

ENGINEERING STATEMENT
RE DTV BROADCAST ENGINEERING DATA
APPLICATION FOR MODIFICATION OF
CONSTRUCTION PERMIT
(FCC FILE NO. BMPCDT-20080305ABQ)
KBTB-DT, PORT ARTHUR, TEXAS
CHANNEL 40 1000 KW ND ERP 252.8 METERS HAAT

NOVEMBER 2008

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;

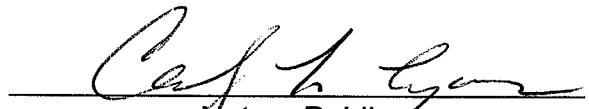
That his qualifications are a matter of record in the Federal Communications Commission;

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 24th day of November, 2008.


Notary Public

My Commission Expires: 2/28/2013



COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Martin R. Doczkat being duly sworn upon his oath, deposes and states that:


He is a graduate electrical engineer of the Pennsylvania State University, and is a staff engineer at 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 the attached engineering report was prepared by him or under his supervision and direction and

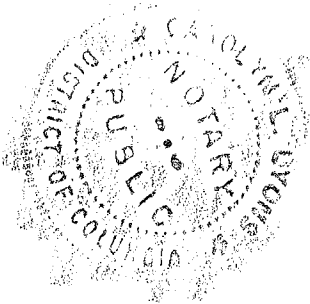
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


Martin R. Doczkat

Subscribed and sworn to before me this 24th day of November, 2008.


Notary Public

My Commission Expires: 2/28/2013



This engineering statement has been prepared on behalf of Nexstar Broadcasting, Inc. (“Nexstar”), licensee of KBTB-DT, Port Arthur, Texas. The purpose of this engineering statement is to request a modification of the outstanding construction permit (FCC File No. BMPCDT-20080305ABQ) for post-transition digital television (“DTV”) facilities.

KBTB-TV is licensed to operate on NTSC television Channel 4 with a maximum visual effective radiated power (“ERP”) of 100 kW (horizontal polarization) and height above average terrain (“HAAT”) of 360 meters. KBTB-DT has been allocated DTV Channel 40 with facilities of 1000 kW non-directional ERP at an HAAT of 360 meters in the final DTV Table of Allotments.¹ KBTB-DT requested in its outstanding construction permit (FCC File No. BMPCDT-20080305ABQ) to construct its Channel 40 DTV facilities of 1000 kW directional ERP at an HAAT of 372 meters. KBTB-DT now requests to construct its Channel 40 DTV facilities of 1000 kW non-directional ERP (horizontal polarization) at an HAAT of 252.8 meters from a replacement tower immediately adjacent to its currently licensed NTSC site.

The DTV antenna will be top-mounted on the replacement tower. The proposed replacement tower will have an overall structure height above ground of 260.7 meters (855.3 feet). Exhibit E-1 shows a vertical sketch and the arrangement of the antenna on the tower. The proposed antenna structure will be located 2.4 miles south off Highway 12 in Vidor, Texas, immediately adjacent to the existing antenna structure that supports the currently licensed KBTB-TV NTSC antenna. An

¹“In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service”, MM Docket 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (FCC 08-72) Released March 6, 2008.

independent aeronautical consultant is in the process of coordinating the obstruction evaluation through the Federal Aviation Administration for the proposed antenna structure.

The geographic coordinates of the site are:

North Latitude: 30° 09' 20"

West Longitude: 93° 59' 10"

NAD-27

Equipment Data

| | | |
|----------|------------|------------------|
| Antenna: | Dielectric | TFU-31JTH-R O4 |
| | Beam Tilt | 0.75° electrical |
| | Power Gain | 30 |

Antenna information per Section 73.625 of the FCC Rules is provided in Exhibit E-2.

Power Data

| | | |
|--|---------|-----------|
| Transmitter output | 42.8 kW | 16.32 dBk |
| Total Transmission line efficiency/loss Dielectric, 6-1/8", 75 ohm rigid or equivalent, length: 271.3 meters (890 feet) | 77.8% | 1.09 dB |
| Input Power to the antenna | 33.3 kW | 15.23 dBk |
| Antenna power gain | 30 | 14.77 dB |
| Effective Radiated Power | 1000 kW | 30 dBk |

Elevation Data

| | |
|---|----------------------------|
| Vertical dimension of Channel 40 top-mounted antenna (less beacon and lightning protection) | 15.6 meters 51.3 feet |
| Overall height above ground of new antenna structure (including appurtenances) | 260.7 meters 855.3 feet |
| Center of radiation of Channel 40 antenna above ground | 251.8 meters 825.7 feet |
| Elevation of site above mean sea level | 6.0 meters 19.7 feet |
| Center of radiation of Channel 40 antenna above mean sea level | 257.8 meters 845.4 feet |
| Overall height above mean sea level of new tower (including appurtenances) | 266.7 meters 875 feet |
| Antenna height above average terrain | 252.8 meters |

Coverage

The average elevation data for 3.2 to 16.1 km along the eight cardinal radials has been determined from the NGDC 3-second database. The F(50,90) DTV coverage contours have been computed from reference to the propagation data for Channel 40 as published by the FCC in Figure 10b and 10c, Section 73.699 of the FCC Rules and Regulations. Utilizing the formula in Section 73.625(b)(2) of the rules for the effective heights, it is found that the depression angle, A_h , varies from 0.437 to 0.442 degrees. Since the relative vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Exhibit E-3 shows the proposed KBTB-DT, 48 dBu and 41 dBu F(50,90) coverage contours on a map and includes the legal boundaries of Port Arthur, Texas.

Exhibit E-4 shows the proposed KBTB-DT operation in relation to the authorized KBTB-DT construction permit and allotted service areas.

Designated Market Area ("DMA")

Based on the 2000 population published by the Bureau of the Census, the population within the Beaumont-Port Arthur DMA is 456,637 persons, including 35,604 persons in Jasper County, 20,871 in Tyler County, 15,072 in Newton County, 48,073 in Hardin County, 252,051 in Jefferson County, and 84,966 in Orange County.

The population within the DMA that is predicted to be served by the current construction permit is 453,746 persons based on the contour method, which includes the entire DMA population except for the northernmost regions of Tyler, Jasper, and Newton Counties outside of the predicted KBTB-DT CP noise-limited contour (a total population excluded of 2,891 persons).

The population within the DMA that is predicted to be served by the current construction permit and is also predicted to be served by the proposed operation of KBTB-DT is 447,000 persons based on the contour method, which excludes the following areas of the DMA:

- the northernmost regions of Tyler, Jasper, and Newton Counties outside of the predicted KBTB-DT proposed noise-limited contour (6,746 persons);

Therefore, the population within the DMA that is predicted to be served by the current construction permit and is also predicted to be served by the proposed operation of KBTB-DT is

approximately 98.5% of the population within the DMA that is predicted to be served by the current construction permit.

In summary, the predicted service within the Beaumont-Port Arthur DMA based on the contour method complies with requirement (2) in Paragraph 140 of the Third Periodic Review Report and Order.² Additionally, the proposed operation of KBTB-DT does not seek to expand its facilities beyond its final post-transition DTV Table Appendix B³ facilities.

