

ENGINEERING STATEMENT
IN SUPPORT OF MODIFICATION OF CONSTRUCTION PERMIT
BMPCDT-20080616ABO
FOR THE DIGITAL TV OPERATION OF
WWTV, CADILLAC, MICHIGAN
CHANNEL 9 45 KW 497 METERS
JULY 2009

This engineering statement has been prepared on behalf of Heritage Broadcasting Company of Michigan, licensee of TV station WWTW, Cadillac, Michigan, in support of modification of construction permit (BMPCDT-20080616ABO) for its digital TV operation on Channel 9.

At present WWTW, Facility ID Number 26994, is authorized (BMPCDT-20080616ABO) to operate its digital TV facilities on Channel 9 (186-192 MHz) with 30 kW effective radiated power (ERP) and 497 meters antenna height above average terrain (HAAT) using a non-directional TV antenna. Station WWTW has realized that its currently authorized operation on VHF TV Channel 9 with ERP of 30 kW is not sufficient to provide adequate TV reception after broadcasting digital TV signal for several weeks. Therefore, WWTW is requesting higher power to improve digital TV signal reception within the station's coverage area. The requested ERP and HAAT do not exceed the maximum parameters for VHF TV stations located within Zone 2 as per Section 73.622 of the Commission's rules. In addition, an electromagnetic study conducted according to FCC OET Bulletin 69 indicates the proposed WWTW operation on Channel 9 with 45 kW would not cause interference to other TV stations exceeding the Commission's guidelines. No other changes in the authorized operation are proposed.

The following information provides pertinent data for the proposed WWTW operation.

Name of the Licensee:	Heritage Broadcasting Company of Michigan
Station Location:	MI-Cadillac
Channel:	9

Hours of Operation:	Unlimited			
Transmitter:	Type Accepted			
Antenna Type:	RCA, TW18A9P			
Beam Tilt:	0.75			
Antenna Coordinates:	North Latitude:	44 deg	08 min	12 sec
	West Longitude:	85 deg	20 min	33 sec
Transmitter output power:	As required to achieve authorized ERP			
Maximum effective radiated power (Average):	45 kW 16.53 dBk			
Elevation of site above mean sea level:	519.5 meters			
Overall height of the tower above ground:	393.3 meters			
Height of radiation center above ground (meters):	376 meters			
Height of radiation center above mean sea level (meters):	895.5 meters			
Height of radiation center above average terrain (meters):	497 meters			
Antenna Structure Registration Number:	1002422			

Response to questions listed on the FCC Form 301, Section III-D-DTV

Engineering

Question 1. (a)

WWTV will operate its DTV operation on Channel 9 as established in 47 C.F.R. Section 73.622.

Question 1. (d)

WWTV is proposing to modify its CP to operate with higher ERP. The proposed noise limited contour would extend beyond the facilities established in Appendix B of the Seventh Report and Order (MB Docket No. 87-268). However, an interference

study conducted (see attached Table I) according to the FCC OET Bulletin 69 indicates the proposed WWTV operation would not cause any interference to other DTV stations exceeding the Commission's guidelines.

Question 1. (e)

The proposed DTV operation would serve 975,567 people within the noise limited service area as compared to 899,968 people served by the CP operation. As such, WWTV proposed noise limited contour would serve 75,599 more people than the currently authorized operation.

Question 2.

The attached environmental statement demonstrates that there will not be any significant environmental impact from the proposed DTV operation in accordance with 47 C.F.R. Section 73.1307.

Question 3.

The attached map shows the proposed WWTV 43 dBu contour will encompass the allotted principal community of Cadillac, Michigan (see Figure 1).

Question 4.

The proposed WWTV facility complies with Section 73.1030 of the Commission's rules; therefore, notification to radio astronomy installations, radio receiving installations and FCC monitoring stations is not required.

Question 5.

The existing WWTV tower is registered (ASR No. 1002422) by the Commission and no changes are proposed to require a change in the registration.

Table I

TW Census data selected 2000

Post Transition Data Base Selected /space/software/cdb/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 07-23-2009 Time: 10:03:34

Record Selected for Analysis

WWTW USERRECORD-01 CADILLAC MI US
 Channel 09 ERP 45. kW HAAT 493. m RCAMSL 00896 m
 Latitude 044-08-12 Longitude 0085-20-33
 Status APP Zone 2 Border
 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

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	45.000	461.9	118.2
45.0	45.000	493.1	120.0
90.0	45.000	506.5	120.7
135.0	45.000	512.8	121.0
180.0	45.000	478.9	119.3
225.0	45.000	505.8	120.7
270.0	45.000	507.9	120.8
315.0	45.000	478.3	119.2

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WWTW 09 CADILLAC MI USERRECORD01

and station

SHORT TO: WWTW 09 CADILLAC MI DTVP0200
 44 -08-12 85 -20-33
 Req. separation 273.6 Actual separation 0.0 Short 273.6 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance
Distance to border = 232.5km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Call	City/State	ARN
09	WWTW	CADILLAC MI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	WWMT	KALAMAZOO MI	168.0	CP	BPCDT	-20080312ABA
08	WWMT	KALAMAZOO MI	168.0	PLN	DTVPLN	-DTVP0136
09	WAOW-TV	WAUSAU WI	355.4	CP	BPCDT	-20090409ADU
09	WAOW-TV	WAUSAU WI	355.4	PLN	DTVPLN	-DTVP0231
10	WILX-TV	ONONDAGA MI	198.3	CP	BPCDT	-20080403ADB
10	WILX-TV	ONONDAGA MI	198.3	PLN	DTVPLN	-DTVP0263
10	WILX-TV	ONONDAGA MI	198.3	APP	BMPCDT	-20080618AAZ

