

## **ENGINEERING EXHIBIT**

### **Application for Digital Television Station Construction Permit**

prepared for

#### **Gray Television Licensee, LLC**

WTVG(DT) Toledo, OH  
Facility ID 74150  
Ch. 13 20.1 kW 307 m

*Gray Television Licensee, LLC* (“Gray”) is the licensee of digital television station WTVG(DT), Channel 13, Facility ID 74150, Toledo, OH. WTVG is licensed (file# BLCDDT-20110415ABN) to operate with 16.7 kW effective radiated power (“ERP”) at 305 meters antenna height above average terrain (“HAAT”). Gray proposes herein to increase the ERP to 20.1 kW. This application is intended to be filed during the temporary lift of the freeze on minor modification applications that expand the coverage contour.<sup>1</sup>

WTVG will continue to employ its presently licensed nondirectional antenna system which is top-mounted on the tower structure associated with FCC Antenna Structure Registration number 1025392. No change to overall structure height will result from this proposal. The antenna HAAT is adjusted to 307 meters.<sup>2</sup>

Figure 1 supplies a map that demonstrates compliance with §73.625(a)(1) regarding coverage of the entire principal community. The proposed facility’s predicted population exceeds 95 percent of the Incentive Auction<sup>3</sup> baseline facility population.

Interference study per FCC OET Bulletin 69<sup>4</sup> shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and

---

<sup>1</sup>Public Notice “Media Bureau Temporarily Lifts the Freeze on the Filing of Minor Modification Applications that Expand the Contour of Full Power and Class A Television Stations from November 28 through December 7, 2017” DA 17-1086, released November 6, 2017.

<sup>2</sup>There is no change in antenna height above ground or above mean sea level. The WTVG antenna HAAT is recalculated to be 306.8 meters, based on FCC 30 meter terrain data developed by OET.

<sup>3</sup>*Incentive Auction Closing and Channel Reassignment Public Notice*, DA 17-317, released April 13, 2017.

Class A television stations and reassignments as required by §73.616. The interference study output report is provided as Table 1. TVStudy analysis also shows that the proposed power increase would not cause impermissible interference to any pre-auction facility that was reassigned or relinquished in the incentive auction.

The site location is within the Canadian coordination zone (35 km to the Canada border). According to TVStudy analysis including non-US records from current FCC LMS data, no Canadian station would receive new interference in excess of 0.5 percent from the proposed WTVG facility.

The nearest FCC monitoring station is 234 km distant at Allegan, MI. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with “quiet” zones specified in §73.1030(a) and (b). There are no authorized AM stations within 3 kilometers of the site.

### **Human Exposure to Radiofrequency Electromagnetic Field (Environmental)**

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC’s OET Bulletin Number 65. Based on OET-65 equation (10), and considering 20 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is  $0.3 \mu\text{W}/\text{cm}^2$ , which is 0.1 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal’s contribution is less than five percent.

---

<sup>4</sup>FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). This analysis employed the FCC’s current “TVStudy” software with the default application processing template settings, 2 km cell size, and 1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC’s implementation of TVStudy show excellent correlation.

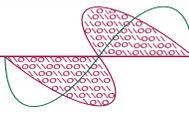
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field. No increase in structure height is proposed.

List of Attachments

Figure 1	Proposed Coverage Contours
Table 1	OET Bulletin 69 Interference Study
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

**Chesapeake RF Consultants, LLC**

Joseph M. Davis, P.E.	December 6, 2017	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600

