

**MULLANEY ENGINEERING, INC.**

9049 SHADY GROVE COURT  
GAITHERSBURG, MD 20877

**ENGINEERING AMENDMENT TO PENDING APPLICATION**

**ENGINEERING EXHIBIT EE-1:**

**APPLICATION FOR  
CONSTRUCTION PERMIT**

**APPLICATION FOR MAXIMIZATION  
OF POST-TRANSITION  
DIGITAL TELEVISION PERMIT**

**GOCOM MEDIA OF ILLINOIS, LLC  
WBUI-DT  
DIGITAL TELEVISION CHANNEL 22  
DECATUR, ILLINOIS**

**FCC FACILITY NUMBER 16363**

**APRIL 2009  
AMENDMENT**

**ENGINEERING EXHIBIT  
IN SUPPORT OF  
APPLICATION FOR A CONSTRUCTION PERMIT FOR  
MAXIMIZATION OF POST-TRANSITION  
DIGITAL TELEVISION FACILITY  
  
DIGITAL TELEVISION STATION WBUI-DT  
DECATUR, ILLINOIS**

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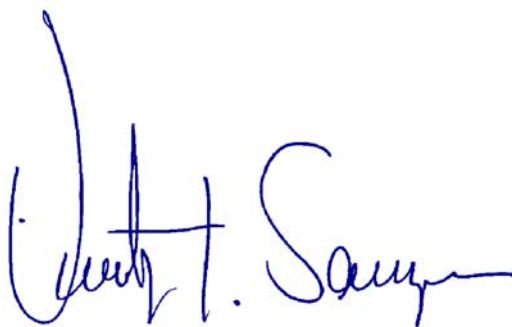
1. F.C.C. Form 301, Section III-D (DTV Engineering )
2. F.C.C. Form 301, Section III (Preparer's Certification)
3. Declaration of Engineer
4. Narrative Statement
5. Figure 1, Proposed Directional Antenna Details
6. Figure 2, Proposed Digital Service Contours
7. Figure 3, Interference Study - OET Bulletin No. 69 Study

## **DECLARATION**

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by GOCOM MEDIA OF ILLINOIS, LLC, to prepare the instant engineering exhibit and/or amendment in support of **an Application for a Construction Permit - Digital Television Broadcast Station - WBUI-DT, Decatur, Illinois for Maximization of a Post-Transition Facility, FCC FACILITY ID NUMBER: 16363.**

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.



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Timothy Z. Sawyer

Executed on the 14<sup>th</sup> day of April 2009

**ENGINEERING AMENDMENT TO PENDING APPLICATION**

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DIGITAL TELEVISION CHANNEL 22  
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**FCC FACILITY NUMBER 16363**

**ENGINEERING STATEMENT**

The technical exhibit and/or engineering amendment, of which this narrative is part, was prepared on behalf of GOCOM MEDIA OF ILLINOIS, LLC, in support of an application for a construction permit to maximize the facilities of Digital Television Station WBUI-DT, Decatur, Illinois. The FCC facility identification number is 16363.

The proposed station will operate on Digital TV Channel 22 with an effective radiated power (ERP) of 325 kilowatts and an antenna height above average terrain (HAAT) of 401 meters utilizing a directional antenna.

The request to modify the current digital facility is a result of the Commission's lifting of the August 3, 2004 "freeze" concerning expansion of service area.<sup>1</sup> This instant application is intended to be filed by June 20, 2008 in response to the FCC notice.

WBUI-DT is licensed to operate on Channel 22 as a digital television facility with an effective radiated power of 253 kilowatts and a height above average terrain of 401 meters. That permit authorizes the use of a directional antenna. The supporting structure has been registered with the FCC and issued tower registration number 1215843.

WBUI-DT proposes to modify its license by increasing the authorized effective radiated power to 325 kilowatts. No other changes are proposed.

The proposal would not be subject to environmental processing in accordance with 47 C.F.R. §1.1306. This proposal does not involve a site location specified under 47 C.F.R. §1.1307 (a)(1)-(7), or involve high intensity lighting under 47 C.F.R. §1.1307(a)(8) or result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 C.F.R. §1.1307(b).

This application conforms with all applicable rules and regulations of the Federal Communications Commission.

The proposed transmitting facility will use the authorized directional antenna a DIE TFU-31ETT-R P220 DC, mounted on the existing guyed, uniform cross-section, steel tower. No increase in tower height will occur, and no changes to the directional antenna radiation pattern or its mounting height above ground or sea level will occur.

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<sup>1</sup>

Public Notice "*Commission Lifts the Freeze On the Filing of Maximization Applications and Petitions for Digital Channel Substitutions, Effective Immediately*" DA 08-1213, released May 30, 2008.

### **DIRECTIONAL ANTENNA DETAILS (FIGURE 1)**

Figure 1 contains the details of the proposed antenna as required by the Commission's rules. The antenna employs horizontal polarization and an electrical beam tilt of 0.75 degrees. There are no changes to the antenna system from that previously authorized and in use by the station.

### **FCC F(50,90) COVERAGE CONTOURS (FIGURE 2)**

The predicted 41 and 48 dBu f(50,90) coverage contours were calculated in accordance with the provisions of 47 C.F.R. §73.313. In accordance with current FCC practice, no consideration was given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers from the proposed site were obtained from the N.G.D.C. 3-second terrain database. 360 radials, evenly spaced at 1-degree intervals were used for determining the average terrain elevations and the distance to the service contours.

The antenna radiation center heights above average terrain in the individual radial directions and the effective radiated power in the appropriate directions were used in conjunction with the appropriate F(50,90) curve contained with the Commission's rules.

The proposed digital service contours have been drawn on the map in Figure 2. As the map in Figure 2 shows, the 48 dBu (City Grade) contour from this proposal completely encompasses the city of license, Decatur, Illinois.