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WWMT	KALAMAZOO MI	BPCDT	-20080312ABA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WLS-TV	CHICAGO IL	191.8	CP	BPCDT	-20080529AJS
07	WLS-TV	CHICAGO IL	191.9	PLN	DTVPLN	-DTVP0062
07	WJBK	DETROIT MI	191.2	CP MOD	BMPCDT	-20080623ACT
07	WJBK	DETROIT MI	191.2	PLN	DTVPLN	-DTVP0070
07	WOOD-TV	GRAND RAPIDS MI	6.5	LIC	BLCDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	6.5	PLN	DTVPLN	-DTVP0071
07	WPBN-TV	TRAVERSE CITY MI	183.2	APP	BPCDT	-20080321ACW
07	WPBN-TV	TRAVERSE CITY MI	183.2	PLN	DTVPLN	-DTVP0072
08	951215KK	GALESBURG IL	426.1	PLN	DTVPLN	-DTVP0127
08	WDHS	IRON MOUNTAIN MI	406.5	CP MOD	BMPCDT	-20090513AFU
08	WDHS	IRON MOUNTAIN MI	406.5	PLN	DTVPLN	-DTVP0135
08	WGTQ	SAULT STE. MARIE MI	396.7	CP MOD	BMPCDT	-20080619AJZ
08	WGTQ	SAULT STE. MARIE MI	396.7	PLN	DTVPLN	-DTVP0137
08	WJW	CLEVELAND OH	345.7	CP MOD	BMPCDT	-20080620AHI
08	WJW	CLEVELAND OH	345.7	PLN	DTVPLN	-DTVP0153
08	WLIO	LIMA OH	239.8	CP MOD	BMPCDT	-20060517ABE
08	WLIO	LIMA OH	239.8	PLN	DTVPLN	-DTVP0154
08	WMVS	MILWAUKEE WI	199.6	APP	BPEDT	-20090310ADU
08	WMVS	MILWAUKEE WI	199.6	PLN	DTVPLN	-DTVP0171
08	WMVS	MILWAUKEE WI	199.6	LIC	BLEDT	-20041207AAL
09	WWTW	CADILLAC MI	168.0	PLN	DTVPLN	-DTVP0200
09	WWTW	CADILLAC MI	168.0	APP	USERRECORD-01	

Total scenarios = 12

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65328	2170.4
lost to ATV IX only	65328	2170.4
lost to all IX	65328	2170.4

Potential Interfering Stations Included in above Scenario 1

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65527	2194.4
lost to ATV IX only	65527	2194.4
lost to all IX	65527	2194.4

Potential Interfering Stations Included in above Scenario 1

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 2
 Scenario 2 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65328	2170.4
lost to ATV IX only	65328	2170.4
lost to all IX	65328	2170.4

Potential Interfering Stations Included in above Scenario 2

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65527	2194.4
lost to ATV IX only	65527	2194.4
lost to all IX	65527	2194.4

Potential Interfering Stations Included in above Scenario 2

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 3
 Scenario 3 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65595	2166.4
lost to ATV IX only	65595	2166.4
lost to all IX	65595	2166.4

Potential Interfering Stations Included in above Scenario 3

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65794	2190.4
lost to ATV IX only	65794	2190.4
lost to all IX	65794	2190.4

Potential Interfering Stations Included in above Scenario 3

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 4
 Scenario 4 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65595	2166.4
lost to ATV IX only	65595	2166.4
lost to all IX	65595	2166.4

Potential Interfering Stations Included in above Scenario 4

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65794	2190.4
lost to ATV IX only	65794	2190.4
lost to all IX	65794	2190.4

Potential Interfering Stations Included in above Scenario 4

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 5
 Scenario 5 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65328	2170.4
lost to ATV IX only	65328	2170.4
lost to all IX	65328	2170.4

Potential Interfering Stations Included in above Scenario 5

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65527	2194.4
lost to ATV IX only	65527	2194.4
lost to all IX	65527	2194.4

Potential Interfering Stations Included in above Scenario 5

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 6
 Scenario 6 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65328	2170.4

lost to ATV IX only	65328	2170.4
lost to all IX	65328	2170.4

Potential Interfering Stations Included in above Scenario 6

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP

HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65527	2194.4
lost to ATV IX only	65527	2194.4
lost to all IX	65527	2194.4

Potential Interfering Stations Included in above Scenario 6

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 7

Scenario 7 Affected station 1

Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP

HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65595	2166.4
lost to ATV IX only	65595	2166.4
lost to all IX	65595	2166.4

Potential Interfering Stations Included in above Scenario 7

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP

HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65794	2190.4
lost to ATV IX only	65794	2190.4
lost to all IX	65794	2190.4

Potential Interfering Stations Included in above Scenario 7

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 8
 Scenario 8 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65595	2166.4
lost to ATV IX only	65595	2166.4
lost to all IX	65595	2166.4

Potential Interfering Stations Included in above Scenario 8

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	65794	2190.4
lost to ATV IX only	65794	2190.4
lost to all IX	65794	2190.4

Potential Interfering Stations Included in above Scenario 8

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0087%

Result key: 9
 Scenario 9 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	72595	2314.8
lost to ATV IX only	72595	2314.8
lost to all IX	72595	2314.8