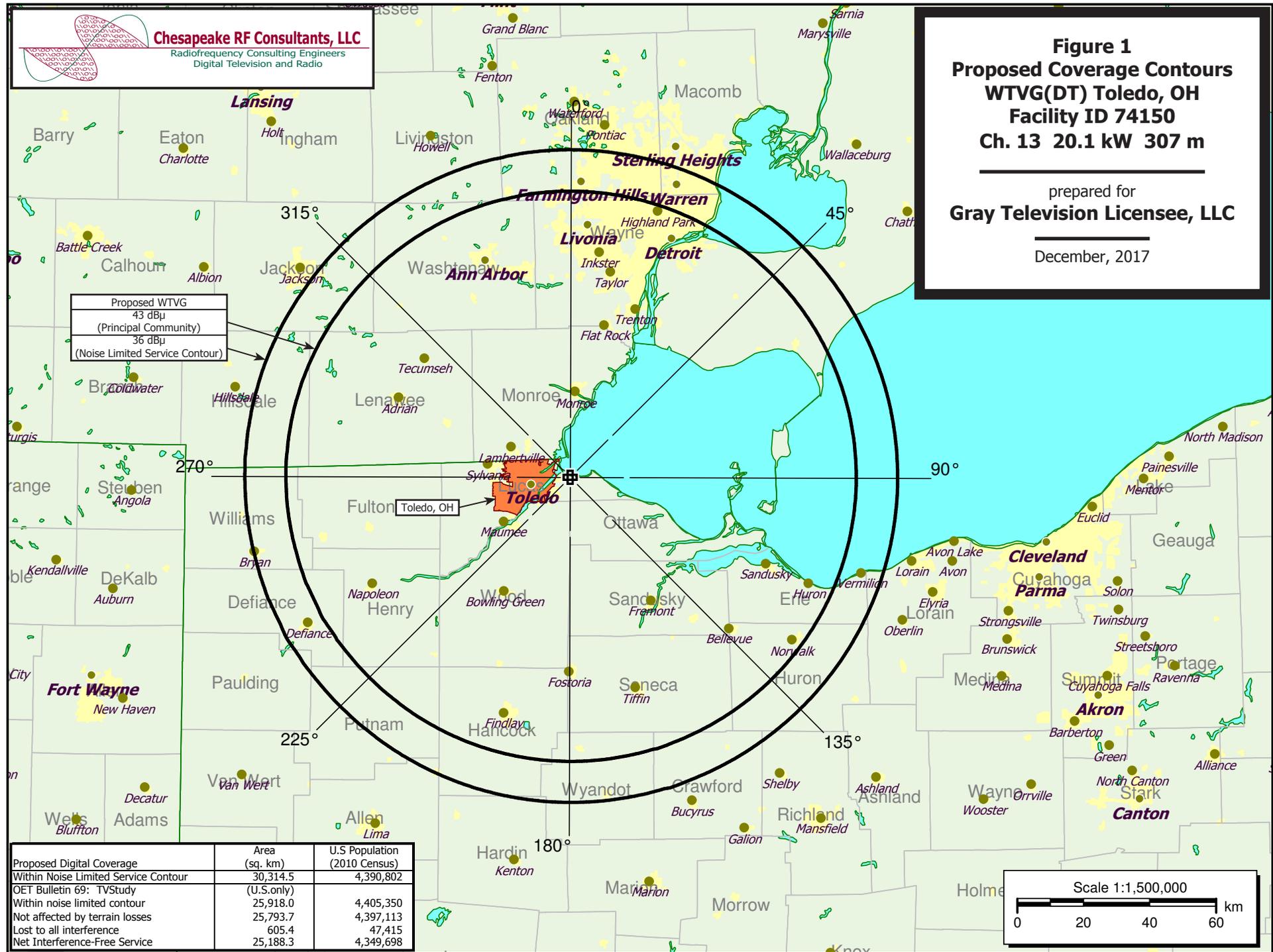


**Chesapeake RF Consultants, LLC**  
 Radiofrequency Consulting Engineers  
 Digital Television and Radio

**Figure 1**  
**Proposed Coverage Contours**  
**WTVG(DT) Toledo, OH**  
**Facility ID 74150**  
**Ch. 13 20.1 kW 307 m**

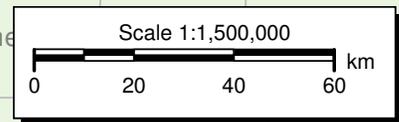
prepared for  
**Gray Television Licensee, LLC**

December, 2017



Proposed WTVG
43 dBu
(Principal Community)
36 dBu
(Noise Limited Service Contour)

Proposed Digital Coverage	Area (sq. km)	U.S Population (2010 Census)
Within Noise Limited Service Contour	30,314.5	4,390,802
OET Bulletin 69: TVStudy (U.S. only)		
Within noise limited contour	25,918.0	4,405,350
Not affected by terrain losses	25,793.7	4,397,113
Lost to all interference	605.4	47,415
Net Interference-Free Service	25,188.3	4,349,698



**Table 1 WTVG OET Bulletin 69 Interference Study**  
 (page 1 of 18)



tvstudy v2.2.4 (Z2Qqz3)  
 Database: localhost, Study: WTVG 20.1kW, Model: Longley-Rice  
 Start: 2017.12.06 14:40:12

Study created: 2017.12.06 14:40:12

Study build station data: LMS TV 2017-12-06 LMSTV

Proposal: WTVG D13 DT APP TOLEDO, OH  
 File number: WTVG 20.1kW  
 Facility ID: 74150  
 Station data: User record  
 Record ID: 1540  
 Country: U.S.  
 Zone: I

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3 km
No	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	179.9
Yes	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	121.9
Yes	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8
Yes	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	303.8
Yes	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	372.8
No	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	372.8
Yes	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1
Yes	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	370.8
Yes	WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189	370.8
Yes	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	370.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D13  
 Latitude: 41 41 0.00 N (NAD83)  
 Longitude: 83 24 49.00 W  
 Height AMSL: 485.4 m  
 HAAT: 306.8 m  
 Peak ERP: 20.1 kW  
 Antenna: Omnidirectional  
 Elev Pattn: Generic  
 Elec Tilt: 0.50

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	20.1 kW	312.3 m	98.6 km
45.0	20.1	311.5	98.5
90.0	20.1	311.4	98.5
135.0	20.1	307.0	98.2
180.0	20.1	301.3	97.8
225.0	20.1	299.7	97.7
270.0	20.1	304.1	98.0
315.0	20.1	307.4	98.2

\*\*Proposal is within coordination distance of Canadian border  
 Distance to Canadian border: 34.9 km

Distance to Mexican border: 2087.0 km

Conditions at FCC monitoring station: Allegan MI  
 Bearing: 296.9 degrees Distance: 233.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
 Bearing: 272.0 degrees Distance: 1834.9 km

Study cell size: 2.00 km

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 2 of 18)



Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

-----  
Interference to BLCDT20130711ABN LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	118.3 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	118.3
WTOL	D11	DT	APP	TOLEDO, OH	BLANK0000035661	120.8
WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLCDT20090612ADR	239.9
WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	206.7
WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	261.1
WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	198.4
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
20035.5	1,001,485	19321.1	971,031	16851.0	890,387	16834.8 889,642 0.10 0.08
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	221.6	12,277	12.1	1,007		
WTVG D13 DT APP	270.0	15,940			28.2	1,752
WTOL D11 DT APP	125.0	9,556	0.0	0	0.0	0
WBBM-TV D12 DT LIC	598.9	23,338	28.3	1,310	28.3	1,310
WJRT-TV D12 DT LIC	1753.8	55,509	789.0	17,765	785.0	17,727
WKRC-TV D12 DT LIC	71.9	2,024	11.9	794	11.9	794
WMFD-TV D12 DT LIC	1500.7	55,366	575.2	16,863	567.1	16,391

-----  
Interference to BLCDT20130711ABN LIC scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	118.3 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	118.3
WTOL	D11	DT	LIC	TOLEDO, OH	BLCDT20090622ABU	120.8
WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLCDT20090612ADR	239.9
WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	206.7
WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	261.1
WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	198.4
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
20035.5	1,001,485	19321.1	971,031	16851.0	890,387	16834.8 889,642 0.10 0.08
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	221.6	12,277	16.1	1,138		
WTVG D13 DT APP	270.0	15,940			32.3	1,883
WTOL D11 DT LIC	72.6	6,799	0.0	0	0.0	0
WBBM-TV D12 DT LIC	598.9	23,338	28.3	1,310	28.3	1,310
WJRT-TV D12 DT LIC	1753.8	55,509	789.0	17,765	785.0	17,727
WKRC-TV D12 DT LIC	71.9	2,024	11.9	794	11.9	794
WMFD-TV D12 DT LIC	1500.7	55,366	575.2	16,863	567.1	16,391

-----  
Interference to BLCDT20130711ABN LIC scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	118.3 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	118.3
WTOL	D11	DT	APP	TOLEDO, OH	BLANK0000035661	120.8
WBBM-TV	D12	DT	APP	CHICAGO, IL	BLANK0000035681	239.9
WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	206.7
WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	261.1
WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	198.4
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 3 of 18)



