.

Prepared By:

Kerry Cozad

HARRIS

HARRIS CORPORATION BROADCAST GROUP
P.O. BOX 4290 QUINCY, IL. 62305


HARRIS
HARRIS CORPORATION
CALCULATED ELEVATION PATTERN
TAB-12H
CH-13
GAIN
RATIO
dB
@ -.75°
9.60
9.82
@ 0°
8.58
9.33
PATTERN NO. 030786-1
RELATIVE FIELD
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
UP
ANGLE FROM HORIZONTAL
DOWN

Cohen, Dippell and Everist, P.C.

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED PRE-TRANSITION DTV OPERATION OF
KETA-DT, OKLAHOMA CITY, OKLAHOMA
CHANNEL 13 50 KW 465 METERS HAAT
JANUARY 2009

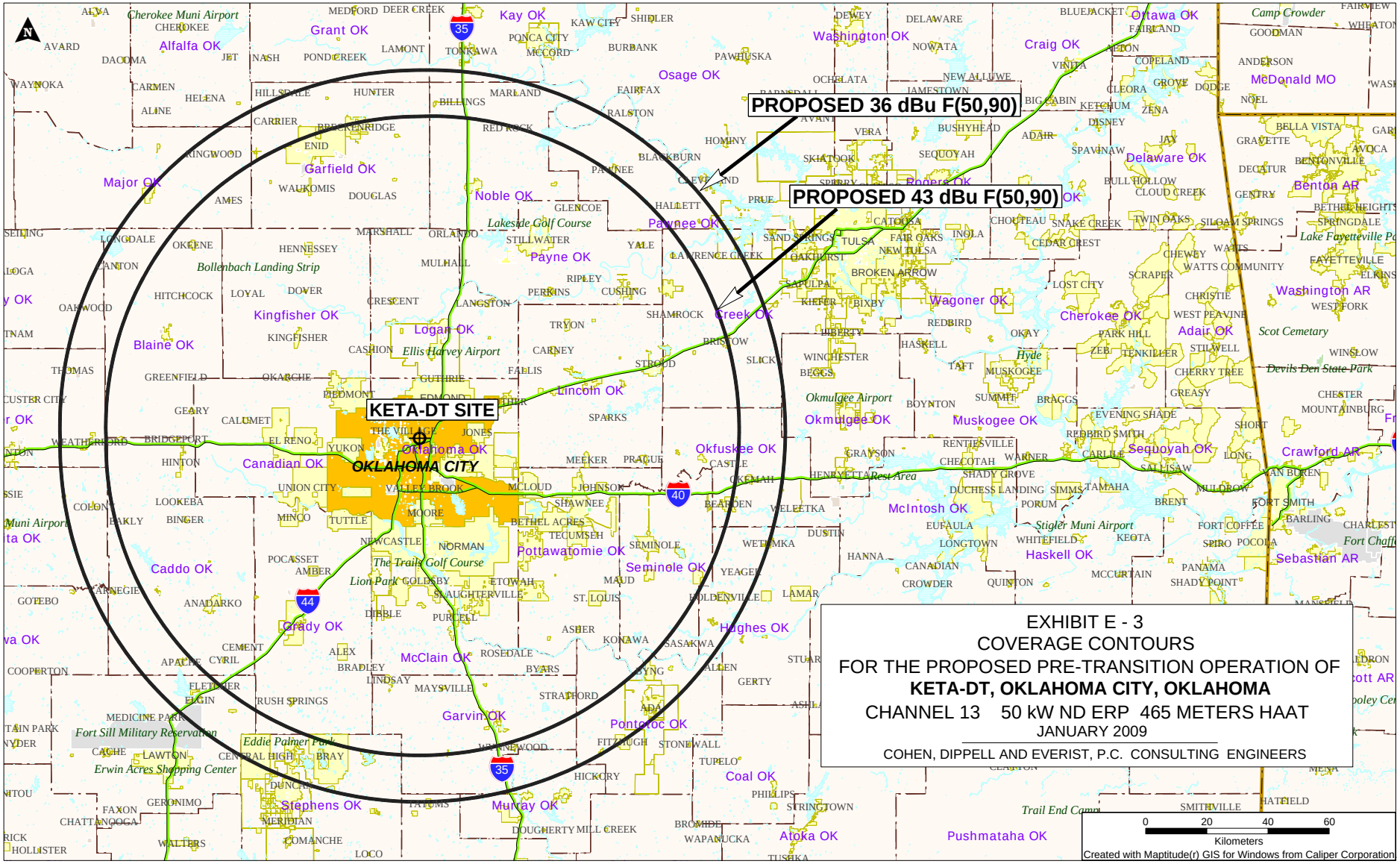
Radial Bearing N ° E, T	Average* Elevation 3.2 to 16.1 km meters	Effective Height meters	Depression Angle	ERP At Radio Horizon kW	Distance to Contour F(50,90) 43 dBu City Grade km	36 dBu Noise-Limited km
0	349.6	470.4	0.601	50	104.7	119.8
45	323.3	496.7	0.617	50	106.7	121.2
90	353.3	466.7	0.598	50	104.4	119.5
135	360.1	459.9	0.594	50	103.9	119.0
180	368.2	451.8	0.589	50	103.2	118.3
225	363.0	457.0	0.592	50	103.6	118.8
270	375.5	444.5	0.584	50	102.6	117.6
315	347.1	472.9	0.602	50	104.9	119.9
Average	355	465				