NBC Network Affiliates

KBTB-DT is an NBC affiliate. Exhibit E-5 demonstrates that the contours for the currently authorized DTV facilities for the NBC affiliate in the Lake Charles, Louisiana DMA (which borders the Beaumont-Port Arthur DMA to the east) and Houston, Texas DMA (which borders the Beaumont-Port Arthur DMA to the west) significantly overlap into the Beaumont-Port Arthur DMA. Therefore, granting the present application will not result in any significant loss of DTV NBC programming. Nearly 100% of the population of the Beaumont-Port Arthur DMA will receive over-the-air DTV NBC programming, and there will be no resulting loss of network programming service to viewers outside of the Beaumont-Port Arthur DMA.

²“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.

³“In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service”, MM Docket 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (FCC 08-72) Appendix B, Released March 6, 2008.

Interference Analysis

A study of predicted interference caused by the proposed KBTv-DT operation has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (February 6, 2004) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a WindowsXP platform. Comparison of service/interference areas and population indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculation identical to the FCC's program. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 2 sq. km. Using 3-second terrain data sampled approximately every 1.0 km at one-degree azimuth intervals with 2000 census centroids, all studies are based upon data in the current CDBS database update of the FCC's engineering database and the final DTV Table of Allotments. A Longley-Rice study was performed with the proposed KBTv-DT facilities and all relevant stations listed in the FCC database as of November 17, 2008. The study results and the included stations are listed in Table II. No potentially affected station is predicted to receive more than 0.5% interference.

Other Licensed and Broadcast Facilities

There are no AM stations located within 3.22 kilometer of the proposed site. According to CDBS, the proposed operation of KBTv-DT will be the only full-service post-transition television station located within one kilometer of the proposed site. Other authorized broadcast stations anticipated to be included after the DTV transition are KKMY(FM) and KIOC(FM). No other

broadcast stations are anticipated to be operating within one kilometer of the proposed site. No adverse technical effect is anticipated by the DTV operation to any other FCC licensed facility, however, if any problems occur, the permittee will take the necessary steps to resolve them.

Radio Frequency Field Level ("RFF" Level)

| <u>Station</u> | <u>ERP</u> (kW) | <u>Frequency</u> (MHz) | <u>Ch</u> | <u>RCAGL*</u> * (m) | <u>F*</u> | <u>S (μW/cm²)</u> | Uncontrolled <u>RFF</u> (%) | Controlled <u>RFF</u> (%) |
|---------------------|--------------------|---------------------------|-----------|---------------------------|-----------|------------------------------|-----------------------------------|---------------------------------|
| KBTv-DT Proposed | 1000 | 626-632 | 40 | 249.8 | 0.05 | 1.3 | 0.4% | 0.1% |
| KKMY(FM) CP | 200 | 104.5 | 283 | 321 | 0.3 | 5.8 | 2.9% | 0.6% |
| KIOC(FM) Lic | 200 | 106.1 | 291 | 321 | 0.3 | 5.8 | 2.9% | 0.6% |

*F = assumed value

** RCAGL - 2 meters

The proposed KBTv-DT facilities are predicted to contribute less than approximately $2 \mu\text{W}/\text{cm}^2$ or less than 1% of the FCC guidelines for an uncontrolled environment which is less than 0.2% of the FCC guidelines for a controlled environment. The total prediction post-transition RFF is less than 7% of the FCC guidelines for an uncontrolled environment which is less than 1.4% of the FCC guidelines for a controlled environment.

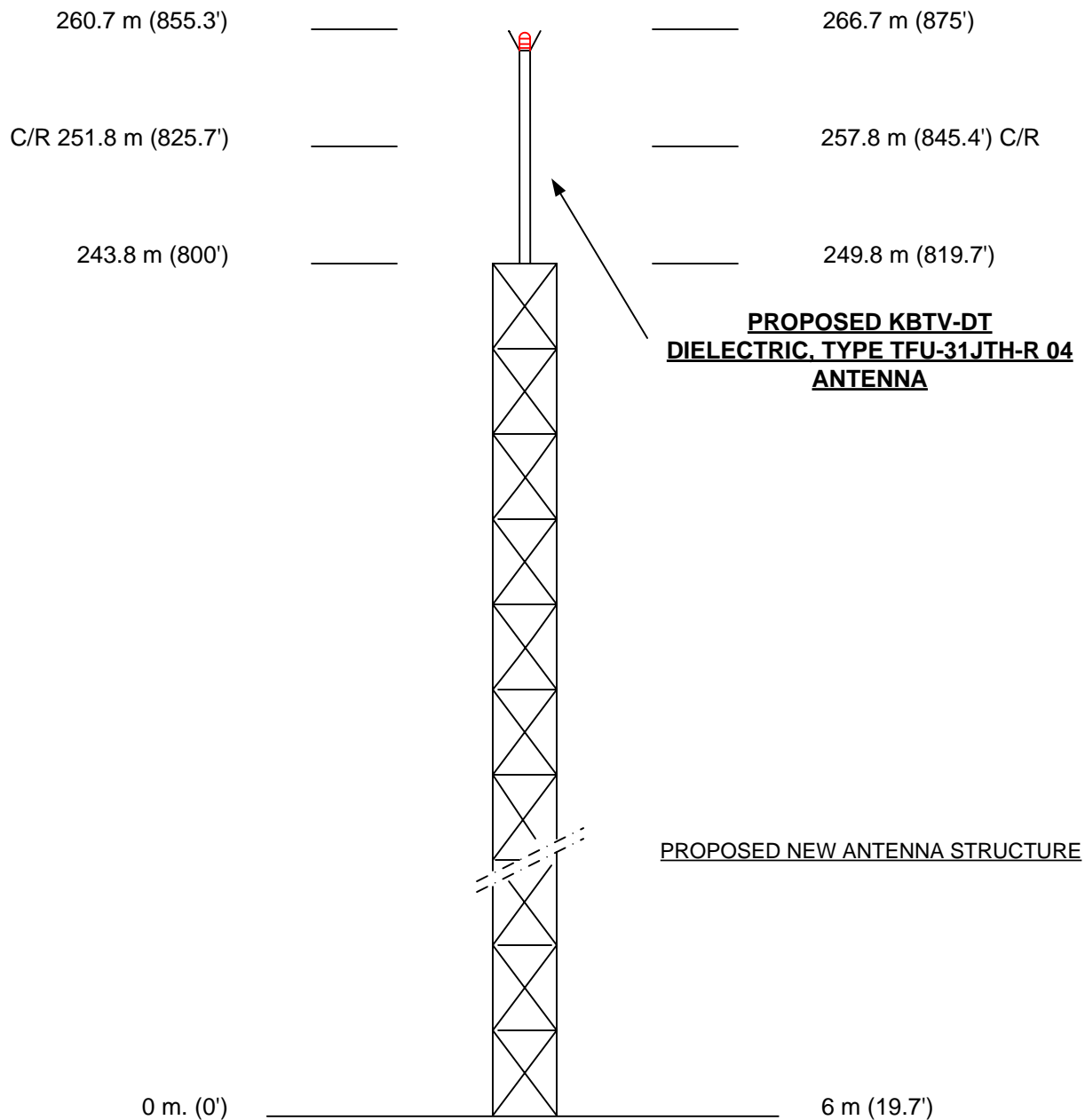
Authorized personnel and rigging contractors will be alerted to the potential zone of high field levels on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors 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.