20035.5	1,001,485	19321.1	971,031	16794.3	887,338	16778.2	886,593	0.10	0.08
Undesired			Total IX	Unique IX, before		Unique IX, after			
WTVG D13 DT BL	221.6		12,277	12.1	1,007				
WTVG D13 DT APP	270.0		15,940			28.2	1,752		
WTOL D11 DT APP	125.0		9,556	0.0	0	0.0	0		
WBBM-TV D12 DT APP	755.8		30,299	84.9	4,359	84.9	4,359		
WJRT-TV D12 DT LIC	1753.8		55,509	749.0	17,091	745.0	17,053		
WKRC-TV D12 DT LIC	71.9		2,024	4.0	96	4.0	96		
WMFD-TV D12 DT LIC	1500.7		55,366	546.9	15,808	538.8	15,336		

-----  
Interference to BLCDT20130711ABN LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN			
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	118.3 km		
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	118.3		
	WTOL	D11	DT	LIC	TOLEDO, OH	BLCDT20090622ABU	120.8		
	WBBM-TV	D12	DT	APP	CHICAGO, IL	BLANK0000035681	239.9		
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	206.7		
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	261.1		
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	198.4		
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX				
20035.5	1,001,485	19321.1	971,031	16794.3	887,338	16778.2	886,593	0.10	0.08

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	221.6	12,277	16.1
WTVG D13 DT APP	270.0	15,940	32.3
WTOL D11 DT LIC	72.6	6,799	0.0
WBBM-TV D12 DT APP	755.8	30,299	84.9
WJRT-TV D12 DT LIC	1753.8	55,509	749.0
WKRC-TV D12 DT LIC	71.9	2,024	4.0
WMFD-TV D12 DT LIC	1500.7	55,366	546.9

-----  
Interference to BLCDT20081112ALJ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ			
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	121.9 km		
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	121.9		
	WTOL	D11	DT	APP	TOLEDO, OH	BLANK0000035661	119.4		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4		
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	298.9		
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	243.5		
	WICU-TV	D12	DT	LIC	ERIE, PA	BLCDT20090619ABT	261.3		
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8		
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX				
21688.4	1,561,367	20574.4	1,324,244	19654.8	1,176,112	19642.7	1,172,263	0.06	0.33

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	242.8	14,856	8.1
WTVG D13 DT APP	299.5	20,217	20.2
WTOL D11 DT APP	303.5	12,523	68.8
WINM D12 DT LIC	254.0	20,208	48.2
WJRT-TV D12 DT LIC	166.0	22,182	24.3
WKRC-TV D12 DT LIC	286.1	91,096	145.0
WICU-TV D12 DT LIC	112.8	22,153	24.1
WBOY-TV D12 DT LIC	265.3	46,452	88.4

-----  
Interference to BLCDT20081112ALJ LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	121.9 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	121.9

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 4 of 18)



	WTOL	D11	DT	LIC	TOLEDO, OH	BLCDT20090622ABU	119.4
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	298.9
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	243.5
	WICU-TV	D12	DT	LIC	ERIE, PA	BLCDT20090619ABT	261.3
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	21688.4	1,561,367	20574.4	1,175,214	0.23

	Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	242.8	14,856	101.1	11,334
WTVG D13 DT APP	299.5	20,217		145.6
WTOL D11 DT LIC	129.5	3,294	4.0	11
WINM D12 DT LIC	254.0	20,208	48.2	1,130
WJRT-TV D12 DT LIC	166.0	22,182	24.3	4,492
WKRC-TV D12 DT LIC	286.1	91,096	145.0	54,400
WICU-TV D12 DT LIC	112.8	22,153	24.1	6,536
WBOY-TV D12 DT LIC	265.3	46,452	88.4	7,905

-----  
Interference to BLCDT20081112ALJ LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	121.9 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	121.9
	WTOL	D11	DT	APP	TOLEDO, OH	BLANK00000035661	119.4
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	298.9
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	243.5
	WICU-TV	D12	DT	APP	ERIE, PA	BPCDT20120619ABB	261.4
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	21688.4	1,561,367	20574.4	1,169,803	0.06

	Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	242.8	14,856	8.1	6,077
WTVG D13 DT APP	299.5	20,217		20.2
WTOL D11 DT APP	303.5	12,523	68.8	3,744
WINM D12 DT LIC	254.0	20,208	48.2	1,130
WJRT-TV D12 DT LIC	166.0	22,182	20.2	4,095
WKRC-TV D12 DT LIC	286.1	91,096	145.0	54,400
WICU-TV D12 DT APP	157.0	25,480	48.1	8,996
WBOY-TV D12 DT LIC	265.3	46,452	88.4	7,905

-----  
Interference to BLCDT20081112ALJ LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	121.9 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	121.9
	WTOL	D11	DT	LIC	TOLEDO, OH	BLCDT20090622ABU	119.4
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	298.9
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLCDT20090622AFI	243.5
	WICU-TV	D12	DT	APP	ERIE, PA	BPCDT20120619ABB	261.4
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8

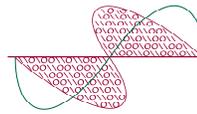
  

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	21688.4	1,561,367	20574.4	1,172,754	0.23

	Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	242.8	14,856	101.1	11,334
WTVG D13 DT APP	299.5	20,217		145.6
WTOL D11 DT LIC	129.5	3,294	4.0	11
WINM D12 DT LIC	254.0	20,208	48.2	1,130
WJRT-TV D12 DT LIC	166.0	22,182	20.2	4,095
WKRC-TV D12 DT LIC	286.1	91,096	145.0	54,400

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 5 of 18)



**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

WICU-TV D12 DT APP	157.0	25,480	48.1	8,996	48.1	8,996
WBOY-TV D12 DT LIC	265.3	46,452	88.4	7,905	88.4	7,905

-----  
Interference to BPCDT20130702ABM APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	CP	MOUNT VERNON, IL	BLANK0000029698	363.8
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	367.2
	WTSE	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	APP	BOWLING GREEN, KY	BLANK0000035946	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	376.5
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37429.5	3,105,106	36266.5	3,054,464	35639.4	3,035,939	0.19 0.06
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		192.2	2,600		188.2	2,558	
WTVG D13 DT APP		260.2	4,556			256.2	4,514
WPXS D13 DT CP		175.4	3,097	91.8	1,181	91.8	1,181
WREX D13 DT LIC		8.0	30	4.0	9	4.0	9
WBKO D13 DT APP		335.2	14,714	251.6	12,798	251.6	12,798
WZZM D13 DT LIC		8.0	63	0.0	0	0.0	0