### **POPULATION AND AREA**

The population to be served within the predicted digital service contour was determined by a computer program that adds the population of census districts whose centroids lie within the contour as defined in OET Bulletin 69. The 2000 U.S. Census data was employed. The area within the digital service contour was calculated by a computer program using a root mean square algorithm.

### Post-Transition Population Summary

Population Summary (2000 Census) OET Bulletin 69 Method	Appendix B	Proposed
Within Noise Limited Contour	918000	933215
Service Match to Appendix B	----	101.7%

### INTERFERENCE STUDY

Figure 3, contains a detailed interference study using the procedures outlined in OET Bulletin Number 69 <sup>2</sup> and complies with the 0.5 percent limit of new interference caused to Appendix B facilities and/or current post-transition authorizations of nearby stations of concern. Protection requirements to Class A television stations were also considered in this study if applicable.

### ENVIRONMENTAL CONSIDERATIONS

The proposed facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields."

Power density contribution from the proposed operation was computed using the appropriate equations of the OET Bulletin 65. The maximum radiated power is 325 kilowatts. Using a "worst-case" relative field pattern of 0.5 for all values 10 degrees and greater below the horizon, the power density was computed at a level of 2 meters above ground to be 0.0393 mW/cm<sup>2</sup> or 2.26 % of the recommended limit of 1.737 mW/cm<sup>2</sup> for a controlled area at the base of the tower and 11.3 % of the recommended limit of 0.347 mW/cm<sup>2</sup> for an uncontrolled area.

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<sup>2</sup>

The implementation of OET Bulletin number 69 for this study followed the guidelines of the bulletin as specified therein. A standard cell size of 2-kilometers was employed. Comparisons of various results of this computer program to the Commission's implementation of the bulletin shows excellent correlation.

Therefore, at ground level (and 2 meters above), at the base of the tower, the potential for radiofrequency radiation exposure will be well within the FCC guidelines.

The "worst-case" minimum distance from the antenna was computed to be 79.1 meters for a controlled environment. As the minimum distance is more than 321.9 meters above ground level, no exposure in excess of the guidelines to workers is predicted to occur from this proposal at ground level.

The permittee/licensee/applicant will coordinate with other users of the site and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of the FCC guidelines.

Suitable warning signs and a fence or other devices have been placed at the base of the tower to prevent unauthorized access. If work is required on the tower, the power to the antenna will be terminated or reduced as required. The applicant will fully comply with the provisions contained within the OET bulletin.

The tower has been in service for a number of years and as no new tower construction will occur this proposal is fully exempt from further environmental processing or notification.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

April 14, 2009



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Timothy Z Sawyer  
Mullaney Engineering, Inc.



FIGURE 1

WBUI-DT ANTENNA DETAILS

NO CHANGE FROM CURRENT AUTHORIZED ANTENNA



Proposal Number

**DCA-7953**

Date

**16-Jun-98**

Call Letters

**WBUI**

Channel

**22/23**

Location

**Decatur, IL**

Customer

Antenna Type

**TFU-31ETT-R P220 DC**

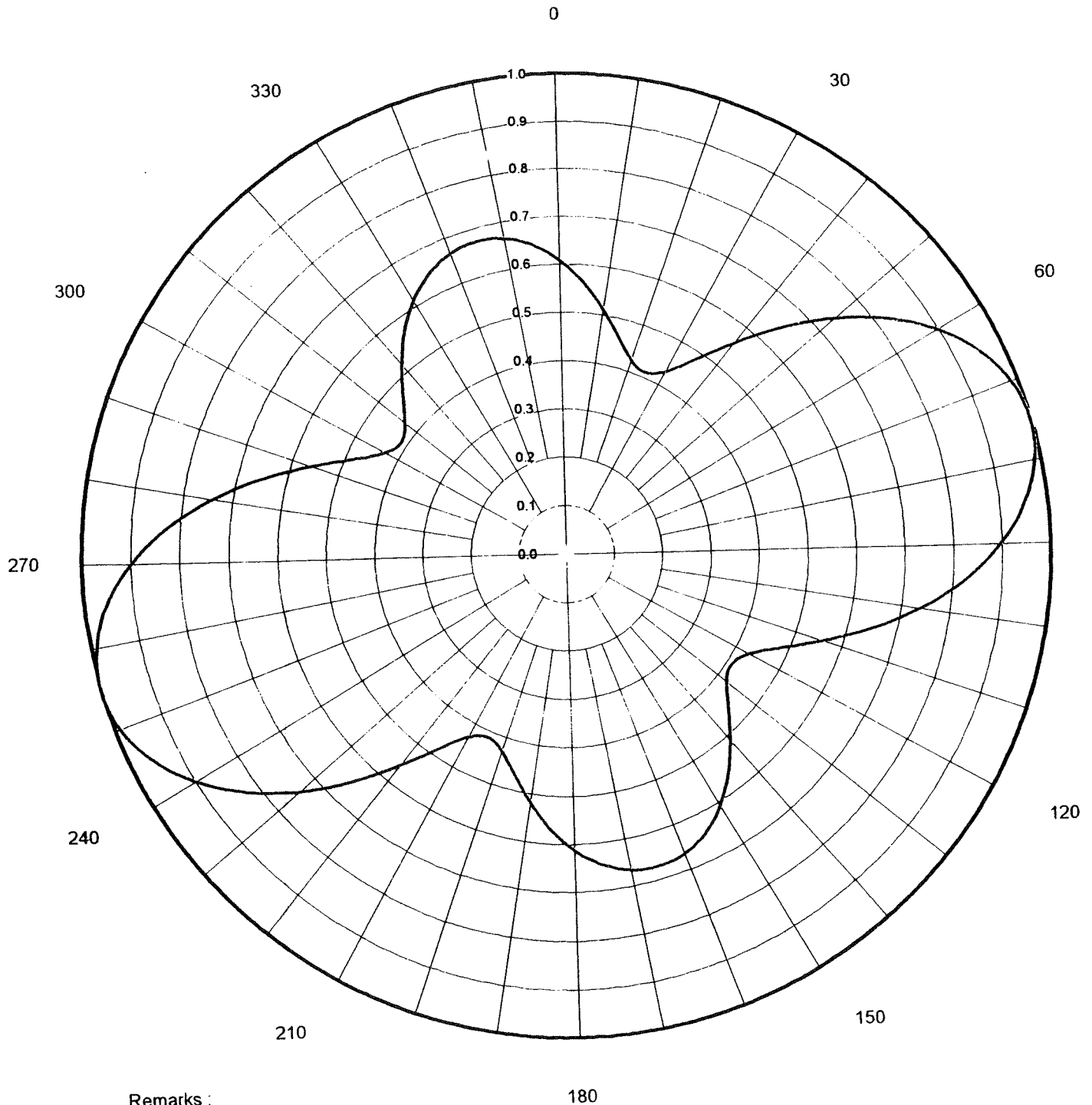
Exhibit No.