Environmental Assessment

An environmental assessment (“EA”) has been performed by Environmental Corporation of America for the proposed replacement tower and is attached as Exhibit E-6. Please see Exhibit E-6 for the complete EA.

ABOVE GROUND

ABOVE MEAN SEA LEVEL



NOT TO SCALE

EXHIBIT E - 1
VERTICAL SKETCH
FOR THE PROPOSED OPERATION OF
KBTv-DT, PORT ARTHUR, TEXAS
NOVEMBER 2008

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

KBTV-DT, PORT ARTHUR, TEXAS



Proposal #: **C-00938-1**
 Call Letters: **KBTB-DT**

Antenna Type: **TFU-31JTH-R 04**
 Location: **Beaumont, TX**

Channel: **40 DTV**

| Electrical Specifications | | Value | | Remarks | |
|---|-----------|-------------------|--------------|-------------------------|------------------------|
| | | Ratio | dBd | | |
| RMS Gain at Main Lobe over Halfwave Dipole | Hpol | 30.0 | 14.77 | | |
| | Vpol | | | | |
| RMS Gain at Horizontal over Halfwave Dipole | Hpol | 16.9 | 12.28 | | |
| | Vpol | | | | |
| Peak Directional Gain over Halfwave Dipole | Hpol | | | | |
| | Vpol | | | | |
| Peak Directional Gain at Horizontal over Halfwave Dipole | Hpol | | | | |
| | Vpol | | | | |
| Circularity | | +/- 1.0 dB | | | |
| Axial Ratio | | dB | | | |
| Beam Tilt | | 0.75 deg | | | |
| Average Power | DTV | 54 kW | 17.32 dBk | Type: EIA/DCA Notes: | |
| Antenna Input: | T/L | 6-1/8 in | 75.0 ohm | | |
| Maximum Antenna Input VSWR | | Channel | 1.08 : 1 | | |
| | | | | | |
| | | | | | |
| Patterns | Azimuth | TFU-O4 | | | |
| | Elevation | 31J300075 | 31J300075-90 | | |
| | | | | | |
| Mechanical Specifications | | Metric | English | Preliminary | with 0.5 in design ice |
| Height with Lightning Protector | H4 | 16.9 m | 55.3 ft | | |
| Height Less Lightning Protector | H2 | 15.6 m | 51.3 ft | | |
| Height of Center of Radiation | H3 | 8.0 m | 25.7 ft | | |
| Basic Wind Speed | V | 193.1 km/h | 120 mi/h | Vi = 30 mph | |
| Structure Class | II | Exposure Category | C | Topographic Category | 1 |
| Effective Projected Area | (EPA)s | 5.0 m² | 54.2 ft² | Above base flange | 121 ft² |
| Moment Arm | D1 | 8.4 m | 27.5 ft | Above base flange | 26.7 ft |
| Effective Projected Area | (EPA)s | m² | ft² | | |
| Moment Arm | D3 | m | ft | | |
| Pole Bury Length | D2 | m | ft | | |
| Weight | W | 3.4 t | 7500.0 lbs | | 9,500 lbs |
| Radome | | | | | |
| Antenna designed in accordance with AISC specifications for design of structural steel for building as prescribed by TIA-222-G. | | | | | |

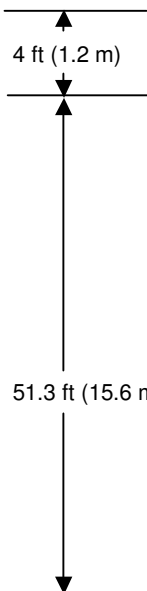
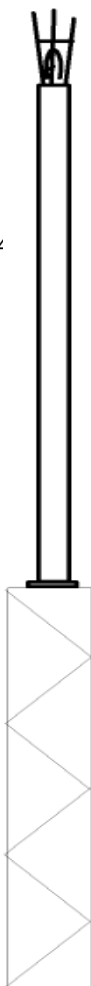
NOTE:

Prepared By : SWB JBC
 Original Date : 2-Jan-07

TLB Approved By :
 Revision: 1 Rev. Date: 22-Aug-08

JLS
 JBC

TFU-31JTH-R O4
Channel: D40



Mechanical Specifications

TIA-222-G. @ 120 mi/h (193.1 km/h)

(EPA)s = 54.2 ft²(5 m²)

D1 = 27.5 ft(8.38 m)

W = 7500 lbs(3.4 t)

with 0.5 in design ice Vi = 30 mph

(EPA)s = 121 ft²

D1 = 26.7 ft

W =9,500 lbs

Structure Class =II

Exposure Category = C

Topographic Category = 1



| | | | |
|-----------------|-----------------------|-----------|-----------|
| Proposal Number | C-00938 | Revision: | 1 |
| Date | 22-Aug-08 | | |
| Call Letters | KBTV-DT | Channel | 40 |
| Location | Beaumont, TX | | |
| Customer | Nexstar | | |
| Antenna Type | TFU-31JTH-R O4 | | |

SYSTEM SUMMARY

Antenna:

| | | | | |
|-----------|-----------------------|--------------|----------------|----------------------|
| Type: | TFU-31JTH-R O4 | ERP: | 1000 kW | (30.00 dBk) |
| Channel: | 40 | RMS Gain*: | 30.0 | (14.77 dB) |
| Location: | Beaumont, TX | Input Power: | 33.3 kW | (15.23 dBk) |

Transmission Line:

| | | | |
|------------|-----------------|--------------|----------------|
| Type: | EIA/DCA | Attenuation: | 1.09 dB |
| Size: | 6-1/8 in | Efficiency: | 77.8% |
| Impedance: | 75 ohm | | |
| Length: | 890 ft | | |

Transmitter:

Power Required: **42.8 kW** (16.32 dBk)

