

ENGINEERING STATEMENT  
REQUEST FOR SPECIAL TEMPORARY AUTHORITY  
TO USE POST-TRANSITION AUTHORIZATION  
FCC FILE NO. BMPCDT-20090225AAI  
DURING THE PRE-TRANSITION PERIOD  
ON BEHALF OF KEVN, INC.  
KEVN-DT, RAPID CITY, SOUTH DAKOTA  
CHANNEL 7 43.5 KW ND ERP 204 METERS HAAT

MARCH 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         )

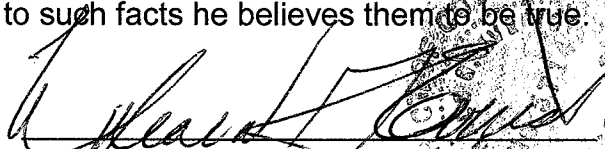
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

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;

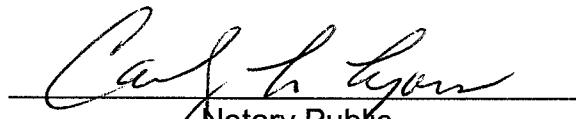
That his qualifications are a matter of record in the Federal Communications Commission;

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

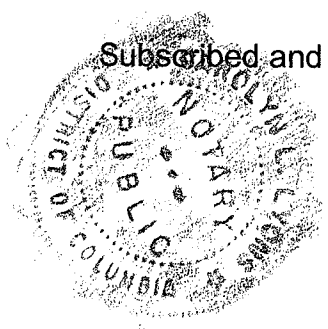
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

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

Subscribed and sworn to before me this 31<sup>st</sup> day of March, 2009.

  
Notary Public

My Commission Expires: 2/28/2013



This engineering statement has been prepared on behalf of KEVN, Inc., licensee of KEVN-TV, Rapid City, South Dakota. The purpose of this engineering statement is to support KEVN-DT's request for special temporary authority ("STA") to operate its recently-authorized 43.5 kW DTV facility (FCC File No. BMPCDT-20090225AAI) during the remaining pre-transition period. As this statement reflects, such operation would not cause impermissible interference to any other broadcast station.

### Maximization

KEVN-TV until recently operated on NTSC Television Channel 7 with a maximum visual horizontal effective radiated power ("ERP") of 263 kW non-directional and a height above average terrain ("HAAT") of 204 meters. KEVN-TV was allocated post-transition DTV Channel 7 with facilities of 12.3 kW maximum directional ERP and HAAT of 204 meters in the final DTV Table of Allotments.<sup>1</sup> KEVN-DT was authorized (FCC File No. BMPCDT-20080208ADY) to construct post-transition DTV facilities of 12.3 kW non-directional ERP (horizontal polarization) at a HAAT of 204 meters and has been authorized an STA to operate pre-transition on its allotted DTV Channel 7 with 12.3 kW non-directional ERP at a HAAT of 204 meters using its existing antenna and antenna structure. KEVN-DT is currently authorized (FCC File No. BMPCDT-20090225AAI) to modify its authorized post-transition facilities by increasing its ERP to 43.5 kW at the same height and site. This engineering statement for STA requests authority to operate with 43.5 kW ERP during the remaining pre-transition period. No other changes are requested.

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<sup>1</sup>"In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket No. 87-268, Seventh Report and Order and Eighth Report and Order (FCC 08-72), Released March 6, 2008.

Transmitter Site and Equipment Data

There are no AM stations located within 3.22 km of the existing KEVN-TV tower site. There are numerous FM and TV stations located and transmitting within 500 meters from this site.

The existing post-transition DTV antenna is already currently being used by KEVN-DT (FCC File No. BDSTA-20090209AMS) and is top-mounted on the existing tower having a total overall structure height above ground of 190.8 meters (626 feet). The existing transmitter site is located at 2000 Skyline Dr., Rapid City, South Dakota.

Since there is no change in overall height, FAA airspace approval is not required. The tower registration number of the existing tower is 1042276. Exhibit E-1 is a diagram of the existing tower and the existing transmitting antenna.

North Latitude: 44° 04' 00"

West Longitude: 103° 15' 01"

NAD-27

Equipment Data

Antenna: RCA, Type TF-12BH (or equivalent) top-mounted, horizontally polarized antenna with 50/50 power split and 1.0° electrical beam tilt. The horizontal and vertical plane patterns and other exhibits required by Section 73.625(c) are herein included as Exhibit E-2.