*Based on data from FCC 3-second data base

DTV Channel 13 (210-216 MHz)
Average Elevation 3.2 to16.1 km 355 meters AMSL
Center of Radiation 820 meters AMSL
Antenna Height Above Average Terrain 465 meters
Effective Radiated Power 50 kW (16.99 dBk) Max.

North Latitude: 35° 32' 58"
West Longitude: 97° 29' 50"

(NAD-27)


PROPOSED 36 dBu F(50,90)
PROPOSED 43 dBu F(50,90)
KETA-DT SITE
OKLAHOMA CITY
EXHIBIT E - 3
COVERAGE CONTOURS
FOR THE PROPOSED PRE-TRANSITION OPERATION OF
KETA-DT, OKLAHOMA CITY, OKLAHOMA
CHANNEL 13 50 kW ND ERP 465 METERS HAAT
JANUARY 2009
COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS
0 20 40 60
Kilometers
Created with Maptitude(r) GIS for Windows from Caliper Corporation

COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
PREDICTED PRE-TRANSITION DTV LONGLEY-RICE INTERFERENCE ANALYSIS
DUE TO PROPOSED EARLY DTV TRANSITION BY
KETA-DT, OKLAHOMA CITY, OKLAHOMA
CHANNEL 13 50 KW ND ERP 465 METERS HAAT
JANUARY 2009

Channel	Call	City/State	Dist(km)	Status	FCC File No.	Result
12	KWET	CHEYENNE OK	196.2	LIC	BLET-20050811AAR	No interference
12	KXII	SHERMAN TX	180.2	LIC	BLCT-19840229KF	-0.12%
12	KXII-DT	SHERMAN TX	180.2	CP MO	BMPCDT-20080609ACT	0.02%
12	KXII	SHERMAN TX	180.2	APP	BSTA-20080606ACG	No interference
13	KAFT	FAYETTEVILLE AR	314.6	LIC	BLET-20060627AAE	-0.26%
13	KUPK-TV	GARDEN CITY KS	366.8	LIC	BLCT-19840406KG	-0.02%
13	KUPK-DT	GARDEN CITY KS	366.8	CP MO	BMPCDT-20080609ACN	No interference
13	KOAM-DT	PITTSBURG KS	311.2	LIC	BLCDT-20050719AGE	0.02%
13	KFJX-DT	PITTSBURG KS	311.2	CP MO	BMPCDT-20080612ABW	-0.15%
13	KOAM-TV	PITTSBURG KS	311.2	GRANT	BPRM-20001212ABW	0.01%
13	WIBW-TV	TOPEKA KS	404.9	LIC	BLCT-2399	No interference
13	WIBW-DT	TOPEKA KS	405	CP MO	BMPCDT-20080613AAC	No interference
13	K53DS	LAWTON OK	146	CP	BDISDTT-20060403ACZ	3.42%
13	K33EK	TULSA OK	145.2	LIC	BLTTV-20050906ABI	-0.11%
13	NEW	ABILENE TX	417.4	CP	BNPTVL-20000830BHI	No interference
13	KDAX-LP	AMARILLO TX	394.7	LIC	BLTVL-20070319AAH	No interference
13	NEW	AMARILLO TX	406.2	APP	BNPTVL-20000831BAD	No interference
13	NEW	AMARILLO TX	395	APP	BNPTVL-20000830BLG	No interference
13	NEW	AMARILLO TX	407.4	APP	BNPTVL-20000831EKY	No interference
13	NEW	AMARILLO TX	395.2	APP	BNPTVL-20000830BHV	No interference
13	KERA-TV	DALLAS TX	334	LIC	BLET-20060530ADR	-0.06%
13	NEW	GAINESVILLE TX	192.7	APP	BNPTVL-20000830BLQ	No interference
13	K13YP	PARIS TX	278	LIC	BLTVL-20070502ABA	No interference
13	K13YP	PARIS TX	278.2	APP	BSTA-20080117AAD	No interference
13	K13YN	SMITH HILL TX	389.5	APP	BSTA-20080117AAB	No interference
13	NEW	WICHITA FALLS TX	204.9	APP	BNPTVL-20000816AAJ	No interference
13	NEW	WICHITA FALLS TX	208.4	APP	BNPTVL-20000831CIY	No interference
13	NEW	WITCHITA FALLS TX	215.2	APP	BNPTVL-20000831BWC	No interference