**One****AZIMUTH PATTERN**Gain  
Calculated / Measured**2.20****( 3.42 dB)****Calculated**

Frequency

**524.00 MHz**

Drawing #

**P220**



Proposal Number

**DCA-7953**

Date

**16-Jun-98**

Call Letters

**WBUI**

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**22/23**

Location

**Decatur, IL**

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Antenna Type

**TFU-31ETT-R P220 DC****TABULATION OF AZIMUTH PATTERN**Azimuth Pattern Drawing #: **P220**

Angle	Field	ERP (kW)	ERP (dBk)
0	0.610	127	21.02
10	0.516	91	19.57
20	0.427	62	17.92
30	0.430	63	17.98
40	0.559	106	20.26
50	0.740	186	22.70
60	0.898	274	24.38
70	0.988	332	25.21
80	0.988	332	25.21
90	0.898	274	24.38
100	0.740	186	22.70
110	0.559	106	20.26
120	0.430	63	17.98
130	0.427	62	17.92
140	0.516	91	19.57
150	0.610	127	21.02
160	0.665	150	21.77
170	0.665	150	21.77
180	0.610	127	21.02
190	0.516	91	19.57
200	0.427	62	17.92
210	0.430	63	17.98
220	0.559	106	20.26
230	0.740	186	22.70
240	0.898	274	24.38
250	0.988	332	25.21
260	0.988	332	25.21
270	0.898	274	24.38
280	0.740	186	22.70
290	0.559	106	20.26
300	0.430	63	17.98
310	0.427	62	17.92
320	0.516	91	19.57
330	0.610	127	21.02
340	0.665	150	21.77
350	0.665	150	21.77

**Maxima**

Angle	Field	ERP (kW)	ERP (dBk)
75	1.000	340	25.31
165	0.672	154	21.86
255	1.000	340	25.31
345	0.672	154	21.86

**Minima**

Angle	Field	ERP (kW)	ERP (dBk)
25	0.411	57	17.59
125	0.411	57	17.59
205	0.411	57	17.59
305	0.411	57	17.59

Remarks:



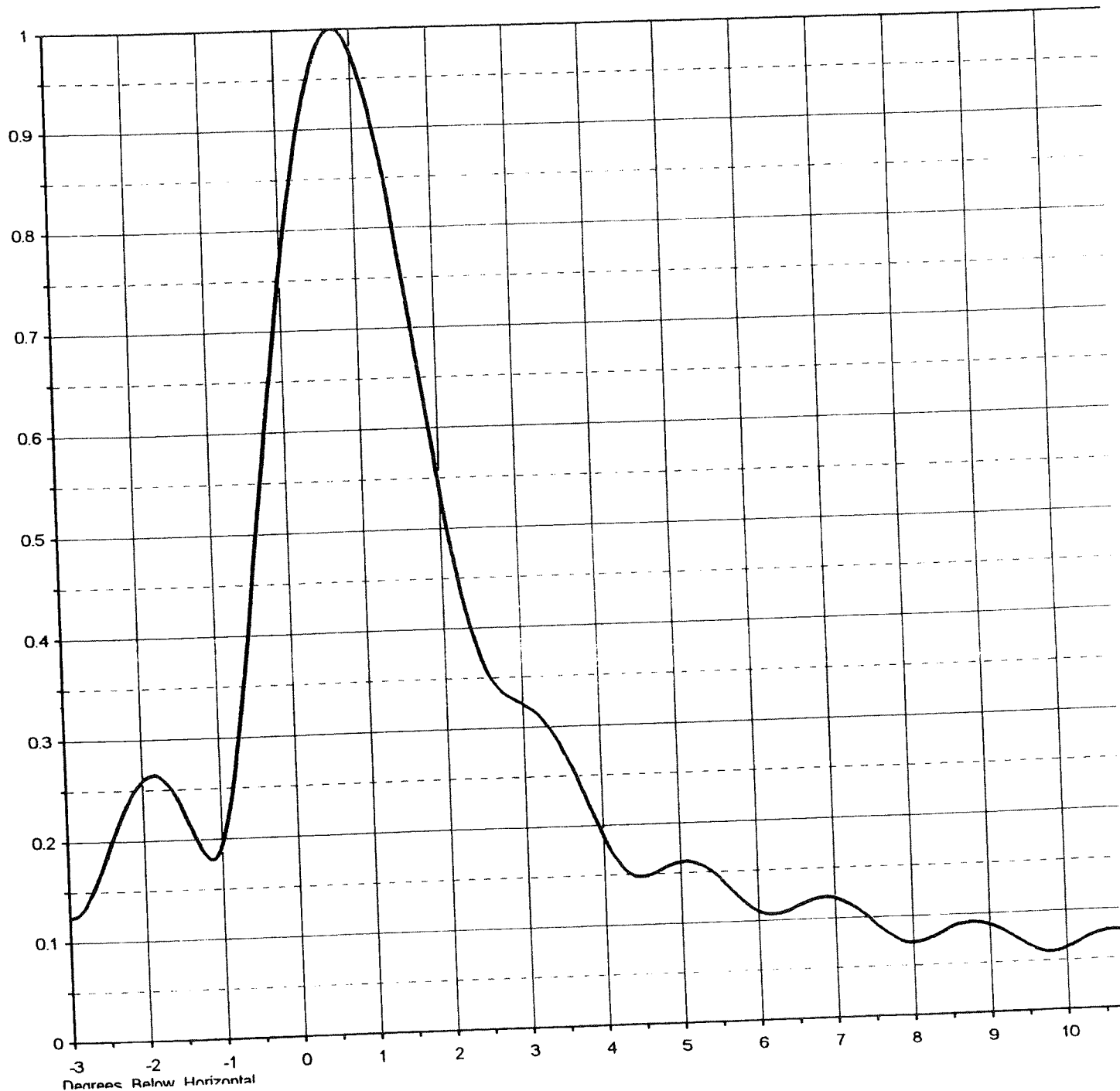
Proposal Number **DCA-7953**  
Date **16-Jun-98**  
Call Letters **WBUI**  
Location **Decatur, IL**  
Customer  
Antenna Type **TFU-31ETT-R P220 DC**