Power Data

Transmitter output filter loss included with transmitter	5.8 kW	7.635 dBk
RCA, Type MI-19313-1H (dual run) 3-1/8"-length 228.6 meters (750 ft)	79.9%	0.975 dB
Input power to the antenna	4.63 kW	6.66 dBk
Antenna power gain, Main Lobe	9.40	9.73 dB
Effective Radiated Power	43.5 kW	16.39 dBk

Elevation Data  
(existing)

Vertical dimension of Channel 7 top-mounted antenna including beacon and lightning rod	23.2 meters 76 feet
Overall height above ground of the proposed antenna structure including beacon and lightning rod	190.8 meters 626 feet
Center of radiation of Channel 7 antenna above ground	179.4 meters 588.5 feet
Elevation of site above mean sea level	1132.6 meters 3716 feet
Center of radiation of Channel 7 antenna above mean sea level	1312 meters 4304.5 feet
Overall height above mean sea level of proposed tower including beacon and lightning rod	1323.4 meters 4342 feet
Antenna height above average terrain	204 meters

NOTE: Slight height differences result due to conversion to metric.

#### Allocation

An allocation study has not been performed as there is no change in channel or site proposed from that allocated in Appendix B, the Final DTV Table of Allotments.<sup>2</sup>

#### Interference Analysis

A study of predicted interference by the proposed KEVN-DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) 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 populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of

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<sup>2</sup>"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.

approximately 4 km<sup>2</sup> using 3-second terrain data sampled approximately every 1.0 km at one degree azimuth intervals with 2000 census centroids. Table I provides a summary of the interference analysis for the pre-transition period.

### Coverage

The average elevation data for 3.2 to 16.1 km along each radial has been determined from the 3-second NGDC for the existing KEVN-DT site. The F(50,90) DTV coverage contours have been computed from reference to the propagation data for Channels 7-13, as published by the FCC in Figures 10 and 10a, 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 shown on the attached tabulations, the depression angle,  $A_h$ , for each azimuth has been calculated. The maximum radiation value has been used to calculate ERP and to determine coverage where the vertical radiation pattern at these angles is greater than 90% of the maximum. The proposed ERP is in compliance with the table contained in Section 73.622(f)(7)(i) of the FCC Rules.

Table II includes the distances along the radials to the predicted F(50,90) 43 and 36 dBu contours (shown on Exhibit E-3), the average elevation 3.2 to 16.1 km, and the effective antenna heights in accordance with Section 73.625(b) of the FCC Rules.

### Other Stations

There are numerous FM and TV stations located within 500 meters of the KEVN-TV tower. The existing KEVN-TV antenna will be used by the proposed KEVN-DT operation post-transition.

No adverse technical effect is anticipated by the proposed DTV operation to any other FCC licensed facility. If required, the applicant will install filters or take other measurements as necessary to resolve the problem.

#### RFF Levels at Tower Site

The radiofrequency field ("RFF") two meters above the ground at the proposed KEVN-DT tower site will be calculated. The following station is exempt from RFF evaluation for the following reason:

<u>Station</u>	<u>Reason</u>
K289AI (FX)	Subpart L Exempt ( $\leq 100$ W ERP)

#### RFF Calculations

The RFF contribution of each broadcast station will be calculated using the following formula abstracted from OET Bulletin No. 65 dated August 1997:

$$S = \frac{33.4(F^2) \text{ Total ERP}}{R^2}$$

where:

S = power density in  $\mu\text{W}/\text{cm}^2$

F = relative field factor

Total ERP = ERP Horizontal Polarization + ERP Vertical Polarization

$R^2 = (\text{RCAGL-2 meters})^2 + (\text{distance from KEVN-TV tower})^2$

ERP = RMS ERP in watts for DTV Stations and FM Stations.

ERP =  $[0.4\text{ERP}_V + \text{ERP}_A]$  for NTSC Stations

$\text{ERP}_V$  = peak visual ERP in watts

$\text{ERP}_A$  = RMS aural ERP in watts

The RFF for each station is calculated in Table II.



Total RFF at KEVN-DT Tower Site

The total percentage of RFF can be calculated by combining the percentage contribution of each station.

The total “worst-case” post-transition RFF contribution of all stations two meters above the ground at the base of the KEVN-DT tower is no more than 16% of the FCC guidelines for an uncontrolled environment which is no more than 3.2% of the proposed FCC guidelines for a controlled environment. Many analog stations have terminated their transmissions, thereby, reducing the RFF levels below that shown in Table III. For example, KEVN-DT is operating under a STA its transition facility that commenced February 17, 2009, and simultaneously terminated its analog operation, thereby, reducing the RFF at the site.

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”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the permittee indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.

- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing guyed tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.