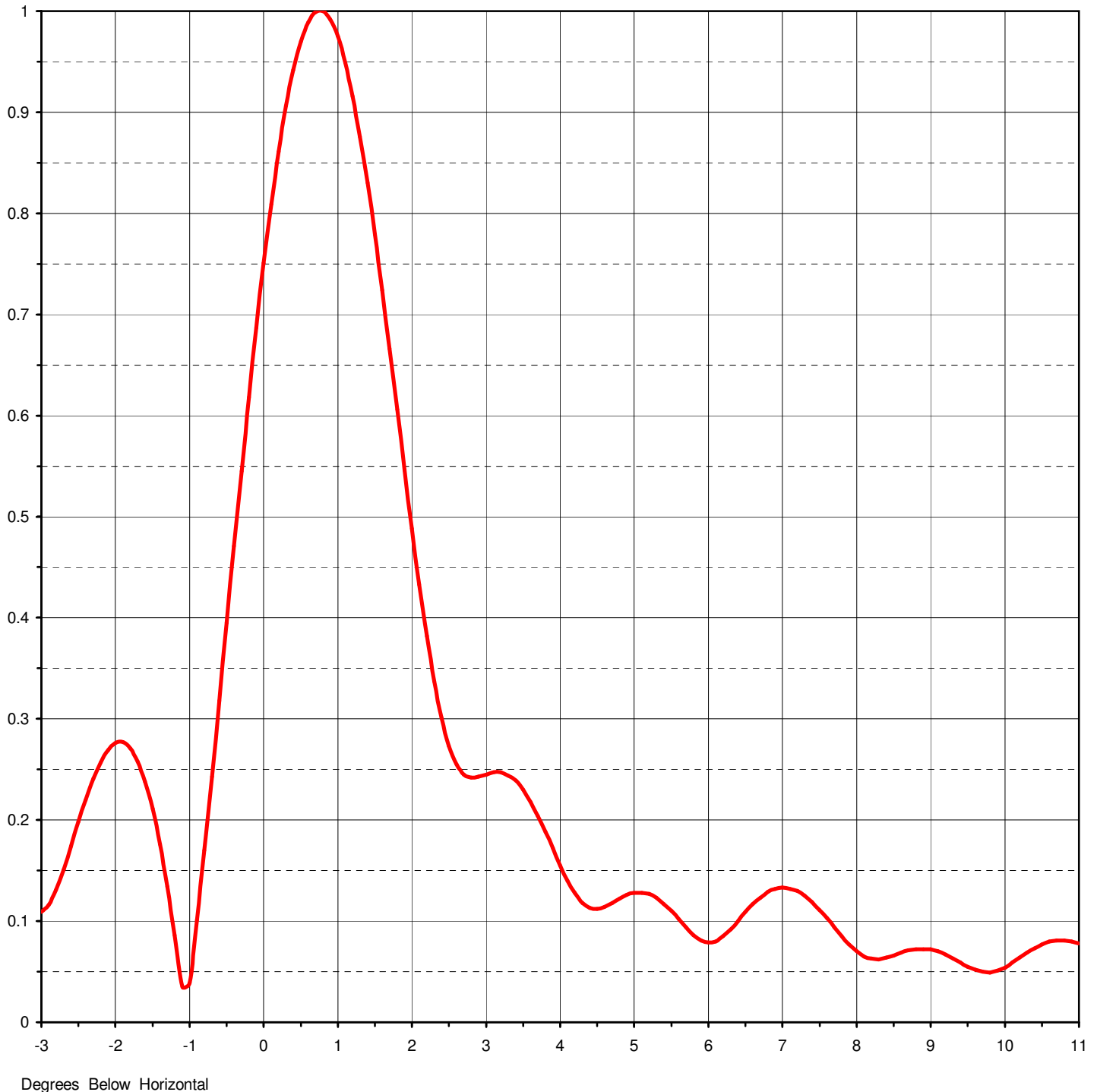
* Gain is with respect to half wave dipole.



| | | | |
|-----------------|-----------------------|-----------|-----------|
| Proposal Number | C-00938 | Revision: | 1 |
| Date | 22-Aug-08 | | |
| Call Letters | KBTV-DT | Channel | 40 |
| Location | Beaumont, TX | | |
| Customer | Nexstar | | |
| Antenna Type | TFU-31JTH-R 04 | | |

ELEVATION PATTERN

| | | | |
|------------------------|---------------------------|-----------|-------------------|
| RMS Gain at Main Lobe | 30.00 (14.77 dB) | Beam Tilt | 0.75 deg |
| RMS Gain at Horizontal | 16.90 (12.28 dB) | Frequency | 629.00 MHz |
| Calculated / Measured | Calculated | Drawing # | 31J300075 |

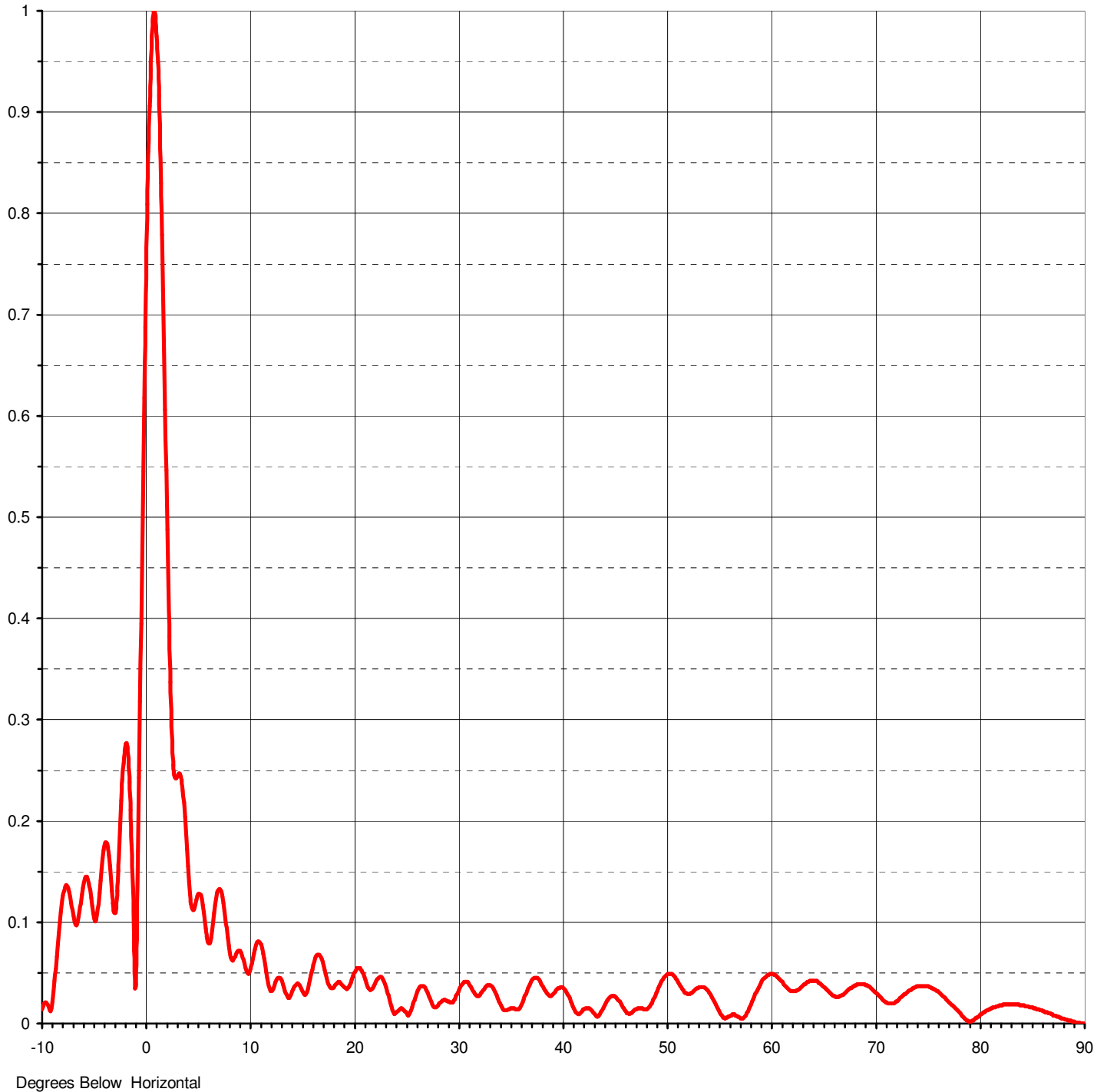




| | | | |
|-----------------|-----------------------|-----------|-----------|
| Proposal Number | C-00938 | Revision: | 1 |
| Date | 22-Aug-08 | | |
| Call Letters | KBTv-DT | Channel | 40 |
| Location | Beaumont, TX | | |
| Customer | Nexstar | | |
| Antenna Type | TFU-31JTH-R O4 | | |

