

ENGINEERING STATEMENT  
RE DTV BROADCAST ENGINEERING DATA  
APPLICATION FOR MODIFICATION OF  
CONSTRUCTION PERMIT  
(FCC FILE NO. BPCDT-20030418ABA)  
KWBF-DT, LITTLE ROCK, ARKANSAS  
CHANNEL 44 1000 KW DA ERP 448.4 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         )

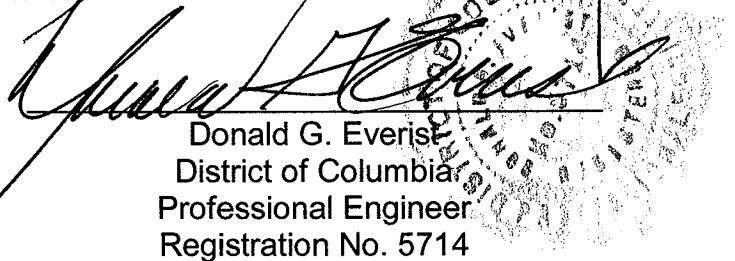
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

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;

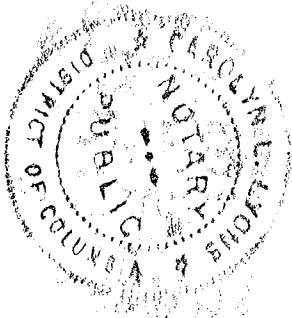
That his qualifications are a matter of record in the Federal Communications Commission;

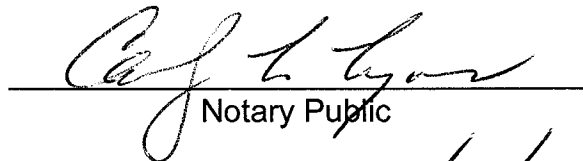
That the attached engineering report was prepared by him or under his supervision and direction and

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 25<sup>th</sup> 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:

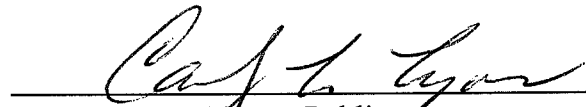
He is a graduate electrical engineer of the Pennsylvania State University, and is a staff engineer at Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

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

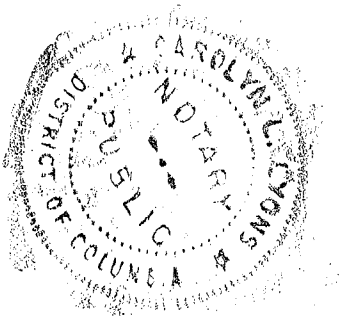
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
Martin R. Doczkat

Subscribed and sworn to before me this 25<sup>th</sup> 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"), proposed assignee of KWBF(TV), Little Rock, Arkansas, pending assignment application (FCC File No. BALCT-20081015AAY). The purpose of this engineering statement is to request a modification of the outstanding construction permit (FCC File No. BPCDT-20030418ABA) for post-transition digital television ("DTV") facilities.

KWBF(TV) is licensed to operate on NTSC television Channel 42 with a maximum visual effective radiated power ("ERP") of 3390 kW (horizontal polarization) and antenna height above average terrain ("HAAT") of 334 meters. KWBF-DT has been allocated DTV Channel 44 with facilities of 1000 kW directional ERP at an HAAT of 485 meters in the Final DTV Table of Allotments.<sup>1</sup> KWBF-DT requested in its outstanding construction permit (FCC File No. BPCDT-20030418ABA) to construct its Channel 44 DTV facilities of 1000 kW directional ERP at an HAAT of 485 meters. KWBF-DT now requests to construct its Channel 44 DTV facilities of 1000 kW directional ERP (horizontal polarization) at an HAAT of 448.4 meters from the currently licensed KARK-TV NTSC site.

The DTV antenna will be side-mounted on an existing tower structure. The proposed tower has an overall structure height above ground of 342.3 meters (1123 feet). Exhibit E-1 shows a vertical sketch and the arrangement of the antennas on the tower. The existing transmitter site is located 13 miles northwest of the Little Rock, Arkansas area.

The geographic coordinates of the site are:

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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 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.

North Latitude: 34° 47' 57"

West Longitude: 92° 29' 59"

NAD-27

Tower Registration No. 1019242

Equipment Data

Antenna:	Dielectric	TFU-34JSC-R O3 or equivalent
	Beam Tilt	0.5° electrical
	Power Gain	35.2
		Antenna information per Section 73.625 of the FCC Rules is provided in Exhibit E-2.

Power Data

Transmitter output	37.7 kW	15.76 dBk
Total Transmission line efficiency/loss Dielectric, 6-1/8", 75 ohm rigid or equivalent, length: 298.7 meters (980 feet)	75.3%	1.23 dB
Input Power to the antenna	28.4 kW	14.53 dBk
Antenna power gain, Main Lobe	35.2	15.47 dB
Effective Radiated Power, Maximum	1000 kW	30 dBk

Elevation Data

Vertical dimension of Channel 44 side-mounted antenna	17.1 meters 56.2 feet
Overall height above ground of existing antenna structure (including appurtenances)	342.3 meters 1123 feet
Center of radiation of Channel 44 antenna above ground	262.1 meters 860 feet
Elevation of site above mean sea level	313.9 meters 1030 feet
Center of radiation of Channel 44 antenna above mean sea level	576.0 meters 1890 feet
Overall height above mean sea level of existing tower (including appurtenances)	656.2 meters 2153 feet
Antenna height above average terrain	448.4 meters

Coverage

The average elevation data for 3.2 to 16.1 km at every 10 degrees in azimuth beginning with true north 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 44 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 0.55 to 0.62 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 KWBF-DT, 48 dBu and 41 dBu F(50,90) coverage contours on a map and includes the legal boundaries of Little Rock, Arkansas.