ABOVE GROUND

ABOVE MEAN SEA LEVEL

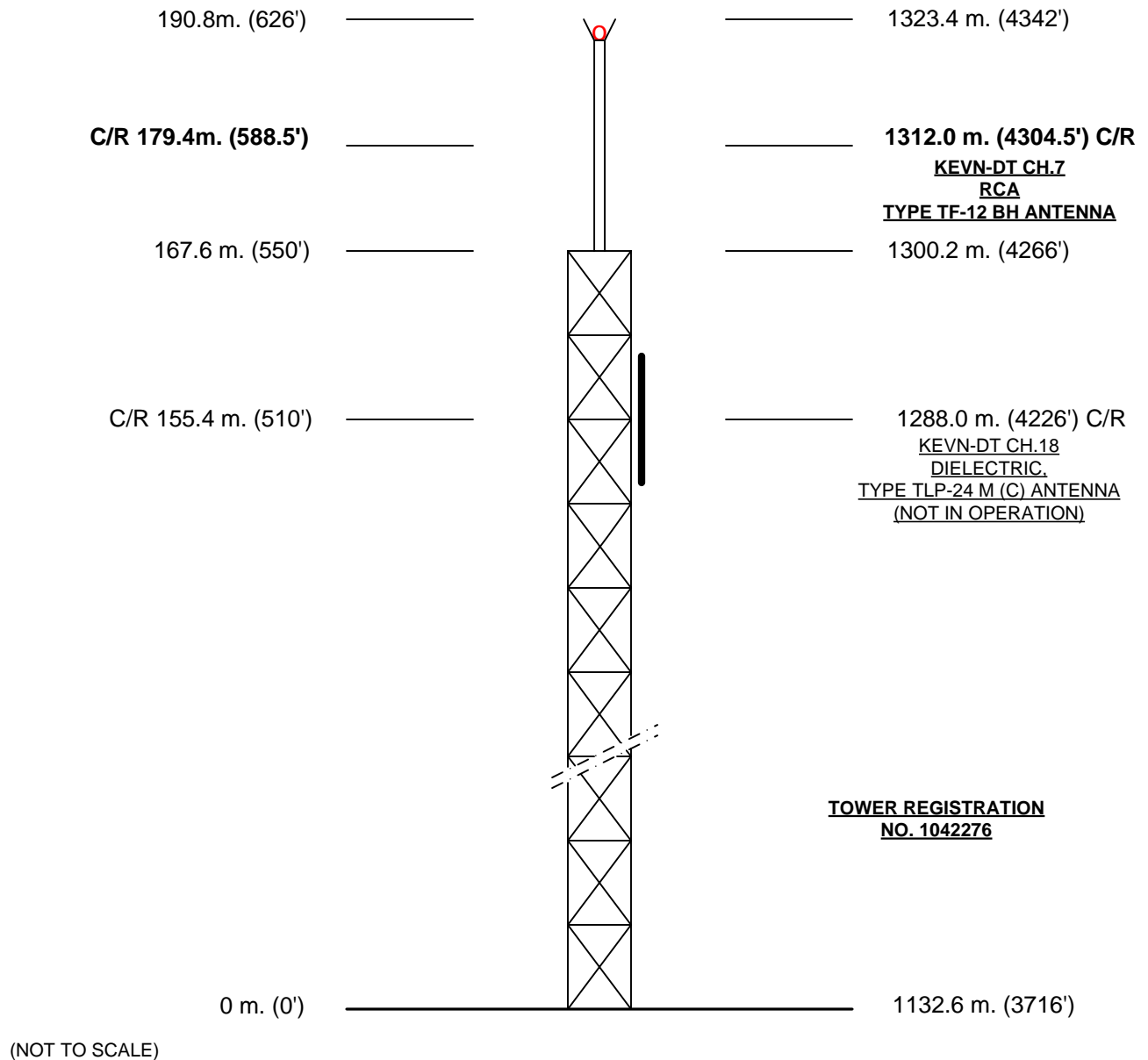


EXHIBIT E - 1  
VERTICAL SKETCH  
FOR THE PROPOSED STA OPERATION OF  
**KEVN-DT, RAPID CITY, SOUTH DAKOTA**  
MARCH 2009

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

KEVN-DT, RAPID CITY, SOUTH DAKOTA



Proposal Number

Revision

Date

**08 Feb 2008**

Call Letters