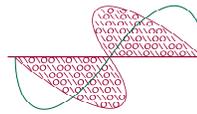
-----  
Interference to BPCDT20130702ABM APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	CP	MOUNT VERNON, IL	BLANK0000029698	363.8
	WREX	D13	DT	APP	ROCKFORD, IL	BLANK0000035733	367.2
	WTSE	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	APP	BOWLING GREEN, KY	BLANK0000035946	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	376.5
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37429.5	3,105,106	36266.5	3,054,464	35587.4	3,035,160	0.19 0.06
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		192.2	2,600		188.2	2,558	
WTVG D13 DT APP		260.2	4,556			256.2	4,514
WPXS D13 DT CP		175.4	3,097	91.8	1,181	91.8	1,181
WREX D13 DT APP		59.9	809	56.0	788	56.0	788
WBKO D13 DT APP		335.2	14,714	251.6	12,798	251.6	12,798
WZZM D13 DT LIC		8.0	63	0.0	0	0.0	0

-----  
Interference to BPCDT20130702ABM APP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	CP	MOUNT VERNON, IL	BLANK0000029698	363.8
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	367.2
	WTSE	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	LIC	BOWLING GREEN, KY	BLCDT20090423ABM	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	376.5
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37429.5	3,105,106	36266.5	3,054,464	35759.2	3,040,354	0.19 0.06
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		192.2	2,600		188.2	2,558	
WTVG D13 DT APP		260.2	4,556			256.2	4,514

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 6 of 18)



WPXS D13 DT CP	175.4	3,097	139.6	1,771	139.6	1,771
WREX D13 DT LIC	8.0	30	4.0	9	4.0	9
WBKO D13 DT LIC	167.6	9,709	131.8	8,383	131.8	8,383
WZZM D13 DT LIC	8.0	63	0.0	0	0.0	0

-----  
Interference to BPCDT20130702ABM APP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	CP	MOUNT VERNON, IL	BLANK0000029698	363.8
	WREX	D13	DT	APP	ROCKFORD, IL	BLANK0000035733	367.2
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	LIC	BOWLING GREEN, KY	BLCDDT20090423ABM	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDDT20100726AKV	376.5
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37429.5	3,105,106	36266.5	3,054,464	35707.2	3,039,575	35639.2 3,037,619 0.19 0.06
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		192.2	2,600		188.2	2,558	
WTVG D13 DT APP		260.2	4,556			256.2	4,514
WPXS D13 DT CP		175.4	3,097		139.6	1,771	139.6 1,771
WREX D13 DT APP		59.9	809		56.0	788	56.0 788
WBKO D13 DT LIC		167.6	9,709		131.8	8,383	131.8 8,383
WZZM D13 DT LIC		8.0	63		0.0	0	0.0 0

-----  
Interference to BPCDT20130702ABM APP scenario 5

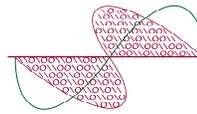
Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	BL	MOUNT VERNON, IL	DTVBL40861	340.8
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	367.2
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	APP	BOWLING GREEN, KY	BLANK0000035946	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDDT20100726AKV	376.5
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37429.5	3,105,106	36266.5	3,054,464	35731.2	3,037,120	35663.2 3,035,164 0.19 0.06
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		192.2	2,600		188.2	2,558	
WTVG D13 DT APP		260.2	4,556			256.2	4,514
WPXS D13 DT BL		4.0	2		0.0	0	0.0 0
WREX D13 DT LIC		8.0	30		4.0	9	4.0 9
WBKO D13 DT APP		335.2	14,714		331.2	14,712	331.2 14,712
WZZM D13 DT LIC		8.0	63		0.0	0	0.0 0

-----  
Interference to BPCDT20130702ABM APP scenario 6

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	BL	MOUNT VERNON, IL	DTVBL40861	340.8
	WREX	D13	DT	APP	ROCKFORD, IL	BLANK0000035733	367.2
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	APP	BOWLING GREEN, KY	BLANK0000035946	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDDT20100726AKV	376.5
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	37429.5	3,105,106	36266.5	3,054,464	35679.3	3,036,341	35611.2 3,034,385 0.19 0.06
Undesired			Total IX		Unique IX, before	Unique IX, after	



**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 8 of 18)



Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 163.9	6,478	143.9 6,076	
WTVG D13 DT APP 211.8	7,561		187.9 6,733
WPXS D13 DT CP 111.5	1,141	55.8 790	55.8 790
WBKO D13 DT APP 259.1	18,614	195.5 18,001	195.5 18,001
WZZM D13 DT LIC 16.0	566	4.0 426	0.0 0

-----  
Interference to BLCDT20120127AIE LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WPXS	D13	DT	CP	MOUNT VERNON, IL	BLANK0000029698	363.8
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	367.2
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	LIC	BOWLING GREEN, KY	BLCDT20090423ABM	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	376.5
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	33303.2 2,988,174	32249.4 2,938,565	31870.4 2,929,448	31826.4 2,928,791	0.14 0.02		

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 163.9	6,478	151.9 6,338	
WTVG D13 DT APP 211.8	7,561		195.9 6,995
WPXS D13 DT CP 111.5	1,141	83.6 1,024	83.6 1,024
WBKO D13 DT LIC 127.6	1,189	99.7 1,072	99.7 1,072
WZZM D13 DT LIC 16.0	566	4.0 426	0.0 0

-----  
Interference to BLCDT20120127AIE LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	367.2
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	APP	BOWLING GREEN, KY	BLANK0000035946	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	376.5
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	33303.2 2,988,174	32249.4 2,938,565	31830.4 2,913,309	31786.4 2,912,652	0.14 0.02		

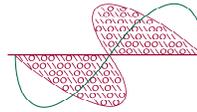
Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 163.9	6,478	143.9 6,076	
WTVG D13 DT APP 211.8	7,561		187.9 6,733
WBKO D13 DT APP 259.1	18,614	251.2 18,352	251.2 18,352
WZZM D13 DT LIC 16.0	566	4.0 426	0.0 0

