



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF A REQUEST FOR
SPECIAL TEMPORARY AUTHORIZATION
WNUV - BALTIMORE, MARYLAND
DTV - CH. 25 - 750 kW - 372.8 m HAAT**

Prepared for: BALTIMORE (WNUV-TV) LICENSEE, INC.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

GENERAL

This office has been authorized by BALTIMORE (WNUV-TV) LICENSEE, INC., licensee of WNUV, channel 40, facility ID number 7933, licensed to Baltimore, Maryland, to prepare this statement and the associated exhibits in support of a request for Special Temporary Authorization to allow WNUV to use a temporary antenna to broadcast on DTV channel 25, its post-reassignment channel for broadcasting.

DISCUSSION

Since the applicant has been unable to install the antenna that is authorized in WNUV's construction permit, file # 0000034499, in a timely manner to permit the station's change over to channel 25, the instant request seeks a temporary authorization to implement operation according to an amendment to a minor modification, file # 0000059355, of WNUV's construction permit, file # 0000034499, to permit the substitution of its existing panel antenna at its current HAAT of 372.8 meters. If necessary the applicant

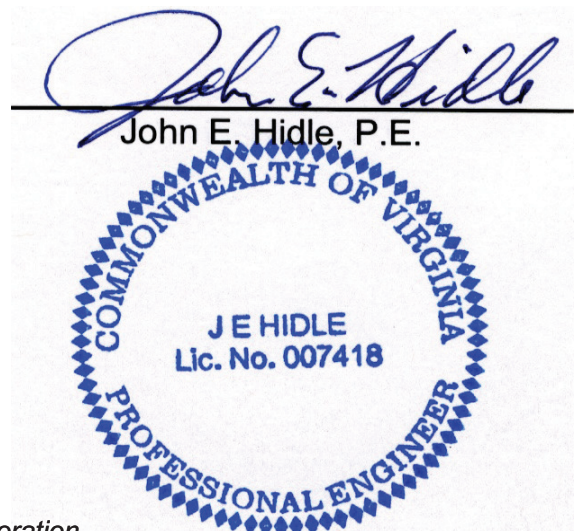
STATEMENT OF JOHN E. HIDLE, P.E.
WNUV - Baltimore, Maryland
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requests waiver of Section 73.1690, and any other pertinent rule, which would permit WNUV to commence broadcasting on its post repack channel 25. The proposed STA ERP is 750 kW, which maintains the station's noise limited contour wholly within the currently authorized noise limited contour, and does not contribute any new interference to any other pertinent facility. Additionally, the current authorization requires that the field strength at the FCC's Laurel monitoring station must not exceed 77 mV/m, and is predicted to be only 48.3 mV/m. No other changes are sought.

SUMMARY

It is submitted that the instant request for STA, according to an amendment to a minor modification, file # 0000059355, of construction permit, file # 0000034499, which authorizes WNUV to broadcast on its post-repack DTV channel 25, and the applicant's waiver request, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: September 4, 2018