Channel **11**

Location

Customer

Antenna Type

**TF-12BH****ELEVATION PATTERN**

RMS Gain at Main Lobe

**12.4 (10.93 dB)**

Beam Tilt

**1.00 Degrees**

RMS Gain at Horizontal

**10.1 (10.04 dB)**

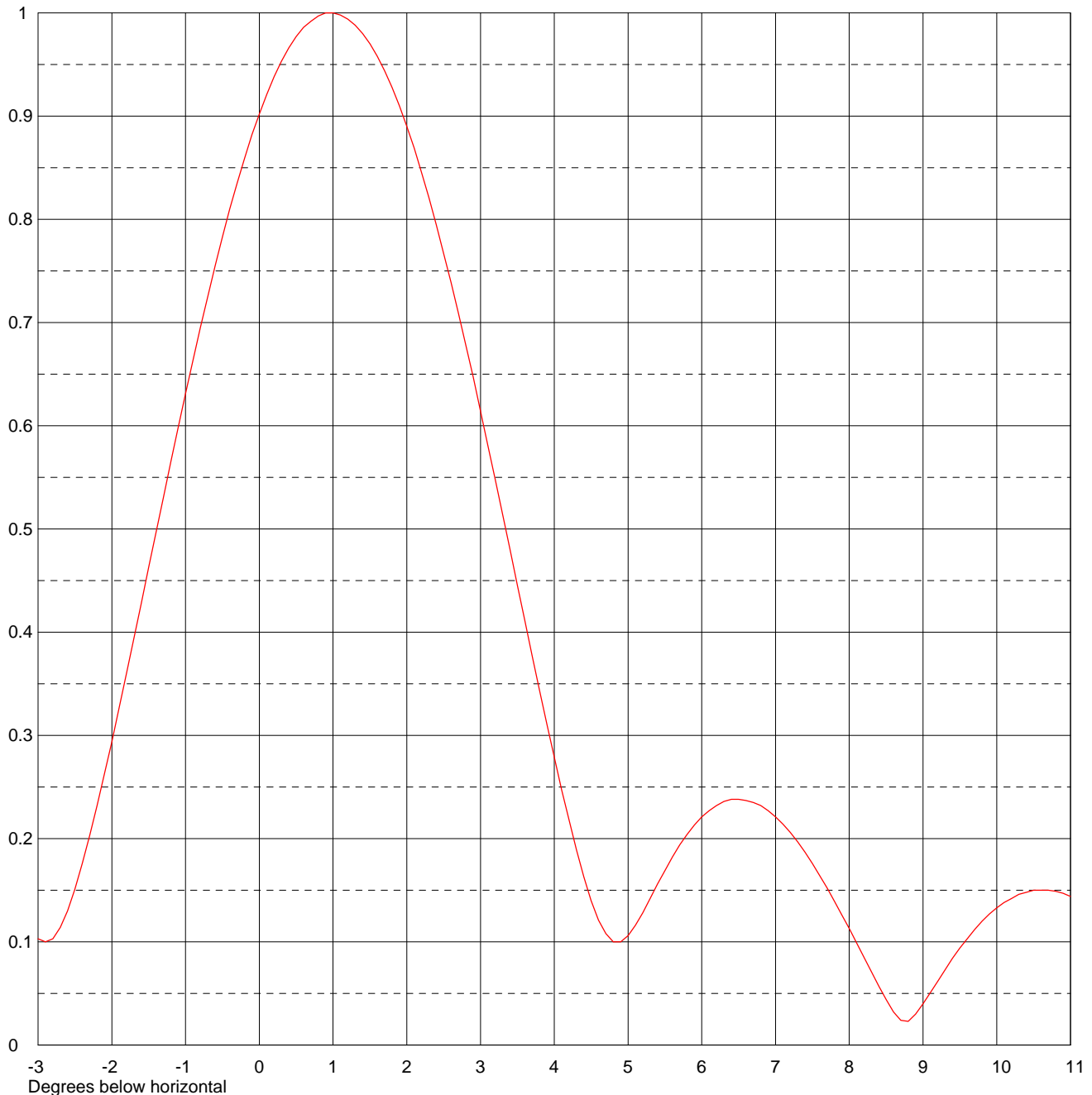
Frequency

**201.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**12S12410**

Remarks:



Proposal Number

Revision

Date

**08 Feb 2008**

Call Letters

Channel **11**

Location

Customer

Antenna Type

**TF-12BH****ELEVATION PATTERN**

RMS Gain at Main Lobe

**12.4 (10.93 dB)**

Beam Tilt

**1.00 Degrees**

RMS Gain at Horizontal

**10.1 (10.04 dB)**

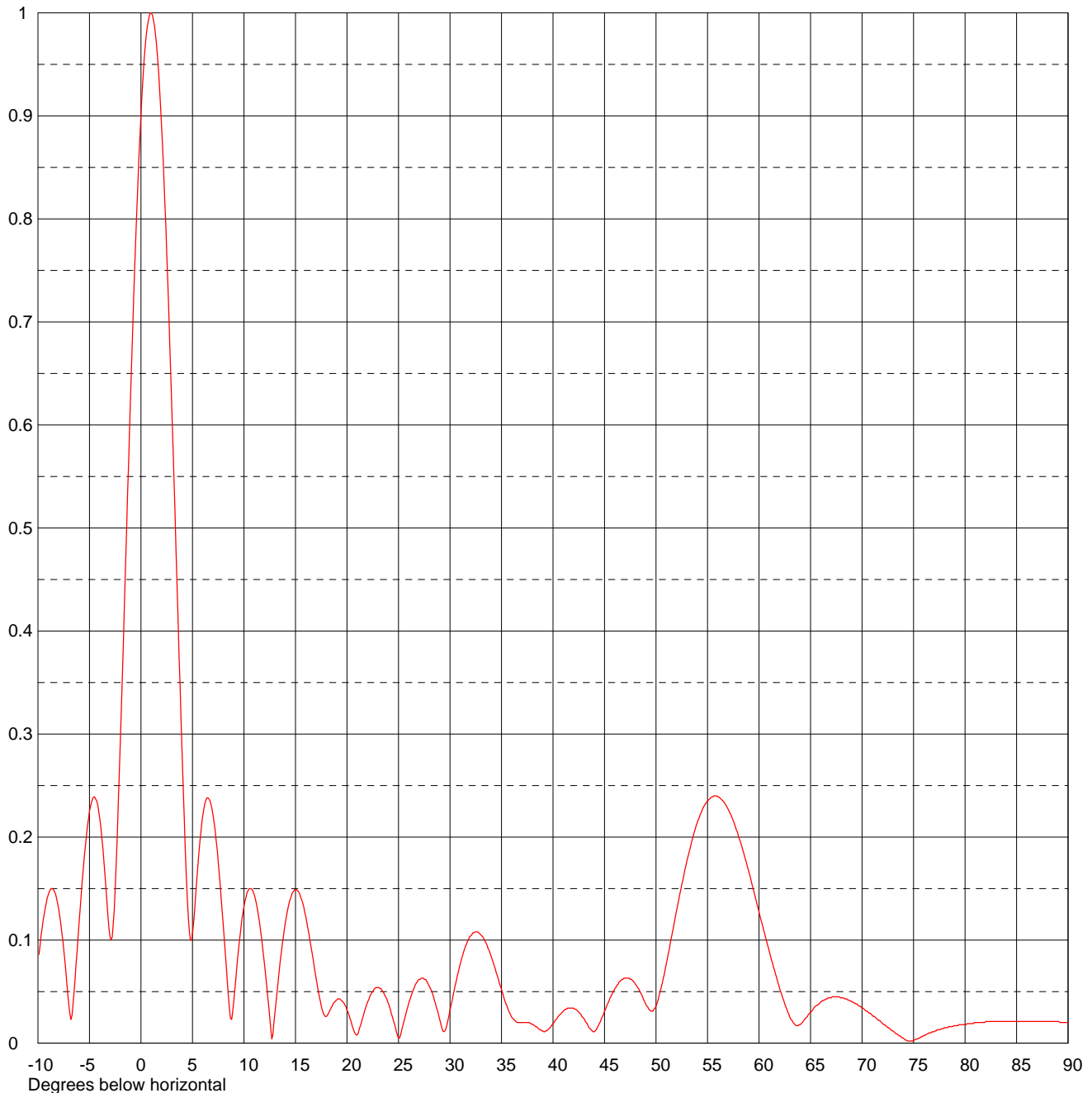
Frequency

**201.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**12S12410-90**

Remarks:



Proposal Number

Revision

Date

**08 Feb 2008**

Call Letters

Channel **11**

Location

Customer

Antenna Type

**TF-12BH**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #

**12S12410**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.077	2.4	0.795	10.6	0.150	30.5	0.056	51.0	0.077	71.5	0.023
-9.5	0.119	2.6	0.739	10.8	0.149	31.0	0.077	51.5	0.103	72.0	0.019
-9.0	0.144	2.8	0.678	11.0	0.144	31.5	0.094	52.0	0.129	72.5	0.015
-8.5	0.149	3.0	0.614	11.5	0.118	32.0	0.104	52.5	0.154	73.0	0.012
-8.0	0.131	3.2	0.548	12.0	0.076	32.5	0.108	53.0	0.177	73.5	0.008
-7.5	0.091	3.4	0.480	12.5	0.025	33.0	0.105	53.5	0.197	74.0	0.005
-7.0	0.037	3.6	0.411	13.0	0.029	33.5	0.097	54.0	0.214	74.5	0.002
-6.5	0.049	3.8	0.344	13.5	0.078	34.0	0.084	54.5	0.227	75.0	0.003
-6.0	0.118	4.0	0.279	14.0	0.116	34.5	0.068	55.0	0.235	75.5	0.005
-5.5	0.181	4.2	0.218	14.5	0.140	35.0	0.052	55.5	0.239	76.0	0.007
-5.0	0.225	4.4	0.163	15.0	0.149	35.5	0.037	56.0	0.239	76.5	0.010
-4.5	0.239	4.6	0.121	15.5	0.142	36.0	0.025	56.5	0.235	77.0	0.011
-4.0	0.218	4.8	0.100	16.0	0.123	36.5	0.020	57.0	0.227	77.5	0.013
-3.5	0.164	5.0	0.106	16.5	0.094	37.0	0.020	57.5	0.216	78.0	0.015
-3.0	0.103	5.2	0.128	17.0	0.063	37.5	0.020	58.0	0.201	78.5	0.016
-2.8	0.103	5.4	0.156	17.5	0.036	38.0	0.018	58.5	0.185	79.0	0.017
-2.6	0.130	5.6	0.182	18.0	0.026	38.5	0.015	59.0	0.167	79.5	0.018
-2.4	0.176	5.8	0.204	18.5	0.035	39.0	0.012	59.5	0.147	80.0	0.018
-2.2	0.232	6.0	0.221	19.0	0.042	39.5	0.013	60.0	0.127	80.5	0.019
-2.0	0.294	6.2	0.232	19.5	0.041	40.0	0.019	60.5	0.108	81.0	0.020
-1.8	0.360	6.4	0.238	20.0	0.032	40.5	0.026	61.0	0.089	81.5	0.020
-1.6	0.428	6.6	0.237	20.5	0.017	41.0	0.031	61.5	0.071	82.0	0.021
-1.4	0.497	6.8	0.232	21.0	0.008	41.5	0.034	62.0	0.053	82.5	0.021
-1.2	0.565	7.0	0.221	21.5	0.024	42.0	0.034	62.5	0.038	83.0	0.021
-1.0	0.631	7.2	0.206	22.0	0.040	42.5	0.030	63.0	0.025	83.5	0.021
-0.8	0.695	7.4	0.187	22.5	0.050	43.0	0.024	63.5	0.018	84.0	0.021
-0.6	0.755	7.6	0.164	23.0	0.054	43.5	0.015	64.0	0.018	84.5	0.021
-0.4	0.810	7.8	0.139	23.5	0.050	44.0	0.011	64.5	0.024	85.0	0.021
-0.2	0.859	8.0	0.113	24.0	0.039	44.5	0.019	65.0	0.030	85.5	0.021
0.0	0.902	8.2	0.085	24.5	0.022	45.0	0.031	65.5	0.036	86.0	0.021
0.2	0.938	8.4	0.057	25.0	0.005	45.5	0.043	66.0	0.040	86.5	0.021
0.4	0.966	8.6	0.032	25.5	0.020	46.0	0.053	66.5	0.043	87.0	0.021
0.6	0.986	8.8	0.023	26.0	0.039	46.5	0.060	67.0	0.044	87.5	0.021
0.8	0.997	9.0	0.040	26.5	0.053	47.0	0.063	67.5	0.045	88.0	0.021
1.0	1.000	9.2	0.062	27.0	0.062	47.5	0.062	68.0	0.044	88.5	0.021
1.2	0.994	9.4	0.084	27.5	0.062	48.0	0.057	68.5	0.043	89.0	0.021
1.4	0.980	9.6	0.103	28.0	0.055	48.5	0.049	69.0	0.040	89.5	0.020
1.6	0.958	9.8	0.120	28.5	0.041	49.0	0.038	69.5	0.038	90.0	0.020
1.8	0.928	10.0	0.133	29.0	0.023	49.5	0.031	70.0	0.034		
2.0	0.890	10.2	0.142	29.5	0.012	50.0	0.036	70.5	0.031		
2.2	0.845	10.4	0.148	30.0	0.032	50.5	0.054	71.0	0.027		

Remarks:

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I  
PREDICTED PRE-TRANSITION LONGLEY-RICE INTERFERENCE ANALYSIS  
FOR POST-TRANSITION OPERATION OF  
KEVN-DT, RAPID CITY, SOUTH DAKOTA  
CHANNEL 7 43.5 KW ND ERP 204 METERS RCAMSL  
ABOVE THE LICENSED ANALOG PRE-TRANSITION OPERATION OF KEVN-TV  
MARCH 2009

<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>
7	K07WJ	COLSTRIP MT	334.3	LIC	BLTTV-19970407JB	No interference
7	K07EQ	EKALAKA MT	228	LIC	BLTTV-3980	No interference
7	K07LO	FORSYTH MT	362.3	LIC	BLTTV-4926	No interference
7	K07QK	ROSEBUD ETC. MT	357	LIC	BLTTV-19810224IR	No interference
7	K07EZ	BEULAH ND	370.4	LIC	BLTTV-696	No interference
7	KQCD-DT	DICKINSON ND	320.9	CP	BPCDT-20080305AEL	-0.24%
7	K07JA	HAZEN ND	383.4	LIC	BLTTV-3578	No interference
7	KMNE-DT	BASSETT NE	360.8	CP MO	BMPEDT-20080620AAK	-0.02%
7	K07JI	LEWELLEN NE	320.2	LIC	BLTTV-3564	No interference
7	KDUH-DT	SCOTTSBLUFF NE	247.8	LIC	BLCDDT-20050914AAH	0.04%
7	KDUHTV	SCOTTSBLUFF NE	210.5	GRANT	BPRM-20000417AAF	2.57% <sup>1</sup>
7	K07YF	CASPER WY	291.1	LIC	BLTVL-20080806ACI	No interference
7	K07SU	MANDERSON ETC. WY	374.8	LIC	BLTTV-19830419IC	No interference
7	K07LI	MEDICINE BOW WY	334.3	LIC	BLTTV-4195	No interference
7	K07JE	ROCK RIVER WY	340.4	LIC	BLTTV-3608	No interference
7	K07NT	SARATOGA ETC. WY	397.1	LIC	BLTTV-4763	No interference
7	KBNM	SHERIDAN WY	313.4	LIC	BLCT-20020408ABG	No interference
7	KSWY	SHERIDAN WY	313.4	CP	BPCDT-20080618ACM	No interference
7	K07HC	SHERIDAN ETC. WY	313.3	LIC	BLTTV-19840116IA	No interference
8	K08LN	HARRISON NE	154.7	LIC	BLDTV-20081125APZ	No interference
8	KZSD-DT	MARTIN SD	153.3	CP MO	BMPEDT-20080618ACQ	0.12%
8	K08AA	WYODAK ETC. WY	177.5	LIC	BLTT-19820122IO	No interference