ELEVATION PATTERN

| | | | |
|------------------------|---------------------------|-----------|---------------------|
| RMS Gain at Main Lobe | 30.00 (14.77 dB) | Beam Tilt | 0.75 deg |
| RMS Gain at Horizontal | 16.90 (12.28 dB) | Frequency | 629.00 MHz |
| Calculated / Measured | Calculated | Drawing # | 31J300075-90 |





Proposal Number **C-00938** Revision: **1**
 Date **22-Aug-08**
 Call Letters **KBTW-DT** Channel **40**
 Location **Beaumont, TX**
 Customer **Nexstar**
 Antenna Type **TFU-31JTH-R 04**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **31J300075-90**

| Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -10.0 | 0.014 | 2.4 | 0.301 | 10.6 | 0.077 | 30.5 | 0.040 | 51.0 | 0.043 | 71.5 | 0.020 |
| -9.5 | 0.019 | 2.6 | 0.255 | 10.8 | 0.081 | 31.0 | 0.040 | 51.5 | 0.034 | 72.0 | 0.022 |
| -9.0 | 0.022 | 2.8 | 0.242 | 11.0 | 0.080 | 31.5 | 0.031 | 52.0 | 0.029 | 72.5 | 0.027 |
| -8.5 | 0.078 | 3.0 | 0.245 | 11.5 | 0.058 | 32.0 | 0.027 | 52.5 | 0.031 | 73.0 | 0.031 |
| -8.0 | 0.126 | 3.2 | 0.247 | 12.0 | 0.032 | 32.5 | 0.034 | 53.0 | 0.035 | 73.5 | 0.035 |
| -7.5 | 0.134 | 3.4 | 0.239 | 12.5 | 0.041 | 33.0 | 0.038 | 53.5 | 0.036 | 74.0 | 0.037 |
| -7.0 | 0.106 | 3.6 | 0.218 | 13.0 | 0.044 | 33.5 | 0.032 | 54.0 | 0.032 | 74.5 | 0.037 |
| -6.5 | 0.105 | 3.8 | 0.188 | 13.5 | 0.029 | 34.0 | 0.020 | 54.5 | 0.023 | 75.0 | 0.037 |
| -6.0 | 0.139 | 4.0 | 0.155 | 14.0 | 0.029 | 34.5 | 0.013 | 55.0 | 0.013 | 75.5 | 0.034 |
| -5.5 | 0.138 | 4.2 | 0.128 | 14.5 | 0.039 | 35.0 | 0.015 | 55.5 | 0.006 | 76.0 | 0.031 |
| -5.0 | 0.104 | 4.4 | 0.113 | 15.0 | 0.034 | 35.5 | 0.014 | 56.0 | 0.007 | 76.5 | 0.026 |
| -4.5 | 0.129 | 4.6 | 0.114 | 15.5 | 0.031 | 36.0 | 0.017 | 56.5 | 0.009 | 77.0 | 0.021 |
| -4.0 | 0.176 | 4.8 | 0.122 | 16.0 | 0.053 | 36.5 | 0.029 | 57.0 | 0.006 | 77.5 | 0.016 |
| -3.5 | 0.156 | 5.0 | 0.128 | 16.5 | 0.068 | 37.0 | 0.041 | 57.5 | 0.007 | 78.0 | 0.011 |
| -3.0 | 0.109 | 5.2 | 0.127 | 17.0 | 0.061 | 37.5 | 0.045 | 58.0 | 0.017 | 78.5 | 0.005 |
| -2.8 | 0.131 | 5.4 | 0.117 | 17.5 | 0.041 | 38.0 | 0.039 | 58.5 | 0.029 | 79.0 | 0.002 |
| -2.6 | 0.174 | 5.6 | 0.102 | 18.0 | 0.035 | 38.5 | 0.030 | 59.0 | 0.039 | 79.5 | 0.005 |
| -2.4 | 0.220 | 5.8 | 0.086 | 18.5 | 0.041 | 39.0 | 0.028 | 59.5 | 0.046 | 80.0 | 0.009 |
| -2.2 | 0.257 | 6.0 | 0.079 | 19.0 | 0.037 | 39.5 | 0.034 | 60.0 | 0.049 | 80.5 | 0.012 |
| -2.0 | 0.276 | 6.2 | 0.085 | 19.5 | 0.036 | 40.0 | 0.036 | 60.5 | 0.047 | 81.0 | 0.015 |
| -1.8 | 0.271 | 6.4 | 0.100 | 20.0 | 0.049 | 40.5 | 0.029 | 61.0 | 0.042 | 81.5 | 0.017 |
| -1.6 | 0.238 | 6.6 | 0.117 | 20.5 | 0.055 | 41.0 | 0.017 | 61.5 | 0.036 | 82.0 | 0.018 |
| -1.4 | 0.176 | 6.8 | 0.129 | 21.0 | 0.046 | 41.5 | 0.009 | 62.0 | 0.032 | 82.5 | 0.019 |
| -1.2 | 0.086 | 7.0 | 0.133 | 21.5 | 0.034 | 42.0 | 0.014 | 62.5 | 0.033 | 83.0 | 0.019 |
| -1.0 | 0.039 | 7.2 | 0.130 | 22.0 | 0.039 | 42.5 | 0.015 | 63.0 | 0.037 | 83.5 | 0.019 |
| -0.8 | 0.170 | 7.4 | 0.119 | 22.5 | 0.046 | 43.0 | 0.010 | 63.5 | 0.041 | 84.0 | 0.018 |
| -0.6 | 0.318 | 7.6 | 0.103 | 23.0 | 0.039 | 43.5 | 0.008 | 64.0 | 0.042 | 84.5 | 0.017 |
| -0.4 | 0.471 | 7.8 | 0.085 | 23.5 | 0.020 | 44.0 | 0.017 | 64.5 | 0.040 | 85.0 | 0.016 |
| -0.2 | 0.618 | 8.0 | 0.070 | 24.0 | 0.010 | 44.5 | 0.025 | 65.0 | 0.036 | 85.5 | 0.014 |
| 0.0 | 0.751 | 8.2 | 0.063 | 24.5 | 0.015 | 45.0 | 0.027 | 65.5 | 0.031 | 86.0 | 0.012 |
| 0.2 | 0.861 | 8.4 | 0.064 | 25.0 | 0.011 | 45.5 | 0.022 | 66.0 | 0.027 | 86.5 | 0.010 |
| 0.4 | 0.942 | 8.6 | 0.069 | 25.5 | 0.013 | 46.0 | 0.013 | 66.5 | 0.027 | 87.0 | 0.008 |
| 0.6 | 0.989 | 8.8 | 0.072 | 26.0 | 0.029 | 46.5 | 0.010 | 67.0 | 0.030 | 87.5 | 0.007 |
| 0.8 | 1.000 | 9.0 | 0.072 | 26.5 | 0.037 | 47.0 | 0.014 | 67.5 | 0.035 | 88.0 | 0.005 |
| 1.0 | 0.975 | 9.2 | 0.067 | 27.0 | 0.032 | 47.5 | 0.015 | 68.0 | 0.038 | 88.5 | 0.003 |
| 1.2 | 0.916 | 9.4 | 0.059 | 27.5 | 0.019 | 48.0 | 0.014 | 68.5 | 0.039 | 89.0 | 0.002 |
| 1.4 | 0.830 | 9.6 | 0.052 | 28.0 | 0.017 | 48.5 | 0.019 | 69.0 | 0.038 | 89.5 | 0.001 |
| 1.6 | 0.724 | 9.8 | 0.050 | 28.5 | 0.023 | 49.0 | 0.030 | 69.5 | 0.035 | 90.0 | 0.000 |
| 1.8 | 0.606 | 10.0 | 0.051 | 29.0 | 0.022 | 49.5 | 0.041 | 70.0 | 0.030 | | |
| 2.0 | 0.488 | 10.2 | 0.059 | 29.5 | 0.021 | 50.0 | 0.048 | 70.5 | 0.025 | | |
| 2.2 | 0.382 | 10.4 | 0.069 | 30.0 | 0.031 | 50.5 | 0.049 | 71.0 | 0.021 | | |