Potential Interfering Stations Included in above Scenario 9

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BPEDT	20090310ADU	APP

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	72758	2334.9
lost to ATV IX only	72758	2334.9

lost to all IX 72758 2334.9

Potential Interfering Stations Included in above Scenario 9

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BPEDT	20090310ADU	APP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0071%

Result key: 10
 Scenario 10 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	72862	2310.8
lost to ATV IX only	72862	2310.8
lost to all IX	72862	2310.8

Potential Interfering Stations Included in above Scenario 10

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BPEDT	20090310ADU	APP

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	73025	2330.8
lost to ATV IX only	73025	2330.8
lost to all IX	73025	2330.8

Potential Interfering Stations Included in above Scenario 10

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BPEDT	20090310ADU	APP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0071%

Result key: 11
 Scenario 11 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	72595	2314.8
lost to ATV IX only	72595	2314.8
lost to all IX	72595	2314.8

Potential Interfering Stations Included in above Scenario 11

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BPEDT	20090310ADU	APP

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	72758	2334.9
lost to ATV IX only	72758	2334.9
lost to all IX	72758	2334.9

Potential Interfering Stations Included in above Scenario 11

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BPEDT	20090310ADU	APP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0071%

Result key: 12
 Scenario 12 Affected station 1
 Before Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	72862	2310.8
lost to ATV IX only	72862	2310.8
lost to all IX	72862	2310.8

Potential Interfering Stations Included in above Scenario 12

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BPEDT	20090310ADU	APP

After Analysis

Results for: 8A MI KALAMAZOO BPCDT 20080312ABA CP
 HAAT 257.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2375087	29935.9
not affected by terrain losses	2362118	29743.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	73025	2330.8
lost to ATV IX only	73025	2330.8
lost to all IX	73025	2330.8

Potential Interfering Stations Included in above Scenario 12

8A OH CLEVELAND	DTVPLN	DTVP0153	PLN
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BPEDT	20090310ADU	APP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0071%

Worst case new IX 0.0087% Scenario 3

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Analysis of Interference to Affected Station 2

KHANNA & GULL, Inc. – Consulting Engineers

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WWMT	KALAMAZOO MI	DTVPLN	-DTPV0136

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WLS-TV	CHICAGO IL	191.8	CP	BPCDT	-20080529AJS
07	WLS-TV	CHICAGO IL	191.9	PLN	DTVPLN	-DTPV0062
07	WJBK	DETROIT MI	191.2	CP MOD	BMPCDT	-20080623ACT
07	WJBK	DETROIT MI	191.2	PLN	DTVPLN	-DTPV0070
07	WOOD-TV	GRAND RAPIDS MI	6.5	LIC	BLCDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	6.5	PLN	DTVPLN	-DTPV0071
07	WPBN-TV	TRAVERSE CITY MI	183.2	APP	BPCDT	-20080321ACW
07	WPBN-TV	TRAVERSE CITY MI	183.2	PLN	DTVPLN	-DTPV0072
08	951215KK	GALESBURG IL	426.1	PLN	DTVPLN	-DTPV0127
08	WDHS	IRON MOUNTAIN MI	406.5	CP MOD	BMPCDT	-20090513AFU
08	WDHS	IRON MOUNTAIN MI	406.5	PLN	DTVPLN	-DTPV0135
08	WGTQ	SAULT STE. MARIE MI	396.7	CP MOD	BMPCDT	-20080619AJZ
08	WGTQ	SAULT STE. MARIE MI	396.7	PLN	DTVPLN	-DTPV0137
08	WJW	CLEVELAND OH	345.7	CP MOD	BMPCDT	-20080620AHI
08	WJW	CLEVELAND OH	345.7	PLN	DTVPLN	-DTPV0153
08	WLIO	LIMA OH	239.8	CP MOD	BMPCDT	-20060517ABE
08	WLIO	LIMA OH	239.8	PLN	DTVPLN	-DTPV0154
08	WMVS	MILWAUKEE WI	199.6	APP	BPEDT	-20090310ADU
08	WMVS	MILWAUKEE WI	199.6	PLN	DTVPLN	-DTPV0171
08	WMVS	MILWAUKEE WI	199.6	LIC	BLEDT	-20041207AAL
09	WWTW	CADILLAC MI	168.0	PLN	DTVPLN	-DTPV0200
09	WWTW	CADILLAC MI	168.0	APP	USERRECORD-01	

Total scenarios = 6

Result key: 13
 Scenario 1 Affected station 2
 Before Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTPV0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41160	1536.6
lost to ATV IX only	41160	1536.6
lost to all IX	41160	1536.6

Potential Interfering Stations Included in above Scenario 1

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	DTVPLN	DTPV0171	PLN

After Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTPV0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41822	1560.6
lost to ATV IX only	41822	1560.6
lost to all IX	41822	1560.6

Potential Interfering Stations Included in above Scenario 1

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	DTVPLN	DTPV0171	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0284%

Result key: 14
 Scenario 2 Affected station 2
 Before Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41160	1536.6
lost to ATV IX only	41160	1536.6
lost to all IX	41160	1536.6

Potential Interfering Stations Included in above Scenario 2

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

After Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41822	1560.6
lost to ATV IX only	41822	1560.6
lost to all IX	41822	1560.6

Potential Interfering Stations Included in above Scenario 2

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0284%

Result key: 15
 Scenario 3 Affected station 2
 Before Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41171	1536.6
lost to ATV IX only	41171	1536.6
lost to all IX	41171	1536.6