Exhibit E-4 shows the proposed KWBF-DT operation in relation to the authorized KWBF-DT construction permit service area. The proposed operation is predicted to serve 1,055,998 persons in an area of 34,553 square kilometers, which is 101.7% of the 1,038,000 in an area of 31,880 square kilometers predicted to be served by the KWBF-DT construction permit according to Appendix B of the Final DTV Table of Allotments.<sup>2</sup>

#### Interference Analysis

A study of predicted interference caused by the proposed KWBF-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 KWBF-DT facilities and

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<sup>2</sup>Ibid.

all relevant stations listed in the FCC database as of November 21, 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 operations of KWBF-DT, KTHV-DT, and KARK-DT will be the only full-service post-transition television stations located within 100 meters of the proposed site. There are no other authorized broadcast stations anticipated to be included within 100 meters of the proposed site after the DTV transition. 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/cm<sup>2</sup>)</u>	Uncontrolled <u>RFF</u> (%)	Controlled <u>RFF</u> (%)
KWBF-DT Proposed	1000	650-656	44	260.1	0.05	1.2	0.3%	0.1%
KTHV-DT Lic	55	204-210	12	330	0.3	1.5	0.8%	0.2%
KARK-DT App	989	578-584	32	286	0.15	9.1	2.4%	0.5%

\*F = assumed value

\*\* RCAGL - 2 meters

The proposed KWBF-DT facilities are predicted to contribute less than approximately 1.2 μW/cm<sup>2</sup> or less than 0.3% of the FCC guidelines for an uncontrolled environment which is less



than 0.1% of the FCC guidelines for a controlled environment. The total prediction post-transition RFF is less than 3.5% of the FCC guidelines for an uncontrolled environment which is less than 0.8% 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

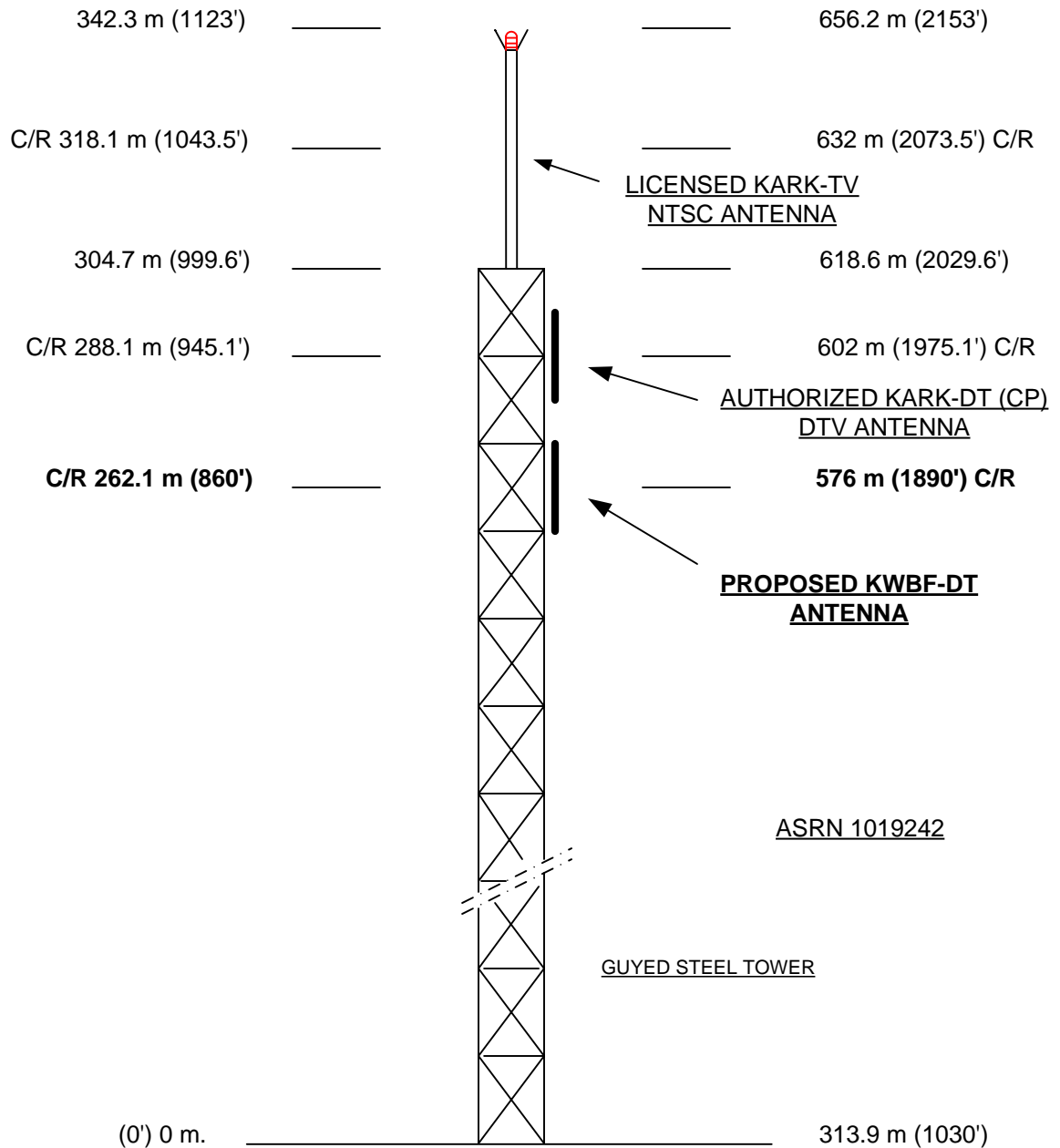
An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the assignee indicates:

- (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 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



NOT TO SCALE

EXHIBIT E - 1  
VERTICAL SKETCH  
FOR THE PROPOSED OPERATION OF  
**KWBF-DT, LITTLE ROCK, ARKANSAS**  
NOVEMBER 2008

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

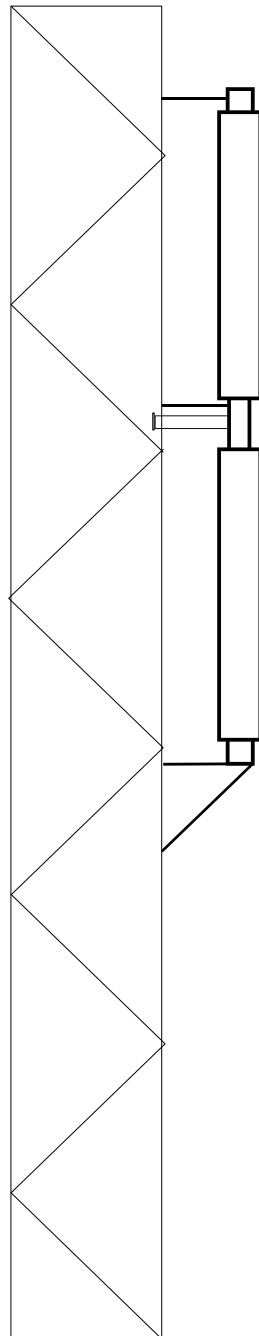
KWBF-DT, LITTLE ROCK, ARKANSAS



Proposal #: **C-03053-1**  
Call Letters: **KWBF-DT**

Antenna Type: **TFU-34JSC-R O3**  
Location: **Little Rock, AR**

Channel: **44 DTV**



**Mechanical Specifications**

**TIA/EIA-222-F. @ 70 mi/h (112.7 km/h )**

CaAc = 75.2 ft<sup>2</sup>(7 m<sup>2</sup>)

