

ENGINEERING EXHIBIT

Application for Digital Television Station Construction Permit

prepared for

Gray Television Licensee, LLC

WDTV(DT) Weston, WV

Facility ID 70592

Ch. 5 12.1 kW 222 m

Gray Television Licensee, LLC (“Gray”) is the licensee of digital television station WDTV(DT), Channel 5, Facility ID 70592, Weston, WV. WDTV is licensed (file# 20090612AJX) to operate with 10 kW effective radiated power (“ERP”) at 240 meters antenna height above average terrain (“HAAT”). Gray proposes herein to increase the ERP to 12.1 kW and decrease antenna height to 222 m HAAT.

No change in site location is proposed. The WDTV tower structure is associated with FCC Antenna Structure Registration number 1034466. No change to overall structure height will result from this proposal.

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 Auction¹ baseline facility population.

Interference study per FCC OET Bulletin 69² shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and 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 proposal would not

¹*Incentive Auction Closing and Channel Reassignment Public Notice*, DA 17-317, released April 13, 2017.

²FCC 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.

cause impermissible interference to any pre-auction facility that was reassigned or relinquished in the incentive auction.

The proposed 12.1 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 222 meters permitted by §73.622(f)(6). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. As demonstrated in Figure 2, the total area within the proposed WDTV NLSC is 32,813 square kilometers, which does not exceed the NLSC area of the licensed WDTV facility (32,865 sq. km, 10 kW ERP 240 m HAAT, BLCDDT-20090612AJX). Although WDTV is located in Zone I, ERP in excess of the customary cap has already been authorized for other Zone I VHF stations³ on the basis of the same “largest station in the market” exception in §73.622(f)(5). Thus, the 12.1 kW ERP specified herein is in compliance with §73.622(f)(5) of the FCC’s Rules.

The nearest FCC monitoring station is 305 km distant at Laurel, MD. 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 nondirectional AM stations within 0.8 kilometers of the site and no authorized directional AM stations within 3 km. The site location is within the 360 km Canadian coordination zone (317 km to the Canada border), however proposals located beyond 300 km of the border are no longer referred to Canada.

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 a conservative assumption of 50 percent antenna relative field in downward elevations, the

³For example, Zone I station WBPB-TV Ch. 9 Bethlehem, PA was allotted 3.2 kW at 284 meters and was authorized an expansion facility of 89 kW at 284 meters (BPCDDT-20080619ALA). Subsequently, WBPB-TV was authorized to increase to 80.6 kW at 302 meters (now licensed, BLCDDT-20100907AAF). Also see WJZ-TV Baltimore MD (licensed at 33.8 kW, BLCDDT-20110914AAS and authorized at 33.2 kW on its post-auction channel, file # 0000024506).

calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $3.7 \mu\text{W}/\text{cm}^2$, which is 1.9 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.

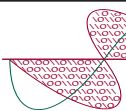
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power 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
Figure 2	Maximum ERP per §73.622(f)
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 7, 2017	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600



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

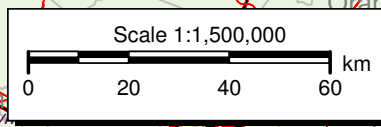
Figure 1
Proposed Coverage Contours
WDTV(DT) Weston, WV
Facility ID 70592
Ch. 5 12.1 kW 222 m

prepared for
Gray Television Licensee, LLC

December, 2017

Proposed WDTV
35 dBμ
(Principal Community)
28 dBμ
(Noise Limited Service Contour)

Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	32,813.2	980,274
OET Bulletin 69: TVStudy		
Within noise limited contour	32,573.5	958,681
Not affected by terrain losses	30,393.1	846,308
Lost to all interference	240.5	2,563
Net Interference-Free Service	30,152.6	843,745





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

Figure 2
Maximum ERP per §73.622(f)
WDTV(DT) Weston, WV
Facility ID 70592
Ch. 5 12.1 kW 222 m

prepared for
Gray Television Licensee, LLC

December, 2017

Proposed WVFX
12.1 kW 222 m
28 dBμ Contour (NLSC)
Area: 32,813 sq. km

Licensed WDTV
BLCDT-20090612AJX
10 kW 240 m
28 dBμ Contour (NLSC)
Area: 32,865 sq. km