-----  
Interference to BLCDT20120127AIE LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	303.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	303.8
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	367.2
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	366.3
	WBKO	D13	DT	LIC	BOWLING GREEN, KY	BLCDT20090423ABM	319.2
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	376.5
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	33303.2 2,988,174	32249.4 2,938,565	31954.0 2,930,472	31910.0 2,929,815	0.14 0.02		

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 163.9	6,478	151.9 6,338	
WTVG D13 DT APP 211.8	7,561		195.9 6,995

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 9 of 18)



**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

WBKO D13 DT LIC	127.6	1,189	127.6	1,189	127.6	1,189
WZZM D13 DT LIC	16.0	566	4.0	426	0.0	0

-----  
Interference to BLANK0000029774 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	372.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	372.8
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	366.3
	WLOS	D13	DT	LIC	ASHEVILLE, NC	BLCDT20101014ABR	334.3
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	203.3
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	22254.6	922,441	19981.6	851,465	19686.9	845,147	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		4.0	17	4.0	17		
WTVG D13 DT APP		4.0	17			4.0	17
WTHR D13 DT APP		4.0	31	0.0	0	0.0	0
WLOS D13 DT LIC		63.4	1,355	43.6	943	43.6	943
WVFX D13 DT CP		247.1	5,358	223.3	4,915	223.3	4,915

-----  
Interference to BLANK0000029774 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	372.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	372.8
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	366.3
	WLOS	D13	DT	LIC	ASHEVILLE, NC	BLCDT20101014ABR	334.3
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	203.3
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	22254.6	922,441	19981.6	851,465	19686.9	845,147	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		4.0	17	4.0	17		
WTVG D13 DT APP		4.0	17			4.0	17
WTHR D13 DT LIC		4.0	31	0.0	0	0.0	0
WLOS D13 DT LIC		63.4	1,355	43.6	943	43.6	943
WVFX D13 DT CP		247.1	5,358	223.3	4,915	223.3	4,915

-----  
Interference to BLANK0000029774 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	372.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	372.8
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	366.3
	WLOS	D13	DT	LIC	ASHEVILLE, NC	BLCDT20101014ABR	334.3
	WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189	203.3
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	22254.6	922,441	19981.6	851,465	19391.7	837,541	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		4.0	17	4.0	17		
WTVG D13 DT APP		4.0	17			4.0	17
WTHR D13 DT APP		4.0	31	0.0	0	0.0	0
WLOS D13 DT LIC		63.4	1,355	11.9	665	11.9	665
WVFX D13 DT APP		574.0	13,242	518.4	12,521	518.4	12,521

-----  
Interference to BLANK0000029774 CP scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
------	------	-----	--------	-------------	-------------	----------

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 10 of 18)



Desired:	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	372.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	372.8
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	366.3
	WLOS	D13	DT	LIC	ASHEVILLE, NC	BLCDT20101014ABR	334.3
	WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189	203.3

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	22254.6	922,441	19981.6	851,465	19391.7	837,541	19391.7	837,541	0.00 0.00

Undesired				Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	4.0			17	4.0	17	
WTVG D13 DT APP	4.0			17		4.0	17
WTHR D13 DT LIC	4.0			31	0.0	0	0
WLOS D13 DT LIC	63.4			1,355	11.9	665	11.9 665
WVFX D13 DT APP	574.0			13,242	518.4	12,521	518.4 12,521

-----  
Interference to BLANK0000029774 CP scenario 5

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	372.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	372.8
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	366.3
	WLOS	D13	DT	LIC	ASHEVILLE, NC	BLCDT20101014ABR	334.3
	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	203.3

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	22254.6	922,441	19981.6	851,465	19718.8	846,294	19718.8	846,294	0.00 0.00

Undesired				Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	4.0			17	4.0	17	
WTVG D13 DT APP	4.0			17		4.0	17
WTHR D13 DT APP	4.0			31	0.0	0	0
WLOS D13 DT LIC	63.4			1,355	43.6	943	43.6 943
WVFX D13 DT BL	215.2			4,211	191.4	3,768	191.4 3,768

-----  
Interference to BLANK0000029774 CP scenario 6

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	372.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	372.8
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	366.3
	WLOS	D13	DT	LIC	ASHEVILLE, NC	BLCDT20101014ABR	334.3
	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	203.3

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	22254.6	922,441	19981.6	851,465	19718.8	846,294	19718.8	846,294	0.00 0.00

Undesired				Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	4.0			17	4.0	17	
WTVG D13 DT APP	4.0			17		4.0	17
WTHR D13 DT LIC	4.0			31	0.0	0	0
WLOS D13 DT LIC	63.4			1,355	43.6	943	43.6 943
WVFX D13 DT BL	215.2			4,211	191.4	3,768	191.4 3,768

-----  
Interference to BLCDT20100726AKV LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	273.1 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	273.1
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	150.3
	WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	293.7
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	376.5

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 11 of 18)



Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
32199.0 1,574,546	31546.9 1,548,835	31192.0 1,519,066	31080.5 1,515,732	0.36 0.22
Undesired	Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	346.9 29,735	310.9 25,580		
WTVG D13 DT APP	462.3 33,103		422.4 28,914	
WJRT-TV D12 DT LIC	23.8 722	4.0 34	0.0 0	
WREX D13 DT LIC	4.0 0	4.0 0	4.0 0	
WTHR D13 DT APP	16.1 3,467	0.0 0	0.0 0	

-----  
Interference to BLCDT20100726AKV LIC scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	273.1 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	273.1
WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	150.3
WREX	D13	DT	LIC	ROCKFORD, IL	BLANK0000005114	293.7
WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	376.5
WMOW	D13	DT	CP	CRANDON, WI	BLANK0000027451	344.7
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
32199.0 1,574,546	31546.9 1,548,835	31192.0 1,519,066	31080.5 1,515,732	0.36 0.22		
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	346.9 29,735	323.0 28,884				
WTVG D13 DT APP	462.3 33,103		434.5 32,218			
WJRT-TV D12 DT LIC	23.8 722	4.0 34	0.0 0			
WREX D13 DT LIC	4.0 0	4.0 0	4.0 0			
WTHR D13 DT LIC	4.0 163	0.0 0	0.0 0			