D1 = ft ( m )

W = 920 lbs(0.4 t)

56.2 ft (17.1 m)

TFU-34JSC-R O3  
Channel: D44

SWB-081105-950

Not to Scale

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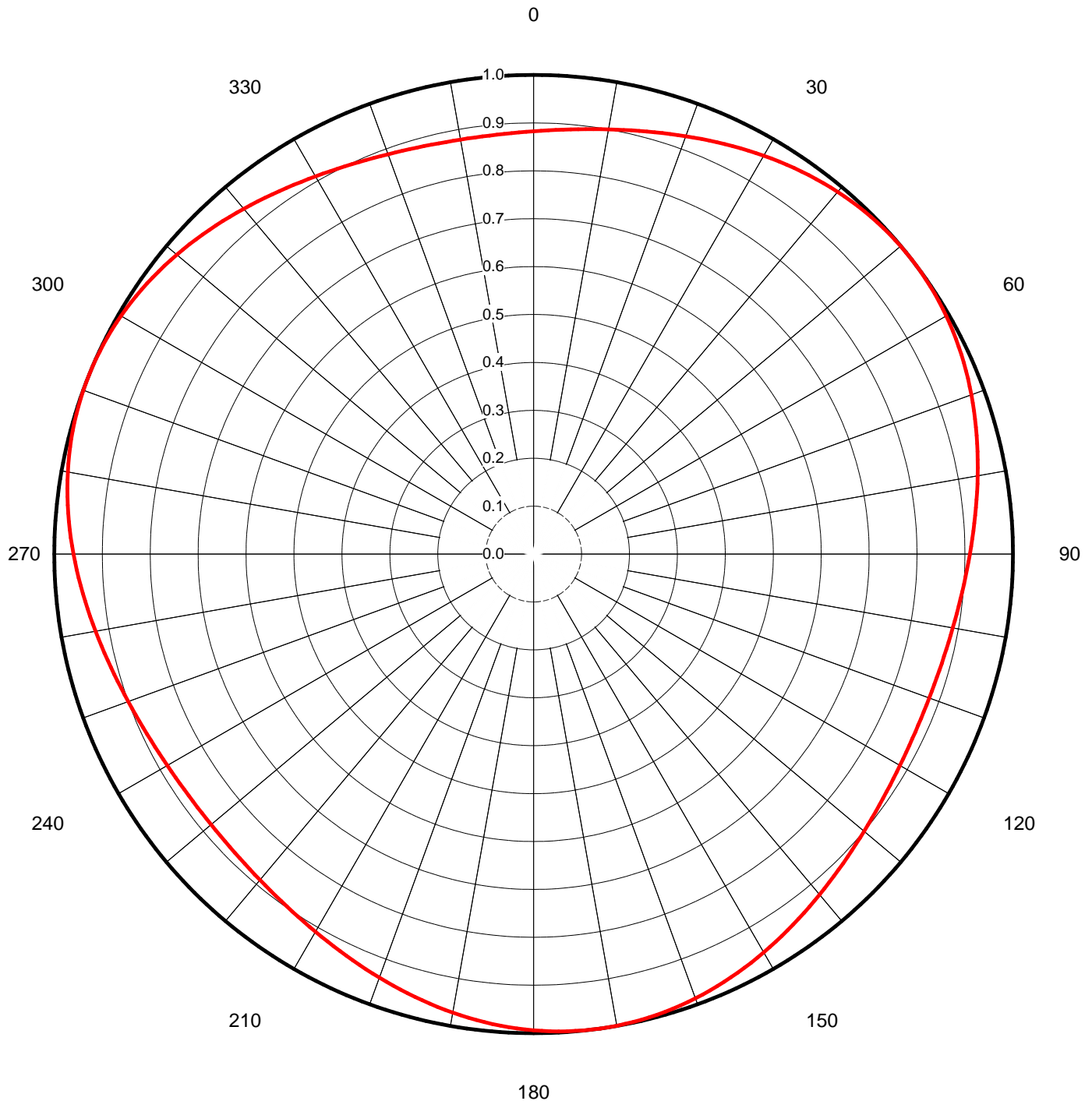


Proposal Number	<b>C-03053</b>	Revision:	<b>1</b>
Date	<b>10-Nov-08</b>		
Call Letters	<b>KWBF-DT</b>	Channel	<b>44</b>
Location	<b>Little Rock, AR</b>		
Customer	<b>Nexstar</b>		
Antenna Type	<b>TFU-34JSC-R O3</b>		

## AZIMUTH PATTERN

Gain **1.10** **(0.41 dB)**  
Calculated / Measured **Calculated**

Frequency **653.00 MHz**  
Drawing # **TFU-O3-6530**





Proposal Number	<b>C-03053</b>	Revision:	<b>1</b>
Date	<b>10-Nov-08</b>		
Call Letters	<b>KWBF-DT</b>	Channel	<b>44</b>
Location	<b>Little Rock, AR</b>		
Customer	<b>Nexstar</b>		
Antenna Type	<b>TFU-34JSC-R O3</b>		