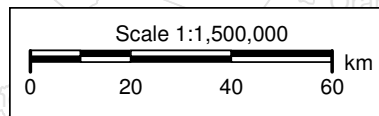


Table 1 WDTV OET Bulletin 69 Interference Study
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tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: WDTV 12.1kW Prop, Model: Longley-Rice
Start: 2017.12.07 13:25:57

Study created: 2017.12.07 13:25:57

Study build station data: LMS TV 2017-12-07 LMSTV

Proposal: WDTV D5 DT APP WESTON, WV
File number: WDTV 12.1kW
Facility ID: 70592
Station data: User record
Record ID: 1531
Country: U.S.
Zone: I

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
Yes	WNYB	D5	DT	CP	JAMESTOWN, NY	BLANK00000028124	356.3
Yes	WNYB	D5	DT	APP	JAMESTOWN, NY	BLANK00000034892	356.3
Yes	WNYB	D5	DT	BL	JAMESTOWN, NY	DTVBL30303	356.3
No	WLMB	D5	DT	APP	TOLEDO, OH	BLANK00000035695	412.5
No	WLMB	D5	DT	LIC	TOLEDO, OH	BLCDT20050201AAF	412.5
Yes	WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
Yes	WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK00000025584	119.5
Yes	WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	119.5
No	WKBS-TV	D6	DT	APP	ALTOONA, PA	BLANK00000034187	214.8
No	WKBS-TV	D6	DT	CP	ALTOONA, PA	BLANK00000026455	214.8
No	WKBS-TV	D6	DT	BL	ALTOONA, PA	DTVBL13929	214.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D5
Latitude: 39 18 2.00 N (NAD83)
Longitude: 80 20 36.00 W
Height AMSL: 581.1 m
HAAT: 221.8 m
Peak ERP: 12.1 kW
Antenna: Omnidirectional
Elev Pattn: Generic

28.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	12.1 kW	232.1 m	102.9 km
45.0	12.1	224.6	102.2
90.0	12.1	220.2	101.7
135.0	12.1	236.9	103.4
180.0	12.1	207.9	100.4
225.0	12.1	227.2	102.4
270.0	12.1	200.8	99.6
315.0	12.1	225.1	102.2

ERP exceeds maximum

ERP: 12.1 kW ERP maximum: 10.0 kW

Distance to Canadian border: 316.0 km

Distance to Mexican border: 2138.5 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 91.7 degrees Distance: 303.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 280.5 degrees Distance: 2122.2 km

Table 1 WDTV OET Bulletin 69 Interference Study
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Study cell size: 2.00 km
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 BLANK000001038 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	368.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	368.5
	WPVI-TV	D6	DT	APP	PHILADELPHIA, PA	BLANK00000035671	141.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26329.9 6,384,827		26169.8 6,257,910		25721.6 6,133,757		25721.6 6,133,757	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WDTV D5 DT BL		8.0 8,753		8.0 8,753			
WDTV D5 DT APP		8.0 8,753				8.0 8,753	
WPVI-TV D6 DT APP		440.2 115,400		440.2 115,400		440.2 115,400	

Interference to BLANK000001038 LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	368.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	368.5
	WPVI-TV	D6	DT	LIC	PHILADELPHIA, PA	BLCDT20111019ACJ	141.2
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26329.9 6,384,827		26169.8 6,257,910		25828.9 6,146,820		25828.9 6,146,820	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WDTV D5 DT BL		8.0 8,753		8.0 8,753			
WDTV D5 DT APP		8.0 8,753				8.0 8,753	
WPVI-TV D6 DT LIC		332.9 102,337		332.9 102,337		332.9 102,337	

Interference to BLANK0000028124 CP scenario 1

Desired:	Call WNYB	Chan D5	Svc DT	Status CP	City, State JAMESTOWN, NY	File Number BLANK0000028124	Distance		
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	356.3 km		
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	356.3		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
17379.9	1,629,249	16891.0	1,603,175	16870.9	1,602,622	16870.9	1,602,622	0.00	0.00
8451.0	800,906	8419.2	742,685	8419.2	742,685	8419.2	742,685	0.00	0.00
(in Canada)									
Undesired				Total IX	Unique IX, before	Unique IX, after			
WDTV	D5	DT	BL	20.1	553	20.1	553		
WDTV	D5	DT	APP	20.1	553			20.1	553