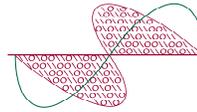
-----  
Interference to BLCDT20100726AKV LIC scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	273.1 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	273.1
WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	150.3
WREX	D13	DT	APP	ROCKFORD, IL	BLANK0000035733	293.7
WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	376.5
WMOW	D13	DT	CP	CRANDON, WI	BLANK0000027451	344.7
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
32199.0 1,574,546	31546.9 1,548,835	31171.9 1,518,467	31060.4 1,515,133	0.36 0.22		
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	346.9 29,735	310.9 25,580				
WTVG D13 DT APP	462.3 33,103		422.4 28,914			
WJRT-TV D12 DT LIC	23.8 722	4.0 34	0.0 0			
WREX D13 DT APP	24.1 599	24.1 599	24.1 599			
WTHR D13 DT APP	16.1 3,467	0.0 0	0.0 0			

-----  
Interference to BLCDT20100726AKV LIC scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	273.1 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	273.1
WJRT-TV	D12	DT	LIC	FLINT, MI	BLCDT20100503ACT	150.3
WREX	D13	DT	APP	ROCKFORD, IL	BLANK0000035733	293.7
WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	376.5
WMOW	D13	DT	CP	CRANDON, WI	BLANK0000027451	344.7
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
32199.0 1,574,546	31546.9 1,548,835	31171.9 1,518,467	31060.4 1,515,133	0.36 0.22		

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 12 of 18)



**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 346.9	29,735	323.0	28,884
WTVG D13 DT APP 462.3	33,103		434.5 32,218
WJRT-TV D12 DT LIC 23.8	722	4.0	34 0
WREX D13 DT APP 24.1	599	24.1	599 24.1 599
WTHR D13 DT LIC 4.0	163	0.0	0 0.0 0

-----  
Interference to BLANK0000027584 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
	WWPX-TV	D13	DT	APP	MARTINSBURG, WV	BLANK0000034933	196.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
25952.4 746,433	23188.2 613,834	22616.3 605,372	22616.3 605,372	0.00 0.00			

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 4.0	203	0.0	0
WTVG D13 DT APP 4.0	203		0.0 0
WBOY-TV D12 DT LIC 44.0	281	36.0	185 36.0 185
WTSF D13 DT CP 339.9	5,240	215.9	2,266 215.9 2,266
WWPX-TV D13 DT APP 311.9	5,712	196.0	3,037 196.0 3,037

-----  
Interference to BLANK0000027584 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
	WWPX-TV	D13	DT	CP	MARTINSBURG, WV	BLANK0000027005	196.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
25952.4 746,433	23188.2 613,834	22660.4 605,964	22660.4 605,964	0.00 0.00			

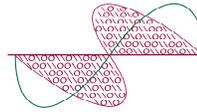
Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 4.0	203	0.0	0
WTVG D13 DT APP 4.0	203		0.0 0
WBOY-TV D12 DT LIC 44.0	281	36.0	185 36.0 185
WTSF D13 DT CP 339.9	5,240	231.9	2,343 231.9 2,343
WWPX-TV D13 DT CP 251.8	5,043	151.9	2,445 151.9 2,445

-----  
Interference to BLANK0000027584 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
	WWPX-TV	D13	DT	BL	MARTINSBURG, WV	DTVBL23264	196.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
25952.4 746,433	23188.2 613,834	22652.4 605,888	22652.4 605,888	0.00 0.00			

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL 4.0	203	0.0	0
WTVG D13 DT APP 4.0	203		0.0 0

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 13 of 18)



**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

WBOY-TV D12 DT LIC	44.0	281	36.0	185	36.0	185
WTSF D13 DT CP	339.9	5,240	231.9	2,343	231.9	2,343
WWPX-TV D13 DT BL	259.7	5,119	159.8	2,521	159.8	2,521

-----  
Interference to BLANK0000027584 CP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	203.3
	WWPX-TV	D13	DT	APP	MARTINSBURG, WV	BLANK0000034933	196.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	25952.4	746,433	23188.2	613,834	22824.1	607,599	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		4.0	203		4.0	203	
WTVG D13 DT APP		4.0	203		4.0	203	
WBOY-TV D12 DT LIC		44.0	281	40.1	281	40.1	281
WTSF D13 DT BL		20.0	43	8.0	39	8.0	39
WWPX-TV D13 DT APP		311.9	5,712	296.0	5,708	296.0	5,708

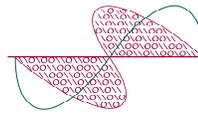
-----  
Interference to BLANK0000027584 CP scenario 5

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	203.3
	WWPX-TV	D13	DT	CP	MARTINSBURG, WV	BLANK0000027005	196.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	25952.4	746,433	23188.2	613,834	22884.3	608,268	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		4.0	203		4.0	203	
WTVG D13 DT APP		4.0	203		4.0	203	
WBOY-TV D12 DT LIC		44.0	281	40.1	281	40.1	281
WTSF D13 DT BL		20.0	43	8.0	39	8.0	39
WWPX-TV D13 DT CP		251.8	5,043	235.8	5,039	235.8	5,039

-----  
Interference to BLANK0000027584 CP scenario 6

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	203.3
	WWPX-TV	D13	DT	BL	MARTINSBURG, WV	DTVBL23264	196.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	25952.4	746,433	23188.2	613,834	22876.3	608,192	0.00 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTVG D13 DT BL		4.0	203		4.0	203	
WTVG D13 DT APP		4.0	203		4.0	203	
WBOY-TV D12 DT LIC		44.0	281	40.1	281	40.1	281
WTSF D13 DT BL		20.0	43	8.0	39	8.0	39
WWPX-TV D13 DT BL		259.7	5,119	243.8	5,115	243.8	5,115

**Table 1 WTVG OET Bulletin 69 Interference Study**  
 (page 14 of 18)



**Chesapeake RF Consultants, LLC**  
 Radiofrequency Consulting Engineers  
 Digital Television and Radio

-----  
 Interference to BLANK000034189 APP scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
WWPX-TV	D13	DT	APP	MARTINSBURG, WV	BLANK0000034933	196.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
30778.8	915,491	27307.6	754,443	26671.4	744,574	26671.4 744,574 0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	20.2	905	4.0	516		
WTVG D13 DT APP	24.2	985	4.0	516		
WBOY-TV D12 DT LIC	40.0	135	32.0	124	32.0	124
WTSF D13 DT CP	347.9	3,449	235.9	2,569	231.9	2,489
WWPX-TV D13 DT APP	360.2	6,483	240.2	5,579	240.2	5,579