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-O3-6530**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.882	45	0.995	90	0.910	135	0.913	180	0.994	225	0.881	270	0.960	315	0.957
1	0.884	46	0.997	91	0.907	136	0.916	181	0.992	226	0.880	271	0.963	316	0.954
2	0.885	47	0.998	92	0.905	137	0.919	182	0.991	227	0.880	272	0.966	317	0.950
3	0.886	48	0.998	93	0.902	138	0.922	183	0.989	228	0.879	273	0.969	318	0.947
4	0.888	49	0.999	94	0.900	139	0.925	184	0.987	229	0.879	274	0.972	319	0.944
5	0.890	50	1.000	95	0.898	140	0.928	185	0.985	230	0.878	275	0.975	320	0.941
6	0.891	51	1.000	96	0.895	141	0.931	186	0.982	231	0.878	276	0.977	321	0.938
7	0.893	52	1.000	97	0.893	142	0.934	187	0.980	232	0.878	277	0.980	322	0.934
8	0.895	53	1.000	98	0.891	143	0.938	188	0.977	233	0.878	278	0.982	323	0.931
9	0.898	54	1.000	99	0.890	144	0.941	189	0.975	234	0.878	279	0.985	324	0.928
10	0.900	55	0.999	100	0.888	145	0.944	190	0.972	235	0.879	280	0.987	325	0.925
11	0.902	56	0.998	101	0.886	146	0.947	191	0.969	236	0.879	281	0.989	326	0.922
12	0.905	57	0.998	102	0.885	147	0.950	192	0.966	237	0.880	282	0.991	327	0.919
13	0.907	58	0.997	103	0.884	148	0.954	193	0.963	238	0.880	283	0.992	328	0.916
14	0.910	59	0.995	104	0.882	149	0.957	194	0.960	239	0.881	284	0.994	329	0.913
15	0.913	60	0.994	105	0.881	150	0.960	195	0.957	240	0.882	285	0.995	330	0.910
16	0.916	61	0.992	106	0.880	151	0.963	196	0.954	241	0.884	286	0.997	331	0.907
17	0.919	62	0.991	107	0.880	152	0.966	197	0.950	242	0.885	287	0.998	332	0.905
18	0.922	63	0.989	108	0.879	153	0.969	198	0.947	243	0.886	288	0.998	333	0.902
19	0.925	64	0.987	109	0.879	154	0.972	199	0.944	244	0.888	289	0.999	334	0.900
20	0.928	65	0.985	110	0.878	155	0.975	200	0.941	245	0.890	290	1.000	335	0.898
21	0.931	66	0.982	111	0.878	156	0.977	201	0.938	246	0.891	291	1.000	336	0.895
22	0.934	67	0.980	112	0.878	157	0.980	202	0.934	247	0.893	292	1.000	337	0.893
23	0.938	68	0.977	113	0.878	158	0.982	203	0.931	248	0.895	293	1.000	338	0.891
24	0.941	69	0.975	114	0.878	159	0.985	204	0.928	249	0.898	294	1.000	339	0.890
25	0.944	70	0.972	115	0.879	160	0.987	205	0.925	250	0.900	295	0.999	340	0.888
26	0.947	71	0.969	116	0.879	161	0.989	206	0.922	251	0.902	296	0.998	341	0.886
27	0.950	72	0.966	117	0.880	162	0.991	207	0.919	252	0.905	297	0.998	342	0.885
28	0.954	73	0.963	118	0.880	163	0.992	208	0.916	253	0.907	298	0.997	343	0.884
29	0.957	74	0.960	119	0.881	164	0.994	209	0.913	254	0.910	299	0.995	344	0.882
30	0.960	75	0.957	120	0.882	165	0.995	210	0.910	255	0.913	300	0.994	345	0.881
31	0.963	76	0.954	121	0.884	166	0.997	211	0.907	256	0.916	301	0.992	346	0.880
32	0.966	77	0.950	122	0.885	167	0.998	212	0.905	257	0.919	302	0.991	347	0.880
33	0.969	78	0.947	123	0.886	168	0.998	213	0.902	258	0.922	303	0.989	348	0.879
34	0.972	79	0.944	124	0.888	169	0.999	214	0.900	259	0.925	304	0.987	349	0.879
35	0.975	80	0.941	125	0.890	170	1.000	215	0.898	260	0.928	305	0.985	350	0.878
36	0.977	81	0.938	126	0.891	171	1.000	216	0.895	261	0.931	306	0.982	351	0.878
37	0.980	82	0.934	127	0.893	172	1.000	217	0.893	262	0.934	307	0.980	352	0.878
38	0.982	83	0.931	128	0.895	173	1.000	218	0.891	263	0.938	308	0.977	353	0.878
39	0.985	84	0.928	129	0.898	174	1.000	219	0.890	264	0.941	309	0.975	354	0.878
40	0.987	85	0.925	130	0.900	175	0.999	220	0.888	265	0.944	310	0.972	355	0.879
41	0.989	86	0.922	131	0.902	176	0.998	221	0.886	266	0.947	311	0.969	356	0.879
42	0.991	87	0.919	132	0.905	177	0.998	222	0.885	267	0.950	312	0.966	357	0.880
43	0.992	88	0.916	133	0.907	178	0.997	223	0.884	268	0.954	313	0.963	358	0.880
44	0.994	89	0.913	134	0.910	179	0.995	224	0.882	269	0.957	314	0.960	359	0.881