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
KBTV-DT, PORT ARTHUR, TEXAS
CHANNEL 40 1000 KW 252.8 METERS HAAT
NOVEMBER 2008

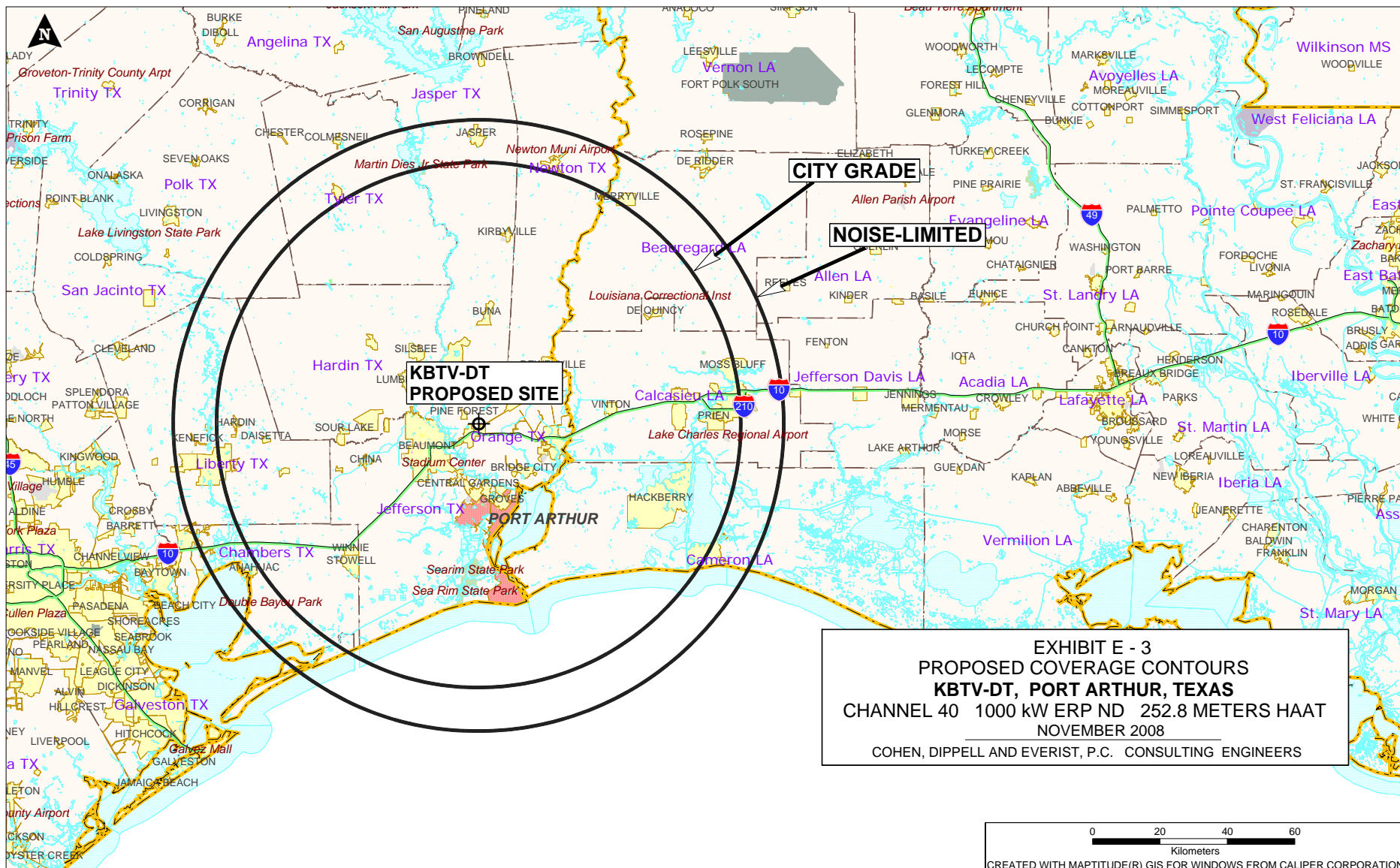
| Radial Bearing N ° E, T | Average* | Effective Height meters | Depression Angle | ERP At Radio Horizon kW | Distance to Contour F(50,90) | |
|-------------------------------|---------------------------------------|-------------------------------|---------------------|----------------------------------|------------------------------|-------------------------------|
| | Elevation 3.2 to 16.1 km meters | | | | 48 dBu City Grade km | 41 dBu Noise-Limited km |
| 0 | 9.0 | 248.8 | 0.437 | 1000 | 77.3 | 89.8 |
| 45 | 7.2 | 250.6 | 0.439 | 1000 | 77.4 | 90.1 |
| 90 | 4.9 | 252.9 | 0.441 | 1000 | 77.6 | 90.4 |
| 135 | 3.9 | 253.9 | 0.441 | 1000 | 77.7 | 90.5 |
| 180 | 2.6 | 255.2 | 0.442 | 1000 | 77.8 | 90.7 |
| 225 | 3.2 | 254.6 | 0.442 | 1000 | 77.8 | 90.6 |
| 270 | 2.7 | 255.1 | 0.442 | 1000 | 77.8 | 90.7 |
| 315 | 6.6 | 251.2 | 0.439 | 1000 | 77.5 | 90.1 |
| Average | 5.0 | 252.8 | | | | |

*Based on data from FCC 3-second data base

DTV Channel 40 (626-632 MHz)
Average Elevation 3.2 to 16.1 km 5.0 meters AMSL
Center of Radiation 257.8 meters AMSL
Antenna Height Above Average Terrain 252.8 meters
Effective Radiated Power 1000 kW (30 dBk) Max.