Potential Interfering Stations Included in above Scenario 3

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN

After Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0

lost to NTSC IX	0	0.0
lost to additional IX by ATV	41833	1560.6
lost to ATV IX only	41833	1560.6
lost to all IX	41833	1560.6

Potential Interfering Stations Included in above Scenario 3

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0284%

Result key: 16
 Scenario 4 Affected station 2
 Before Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN

HAAT 305.0 m, ATV ERP 20.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41171	1536.6
lost to ATV IX only	41171	1536.6
lost to all IX	41171	1536.6

Potential Interfering Stations Included in above Scenario 4

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

After Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN

HAAT 305.0 m, ATV ERP 20.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	41833	1560.6
lost to ATV IX only	41833	1560.6
lost to all IX	41833	1560.6

Potential Interfering Stations Included in above Scenario 4

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0284%

Result key: 17
 Scenario 5 Affected station 2
 Before Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN

HAAT 305.0 m, ATV ERP 20.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	48778	1697.0
lost to ATV IX only	48778	1697.0
lost to all IX	48778	1697.0

Potential Interfering Stations Included in above Scenario 5

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8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BPEDT	20090310ADU	APP

After Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	49440	1721.1
lost to ATV IX only	49440	1721.1
lost to all IX	49440	1721.1

Potential Interfering Stations Included in above Scenario 5

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	BMPCDT	20060517ABE	CP
8A WI MILWAUKEE	BPEDT	20090310ADU	APP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0284%

Result key: 18
 Scenario 6 Affected station 2
 Before Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	48789	1697.0
lost to ATV IX only	48789	1697.0
lost to all IX	48789	1697.0

Potential Interfering Stations Included in above Scenario 6

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BPEDT	20090310ADU	APP

After Analysis

Results for: 8A MI KALAMAZOO DTVPLN DTVP0136 PLN
 HAAT 305.0 m, ATV ERP 20.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2381225	30169.4
not affected by terrain losses	2375838	30033.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	49451	1721.1
lost to ATV IX only	49451	1721.1
lost to all IX	49451	1721.1

Potential Interfering Stations Included in above Scenario 6

8A OH CLEVELAND	BMPCDT	20080620AHI	CP
8A OH LIMA	DTVPLN	DTVP0154	PLN
8A WI MILWAUKEE	BPEDT	20090310ADU	APP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.0284%

Worst case new IX 0.0284% Scenario 6

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
09	WAOW-TV	WAUSAU WI	BPCDT	-20090409ADU

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	WDHS	IRON MOUNTAIN MI	162.9	CP MOD	BMPCDT	-20090513AFU
08	WDHS	IRON MOUNTAIN MI	162.9	PLN	DTVPLN	-DTVP0135
08	WKBT	LA CROSSE WI	159.8	CP MOD	BMPCDT	-20080617ACU
08	WKBT	LA CROSSE WI	159.8	PLN	DTVPLN	-DTVP0170
09	KCRG-TV	CEDAR RAPIDS IA	337.9	CP MOD	BMPCDT	-20080717ADH
09	KCRG-TV	CEDAR RAPIDS IA	337.9	PLN	DTVPLN	-DTVP0193
09	WWTW	CADILLAC MI	355.4	PLN	DTVPLN	-DTVP0200
09	KMSP-TV	MINNEAPOLIS MN	270.3	CP MOD	BMPCDT	-20080620ALS
09	KMSP-TV	MINNEAPOLIS MN	270.3	PLN	DTVPLN	-DTVP0202
10	WBUP	ISHPEMING MI	213.8	CP	BPCDT	-20080402ABL
10	WBUP	ISHPEMING MI	213.8	PLN	DTVPLN	-DTVP0262
09	WWTW	CADILLAC MI	355.4	APP	USERRECORD-01	

Total scenarios = 8

Result key: 19
 Scenario 1 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7304	1046.3
lost to ATV IX only	7304	1046.3
lost to all IX	7304	1046.3

Potential Interfering Stations Included in above Scenario 1

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	8147	1162.1
lost to ATV IX only	8147	1162.1
lost to all IX	8147	1162.1

Potential Interfering Stations Included in above Scenario 1

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1508%

Result key: 20
 Scenario 2 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4706	802.7
lost to ATV IX only	4706	802.7
lost to all IX	4706	802.7

Potential Interfering Stations Included in above Scenario 2

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5549	918.5
lost to ATV IX only	5549	918.5
lost to all IX	5549	918.5

Potential Interfering Stations Included in above Scenario 2

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1501%

Result key: 21
 Scenario 3 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	6923	1026.3
lost to ATV IX only	6923	1026.3
lost to all IX	6923	1026.3

Potential Interfering Stations Included in above Scenario 3

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7766	1142.1
lost to ATV IX only	7766	1142.1
lost to all IX	7766	1142.1

Potential Interfering Stations Included in above Scenario 3

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1507%

Result key: 22
 Scenario 4 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4325	782.7
lost to ATV IX only	4325	782.7
lost to all IX	4325	782.7

Potential Interfering Stations Included in above Scenario 4

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5168	898.5
lost to ATV IX only	5168	898.5
lost to all IX	5168	898.5

Potential Interfering Stations Included in above Scenario 4

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1500%

Result key: 23
 Scenario 5 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7304	1022.3
lost to ATV IX only	7304	1022.3
lost to all IX	7304	1022.3