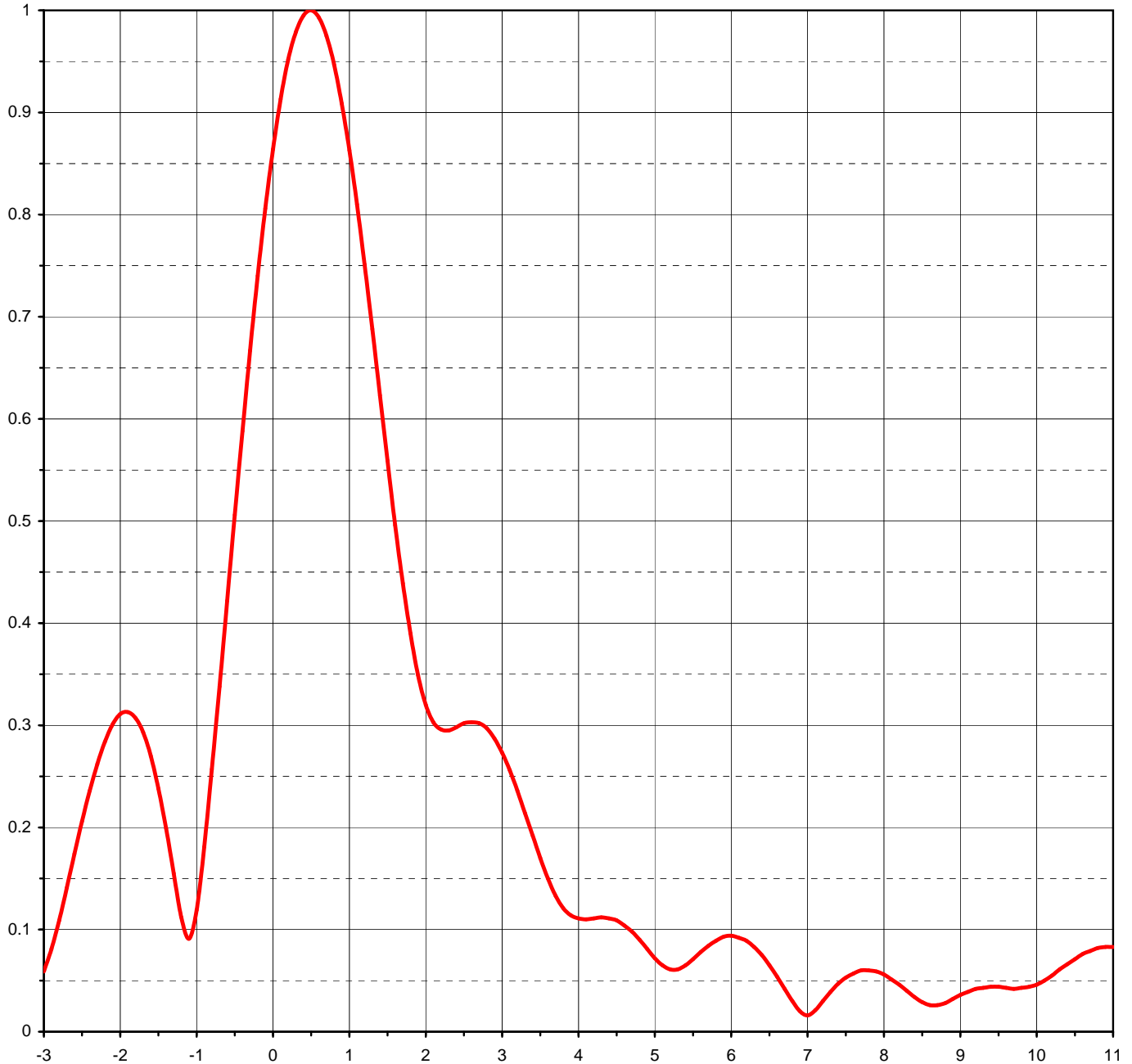
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Proposal Number	<b>C-03053</b>	Revision:	<b>1</b>
Date	<b>10-Nov-08</b>		
Call Letters	<b>KWBF-DT</b>	Channel	<b>44</b>
Location	<b>Little Rock, AR</b>		
Customer	<b>Nexstar</b>		
Antenna Type	<b>TFU-34JSC-R O3</b>		

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>32.00 ( 15.05 dB )</b>	Beam Tilt	<b>0.50 deg</b>
RMS Gain at Horizontal	<b>23.90 ( 13.78 dB )</b>	Frequency	<b>653.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>34Y320050</b>



Degrees Below Horizontal

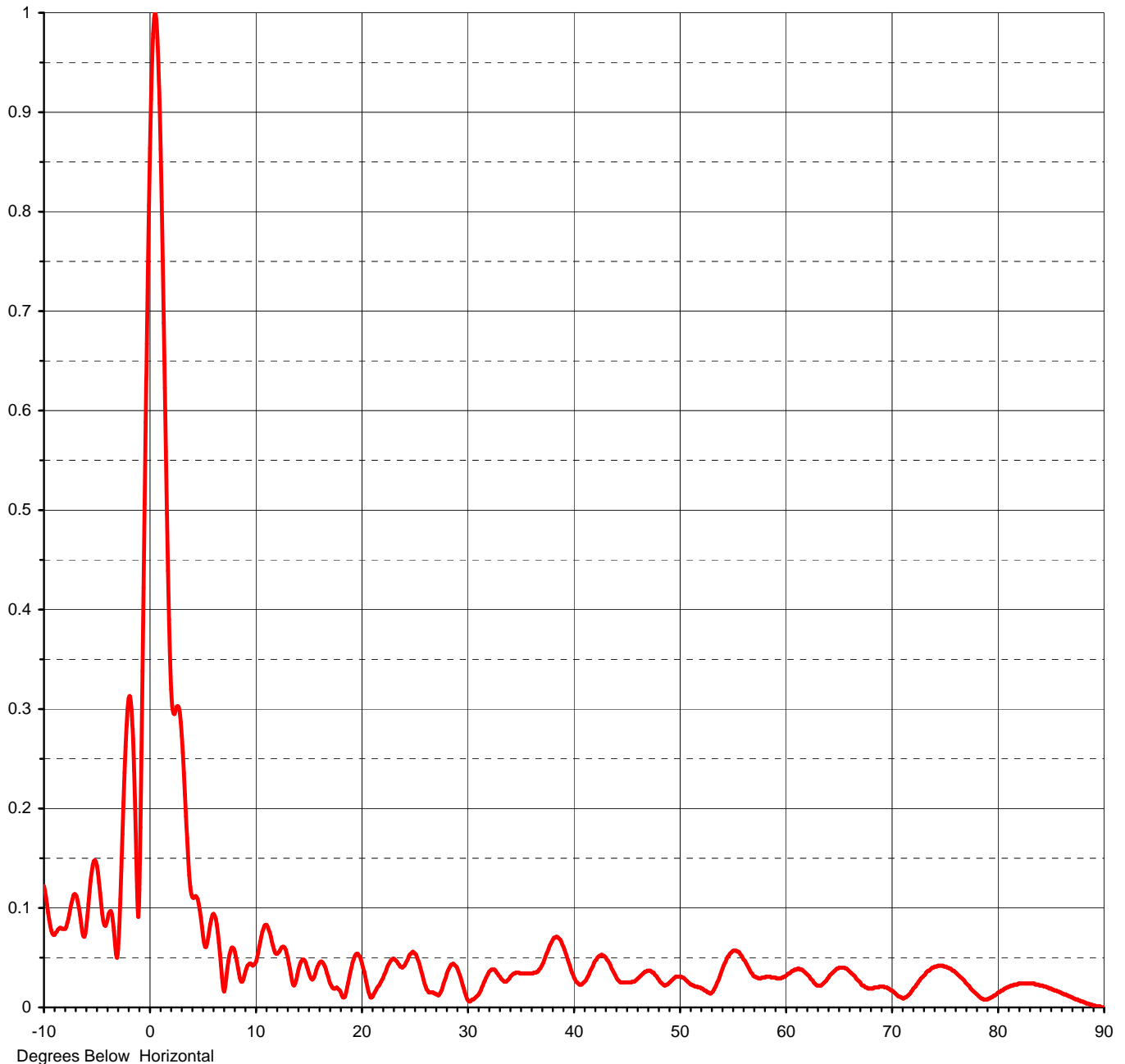




Proposal Number	<b>C-03053</b>	Revision:	<b>1</b>
Date	<b>10-Nov-08</b>		
Call Letters	<b>KWBF-DT</b>	Channel	<b>44</b>
Location	<b>Little Rock, AR</b>		
Customer	<b>Nexstar</b>		
Antenna Type	<b>TFU-34JSC-R 03</b>		