-----  
 Interference to BLANK000034189 APP scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
WWPX-TV	D13	DT	CP	MARTINSBURG, WV	BLANK0000027005	196.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
30778.8	915,491	27307.6	754,443	26723.7	746,299	26723.7 746,299 0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	20.2	905	12.1	717		
WTVG D13 DT APP	24.2	985	12.1	717		
WBOY-TV D12 DT LIC	40.0	135	32.0	124	32.0	124
WTSF D13 DT CP	347.9	3,449	243.9	2,601	239.8	2,521
WWPX-TV D13 DT CP	291.9	4,525	188.0	3,854	188.0	3,854

-----  
 Interference to BLANK000034189 APP scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.8 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.8
WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
WWPX-TV	D13	DT	BL	MARTINSBURG, WV	DTVBL23264	196.6
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
30778.8	915,491	27307.6	754,443	26719.6	746,222	26719.6 746,222 0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after			
WTVG D13 DT BL	20.2	905	8.1	552		
WTVG D13 DT APP	24.2	985	8.1	552		
WBOY-TV D12 DT LIC	40.0	135	32.0	124	32.0	124
WTSF D13 DT CP	347.9	3,449	247.9	2,682	243.8	2,602
WWPX-TV D13 DT BL	295.9	4,686	192.0	3,931	192.0	3,931

-----  
 Interference to BLANK000034189 APP scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
------	------	-----	--------	-------------	-------------	----------

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 15 of 18)



Desired:	WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189			
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150		370.8	km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW		370.8	
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448		154.6	
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150		2.1	
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798		203.3	
	WVPX-TV	D13	DT	APP	MARTINSBURG, WV	BLANK0000034933		196.6	
	Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
	30778.8	915,491	27307.6	754,443	26895.3	747,051	26891.2	746,971	0.02 0.01
Undesired			Total IX		Unique IX, before		Unique IX, after		
WTVG D13 DT BL		20.2	905		8.1	693			
WTVG D13 DT APP		24.2	985				12.1	773	
WBOY-TV D12 DT LIC		40.0	135	32.0	124		32.0	124	
WTSF D13 DT BL		24.1	145	12.0	92		12.0	92	
WVPX-TV D13 DT APP		360.2	6,483	332.1	6,218		332.1	6,218	

-----  
Interference to BLANK0000034189 APP scenario 5

Desired:	Call	Chan	Svc	Status	City, State	File Number		Distance	
	WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189			
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150		370.8 km	
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW		370.8	
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448		154.6	
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150		2.1	
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798		203.3	
	WVPX-TV	D13	DT	CP	MARTINSBURG, WV	BLANK0000027005		196.6	
	Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
	30778.8	915,491	27307.6	754,443	26955.5	748,808	26951.4	748,728	0.02 0.01
Undesired			Total IX		Unique IX, before		Unique IX, after		
WTVG D13 DT BL		20.2	905		16.1	894			
WTVG D13 DT APP		24.2	985				20.2	974	
WBOY-TV D12 DT LIC		40.0	135	32.0	124		32.0	124	
WTSF D13 DT BL		24.1	145	12.0	92		12.0	92	
WVPX-TV D13 DT CP		291.9	4,525	271.9	4,461		271.9	4,461	

-----  
Interference to BLANK0000034189 APP scenario 6

Desired:	Call	Chan	Svc	Status	City, State	File Number		Distance	
	WVFX	D13	DT	APP	CLARKSBURG, WV	BLANK0000034189			
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150		370.8 km	
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW		370.8	
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448		154.6	
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150		2.1	
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798		203.3	
	WVPX-TV	D13	DT	BL	MARTINSBURG, WV	DTVBL23264		196.6	
	Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
	30778.8	915,491	27307.6	754,443	26955.5	748,812	26951.5	748,732	0.02 0.01
Undesired			Total IX		Unique IX, before		Unique IX, after		
WTVG D13 DT BL		20.2	905		12.1	729			
WTVG D13 DT APP		24.2	985				16.1	809	
WBOY-TV D12 DT LIC		40.0	135	32.0	124		32.0	124	
WTSF D13 DT BL		24.1	145	12.0	92		12.0	92	
WVPX-TV D13 DT BL		295.9	4,686	271.9	4,457		271.9	4,457	

-----  
Interference to DTVBL10976 BL scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number		Distance
	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976		
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150		370.7 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW		370.7

**Table 1 WTVG OET Bulletin 69 Interference Study**  
(page 16 of 18)



WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
WWPX-TV	D13	DT	APP	MARTINSBURG, WV	BLANK0000034933	196.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25599.2 731,198	22895.5 608,072	22339.7 599,900	22339.7 599,900	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	4.0 203	0.0 0	
WTVG D13 DT APP	8.1 349		0.0 0
WBOY-TV D12 DT LIC	44.0 253	36.0 236	36.0 236
WTSF D13 DT CP	343.8 5,710	216.1 2,807	216.1 2,807
WWPX-TV D13 DT APP	299.6 4,926	172.0 2,226	168.0 2,080

-----  
Interference to DTVBL10976 BL scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.7 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.7
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
	WWPX-TV	D13	DT	CP	MARTINSBURG, WV	BLANK0000027005	196.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25599.2 731,198	22895.5 608,072	22363.6 600,498	22363.6 600,498	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	4.0 203	0.0 0	
WTVG D13 DT APP	8.1 349		0.0 0
WBOY-TV D12 DT LIC	44.0 253	36.0 236	36.0 236
WTSF D13 DT CP	343.8 5,710	228.1 2,920	228.1 2,920
WWPX-TV D13 DT CP	263.6 4,215	148.0 1,628	144.0 1,482

-----  
Interference to DTVBL10976 BL scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.7 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.7
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	203.3
	WWPX-TV	D13	DT	BL	MARTINSBURG, WV	DTVBL23264	196.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25599.2 731,198	22895.5 608,072	22363.6 600,498	22363.6 600,498	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTVG D13 DT BL	4.0 203	0.0 0	
WTVG D13 DT APP	8.1 349		0.0 0
WBOY-TV D12 DT LIC	44.0 253	36.0 236	36.0 236
WTSF D13 DT CP	343.8 5,710	228.1 2,920	228.1 2,920
WWPX-TV D13 DT BL	263.6 4,215	148.0 1,628	144.0 1,482

-----  
Interference to DTVBL10976 BL scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	
Undesireds:	WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.7 km
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.7
	WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
	WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	203.3
	WWPX-TV	D13	DT	APP	MARTINSBURG, WV	BLANK0000034933	196.6