Potential Interfering Stations Included in above Scenario 5

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP

9A MI CADILLAC DTVPLN DTVP0200 PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP

HAAT 368.0 m, ATV ERP 31.6 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	8147	1138.1
lost to ATV IX only	8147	1138.1
lost to all IX	8147	1138.1

Potential Interfering Stations Included in above Scenario 5

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1508%

Result key: 24
 Scenario 6 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP

HAAT 368.0 m, ATV ERP 31.6 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4706	778.7
lost to ATV IX only	4706	778.7
lost to all IX	4706	778.7

Potential Interfering Stations Included in above Scenario 6

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP

HAAT 368.0 m, ATV ERP 31.6 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5549	894.5
lost to ATV IX only	5549	894.5
lost to all IX	5549	894.5

Potential Interfering Stations Included in above Scenario 6

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1501%

Result key: 25
 Scenario 7 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP

HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	6923	1002.4
lost to ATV IX only	6923	1002.4
lost to all IX	6923	1002.4

Potential Interfering Stations Included in above Scenario 7

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7766	1118.2
lost to ATV IX only	7766	1118.2
lost to all IX	7766	1118.2

Potential Interfering Stations Included in above Scenario 7

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1507%

Result key: 26
 Scenario 8 Affected station 3
 Before Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4325	758.8
lost to ATV IX only	4325	758.8
lost to all IX	4325	758.8

Potential Interfering Stations Included in above Scenario 8

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU BPCDT 20090409ADU CP
 HAAT 368.0 m, ATV ERP 31.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	576396	35789.8
not affected by terrain losses	566223	35047.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5168	874.6
lost to ATV IX only	5168	874.6
lost to all IX	5168	874.6

Potential Interfering Stations Included in above Scenario 8

KHANNA & GULL, Inc. – Consulting Engineers

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1500%

Worst case new IX 0.1508% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
09	WAOW-TV	WAUSAU WI	DTVPLN	-DTVP0231

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	WDHS	IRON MOUNTAIN MI	163.0	CP MOD	BMPCDT	-20090513AFU
08	WDHS	IRON MOUNTAIN MI	163.0	PLN	DTVPLN	-DTVP0135
08	WKBT	LA CROSSE WI	159.8	CP MOD	BMPCDT	-20080617ACU
08	WKBT	LA CROSSE WI	159.7	PLN	DTVPLN	-DTVP0170
09	KCRG-TV	CEDAR RAPIDS IA	337.9	CP MOD	BMPCDT	-20080717ADH
09	KCRG-TV	CEDAR RAPIDS IA	337.9	PLN	DTVPLN	-DTVP0193
09	WWTW	CADILLAC MI	355.4	PLN	DTVPLN	-DTVP0200
09	KMSP-TV	MINNEAPOLIS MN	270.2	CP MOD	BMPCDT	-20080620ALS
09	KMSP-TV	MINNEAPOLIS MN	270.2	PLN	DTVPLN	-DTVP0202
10	WBUP	ISHPEMING MI	213.9	CP	BPCDT	-20080402ABL
10	WBUP	ISHPEMING MI	213.9	PLN	DTVPLN	-DTVP0262
09	WWTW	CADILLAC MI	355.4	APP	USERRECORD-01	

Total scenarios = 4

Result key: 27
 Scenario 1 Affected station 4
 Before Analysis

Results for: 9A WI WAUSAU DTVPLN DTVP0231 PLN

HAAT 369.0 m, ATV ERP 17.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	539813	32484.2
not affected by terrain losses	531144	31769.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5523	878.6
lost to ATV IX only	5523	878.6
lost to all IX	5523	878.6

Potential Interfering Stations Included in above Scenario 1

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU DTVPLN DTVP0231 PLN

HAAT 369.0 m, ATV ERP 17.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	539813	32484.2
not affected by terrain losses	531144	31769.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	6320	974.4
lost to ATV IX only	6320	974.4
lost to all IX	6320	974.4

Potential Interfering Stations Included in above Scenario 1

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1516%

Result key: 28
 Scenario 2 Affected station 4
 Before Analysis

Results for: 9A WI WAUSAU DTVPLN DTVP0231 PLN
 HAAT 369.0 m, ATV ERP 17.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	539813	32484.2
not affected by terrain losses	531144	31769.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4434	647.0
lost to ATV IX only	4434	647.0
lost to all IX	4434	647.0

Potential Interfering Stations Included in above Scenario 2

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for: 9A WI WAUSAU DTVPLN DTVP0231 PLN
 HAAT 369.0 m, ATV ERP 17.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	539813	32484.2
not affected by terrain losses	531144	31769.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5231	742.8
lost to ATV IX only	5231	742.8
lost to all IX	5231	742.8

Potential Interfering Stations Included in above Scenario 2

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	BMPCDT	20080717ADH	CP
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1513%

Result key: 29
 Scenario 3 Affected station 4
 Before Analysis

Results for: 9A WI WAUSAU DTVPLN DTVP0231 PLN
 HAAT 369.0 m, ATV ERP 17.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	539813	32484.2
not affected by terrain losses	531144	31769.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5270	858.6
lost to ATV IX only	5270	858.6
lost to all IX	5270	858.6

Potential Interfering Stations Included in above Scenario 3

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for:	9A WI WAUSAU	DTVPLN	DTVP0231	PLN
HAAT	369.0 m, ATV ERP	17.0 kW		
		POPULATION	AREA (sq km)	
within Noise Limited Contour		539813	32484.2	
not affected by terrain losses		531144	31769.3	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		6067	954.5	
lost to ATV IX only		6067	954.5	
lost to all IX		6067	954.5	