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>32.00 ( 15.05 dB )</b>	Beam Tilt	<b>0.50 deg</b>
RMS Gain at Horizontal	<b>23.90 ( 13.78 dB )</b>	Frequency	<b>653.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>34Y320050-90</b>





Proposal Number **C-03053** Revision: **1**  
Date **10-Nov-08**  
Call Letters **KWBF-DT** Channel **44**  
Location **Little Rock, AR**  
Customer **Nexstar**  
Antenna Type **TFU-34JSC-R 03**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **34Y320050-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.122	2.4	0.298	10.6	0.071	30.5	0.008	51.0	0.024	71.5	0.012
-9.5	0.088	2.6	0.303	10.8	0.079	31.0	0.012	51.5	0.021	72.0	0.019
-9.0	0.073	2.8	0.297	11.0	0.083	31.5	0.022	52.0	0.020	72.5	0.026
-8.5	0.080	3.0	0.273	11.5	0.071	32.0	0.034	52.5	0.017	73.0	0.032
-8.0	0.079	3.2	0.236	12.0	0.054	32.5	0.038	53.0	0.014	73.5	0.037
-7.5	0.100	3.4	0.192	12.5	0.060	33.0	0.032	53.5	0.022	74.0	0.041
-7.0	0.113	3.6	0.150	13.0	0.054	33.5	0.026	54.0	0.036	74.5	0.042
-6.5	0.085	3.8	0.121	13.5	0.027	34.0	0.029	54.5	0.049	75.0	0.041
-6.0	0.082	4.0	0.111	14.0	0.033	34.5	0.034	55.0	0.056	75.5	0.039
-5.5	0.136	4.2	0.111	14.5	0.048	35.0	0.034	55.5	0.056	76.0	0.035
-5.0	0.142	4.4	0.111	15.0	0.038	35.5	0.034	56.0	0.050	76.5	0.030
-4.5	0.094	4.6	0.104	15.5	0.029	36.0	0.034	56.5	0.041	77.0	0.024
-4.0	0.089	4.8	0.090	16.0	0.043	36.5	0.035	57.0	0.032	77.5	0.018
-3.5	0.087	5.0	0.072	16.5	0.043	37.0	0.041	57.5	0.029	78.0	0.013
-3.0	0.059	5.2	0.061	17.0	0.027	37.5	0.054	58.0	0.030	78.5	0.009
-2.8	0.109	5.4	0.065	17.5	0.019	38.0	0.066	58.5	0.031	79.0	0.008
-2.6	0.174	5.6	0.078	18.0	0.017	38.5	0.071	59.0	0.030	79.5	0.011
-2.4	0.236	5.8	0.089	18.5	0.011	39.0	0.063	59.5	0.029	80.0	0.015
-2.2	0.284	6.0	0.094	19.0	0.036	39.5	0.048	60.0	0.031	80.5	0.018
-2.0	0.311	6.2	0.089	19.5	0.053	40.0	0.033	60.5	0.035	81.0	0.021
-1.8	0.307	6.4	0.075	20.0	0.048	40.5	0.024	61.0	0.038	81.5	0.023
-1.6	0.270	6.6	0.054	20.5	0.026	41.0	0.025	61.5	0.038	82.0	0.024
-1.4	0.199	6.8	0.030	21.0	0.010	41.5	0.033	62.0	0.034	82.5	0.024
-1.2	0.112	7.0	0.016	21.5	0.019	42.0	0.045	62.5	0.028	83.0	0.024
-1.0	0.119	7.2	0.030	22.0	0.028	42.5	0.052	63.0	0.022	83.5	0.023
-0.8	0.257	7.4	0.047	22.5	0.041	43.0	0.051	63.5	0.023	84.0	0.022
-0.6	0.422	7.6	0.057	23.0	0.049	43.5	0.043	64.0	0.029	84.5	0.021
-0.4	0.588	7.8	0.060	23.5	0.044	44.0	0.032	64.5	0.036	85.0	0.019
-0.2	0.740	8.0	0.056	24.0	0.041	44.5	0.025	65.0	0.040	85.5	0.017
0.0	0.864	8.2	0.046	24.5	0.051	45.0	0.025	65.5	0.040	86.0	0.014
0.2	0.952	8.4	0.034	25.0	0.055	45.5	0.025	66.0	0.036	86.5	0.012
0.4	0.995	8.6	0.026	25.5	0.044	46.0	0.028	66.5	0.031	87.0	0.010
0.6	0.993	8.8	0.028	26.0	0.024	46.5	0.033	67.0	0.025	87.5	0.008
0.8	0.947	9.0	0.036	26.5	0.015	47.0	0.037	67.5	0.020	88.0	0.006
1.0	0.863	9.2	0.042	27.0	0.014	47.5	0.035	68.0	0.019	88.5	0.004
1.2	0.751	9.4	0.044	27.5	0.015	48.0	0.029	68.5	0.020	89.0	0.002
1.4	0.623	9.6	0.043	28.0	0.030	48.5	0.023	69.0	0.021	89.5	0.001
1.6	0.496	9.8	0.042	28.5	0.043	49.0	0.024	69.5	0.020	90.0	0.000
1.8	0.390	10.0	0.044	29.0	0.041	49.5	0.029	70.0	0.017		
2.0	0.320	10.2	0.050	29.5	0.026	50.0	0.031	70.5	0.012		
2.2	0.296	10.4	0.061	30.0	0.009	50.5	0.029	71.0	0.009		

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TABLE I  
COMPUTED COVERAGE DATA  
FOR THE PROPOSED DTV OPERATION OF  
KWBF-DT, LITTLE ROCK, ARKANSAS  
CHANNEL 44 1000 KW ERP 448.4 METERS HAAT  
NOVEMBER 2008