<sup>1</sup>This is for the initial allotment which is now superceded by the filing for license.



COHEN, DIPPELL AND EVERIST, P.C.

TABLE II  
COMPUTED COVERAGE DATA  
FOR THE PROPOSED DTV STA OPERATION OF  
KEVN-DT, RAPID CITY, SOUTH DAKOTA  
CHANNEL 7 43.5 KW ERP 204 METERS HAAT  
MARCH 2009

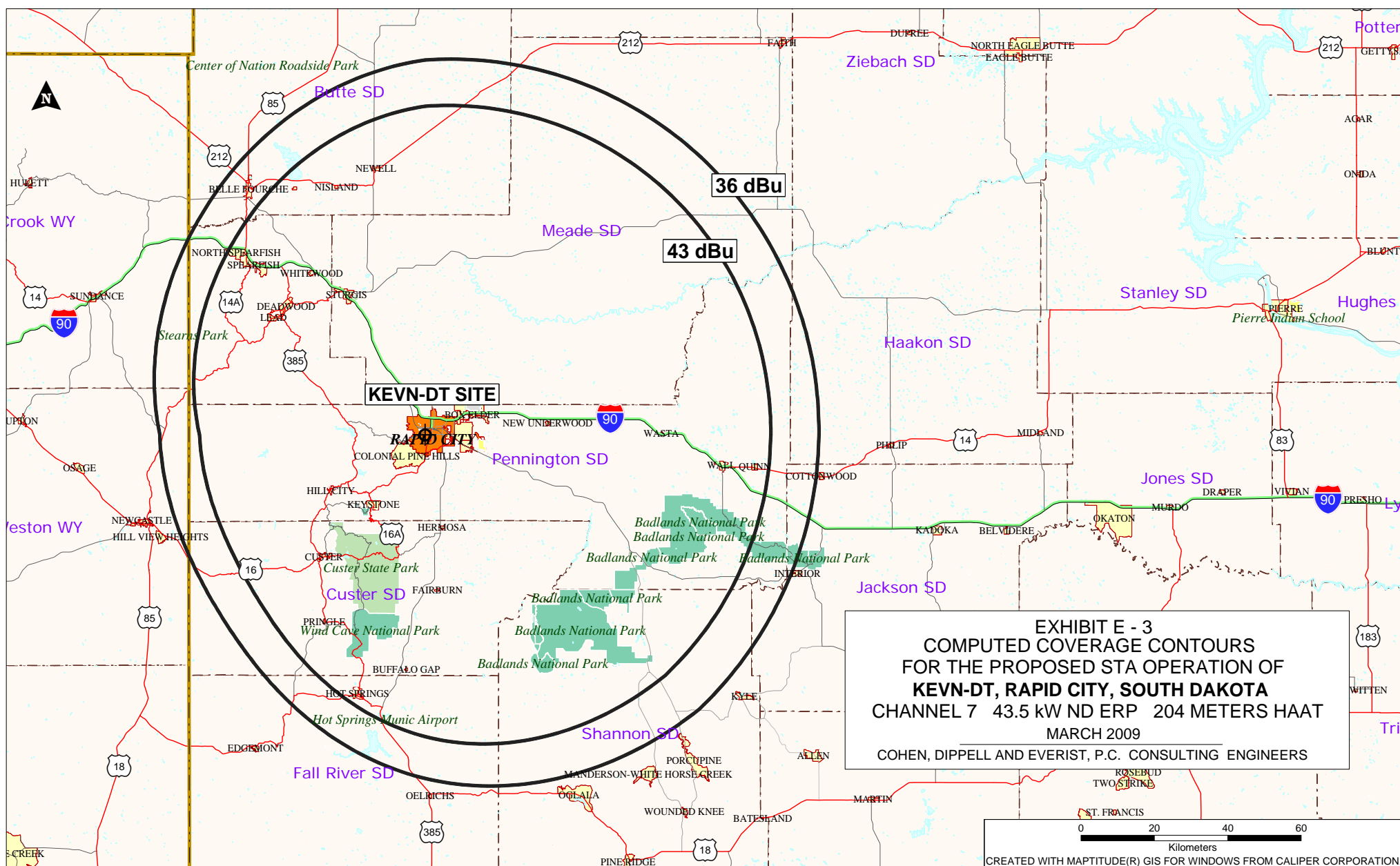
Radial Bearing N ° E, T	Average*	Effective Height meters	Depression Angle	ERP At Radio Horizon kW	Distance to Contour F(50,90)	
	Elevation 3.2 to 16.1 km meters				43 dBu City Grade km	36 dBu Noise-Limited km
0	1055.8	256.2	0.443	43.5	89.3	101.9
45	982.4	329.6	0.503	43.5	93.4	106.5
90	971.9	340.1	0.511	43.5	94.2	107.4
135	993.4	318.6	0.494	43.5	92.5	105.6
180	1151.9	160.1	0.350	43.5	82.1	93.5
225	1247.5	64.5	0.223	43.5	64.1	74.9
270	1257.7	54.3	0.204	43.5	61.6	72.5
315	1202.4	109.6	0.290	43.5	74.1	85.7
Average	1108	204				