Potential Interfering Stations Included in above Scenario 3

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	BMPCDT	20080620ALS	CP
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1516%

Result key: 30
 Scenario 4 Affected station 4
 Before Analysis

Results for:	9A WI WAUSAU	DTVPLN	DTVP0231	PLN
HAAT	369.0 m, ATV ERP	17.0 kW		
		POPULATION	AREA (sq km)	
within Noise Limited Contour		539813	32484.2	
not affected by terrain losses		531144	31769.3	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		4181	627.0	
lost to ATV IX only		4181	627.0	
lost to all IX		4181	627.0	

Potential Interfering Stations Included in above Scenario 4

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	DTVPLN	DTVP0200	PLN

After Analysis

Results for:	9A WI WAUSAU	DTVPLN	DTVP0231	PLN
HAAT	369.0 m, ATV ERP	17.0 kW		
		POPULATION	AREA (sq km)	
within Noise Limited Contour		539813	32484.2	
not affected by terrain losses		531144	31769.3	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		4978	722.8	
lost to ATV IX only		4978	722.8	
lost to all IX		4978	722.8	

Potential Interfering Stations Included in above Scenario 4

8A WI LA CROSSE	BMPCDT	20080617ACU	CP
9A IA CEDAR RAPIDS	DTVPLN	DTVP0193	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0202	PLN
9A MI CADILLAC	USERRECORD01		APP

Percent new IX = 0.1512%

Worst case new IX 0.1516% Scenario 1

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Analysis of Interference to Affected Station 5

KHANNA & GULL, Inc. – Consulting Engineers

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
10	WILX-TV	ONONDAGA MI	BPCDT	-20080403ADB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
09	WWTW	CADILLAC MI	198.3	PLN	DTVPLN	-DTVP0200
10	WWTO-TV	LA SALLE IL	383.6	CP	BPCDT	-20080611ACK
10	WWTO-TV	LA SALLE IL	383.6	PLN	DTVPLN	-DTVP0252
10	WWTO-TV	LA SALLE IL	383.6	LIC	BLCDT	-20060630AEE
10	WTHI-TV	TERRE HAUTE IN	427.0	CP MOD	BMPCDT	-20080619AEM
10	WTHI-TV	TERRE HAUTE IN	427.0	PLN	DTVPLN	-DTVP0254
10	WWUP-TV	SAULT STE. MARIE MI	403.8	CP MOD	BMPCDT	-20080328ADZ
10	WWUP-TV	SAULT STE. MARIE MI	404.2	PLN	DTVPLN	-DTVP0264
10	WCPO-TV	CINCINNATI OH	368.8	CP MOD	BMPCDT	-20080618ABE
10	WCPO-TV	CINCINNATI OH	368.8	PLN	DTVPLN	-DTVP0280
10	WCPO-TV	CINCINNATI OH	368.8	LIC	BLCDT	-20041230ACA
10	WOIO	SHAKER HEIGHTS OH	265.3	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	265.3	PLN	DTVPLN	-DTVP0281
10	WOIO	SHAKER HEIGHTS OH	265.3	APP	BPCDT	-20080620AKW
11	WGVU-TV	GRAND RAPIDS MI	122.4	CP	BPEDT	-20090618AAK
11	WGVU-TV	GRAND RAPIDS MI	122.4	PLN	DTVPLN	-DTVP0321
11	WGVU-TV	GRAND RAPIDS MI	122.4	LIC	BLEDT	-20060703ABP
11	WTOL	TOLEDO OH	130.4	CP MOD	BMPCDT	-20081124AKP
11	WTOL	TOLEDO OH	130.4	PLN	DTVPLN	-DTVP0334
09	WWTW	CADILLAC MI	198.3	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
10	WILX-TV	ONONDAGA MI	DTVPLN	-DTVP0263

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
09	WWTW	CADILLAC MI	198.3	PLN	DTVPLN	-DTVP0200
10	WWTO-TV	LA SALLE IL	383.6	CP	BPCDT	-20080611ACK
10	WWTO-TV	LA SALLE IL	383.6	PLN	DTVPLN	-DTVP0252
10	WWTO-TV	LA SALLE IL	383.6	LIC	BLCDT	-20060630AEE
10	WTHI-TV	TERRE HAUTE IN	427.0	CP MOD	BMPCDT	-20080619AEM
10	WTHI-TV	TERRE HAUTE IN	427.0	PLN	DTVPLN	-DTVP0254
10	WWUP-TV	SAULT STE. MARIE MI	403.8	CP MOD	BMPCDT	-20080328ADZ
10	WWUP-TV	SAULT STE. MARIE MI	404.2	PLN	DTVPLN	-DTVP0264
10	WCPO-TV	CINCINNATI OH	368.8	CP MOD	BMPCDT	-20080618ABE
10	WCPO-TV	CINCINNATI OH	368.8	PLN	DTVPLN	-DTVP0280
10	WCPO-TV	CINCINNATI OH	368.8	LIC	BLCDT	-20041230ACA
10	WOIO	SHAKER HEIGHTS OH	265.3	LIC	BLCDT	-19991110AAR
10	WOIO	SHAKER HEIGHTS OH	265.3	PLN	DTVPLN	-DTVP0281
10	WOIO	SHAKER HEIGHTS OH	265.3	APP	BPCDT	-20080620AKW
11	WGVU-TV	GRAND RAPIDS MI	122.4	CP	BPEDT	-20090618AAK
11	WGVU-TV	GRAND RAPIDS MI	122.4	PLN	DTVPLN	-DTVP0321
11	WGVU-TV	GRAND RAPIDS MI	122.4	LIC	BLEDT	-20060703ABP
11	WTOL	TOLEDO OH	130.4	CP MOD	BMPCDT	-20081124AKP
11	WTOL	TOLEDO OH	130.4	PLN	DTVPLN	-DTVP0334
09	WWTW	CADILLAC MI	198.3	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 7