<u>Radial</u> N ° E, T	<u>Average*</u>	<u>Effective</u>	<u>Depression</u>	<u>ERP</u> kW	<u>Distance to Contour</u>	
	<u>Elevation</u> meters	<u>Height</u> meters	<u>Angle</u> degrees		<u>48 dBu</u> km	<u>41 dBu</u> km
0	98.2	480.9	0.607	777.9	95.4	110.6
10	88.0	491.1	0.614	810.0	96.6	111.8
20	82.0	497.1	0.618	861.2	97.6	112.8
30	86.2	492.9	0.615	921.6	97.8	113.2
40	94.9	484.2	0.610	974.2	97.6	113.1
50	92.5	486.6	0.611	1000.0	98.0	113.5
60	82.3	496.8	0.617	988.0	98.8	114.2
70	86.3	492.8	0.615	944.8	98.0	113.4
80	95.8	483.3	0.609	885.5	96.7	112.1
90	101.1	478.0	0.606	828.1	95.7	111.0
100	142.7	436.4	0.579	788.5	92.4	107.0
110	138.9	440.2	0.581	770.9	92.5	107.1
120	148.3	430.8	0.575	777.9	92.0	106.3
130	140.3	438.8	0.580	810.0	92.8	107.4
140	132.6	446.5	0.585	861.2	93.8	108.7
150	147.1	432.0	0.576	921.6	93.3	108.2
160	148.0	431.1	0.575	974.2	93.7	108.7
170	152.8	426.3	0.572	1000.0	93.6	108.5
180	150.7	428.4	0.573	988.0	93.7	108.6
190	153.5	425.6	0.571	944.8	93.1	107.9
200	160.6	418.5	0.567	885.5	92.2	106.6
210	161.3	417.8	0.566	828.1	91.7	105.8
220	165.1	414.0	0.564	788.5	91.1	105.0
230	160.1	419.0	0.567	770.9	91.2	105.2
240	156.0	423.1	0.570	777.9	91.5	105.7
250	171.5	407.6	0.559	810.0	91.0	104.7
260	182.6	396.5	0.552	861.2	90.8	104.4
270	169.2	409.9	0.561	921.6	92.0	106.2
280	171.5	407.6	0.559	974.2	92.3	106.6

TABLE I  
COMPUTED COVERAGE DATA  
FOR PROPOSED OPERATION OF  
KWBF-DT, LITTLE ROCK, ARKANSAS  
CHANNEL 44 1000 KW ERP 448.4 METERS HAAT  
NOVEMBER 2008  
(continued)

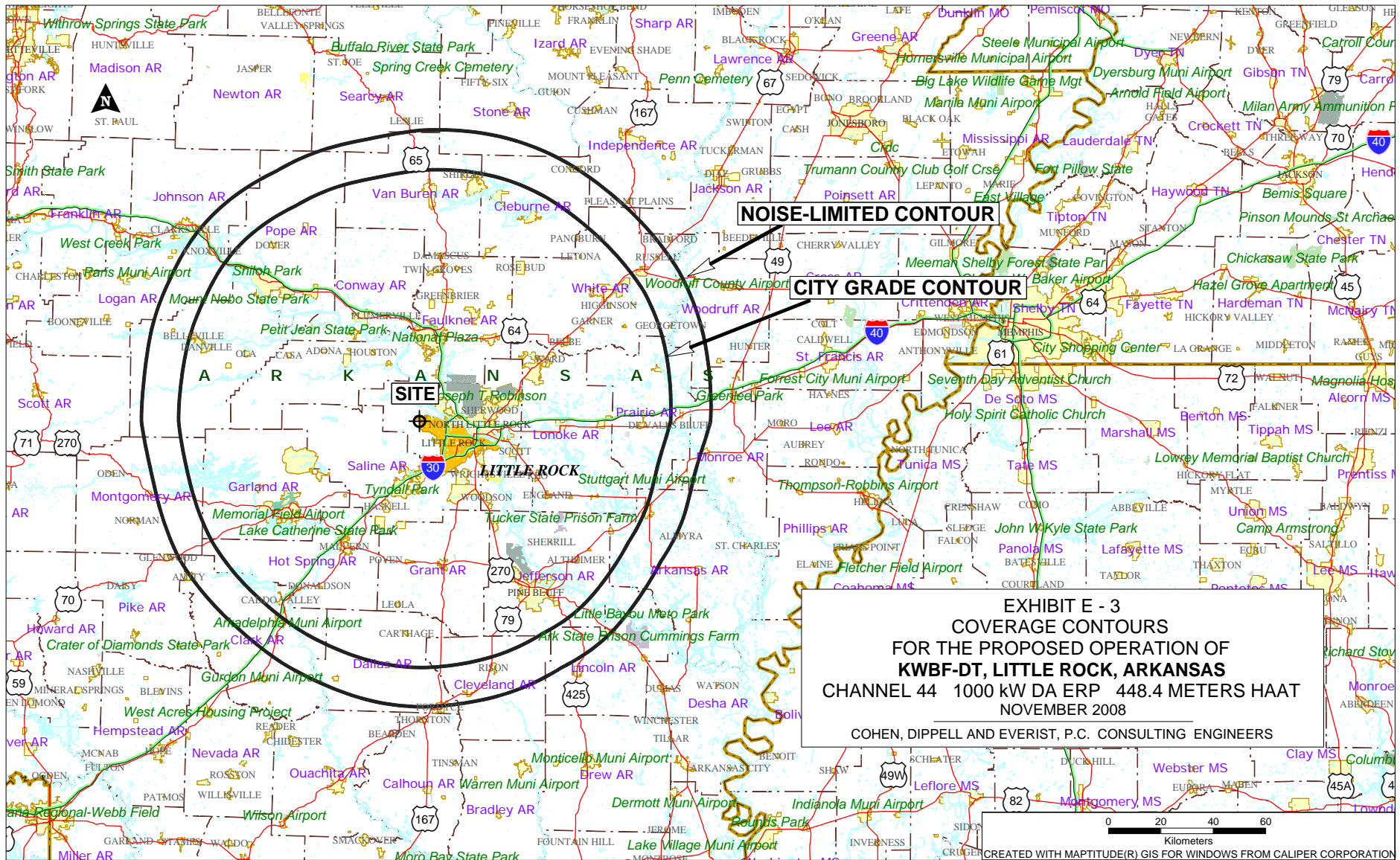
<u>Radial</u> N ° E, T	<u>Average*</u> <u>Elevation</u>	<u>Effective</u> <u>Height</u>	<u>Depression</u> <u>Angle</u>	<u>ERP</u> kW	<u>Distance to Contour</u>	
	meters	meters	degrees		<u>48 dBu</u> km	<u>41 dBu</u> km
290	155.5	423.6	0.570	1000.0	93.5	108.3
300	138.9	440.2	0.581	988.0	94.4	109.6
310	115.2	463.9	0.597	944.8	95.8	111.2
320	108.5	470.6	0.601	885.5	95.7	111.1
330	116.1	463.0	0.596	828.1	94.6	109.7
340	111.8	467.3	0.599	788.5	94.5	109.6
350	114.7	464.4	0.597	770.9	94.1	109.1