**Table 1 WTVG OET Bulletin 69 Interference Study**  
 (page 17 of 18)



Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25599.2 731,198	22895.5 608,072	22547.7 602,668	22547.7 602,668	0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	4.0 203	4.0 203		
WTVG D13 DT APP	8.1 349		4.0 203	
WBOY-TV D12 DT LIC	44.0 253	36.0 236	36.0 236	
WTSF D13 DT BL	16.0 46	8.0 39	8.0 39	
WWPX-TV D13 DT APP	299.6 4,926	283.7 4,902	279.7 4,756	

-----  
 Interference to DTVBL10976 BL scenario 5

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.7 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.7
WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	203.3
WWPX-TV	D13	DT	CP	MARTINSBURG, WV	BLANK0000027005	196.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25599.2 731,198	22895.5 608,072	22583.7 603,379	22583.7 603,379	0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	4.0 203	4.0 203		
WTVG D13 DT APP	8.1 349		4.0 203	
WBOY-TV D12 DT LIC	44.0 253	36.0 236	36.0 236	
WTSF D13 DT BL	16.0 46	8.0 39	8.0 39	
WWPX-TV D13 DT CP	263.6 4,215	247.7 4,191	243.7 4,045	

-----  
 Interference to DTVBL10976 BL scenario 6

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WVFX	D13	DT	BL	CLARKSBURG, WV	DTVBL10976	
Undesireds: WTVG	D13	DT	BL	TOLEDO, OH	DTVBL74150	370.7 km
WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	370.7
WVPT	D12	DD	CP	STAUNTON, VA	BLANK0000028448	154.6
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	2.1
WTSF	D13	DT	BL	ASHLAND, KY	DTVBL67798	203.3
WWPX-TV	D13	DT	BL	MARTINSBURG, WV	DTVBL23264	196.6

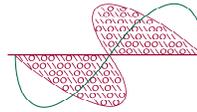
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25599.2 731,198	22895.5 608,072	22583.7 603,379	22583.7 603,379	0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after	
WTVG D13 DT BL	4.0 203	4.0 203		
WTVG D13 DT APP	8.1 349		4.0 203	
WBOY-TV D12 DT LIC	44.0 253	36.0 236	36.0 236	
WTSF D13 DT BL	16.0 46	8.0 39	8.0 39	
WWPX-TV D13 DT BL	263.6 4,215	247.7 4,191	243.7 4,045	

-----  
 Interference to proposal scenario 1  
 \*\*MX: 1.08% interference received

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	
Undesireds: WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3 km
WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	121.9
WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8
WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	372.8
WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1
WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	370.8

Service area	Terrain-limited	IX-free	Percent IX
25918.0 4,405,350	25793.7 4,397,113	25188.3 4,349,698	2.35 1.08

**Table 1 WTVG OET Bulletin 69 Interference Study**  
 (page 18 of 18)



4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00	0.00	(in Canada)
Undesired		Total IX		Unique IX		Prcnt Unique IX		
WINM D12 DT LIC	16.1	114	0.0	0	0.00	0.00		
WMFD-TV D12 DT LIC	51.7	386	51.7	386	0.20	0.01		
WTHR D13 DT APP	189.4	5,977	153.3	4,549	0.59	0.10		
WZZM D13 DT LIC	392.3	42,414	364.3	41,052	1.41	0.93		

-----  
 Interference to proposal scenario 2  
 1.00% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	APP	TOLEDO, OH	WTVG 20.1kW	
Undesireds:	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3 km
	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	121.9
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLCDT20120127AIE	303.8
	WTSF	D13	DT	CP	ASHLAND, KY	BLANK0000029774	372.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1
	WVFX	D13	DT	CP	CLARKSBURG, WV	BLANK0000027584	370.8

Service area	Terrain-limited	IX-free	Percent IX
25918.0 4,405,350	25793.7 4,397,113	25309.4 4,353,209	1.88 1.00
4368.4 389,070	4368.4 389,070	4368.4 389,070	0.00 0.00 (in Canada)

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WINM D12 DT LIC	16.1	114	4.0	42	0.02	0.00	
WMFD-TV D12 DT LIC	51.7	386	51.7	386	0.20	0.01	
WTHR D13 DT LIC	52.3	2,161	32.2	1,038	0.12	0.02	
WZZM D13 DT LIC	392.3	42,414	376.3	41,315	1.46	0.94	

**Channel and Facility Information**

Section	Question	Response
<b>Proposed Community of License</b>	Facility ID	74150
	State	Ohio
	City	TOLEDO
	DTV Channel	13
<b>Facility Type</b>	Facility Type	Commercial
	Station Type	Main
<b>Zone</b>	Zone	1

**Antenna Location Data**

Section	Question	Response
<b>Antenna Structure Registration</b>	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1025392
<b>Coordinates (NAD83)</b>	Latitude	41° 41' 00.0" N+
	Longitude	083° 24' 49.0" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	319.7 meters
	Support Structure Height	296.6 meters
	Ground Elevation (AMSL)	176.8 meters
<b>Antenna Data</b>	Height of Radiation Center Above Ground Level	308.6 meters
	Height of Radiation Center Above Average Terrain	306.8 meters
	Height of Radiation Center Above Mean Sea Level	485.4 meters
	Effective Radiated Power	20.1 kW

**Antenna  
Technical Data**

Section	Question	Response
<b>Antenna Type</b>	Antenna Type	Non-Directional
	Do you have an Antenna ID?	
	Antenna ID	
<b>Antenna Manufacturer and Model</b>	Manufacturer:	DIE
	Model	TW-12B13R
	Rotation	
	Electrical Beam Tilt	0.5
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
<b>DTV and DTS: Elevation Pattern</b>	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	

**Construction  
Permit  
Certifications**

Section	Question	Response
<p><b>Post-Incentive Auction Expedited Processing</b></p>	<p>It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.</p>	<p>Yes</p>
	<p>It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.</p>	<p>No</p>
	<p>It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.</p>	<p>Yes</p>
	<p>The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect 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.</p>	<p>Yes</p>
<p><b>Environmental Effect</b></p>	<p>Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See Section 1.1306 of 47 C.F.R.)</p>	<p>No</p>
<p><b>Broadcast Facility</b></p>	<p>The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C.F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.</p>	<p>Yes</p>