Exhibit No.  
**Three**

Channel **22/23**

## ELEVATION PATTERN

RMS Gain at Main Lobe	<b>28.0 ( 14.47 dB )</b>	Beam Tilt	<b>0.75 deg</b>
RMS Gain at Horizontal	<b>16.0 ( 12.04 dB )</b>	Frequency	<b>524.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>31E28007</b>





Proposal Number **DCA-7953**

Date **16-Jun-98**

Call Letters **WBUI** Channel **22/23**

Location **Decatur, IL**

Customer

Antenna Type **TFU-31ETT-R P220 DC**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **31E28007-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.055	2.4	0.391	10.6	0.078	30.5	0.037	51.0	0.032	71.5	0.022
-9.5	0.083	2.6	0.351	10.8	0.079	31.0	0.038	51.5	0.023	72.0	0.023
-9.0	0.071	2.8	0.333	11.0	0.076	31.5	0.024	52.0	0.014	72.5	0.025
-8.5	0.042	3.0	0.324	11.5	0.053	32.0	0.015	52.5	0.020	73.0	0.028
-8.0	0.074	3.2	0.313	12.0	0.050	32.5	0.031	53.0	0.029	73.5	0.031
-7.5	0.098	3.4	0.293	12.5	0.066	33.0	0.039	53.5	0.034	74.0	0.034
-7.0	0.078	3.6	0.264	13.0	0.061	33.5	0.030	54.0	0.032	74.5	0.035
-6.5	0.062	3.8	0.228	13.5	0.041	34.0	0.014	54.5	0.025	75.0	0.034
-6.0	0.106	4.0	0.192	14.0	0.048	34.5	0.023	55.0	0.017	75.5	0.033
-5.5	0.121	4.2	0.164	14.5	0.062	35.0	0.036	55.5	0.018	76.0	0.031
-5.0	0.085	4.4	0.149	15.0	0.052	35.5	0.036	56.0	0.027	76.5	0.028
-4.5	0.090	4.6	0.149	15.5	0.032	36.0	0.022	56.5	0.033	77.0	0.024
-4.0	0.151	4.8	0.156	16.0	0.044	36.5	0.013	57.0	0.035	77.5	0.021
-3.5	0.159	5.0	0.161	16.5	0.056	37.0	0.028	57.5	0.030	78.0	0.018
-3.0	0.125	5.2	0.160	17.0	0.043	37.5	0.037	58.0	0.022	78.5	0.016
-2.8	0.133	5.4	0.152	17.5	0.028	38.0	0.032	58.5	0.016	79.0	0.015
-2.6	0.162	5.6	0.138	18.0	0.043	38.5	0.017	59.0	0.019	79.5	0.016
-2.4	0.200	5.8	0.122	18.5	0.052	39.0	0.017	59.5	0.027	80.0	0.017
-2.2	0.235	6.0	0.110	19.0	0.038	39.5	0.031	60.0	0.033	80.5	0.018
-2.0	0.258	6.2	0.106	19.5	0.024	40.0	0.036	60.5	0.035	81.0	0.019
-1.8	0.264	6.4	0.109	20.0	0.040	40.5	0.029	61.0	0.032	81.5	0.020
-1.6	0.249	6.6	0.116	20.5	0.048	41.0	0.015	61.5	0.026	82.0	0.021
-1.4	0.217	6.8	0.121	21.0	0.034	41.5	0.018	62.0	0.020	82.5	0.021
-1.2	0.185	7.0	0.121	21.5	0.022	42.0	0.031	62.5	0.019	83.0	0.021
-1.0	0.191	7.2	0.114	22.0	0.039	42.5	0.036	63.0	0.024	83.5	0.020
-0.8	0.259	7.4	0.103	22.5	0.046	43.0	0.029	63.5	0.030	84.0	0.019
-0.6	0.371	7.6	0.089	23.0	0.033	43.5	0.016	64.0	0.034	84.5	0.018
-0.4	0.501	7.8	0.078	23.5	0.019	44.0	0.017	64.5	0.035	85.0	0.016
-0.2	0.634	8.0	0.073	24.0	0.035	44.5	0.030	65.0	0.032	85.5	0.014
0.0	0.757	8.2	0.076	24.5	0.044	45.0	0.036	65.5	0.027	86.0	0.012
0.2	0.861	8.4	0.083	25.0	0.033	45.5	0.031	66.0	0.021	86.5	0.010
0.4	0.940	8.6	0.090	25.5	0.017	46.0	0.019	66.5	0.018	87.0	0.009
0.6	0.987	8.8	0.092	26.0	0.032	46.5	0.014	67.0	0.021	87.5	0.007
0.8	1.000	9.0	0.089	26.5	0.043	47.0	0.025	67.5	0.025	88.0	0.005
1.0	0.979	9.2	0.082	27.0	0.034	47.5	0.034	68.0	0.030	88.5	0.003
1.2	0.927	9.4	0.072	27.5	0.016	48.0	0.034	68.5	0.034	89.0	0.002
1.4	0.850	9.6	0.063	28.0	0.027	48.5	0.025	69.0	0.035	89.5	0.001
1.6	0.754	9.8	0.060	28.5	0.040	49.0	0.015	69.5	0.034	90.0	0.000
1.8	0.649	10.0	0.060	29.0	0.036	49.5	0.019	70.0	0.031		
2.0	0.546	10.2	0.065	29.5	0.019	50.0	0.030	70.5	0.028		
2.2	0.457	10.4	0.073	30.0	0.021	50.5	0.035	71.0	0.024		