KHANNA & GULL, Inc. – Consulting Engineers

Analysis of current record

Channel	Call	City/State	Application Ref. No.
10	WILX-TV	ONONDAGA MI	BMPCDT -20080618AAZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
09	WWTW	CADILLAC MI	198.3	PLN	DTVPLN -DTVP0200
10	WWTO-TV	LA SALLE IL	383.6	CP	BPCDT -20080611ACK
10	WWTO-TV	LA SALLE IL	383.6	PLN	DTVPLN -DTVP0252
10	WWTO-TV	LA SALLE IL	383.6	LIC	BLCDT -20060630AEE
10	WTHI-TV	TERRE HAUTE IN	427.0	CP MOD	BMPCDT -20080619AEM
10	WTHI-TV	TERRE HAUTE IN	427.0	PLN	DTVPLN -DTVP0254
10	WWUP-TV	SAULT STE. MARIE MI	403.8	CP MOD	BMPCDT -20080328ADZ
10	WWUP-TV	SAULT STE. MARIE MI	404.2	PLN	DTVPLN -DTVP0264
10	WCPO-TV	CINCINNATI OH	368.8	CP MOD	BMPCDT -20080618ABE
10	WCPO-TV	CINCINNATI OH	368.8	PLN	DTVPLN -DTVP0280
10	WCPO-TV	CINCINNATI OH	368.8	LIC	BLCDT -20041230ACA
10	WOIO	SHAKER HEIGHTS OH	265.3	LIC	BLCDT -19991110AAR
10	WOIO	SHAKER HEIGHTS OH	265.3	PLN	DTVPLN -DTVP0281
10	WOIO	SHAKER HEIGHTS OH	265.3	APP	BPCDT -20080620AKW
11	WGVU-TV	GRAND RAPIDS MI	122.4	CP	BPEDT -20090618AAK
11	WGVU-TV	GRAND RAPIDS MI	122.4	PLN	DTVPLN -DTVP0321
11	WGVU-TV	GRAND RAPIDS MI	122.4	LIC	BLEDT -20060703ABP
11	WTOL	TOLEDO OH	130.4	CP MOD	BMPCDT -20081124AKP
11	WTOL	TOLEDO OH	130.4	PLN	DTVPLN -DTVP0334
09	WWTW	CADILLAC MI	198.3	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application Ref. No.
09	WWTW	CADILLAC MI	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
08	WWTW	KALAMAZOO MI	168.0	CP	BPCDT -20080312ABA
08	WWTW	KALAMAZOO MI	168.0	PLN	DTVPLN -DTVP0136
09	WAOW-TV	WAUSAU WI	355.4	CP	BPCDT -20090409ADU
09	WAOW-TV	WAUSAU WI	355.4	PLN	DTVPLN -DTVP0231
10	WILX-TV	ONONDAGA MI	198.3	CP	BPCDT -20080403ADB
10	WILX-TV	ONONDAGA MI	198.3	PLN	DTVPLN -DTVP0263
10	WILX-TV	ONONDAGA MI	198.3	APP	BMPCDT -20080618AAZ

Total scenarios = 4

Result key: 31
 Scenario 1 Affected station 8
 Before Analysis

Results for: 9A MI CADILLAC USERRECORD01 APP

HAAT 493.0 m, ATV ERP 45.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	990137	45204.7
not affected by terrain losses	977018	44520.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1451	40.0
lost to ATV IX only	1451	40.0
lost to all IX	1451	40.0

Potential Interfering Stations Included in above Scenario 1

8A MI KALAMAZOO	BPCDT	20080312ABA	CP
9A WI WAUSAU	BPCDT	20090409ADU	CP

Result key: 32
 Scenario 2 Affected station 8
 Before Analysis

Results for: 9A MI CADILLAC USERRECORD01 APP
 HAAT 493.0 m, ATV ERP 45.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	990137	45204.7
not affected by terrain losses	977018	44520.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1451	36.0
lost to ATV IX only	1451	36.0
lost to all IX	1451	36.0

Potential Interfering Stations Included in above Scenario 2

8A MI KALAMAZOO	BPCDT	20080312ABA	CP
9A WI WAUSAU	DTVPLN	DTVP0231	PLN

Result key: 33
 Scenario 3 Affected station 8
 Before Analysis

Results for: 9A MI CADILLAC USERRECORD01 APP
 HAAT 493.0 m, ATV ERP 45.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	990137	45204.7
not affected by terrain losses	977018	44520.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1451	40.0
lost to ATV IX only	1451	40.0
lost to all IX	1451	40.0