\*Based on data from FCC 3-second data base

DTV Channel 7 (174-180 MHz)  
Average Elevation 3.2 to 16.1 km 1108 meters AMSL  
Center of Radiation 1312 meters AMSL  
Antenna Height Above Average Terrain 204 meters  
Effective Radiated Power 43.5 kW (16.38 dBk) Max.

North Latitude: 44° 04' 00"  
West Longitude: 103° 15' 01"

(NAD-27)



COHEN, DIPPELL AND EVERIST, P.C.

TABLE III  
PREDICTED RADIOFREQUENCY FIELD LEVELS  
AS A PERCENTAGE FOR AN UNCONTROLLED ENVIRONMENT  
2 METERS ABOVE GROUND LEVEL AT THE BASE OF THE KEVN-TV TOWER IN  
RAPID CITY, SOUTH DAKOTA  
MARCH 2009

<u>Call Sign</u>	<u>Status</u>	<u>Center</u> <u>Frequency</u> MHz	<u>Channel</u>	<u>ERP</u> kW	<u>Polarization</u>	<u>Approximate</u> <u>Distance from</u> <u>KEVN-TV Tower</u> m	<u>RCAGL</u> <sup>1</sup> m	<u>R</u> <sup>2</sup> m	<u>RFV</u> <sup>3</sup>	<u>S</u> μW/cm <sup>2</sup>	<u>MPE</u> <sup>4</sup> μW/cm <sup>2</sup>	<u>RFF</u> %
KEVN-DT	Prop	177	7	43.5	H	0	177.4	177.4	0.2	1.9	200	<1.0
KOTA-DT	Lic	57	2	7.1	H	210	136	250.2	0.8	2.4	200	1.2
KOTA-TV	Lic	63	3	100	H	250	168	268.9	0.21	1.0	200	0.5
KCLO-TV	Lic	479	15	692	H	400	112	415.4	0.2	2.7	319.3	0.9
KCLO-DT	Lic	485	16	150	H	400	112	415.4	0.2	1.2	323.3	0.4
KASD(FM)	Lic	90.3	212	1	H&V	400	77	407.3	0.3	<0.1	200	<0.1
KQRQ(FM)	Lic	92.3	222	100	H&V	220	128	254.5	0.3	9.3	200	4.7
K242BK (FX)	Lic	96.3	242	0.25	H&V	220	63	228.8	0.5	<0.1	200	<0.1
KOUT(FM)	Lic	98.7	254	100	H&V	400	94	410.9	0.25	2.5	200	1.3
KFXS(FM)	Lic	100.3	262	100	H&V	400	94	410.9	0.25	2.5	200	1.3
K278AN (FX)	Lic	103.5	278	0.28	H	250	74	260.7	0.5	<0.1	200	<0.1
KZLK(FM)	Lic	106.3	292	100	H&V	220	163	273.8	0.3	8.0	200	4.0

<sup>1</sup>Radiation Center Above Ground Level -2 Meters

<sup>2</sup>R = diagonal downward distance from radiation center to 2 meters above base of KEVN-DT proposed site

<sup>3</sup>F = Assumed downward relative field value

<sup>4</sup>Limit for an uncontrolled environment

Note: Many of the analog stations have terminated the NTSC operations, and therefore, the above determination will even be less than shown.

### 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
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- 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.
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- 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.

KEVN-DT

☐ Yes STA

10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable.

Exhibit No. 

An exhibit is required unless this question is inapplicable.

11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

☐ Yes ☐ No

12. **Equal Employment Opportunity (EEO).** If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.

☐ Yes ☐ No ☐ N/A

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

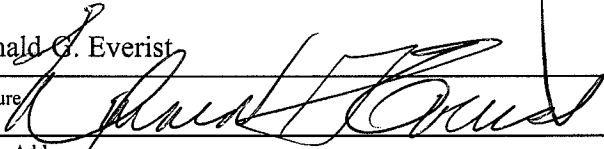
I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in 'good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular 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 March 31, 2009	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, N.W., 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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