**WBUI-D.APP**

MOD OF PENDING APPLICATION

BPCDT20080620AFV

Latitude: 39-56-56 N

Longitude: 088-50-12 W

Channel: 22

Frequency: 521.0 MHz

ERP: 325.00 kW

Antenna HAAT: 401.0 m

Antenna AMSL Height: 609.0 m

Antenna AGL Height: 401.0 m

Site Elevation AMSL: 208.0 m

Horiz. Pattern: Directional

**WBUI-DT APPLICATION**

MODIFICATION OF PENDING APPLICATION

BPCDT-20080620AFV

PREDICTED SERVICE CONTOURS

FIGURE 2(REVISED)

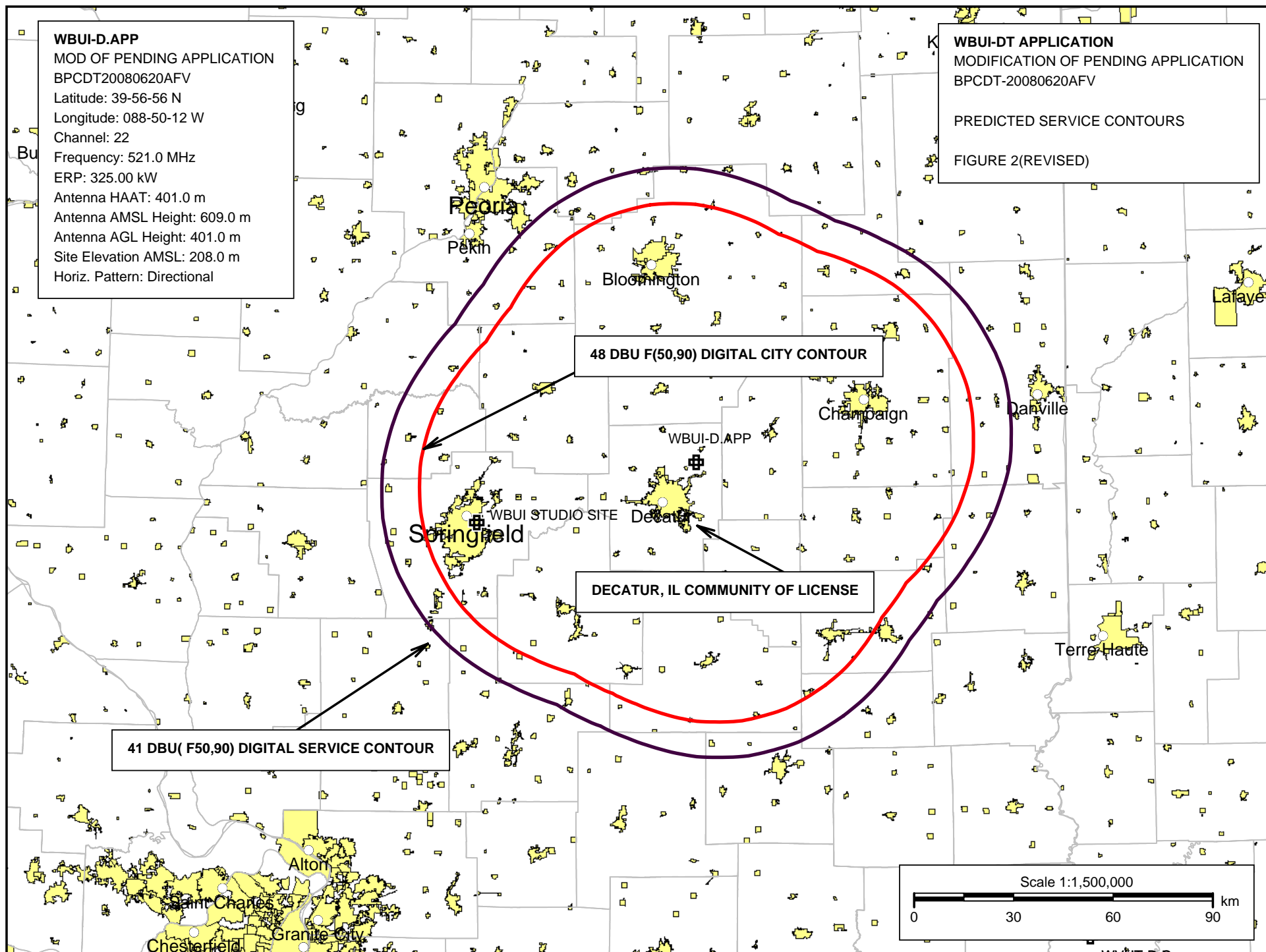


FIGURE 3 OET BULLETIN 69 INTERFERENCE STUDY

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-19-2009 Time: 02:51:46

Record Selected for Analysis

WBUI-D USERRECORD-01 DECATUR\_2 IL US  
Channel 22 ERP 325. kW HAAT 401. m RCAMSL 00609 m  
Latitude 039-56-56 Longitude 0088-50-12  
Status APP Zone 1 Border  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km\