Potential Interfering Stations Included in above Scenario 3

8A MI KALAMAZOO	DTVPLN	DTVP0136	PLN
9A WI WAUSAU	BPCDT	20090409ADU	CP

Result key: 34
 Scenario 4 Affected station 8
 Before Analysis

Results for: 9A MI CADILLAC USERRECORD01 APP
 HAAT 493.0 m, ATV ERP 45.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	990137	45204.7
not affected by terrain losses	977018	44520.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1451	36.0
lost to ATV IX only	1451	36.0
lost to all IX	1451	36.0

Potential Interfering Stations Included in above Scenario 4

8A MI KALAMAZOO	DTVPLN	DTVP0136	PLN
9A WI WAUSAU	DTVPLN	DTVP0231	PLN

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

ENVIRONMENTAL PROTECTION ACT

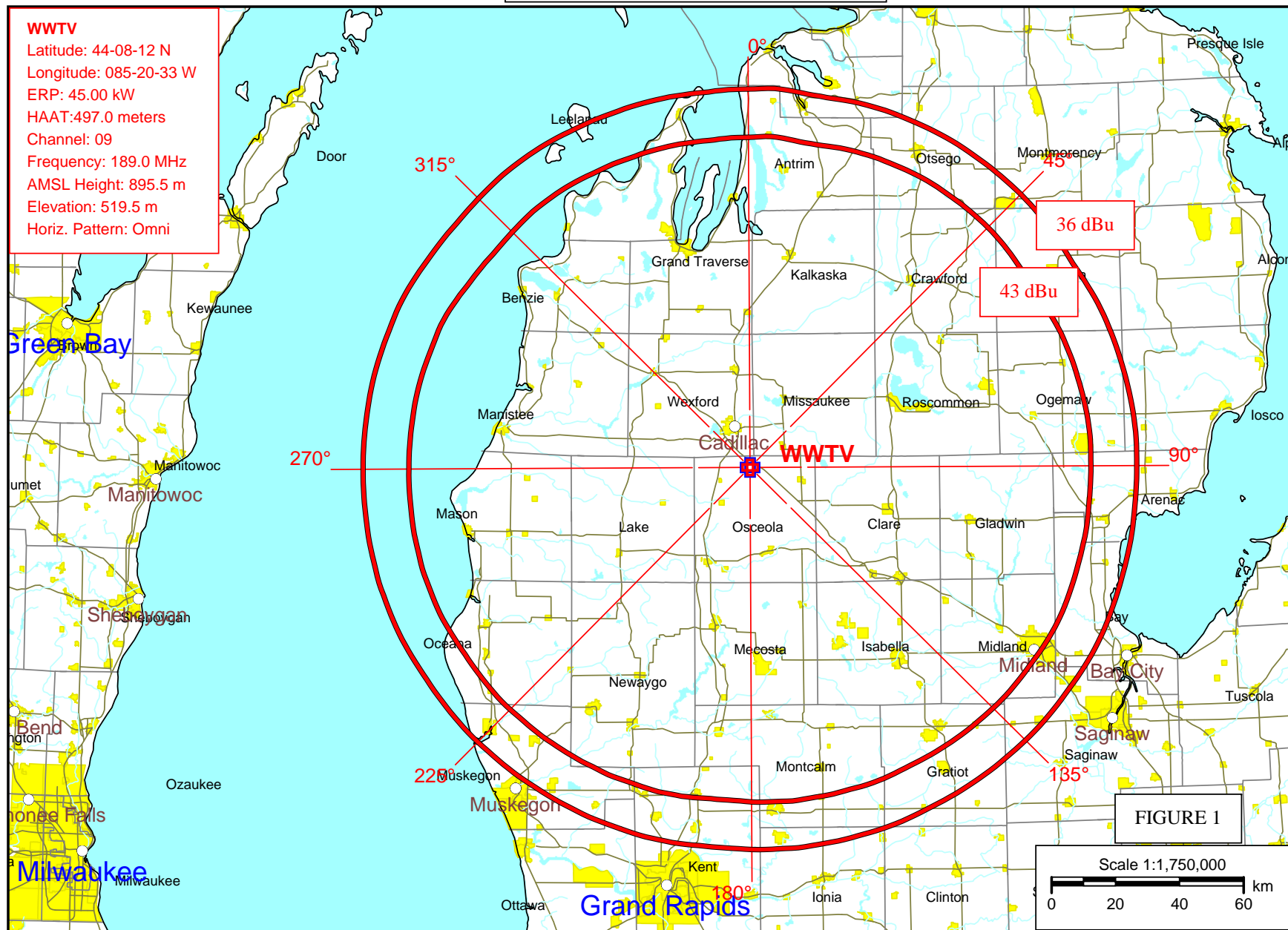
Since WWTV will be using a registered tower (ASR No. 1002422), for the digital TV operation the environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent; therefore, those issues have not been addressed.

An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 45 kW and a radiation center of 376 meters above ground level, the proposed Channel 9 TV operation would have a maximum of 2.7 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field at 2 meters above the base of tower assuming an antenna field factor of 0.5 in the downward direction.

The Commission's guidelines for TV Channel 9 are $1,000 \mu\text{W}/\text{cm}^2$ for the occupational/controlled, and $200 \mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

The above analysis indicates that members of the public and personnel working around the WWTV tower would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, WWTV will establish procedures to ensure that workers are not exposed to RF fields above the Commission's guidelines, by reducing or turning off the power, as appropriate.

For the reasons stated above, it is believed this proposal complies with Section 1.1307(a) and (b) of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from environmental processing.



COMPUTED CONTOURS FOR THE PROPOSED DIGITAL TV OPERATION OF WWTV, CADILLAC, MICHIGAN