Interference to BLANK0000034892 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WNYB	D5	DT	APP	JAMESTOWN, NY	BLANK00000034892	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	356.3 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	356.3
	WLMB	D5	DT	APP	TOLEDO, OH	BLANK00000035695	401.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX

Table 1 WDTV OET Bulletin 69 Interference Study
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26041.8	1,818,490	24993.8	1,788,602	24917.3	1,787,486	24905.2	1,787,313	0.05	0.01
10590.1	1,102,225	10538.4	1,025,574	10538.4	1,025,574	10538.4	1,025,574	0.00	0.00

(in Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	76.5	1,116	76.5	1,116
WDTV D5 DT APP	88.6	1,289		88.6 1,289

Interference to DTVBL30303 BL scenario 1

Desired:	Call WNYB	Chan D5	Svc DT	Status BL	City, State JAMESTOWN, NY	File Number DTVBL30303	Distance
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	356.3 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	356.3

Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
17387.9	1,629,683	16890.9	1,603,032	16874.9	1,602,493	16874.9	0.00 0.00
8451.0	800,906	8419.2	742,685	8419.2	742,685	8419.2	0.00 0.00

(in Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	16.1	539	16.1	539
WDTV D5 DT APP	16.1	539		16.1 539

Interference to BLCDT20100629AUD LIC scenario 1

Desired:	Call WCYB-TV	Chan D5	Svc DT	Status LIC	City, State BRISTOL, VA	File Number BLCDT20100629AUD	Distance
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	352.7 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	352.7
	WTNB-CD	D5	DC	CP	CLEVELAND, TN	BLANK0000025628	286.0

Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
67562.3	3,032,475	60826.5	2,684,427	60379.1	2,671,341	60347.1	0.05 0.17

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	315.1	7,783	315.1	7,783
WDTV D5 DT APP	347.1	12,442		347.1 12,442
WTNB-CD D5 DC CP	132.2	5,303	132.2	5,303

Interference to BLCDT20100629AUD LIC scenario 2

Desired:	Call WCYB-TV	Chan D5	Svc DT	Status LIC	City, State BRISTOL, VA	File Number BLCDT20100629AUD	Distance
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	352.7 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	352.7
	WTNB-CD	D5	DC	APP	CLEVELAND, TN	BLANK0000034882	298.2

Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
67562.3	3,032,475	60826.5	2,684,427	60319.0	2,667,560	60287.0	0.05 0.17

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	315.1	7,783	315.1	7,783
WDTV D5 DT APP	347.1	12,442		347.1 12,442
WTNB-CD D5 DC APP	192.3	9,084	192.3	9,084

Interference to BLCDT20100629AUD LIC scenario 3

Desired:	Call WCYB-TV	Chan D5	Svc DT	Status LIC	City, State BRISTOL, VA	File Number BLCDT20100629AUD	Distance
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	352.7 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	352.7
	WTNB-CD	D5	DC	BL	CLEVELAND, TN	DTVBL49240	286.0

Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
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Table 1 WDTV OET Bulletin 69 Interference Study
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67562.3 3,032,475 60826.5 2,684,427 60379.1 2,671,341 60347.1 2,666,682 0.05 0.17

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	315.1	7,783	315.1	7,783
WDTV D5 DT APP	347.1	12,442		
WTNB-CD D5 DC BL	132.2	5,303	132.2	5,303

Interference to BLANK0000025584 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK0000025584	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	119.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	119.5
	WKBS-TV	D6	DT	APP	ALTOONA, PA	BLANK0000034187	247.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
22132.0 1,096,058	21565.1 1,062,270	21429.1 1,054,383	21429.1 1,054,383	0.00 0.00			
Undesired		Total IX	Unique IX, before	Unique IX, after			
WDTV D5 DT BL	19.9	213	15.9	200			
WDTV D5 DT APP	19.9	213			15.9	200	
WKBS-TV D6 DT APP	120.1	7,687	116.1	7,674	116.1	7,674	