Facility meets maximum height/power limits

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WBUI-D 22 DECATUR\_2 IL USERRECORD01 and station

SHORT TO: WVUT 22 VINCENNES IN BDTV 0601

38 -39-06 087 -28-37  
Req. separation 196.3 Actual separation 185.7 Short 10.6 km

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
22	WBUI-D	DECATUR_2 IL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WMEC	MACOMB IL	168.5	LIC	BDTV	-0539
21	WPXS	MOUNT VERNON IL	165.5	LIC	BDTV	-0543
21	WFYI	INDIANAPOLIS IN	224.8	LIC	BDTV	-0584
22	KWWF	WATERLOO IA	381.5	LIC	BDTV	-0490
22	WSBT-TV	SOUTH BEND IN	288.0	LIC	BDTV	-0594
22	WVUT	VINCENNES IN	185.6	LIC	BDTV	-0601
22	KBSI	CAPE GIRARDEAU MO	289.5	LIC	BDTV	-0849
22	WVCY-TV	MILWAUKEE WI	358.2	LIC	BDTV	-1760
23	WQPT-TV	MOLINE IL	199.7	LIC	BDTV	-0541

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	WMEC	MACOMB IL	BDTV	-0539

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
20	KNLJ	JEFFERSON CITY MO	221.3	LIC	BDTV	-0854
21	WYCC	CHICAGO IL	309.0	LIC	BDTV	-0523



21	WPXS	MOUNT VERNON IL	231.7	LIC	BDTV	-0543
21	WFYI	INDIANAPOLIS IN	388.9	LIC	BDTV	-0584
21	KTAJ-TV	ST. JOSEPH MO	357.7	LIC	BDTV	-0876
22	WBUI-D	DECATUR_2 IL	168.5	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 2

### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	WPXS	MOUNT VERNON IL	BDTV	-0543

### Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
20	WAZE-TV	MADISONVILLE KY	213.1	LIC	BDTV	-0656
20	KNLJ	JEFFERSON CITY MO	226.5	LIC	BDTV	-0854
21	WYCC	CHICAGO IL	404.7	LIC	BDTV	-0523
21	WMEC	MACOMB IL	231.7	LIC	BDTV	-0539
21	WFYI	INDIANAPOLIS IN	320.5	LIC	BDTV	-0584
21	WUXP-TV	NASHVILLE TN	347.9	LIC	BDTV	-1481
22	WVUT	VINCENNES IN	175.1	LIC	BDTV	-0601
22	KBSI	CAPE GIRARDEAU MO	127.1	LIC	BDTV	-0849
22	WBUI-D	DECATUR_2 IL	165.5	APP	USERRECORD-01	

Proposal causes no interference

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## Analysis of Interference to Affected Station 3

### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	WFYI	INDIANAPOLIS IN	BDTV	-0584

### Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WYCC	CHICAGO IL	252.3	LIC	BDTV	-0523
21	WMEC	MACOMB IL	388.9	LIC	BDTV	-0539
21	WPXS	MOUNT VERNON IL	320.5	LIC	BDTV	-0543
21	WUPX-TV	MOREHEAD KY	313.6	LIC	BDTV	-0659
21	WMYD	DETROIT MI	379.9	LIC	BDTV	-0777
21	WBNS-TV	COLUMBUS OH	270.5	LIC	BDTV	-1204
21	WUXP-TV	NASHVILLE TN	407.4	LIC	BDTV	-1481
22	WSBT-TV	SOUTH BEND IN	190.8	LIC	BDTV	-0594
22	WVUT	VINCENNES IN	176.9	LIC	BDTV	-0601
22	WBUI-D	DECATUR_2 IL	224.8	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

#####

# Analysis of Interference to Affected Station 4

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	KWWF	WATERLOO IA	BDTV	-0490

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
22	WUCW	MINNEAPOLIS MN	307.9	LIC	BDTV	-0834
22	WOWT-TV	OMAHA NE	354.4	LIC	BDTV	-1040
22	WVCY-TV	MILWAUKEE WI	343.4	LIC	BDTV	-1760
23	KPWB-TV	AMES IA	147.5	LIC	BDTV	-0459
23	WQPT-TV	MOLINE IL	182.3	LIC	BDTV	-0541
22	WBUI-D	DECATUR_2 IL	381.5	APP	USERRECORD-01	

Proposal causes no interference

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# Analysis of Interference to Affected Station 5

## Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WSBT-TV	SOUTH BEND IN	BDTV	-0594

## Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WYCC	CHICAGO IL	120.7	LIC	BDTV	-0523
21	WFYI	INDIANAPOLIS IN	190.8	LIC	BDTV	-0584
22	WVUT	VINCENNES IN	346.5	LIC	BDTV	-0601
22	WNEM-TV	BAY CITY MI	283.2	LIC	BDTV	-0768
22	WVCY-TV	MILWAUKEE WI	215.0	LIC	BDTV	-1760
23	WIPB	MUNCIE IN	182.9	LIC	BDTV	-0591
22	WBUI-D	DECATUR_2 IL	288.0	APP	USERRECORD-01	