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

DTV Channel 44 (650-656 MHz)  
Average Elevation 3.2 to 16.1 km 127.6 meters AMSL  
Center of Radiation 576 meters AMSL  
Antenna Height Above Average Terrain 448.4 meters  
Effective Radiated Power 1000 kW (30 dBk) Max

North Latitude: 34° 47' 57"  
West Longitude: 92° 29' 59"

(NAD-27)

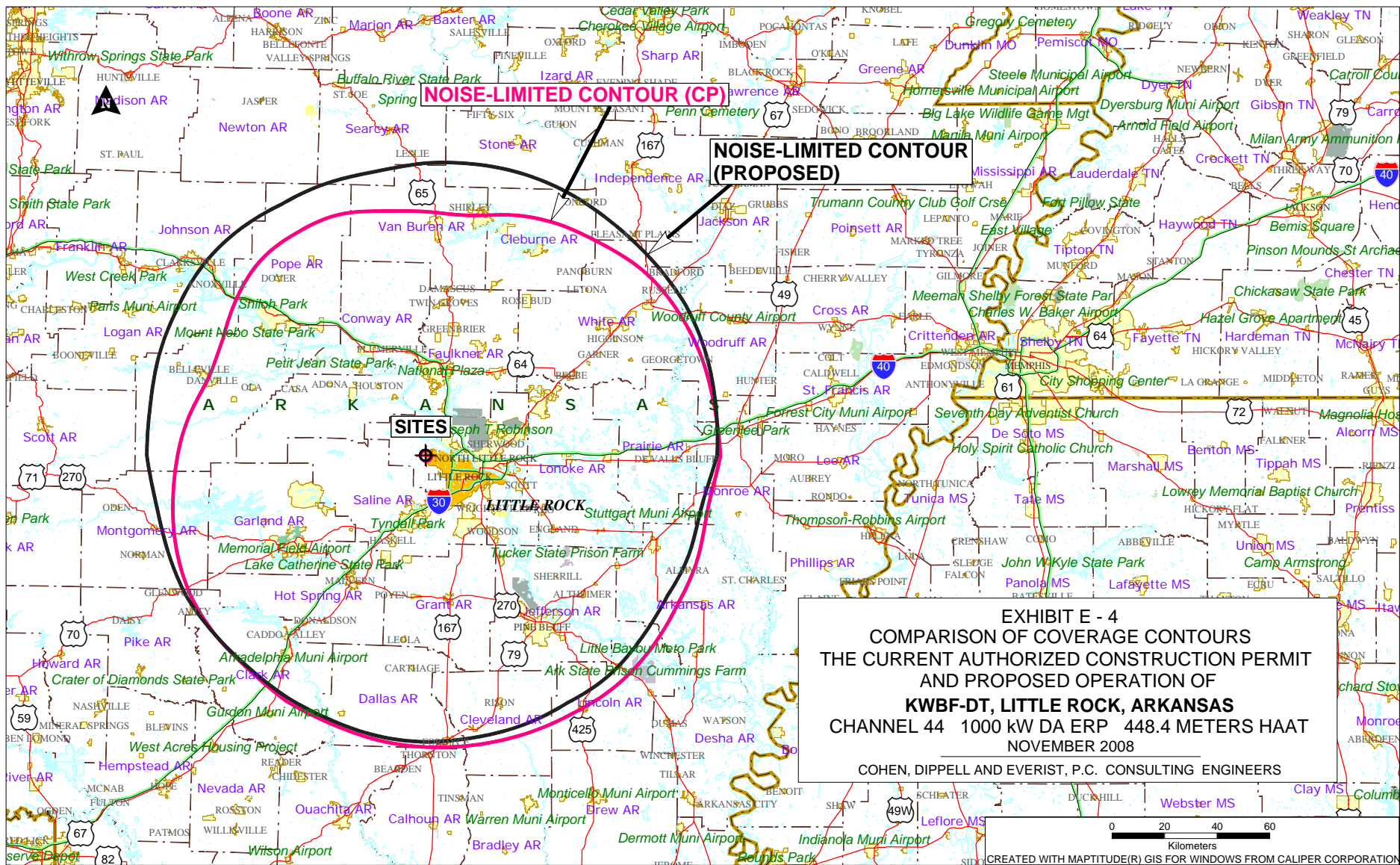


COHEN, DIPPELL AND EVERIST, P.C.

TABLE II  
PREDICTED LONGLEY-RICE INTERFERENCE ANALYSIS  
FOR THE PROPOSED OPERATION OF  
KWBF-DT, LITTLE ROCK, ARKANSAS  
CHANNEL 44 1000 KW DA ERP 448.4 METERS HAAT  
NOVEMBER 2008

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Distance</u> km	<u>Status</u>	<u>FCC File No.</u>	<u>Results</u>
29	KSJA-CA	Nashville, AR	152.9	App	BDISTTA- 20080805ABF	0.00%
29	KSJA-CA	Nashville, AR	152.9	App	BDISTTA- 20070108ABP	0.00%
43	KEJB-DT	El Dorado, AR	192.9	Allot		No Interference
43	KEJB-DT	El Dorado, AR	193.0	CP Mod	BMPCDT- 20080620AKK	No Interference
44	KSHV-DT	Shreveport, LA	271.6	Allot		0.12%
44	KSHV-DT	Shreveport, LA	271.6	Lic	BLCDT- 20060215ACP	0.12%
44	KYTV-DT	Springfield, MO	266.9	Allot		0.41%
44	KYTV-DT	Springfield, MO	266.9	Lic	BLCDT- 20020213AAA	0.32%
44	W44BS	Memphis, TN	226.5	Lic	BLTTL- 19991119AAW	No Interference





### 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:
- | Manufacturer | Model |
|--------------|-------|
| a. _____     |       |
- 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

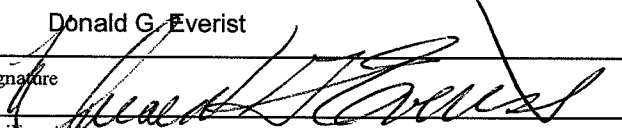
I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in 'good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular 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 25, 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	

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).