Interference to BLANK0000025584 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK0000025584	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	119.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	119.5
	WKBS-TV	D6	DT	CP	ALTOONA, PA	BLANK0000026455	247.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
22132.0 1,096,058	21565.1 1,062,270	21525.1 1,061,501	21525.1 1,061,501	0.00 0.00			
Undesired		Total IX	Unique IX, before	Unique IX, after			
WDTV D5 DT BL	19.9	213	15.9	200			
WDTV D5 DT APP	19.9	213			15.9	200	
WKBS-TV D6 DT CP	24.1	569	20.1	556	20.1	556	

Interference to BLANK0000025584 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK0000025584	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	119.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	119.5
	WKBS-TV	D6	DT	BL	ALTOONA, PA	DTVBL13929	247.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
22132.0 1,096,058	21565.1 1,062,270	21521.1 1,060,797	21521.1 1,060,797	0.00 0.00			
Undesired		Total IX	Unique IX, before	Unique IX, after			
WDTV D5 DT BL	19.9	213	15.9	200			
WDTV D5 DT APP	19.9	213			15.9	200	
WKBS-TV D6 DT BL	28.1	1,273	24.1	1,260	24.1	1,260	

Interference to DTVBL50141 BL scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	119.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	119.5
	WKBS-TV	D6	DT	APP	ALTOONA, PA	BLANK0000034187	247.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
24608.0 1,256,827	24044.9 1,226,752	23853.1 1,200,597	23853.1 1,200,597	0.00 0.00			

Table 1 WDTV OET Bulletin 69 Interference Study
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Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	23.8	49	15.9	36
WDTV D5 DT APP	23.8	49	15.9	36
WKBS-TV D6 DT APP	175.9	26,119	168.0	26,106

Interference to DTVBL50141 BL scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	119.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	119.5
	WKBS-TV	D6	DT	CP	ALTOONA, PA	BLANK0000026455	247.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
24608.0	1,256,827	24044.9	1,226,752	23993.0	1,222,820	23993.0	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	23.8	49	23.8	49
WDTV D5 DT APP	23.8	49	23.8	49
WKBS-TV D6 DT CP	28.1	3,883	28.1	3,883

Interference to DTVBL50141 BL scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	
Undesireds:	WDTV	D5	DT	BL	WESTON, WV	DTVBL70592	119.5 km
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	119.5
	WKBS-TV	D6	DT	BL	ALTOONA, PA	DTVBL13929	247.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
24608.0	1,256,827	24044.9	1,226,752	23993.0	1,222,820	23993.0	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WDTV D5 DT BL	23.8	49	23.8	49
WDTV D5 DT APP	23.8	49	23.8	49
WKBS-TV D6 DT BL	28.1	3,883	28.1	3,883

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	
Undesireds:	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
	WNYB	D5	DT	CP	JAMESTOWN, NY	BLANK0000028124	356.3
	WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
	WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK0000025584	119.5
Service area		Terrain-limited		IX-free		Percent IX	
32573.5	958,681	30393.1	846,308	30152.6	843,745	0.79	0.30

Undesired		Total IX	Unique IX	Prcnt Unique IX
WMDE D5 DT LIC	67.6	523	67.6	0.22 0.06
WNYB D5 DT CP	4.0	0	4.0	0.01 0.00
WCYB-TV D5 DT LIC	104.3	1,149	104.3	0.34 0.14
WOUC-TV D6 DT CP	64.6	891	64.6	0.21 0.11

Interference to proposal scenario 2
0.58% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	
Undesireds:	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
	WNYB	D5	DT	CP	JAMESTOWN, NY	BLANK0000028124	356.3
	WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
	WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	119.5

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Service area	Terrain-limited	IX-free	Percent IX
32573.5 958,681	30393.1 846,308	30124.4 841,416	0.88 0.58
Undesired	Total IX	Unique IX	Prcnt Unique IX
WMDE D5 DT LIC	67.6 523	67.6 523	0.22 0.06
WNYB D5 DT CP	4.0 0	4.0 0	0.01 0.00
WCYB-TV D5 DT LIC	104.3 1,149	104.3 1,149	0.34 0.14
WOUC-TV D6 DT BL	92.8 3,220	92.8 3,220	0.31 0.38

Interference to proposal scenario 3
**MX: 1.09% interference received

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	
Undesireds: WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
WNYB	D5	DT	APP	JAMESTOWN, NY	BLANK0000034892	356.3
WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK0000025584	119.5