Total scenarios = 2

Result key: 1

Scenario 1 Affected station 5

Before Analysis

Results for: 22A IN SOUTH BEND BDTV 0594 LIC

HAAT 332.0 m, ATV ERP 192.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1556712	24768.1
not affected by terrain losses	1556712	24768.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	34591	100.7
lost to ATV IX only	34591	100.7
lost to all IX	34591	100.7

Potential Interfering Stations Included in above Scenario 1

21A IL CHICAGO	BDTV	0523	LIC
22A MI BAY CITY	BDTV	0768	LIC
22A WI MILWAUKEE	BDTV	1760	LIC

After Analysis

Results for: 22A IN SOUTH BEND BDTV 0594 LIC  
 HAAT 332.0 m, ATV ERP 192.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1556712	24768.1
not affected by terrain losses	1556712	24768.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	34754	108.8
lost to ATV IX only	34754	108.8
lost to all IX	34754	108.8

Potential Interfering Stations Included in above Scenario 1

21A IL CHICAGO	BDTV	0523	LIC
22A MI BAY CITY	BDTV	0768	LIC
22A WI MILWAUKEE	BDTV	1760	LIC
22A IL DECATUR_2	USERRECORD01		APP
*Percent Service lost without proposal:		0.0 to BDTV	0594
*Percent Service lost with proposal:		0.0 to BDTV	0594

Result key: 2  
 Scenario 2 Affected station 5  
 Before Analysis

Results for: 22A IN SOUTH BEND BDTV 0594 LIC  
 HAAT 332.0 m, ATV ERP 192.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1556712	24768.1
not affected by terrain losses	1556712	24768.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	34591	100.7
lost to ATV IX only	34591	100.7
lost to all IX	34591	100.7

Potential Interfering Stations Included in above Scenario 2

21A IL CHICAGO	BDTV	0523	LIC
22A MI BAY CITY	BDTV	0768	LIC
22A WI MILWAUKEE	BDTV	1760	LIC

After Analysis

Results for: 22A IN SOUTH BEND BDTV 0594 LIC  
 HAAT 332.0 m, ATV ERP 192.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1556712	24768.1
not affected by terrain losses	1556712	24768.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	34754	108.8
lost to ATV IX only	34754	108.8
lost to all IX	34754	108.8

Potential Interfering Stations Included in above Scenario 2

21A IL CHICAGO	BDTV	0523	LIC	
22A MI BAY CITY	BDTV	0768	LIC	
22A WI MILWAUKEE	BDTV	1760	LIC	
22A IL DECATUR_2	USERRECORD01		APP	
*Percent Service lost without proposal:		0.0	to BDTV	0594
*Percent Service lost with proposal:		0.0	to BDTV	0594

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WVUT	VINCENNES IN	BDTV	-0601

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WPXS	MOUNT VERNON IL	175.1	LIC	BDTV	-0543
21	WFYI	INDIANAPOLIS IN	176.9	LIC	BDTV	-0584
22	WSBT-TV	SOUTH BEND IN	346.5	LIC	BDTV	-0594
22	KBSI	CAPE GIRARDEAU MO	229.1	LIC	BDTV	-0849
22	WCTE	COOKEVILLE TN	333.6	LIC	BDTV	-1449
22	WBUI-D	DECATUR_2 IL	185.6	APP	USERRECORD-01	

Total scenarios = 2

Result key: 3

Scenario 1 Affected station 6  
Before Analysis

Results for: 22A IN VINCENNES BDTV 0601 LIC  
HAAT 174.0 m, ATV ERP 50.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	270582	11788.2
not affected by terrain losses	270386	11764.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	360	68.3
lost to ATV IX only	360	68.3
lost to all IX	360	68.3

Potential Interfering Stations Included in above Scenario 1

22A MO CAPE GIRARDEAU	BDTV	0849	LIC
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After Analysis

Results for: 22A IN VINCENNES BDTV 0601 LIC  
HAAT 174.0 m, ATV ERP 50.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	270582	11788.2
not affected by terrain losses	270386	11764.1
lost to NTSC IX	0	0.0

lost to additional IX by ATV	4374	301.2
lost to ATV IX only	4374	301.2
lost to all IX	4374	301.2

Potential Interfering Stations Included in above Scenario 1

22A MO CAPE GIRARDEAU	BDTV	0849	LIC
22A IL DECATUR_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	0601
*Percent Service lost with proposal:	0.0	to BDTV	0601

Result key: 4  
 Scenario 2 Affected station 6  
 Before Analysis

Results for: 22A IN VINCENNES	BDTV	0601	LIC
HAAT 174.0 m, ATV ERP 50.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	270582	11788.2	
not affected by terrain losses	270386	11764.1	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	360	68.3	
lost to ATV IX only	360	68.3	
lost to all IX	360	68.3	

Potential Interfering Stations Included in above Scenario 2

22A MO CAPE GIRARDEAU	BDTV	0849	LIC
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After Analysis

Results for: 22A IN VINCENNES	BDTV	0601	LIC
HAAT 174.0 m, ATV ERP 50.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	270582	11788.2	
not affected by terrain losses	270386	11764.1	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	4374	301.2	
lost to ATV IX only	4374	301.2	
lost to all IX	4374	301.2	

Potential Interfering Stations Included in above Scenario 2

22A MO CAPE GIRARDEAU	BDTV	0849	LIC
22A IL DECATUR_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	0601
*Percent Service lost with proposal:	0.0	to BDTV	0601

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application Ref. No.
22	KBSI	CAPE GIRARDEAU MO	BDTV -0849

# Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WPXS	MOUNT VERNON IL	127.1	LIC	BDTV	-0543
22	WFIQ	FLORENCE AL	352.7	LIC	BDTV	-0032
22	KATV	LITTLE ROCK AR	403.4	LIC	BDTV	-0081
22	WVUT	VINCENNES IN	229.1	LIC	BDTV	-0601
22	WCTE	COOKEVILLE TN	399.7	LIC	BDTV	-1449
23	960405KF	MEMPHIS TN	222.7	LIC	BDTV	-1470
22	WBUI-D	DECATUR_2 IL	289.5	APP	USERRECORD-01	