North Latitude: 30° 09' 20"
West Longitude: 93° 59' 10"

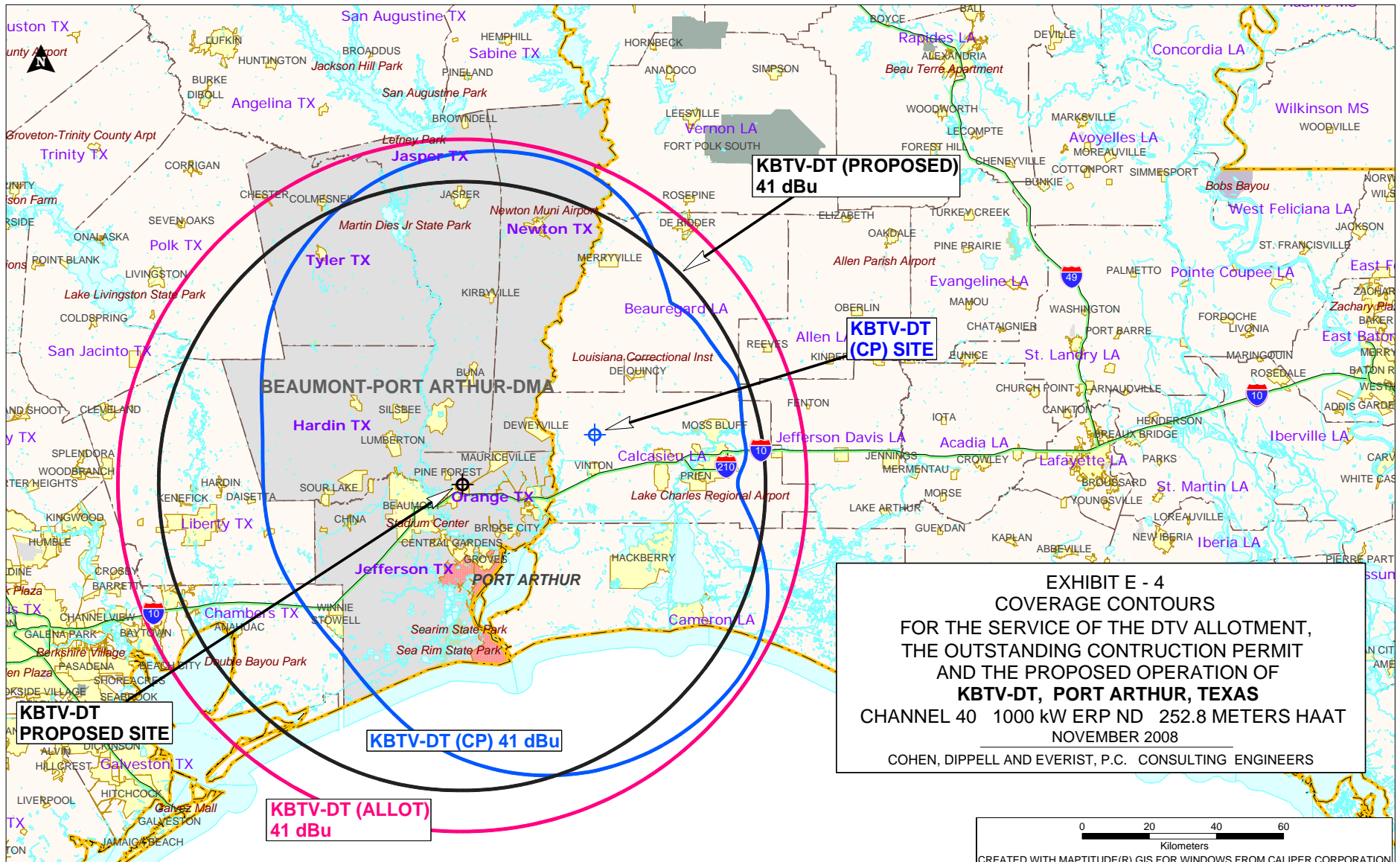
(NAD-27)