Service area	Terrain-limited	IX-free	Percent IX
32573.5 958,681	30393.1 846,308	30051.9 837,049	1.12 1.09
Undesired	Total IX	Unique IX	Prcnt Unique IX
WMDE D5 DT LIC	67.6 523	67.6 523	0.22 0.06
WNYB D5 DT APP	104.7 6,696	104.7 6,696	0.34 0.79
WCYB-TV D5 DT LIC	104.3 1,149	104.3 1,149	0.34 0.14
WOUC-TV D6 DT CP	64.6 891	64.6 891	0.21 0.11

Interference to proposal scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	
Undesireds: WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
WNYB	D5	DT	BL	JAMESTOWN, NY	DTVBL30303	356.3
WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
WOUC-TV	D6	DT	CP	CAMBRIDGE, OH	BLANK0000025584	119.5

Service area	Terrain-limited	IX-free	Percent IX
32573.5 958,681	30393.1 846,308	30152.6 843,745	0.79 0.30
Undesired	Total IX	Unique IX	Prcnt Unique IX
WMDE D5 DT LIC	67.6 523	67.6 523	0.22 0.06
WNYB D5 DT BL	4.0 0	4.0 0	0.01 0.00
WCYB-TV D5 DT LIC	104.3 1,149	104.3 1,149	0.34 0.14
WOUC-TV D6 DT CP	64.6 891	64.6 891	0.21 0.11

Interference to proposal scenario 5
**MX: 1.37% interference received

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	
Undesireds: WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
WNYB	D5	DT	APP	JAMESTOWN, NY	BLANK0000034892	356.3
WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	119.5

Service area	Terrain-limited	IX-free	Percent IX
32573.5 958,681	30393.1 846,308	30023.7 834,720	1.22 1.37
Undesired	Total IX	Unique IX	Prcnt Unique IX
WMDE D5 DT LIC	67.6 523	67.6 523	0.22 0.06
WNYB D5 DT APP	104.7 6,696	104.7 6,696	0.34 0.79
WCYB-TV D5 DT LIC	104.3 1,149	104.3 1,149	0.34 0.14
WOUC-TV D6 DT BL	92.8 3,220	92.8 3,220	0.31 0.38

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Interference to proposal scenario 6
0.58% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDTV	D5	DT	APP	WESTON, WV	WDTV 12.1kW	
Undesireds:	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	368.5 km
	WNYB	D5	DT	BL	JAMESTOWN, NY	DTVBL30303	356.3
	WCYB-TV	D5	DT	LIC	BRISTOL, VA	BLCDT20100629AUD	352.7
	WOUC-TV	D6	DT	BL	CAMBRIDGE, OH	DTVBL50141	119.5

Service area	Terrain-limited	IX-free	Percent IX
32573.5 958,681	30393.1 846,308	30124.4 841,416	0.88 0.58

Undesired	Total IX	Unique IX	Prcnt Unique IX
WMDE D5 DT LIC 67.6 523 67.6 523 0.22 0.06			
WNYB D5 DT BL 4.0 0 4.0 0 0.01 0.00			
WCYB-TV D5 DT LIC 104.3 1,149 104.3 1,149 0.34 0.14			
WOUC-TV D6 DT BL 92.8 3,220 92.8 3,220 0.31 0.38			

**Channel and
Facility
Information**

Section	Question	Response
Proposed Community of License	Facility ID	70592
	State	West Virginia
	City	WESTON
	DTV Channel	5
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	1

**Antenna Location
Data**

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1034466
Coordinates (NAD83)	Latitude	39° 18' 02.0" N+
	Longitude	080° 20' 36.0" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	192.7 meters
	Support Structure Height	182.9 meters
	Ground Elevation (AMSL)	414.5 meters
Antenna Data	Height of Radiation Center Above Ground Level	166.6 meters
	Height of Radiation Center Above Average Terrain	221.8 meters
	Height of Radiation Center Above Mean Sea Level	581.1 meters
	Effective Radiated Power	12.1 kW

Antenna Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Non-Directional
	Do you have an Antenna ID?	
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	SWR
	Model	SWDW2-2-2/5
	Rotation	
	Electrical Beam Tilt	Not Applicable
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
DTV and DTS: Elevation Pattern	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
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	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.	Yes
	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.	Yes
	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.	Yes
Environmental Effect	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.)	No
Broadcast Facility	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.	Yes