Total scenarios = 2

Result key: 5  
Scenario 1 Affected station 7  
Before Analysis

Results for: 22A MO CAPE GIRARDEAU BDTV 0849 LIC  
HAAT 543.0 m, ATV ERP 435.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	701007	32584.5
not affected by terrain losses	698899	32233.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	6893	247.4
lost to ATV IX only	6893	247.4
lost to all IX	6893	247.4

Potential Interfering Stations Included in above Scenario 1

21A IL MOUNT VERNON	BDTV	0543	LIC
22A AL FLORENCE	BDTV	0032	LIC
22A IN VINCENNES	BDTV	0601	LIC

After Analysis

Results for: 22A MO CAPE GIRARDEAU BDTV 0849 LIC  
HAAT 543.0 m, ATV ERP 435.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	701007	32584.5
not affected by terrain losses	698899	32233.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7353	299.2
lost to ATV IX only	7353	299.2
lost to all IX	7353	299.2

Potential Interfering Stations Included in above Scenario 1

21A IL MOUNT VERNON	BDTV	0543	LIC
22A AL FLORENCE	BDTV	0032	LIC
22A IN VINCENNES	BDTV	0601	LIC
22A IL DECATUR_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	0849
*Percent Service lost with proposal:	0.0	to BDTV	0849

Result key: 6  
Scenario 2 Affected station 7  
Before Analysis

Results for: 22A MO CAPE GIRARDEAU BDTV 0849 LIC  
 HAAT 543.0 m, ATV ERP 435.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	701007	32584.5
not affected by terrain losses	698899	32233.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	6893	247.4
lost to ATV IX only	6893	247.4
lost to all IX	6893	247.4

Potential Interfering Stations Included in above Scenario 2

21A IL MOUNT VERNON	BDTV	0543	LIC
22A AL FLORENCE	BDTV	0032	LIC
22A IN VINCENNES	BDTV	0601	LIC

After Analysis

Results for: 22A MO CAPE GIRARDEAU BDTV 0849 LIC  
 HAAT 543.0 m, ATV ERP 435.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	701007	32584.5
not affected by terrain losses	698899	32233.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7353	299.2
lost to ATV IX only	7353	299.2
lost to all IX	7353	299.2

Potential Interfering Stations Included in above Scenario 2

21A IL MOUNT VERNON	BDTV	0543	LIC
22A AL FLORENCE	BDTV	0032	LIC
22A IN VINCENNES	BDTV	0601	LIC
22A IL DECATUR_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	0849
*Percent Service lost with proposal:	0.0	to BDTV	0849

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WVCY-TV	MILWAUKEE WI	BDTV	-1760

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WYCC	CHICAGO IL	135.0	LIC	BDTV	-0523
21	WCMW	MANISTEE MI	166.3	LIC	BDTV	-0800
21	WIWB	SURING WI	137.8	LIC	BDTV	-1771
22	KWWF	WATERLOO IA	343.4	LIC	BDTV	-0490
22	WSBT-TV	SOUTH BEND IN	215.0	LIC	BDTV	-0594
22	WNEM-TV	BAY CITY MI	331.2	LIC	BDTV	-0768
23	WIFR	FREEMONT IL	136.3	LIC	BDTV	-0533

23	WBAY-TV	GREEN BAY WI	146.3	LIC	BDTV	-1741
22	WBUI-D	DECATUR_2 IL	358.2	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 9

##### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
23	WQPT-TV	MOLINE IL	BDTV	-0541

##### Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
22	KWWF	WATERLOO IA	182.3	LIC	BDTV	-0490
23	KPWB-TV	AMES IA	275.2	LIC	BDTV	-0459
23	WIFR	FREEPORT IL	148.3	LIC	BDTV	-0533
23	WBAY-TV	GREEN BAY WI	395.0	LIC	BDTV	-1741
22	WBUI-D	DECATUR_2 IL	199.7	APP	USERRECORD-01	

Proposal causes no interference

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#### Analysis of Interference to Affected Station 10

##### Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WBUI-D	DECATUR_2 IL	USERRECORD-01	

##### Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
21	WMEC	MACOMB IL	168.5	LIC	BDTV	-0539
21	WPXS	MOUNT VERNON IL	165.5	LIC	BDTV	-0543
21	WFYI	INDIANAPOLIS IN	224.8	LIC	BDTV	-0584
22	KWWF	WATERLOO IA	381.5	LIC	BDTV	-0490
22	WSBT-TV	SOUTH BEND IN	288.0	LIC	BDTV	-0594
22	WVUT	VINCENNES IN	185.6	LIC	BDTV	-0601
22	KBSI	CAPE GIRARDEAU MO	289.5	LIC	BDTV	-0849
22	WVCY-TV	MILWAUKEE WI	358.2	LIC	BDTV	-1760
23	WQPT-TV	MOLINE IL	199.7	LIC	BDTV	-0541

Total scenarios = 1

Result key: 7

Scenario 1 Affected station 10  
Before Analysis

Results for: 22A IL DECATUR\_2 USERRECORD01 APP  
HAAT 401.0 m, ATV ERP 750.0 kW  
POPULATION 1057897 AREA (sq km) 30421.1  
within Noise Limited Contour



not affected by terrain losses	1057866	30413.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	198	16.0
lost to ATV IX only	198	16.0
lost to all IX	198	16.0

Potential Interfering Stations Included in above Scenario 1

22A IN SOUTH BEND	BDTV	0594	LIC
22A IN VINCENNES	BDTV	0601	LIC
22A MO CAPE GIRARDEAU	BDTV	0849	LIC

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

NO PROBLEMS FOUND