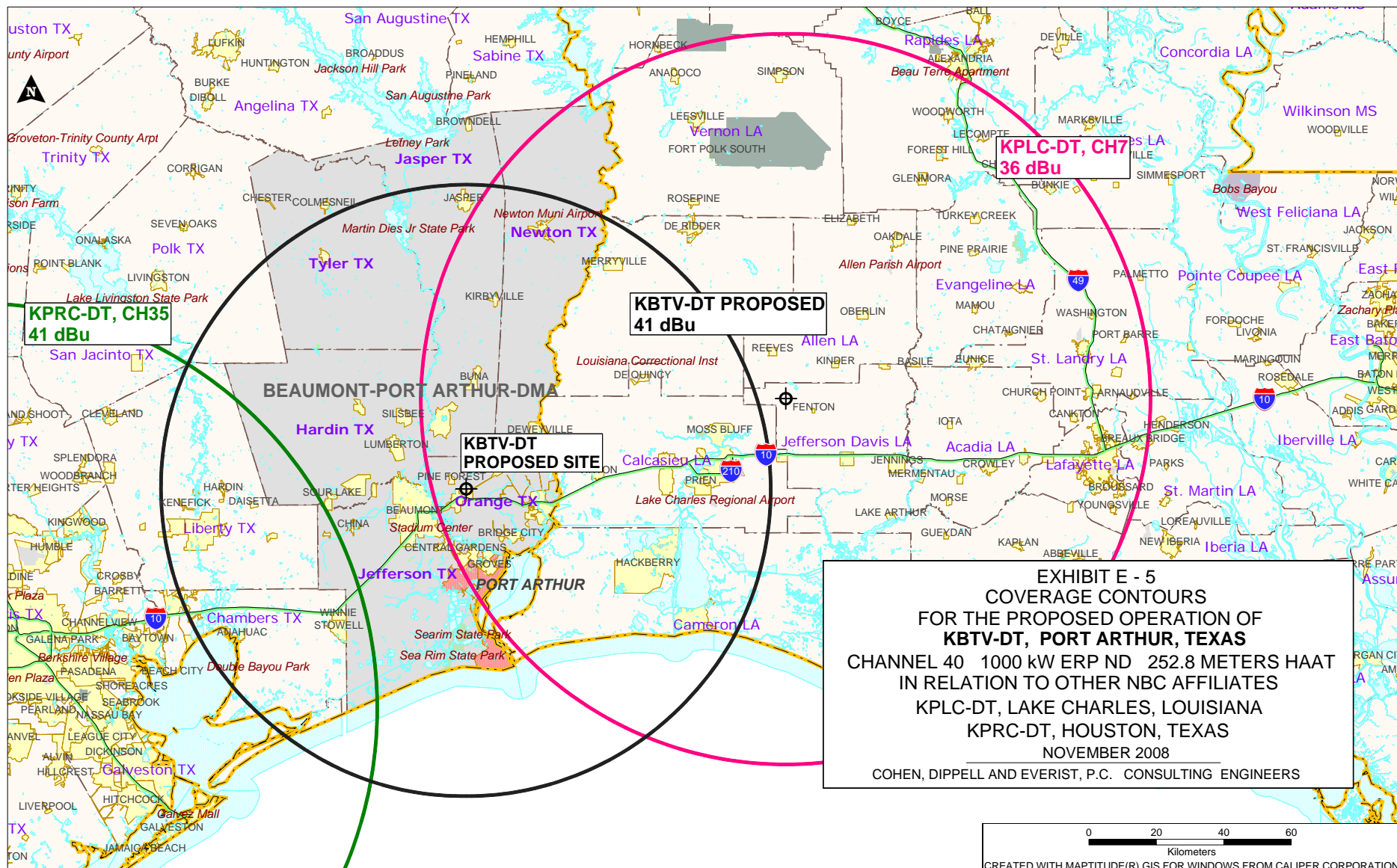


COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
PREDICTED POST-TRANSITION LONGLEY-RICE INTERFERENCE ANALYSIS
DUE TO THE PROPOSED OPERATION OF
KBTB-DT, PORT ARTHUR, TEXAS
CHANNEL 40 1000 KW ND ERP 252.8 METERS HAAT
NOVEMBER 2008

| <u>Channel</u> | <u>Call</u> | <u>City/State</u> | <u>Dist(km)</u> | <u>Status</u> | <u>FCC File No.</u> | <u>Result</u> |
|----------------|-------------|-------------------|-----------------|---------------|---------------------|-----------------|
| 40 | KAJN-LP | LAFAYETTE LA | 191.6 | LIC | BLTTA-20030508ACV | no interference |
| 40 | WDBD-DT | JACKSON MS | 412 | ALLOT | | no interference |
| 40 | WDBD-DT | JACKSON MS | 412 | CP | BPCDT-20080401ATJ | no interference |
| 40 | KXLK-CA | AUSTIN TX | 366.8 | LIC | BLTTA-20030424ABA | no interference |
| 40 | KRHD-LP | BRYAN TX | 247 | LIC | BLTTA-20071220AAZ | no interference |
| 40 | KXTX-DT | DALLAS TX | 391.2 | LIC | BLCDT-20021106ABR | no interference |
| 40 | KXTX-DT | DALLAS TX | 391.2 | ALLOT | | no interference |
| 40 | KHPL-CA | LA GRANGE TX | 279.9 | LIC | BLTTA-20020405ABH | no interference |
| 40 | KHPM-CA | SAN MARCOS TX | 382.4 | LIC | BLTTA-20060515ADT | no interference |
| 41 | KBCA-DT | ALEXANDRIA LA | 155 | ALLOT | | no interference |
| 41 | KBCA-DT | ALEXANDRIA LA | 154.7 | CP MOD | BMPCDT-20080827AAE | no interference |
| 41 | KAZH-DT | BAYTOWN TX | 160.6 | ALLOT | | no interference |
| 41 | KAZH-DT | BAYTOWN TX | 160.6 | CP MOD | BMPCDT-20080808AAH | no interference |
| 47 | K47DW | ALEXANDRIA LA | 192.6 | LIC | BLTT-19910610JD | 0.00% |





SECTION III - D - DTV Engineering

Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

Pre-Transition Certification Checklist: An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of the questions will ensure an expeditious grant of a construction pen-nit application to modify pre-transition facilities. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

Post-Transition Expedited Processing. An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed within 45 days of the effective date of Section 73.616 of the rules adopted in the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91.

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:
 - (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
 - (b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
 - (c) It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
 - (d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"). ☐ Yes ☐ No
☐ N/A
 - (e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B. ☐ Yes ☐ No
☐ N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RIF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. ☐ Yes ☐ No

Applicant must **submit the Exhibit** called for in Item 13.

3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. ☐ Yes ☐ No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. ☐ Yes ☐ No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. ☐ Yes ☐ No

SECTION III - D DTV Engineering

TECHNICAL SPECIFICATIONS Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number: DTV _____ Analog TV, if any _____
2. Zone: ☐ I ☐ II ☐ III
3. Antenna Location Coordinates: (NAD 27)
- _____ ° _____ ' _____ " ☐ N ☐ S Latitude
_____ ° _____ ' _____ " ☐ E ☐ W Longitude
4. Antenna Structure Registration Number: _____
- ☐ Not applicable ☐ FAA Notification Filed with FAA
5. Antenna Location Site Elevation Above Mean Sea Level: _____ meters
6. Overall Tower Height Above Ground Level: _____ meters
7. Height of Radiation Center Above Ground Level: _____ meters
8. Height of Radiation Center Above Average Terrain: _____ meters
9. Maximum Effective Radiated Power (average power): _____ kW
10. Antenna Specifications:
- a.

| | |
|--------------|-------|
| Manufacturer | Model |
|--------------|-------|
- b. Electrical Beam Tilt: _____ degrees ☐ Not Applicable
- c. Mechanical Beam Tilt: _____ degrees toward azimuth _____ degrees True ☐ Not Applicable
- Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). Exhibit No.
- d. Polarization: ☐ Horizontal ☐ Circular ☐ Elliptical

TECH BOX

e. Directional Antenna Relative Field Values:

☐

Not applicable (Nondirectional)

Rotation: _____

☐

No rotation

| Degree | Value | Degree | Value | Degree | Value | Degree | Value | Degree | Value | Degree | Value |
|---------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| 0 | | 60 | | 120 | | 180 | | 240 | | 300 | |
| 10 | | 70 | | 130 | | 190 | | 250 | | 310 | |
| 20 | | 80 | | 140 | | 200 | | 260 | | 320 | |
| 30 | | 90 | | 150 | | 210 | | 270 | | 330 | |
| 40 | | 100 | | 160 | | 220 | | 280 | | 340 | |
| 50 | | 110 | | 170 | | 230 | | 290 | | 350 | |
| Additional Azimuths | | | | | | | | | | | |

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616?

☐

Yes

☐

No

If "No," attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

Exhibit No.

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.

13. **Environmental Protection Act. Submit in an Exhibit** the following:

Exhibit No.

- a. If **Certification Checklist Item 2** is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist Item 2**, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radio frequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist Item 2** is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.

13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the FM Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter-proponent will apply to participate in the auction of the channel allotment requested and specified in this application.

☐ Yes ☐ No ☐ N/A

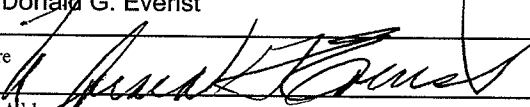
I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in 'good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

| | |
|---|--|
| Typed or Printed Name of Person Signing | Typed or Printed Title of Person Signing |
| Signature | Date |

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

| | | |
|--|--|-------------------|
| Name Donald G. Everist | Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer | |
| Signature  | Date November 24, 2008 | |
| Mailing Address Cohen, Dippell and Everist, P.C, 1300 L Street, NW Suite 1100 | | |
| City Washington | State or Country (if foreign address) DC | ZIP Code 20005 |
| Telephone Number (include area code) (202) 898-0111 | E-Mail Address (if available) cde@attglobal.net | |

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