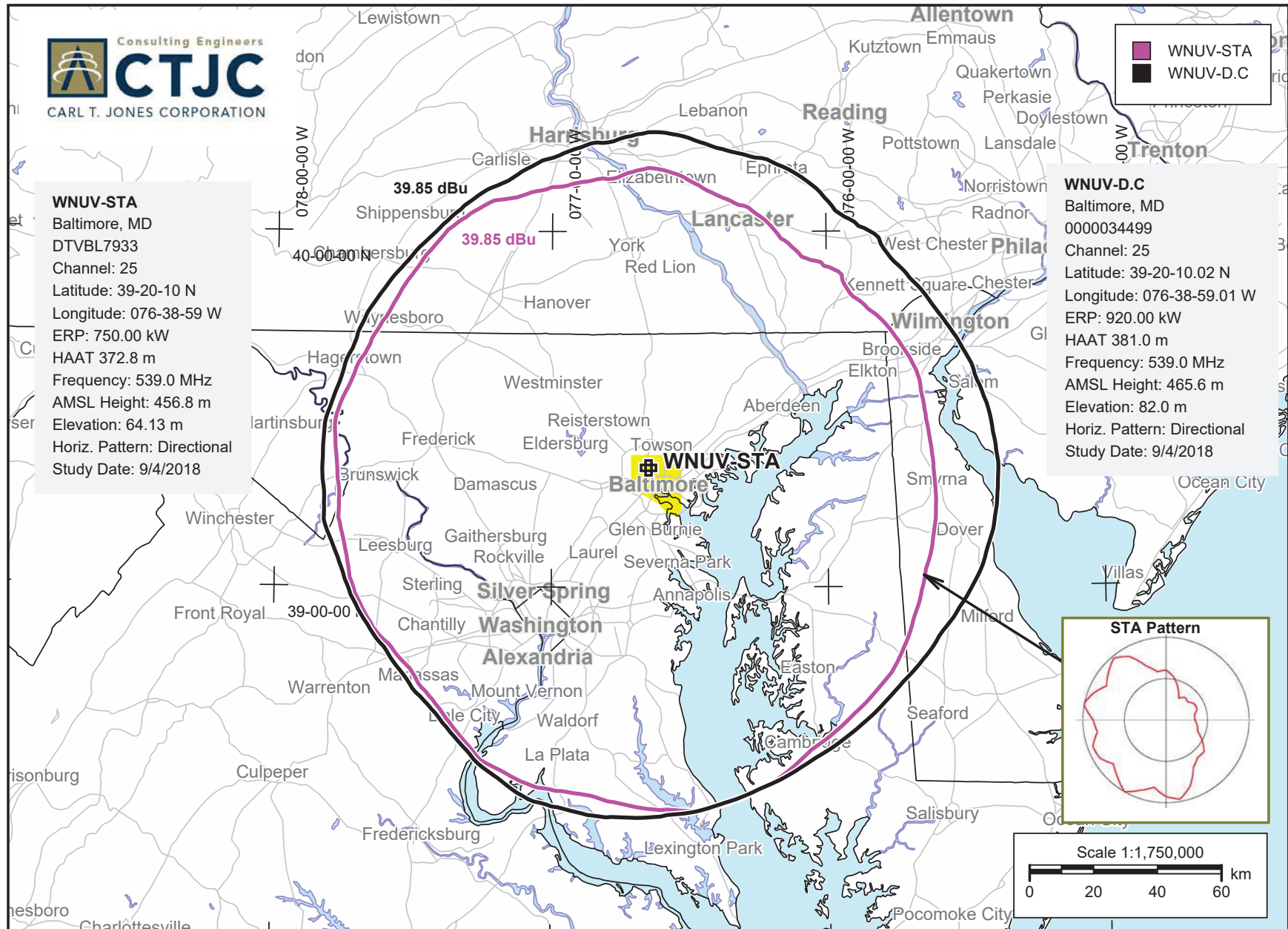
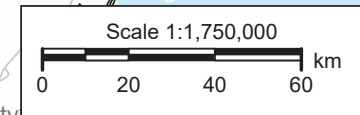
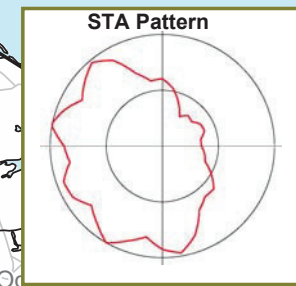
Special Temporary Authority request for WNUV-D 25 Baltimore, MD



WNUV-STA
Baltimore, MD
DTVBL7933
Channel: 25
Latitude: 39-20-10 N
Longitude: 076-38-59 W
ERP: 750.00 kW
HAAT 372.8 m
Frequency: 539.0 MHz
AMSL Height: 456.8 m
Elevation: 64.13 m
Horiz. Pattern: Directional
Study Date: 9/4/2018

■ WNUV-STA
■ WNUV-D.C

WNUV-D.C
Baltimore, MD
0000034499
Channel: 25
Latitude: 39-20-10.02 N
Longitude: 076-38-59.01 W
ERP: 920.00 kW
HAAT 381.0 m
Frequency: 539.0 MHz
AMSL Height: 465.6 m
Elevation: 82.0 m
Horiz. Pattern: Directional
Study Date: 9/4/2018





WNUV - BALTIMORE, MARYLAND Longley-Rice Interference Analysis September 2018

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: WNUV 25 STA TUDC5SP 750K #2859, Model: Longley-Rice
Start: 2018.09.04 14:38:00

Study created: 2018.09.04 14:38:00

Study build station data: LMS TV 2018-09-03

Proposal: WNUV D25 DT STA BALTIMORE, MD
File number: WNUV 25 STA TUDC5SP 750K
Facility ID: 7933
Station data: User record
Record ID: 782
Country: U.S.
Zone: I

Search options:

Non-U.S. records included

Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	117.4 km
No	W24EM-D	D24	LD	CP	WYOMING, DE	BDISDTL20140610ACV	145.8
Yes	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	77.6
No	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	276.1
No	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	276.1
No	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	205.0
No	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	144.1
No	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	144.1
No	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	130.0
No	W24CS-D	D24	LD	APP	READING, PA	BLANK0000059171	130.0
No	WHSV-TV	D24	LD	CP	HARRISONBURG, VA	BLANK0000054176	150.8
No	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	219.0
Yes	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3
No	WASA-LD	D25	LD	LIC	Greenwich, CT	BLDTL20091222AQB	276.1
Yes	W42CK	D25+	LD	CP	HAGERSTOWN, MD	BLANK0000054340	101.8
No	WUNK-TV	D25	DT	CP	GREENVILLE, NC	BLANK0000025767	428.8
Yes	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6
No	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	259.9
No	WSKA	D25	DT	CP	CORNING, NY	BLANK0000034484	313.9
No	W25DY-D	D25	LD	LIC	MONTICELLO, NY	BLDTT20100506AEI	307.0
No	W26CE	D25	LD	CP	NEW YORK, NY	BDISDTL20100120ABI	370.6
No	WHSB-LP	D25z	LD	APP	ROCHESTER, NY	BLANK0000054586	429.4
No	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	427.4
No	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	427.4
No	WTVU-CD	D25	DC	CP	SYRACUSE, NY	BLANK0000034939	415.7
No	WSSS-LP	N25z	TX	LIC	STEBENVILLE, OH	BLTTL19980506JD	355.1
Yes	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	144.1
No	WWBP-LP	N25-	TX	LIC	FREEDOM, PA	BLTTL19990124JD	341.6
Yes	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	171.0
Yes	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	314.7
No	WYOU	D25	LD	LIC	SCRANTON, PA	BLCDT20091211ACN	275.4
No	W25AQ-D	D25	LD	LIC	TOWANDA, PA	BLDTT20090727ADM	261.2
No	WVAD-LD	D25	LD	LIC	CHESAPEAKE, VA	BLDTL20121214ABD	282.6
No	WSVF-LP	N25+	TX	LIC	HARRISONBURG, VA	BLTTL20011107ABW	211.4
No	W25AA-D	D25	LD	LIC	ONANCOCK, VA	BLDTT20121127AMR	190.6
Yes	WWBK-LD	D25	LD	CP	RICHMOND, VA	BLANK0000051589	219.0
No	WLFB	D25	DT	CP	BLUEFIELD, WV	BLANK0000034862	465.6

Appendix B - Interference Analysis **WNUV - Baltimore, Maryland** **Channel 25 - 750 kW - Page 2**

No	WBFF	D26	DT	CP	BALTIMORE, MD	BLANK0000025699	0.0
No	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	227.3
No	WQAV-CD	D26	DC	CP	GLASSBORO, NJ	BLANK0000034526	161.2
No	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	275.7
No	W42DG-D	D26	LD	CP	STATE COLLEGE, PA	BLANK0000040781	186.4
No	WHTJ	D26	DT	CP	CHARLOTTESVILLE, VA	BLANK0000034130	219.0
No	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8
No	WEVD-LD	N27+	TX	LIC	DOVER, DE	BLTTL19870929IH	101.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D25
Latitude: 39 20 10.40 N (NAD83)
Longitude: 76 38 57.90 W
Height AMSL: 456.8 m
HAAT: 372.8 m
Peak ERP: 750 kW
Antenna: DIE-TUD-C5SP-10/36SPH-1-B (ID 106798) 0.0 deg
Elev Pattn: Generic
Elec Tilt: 0.75

39.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	272 kW	355.0 m	93.4 km
45.0	90.8	357.5	85.3
90.0	90.8	412.6	89.2
135.0	265	446.3	99.8
180.0	642	425.0	106.6
225.0	561	344.1	98.5
270.0	574	328.2	97.3
315.0	660	306.0	96.2

Database HAAT does not agree with computed HAAT

Database HAAT: 373 m Computed HAAT: 372 m

Distance to Canadian border: 432.8 km

Distance to Mexican border: 2399.5 km

****Proposal is within coordination distance of FCC monitoring station**

****Proposal exceeds field strength limit at FCC monitoring station**

Conditions at FCC monitoring station: Laurel MD

Bearing: 217.9 degrees Distance: 24.1 km

ERP: 641 kW HAAT: 358.0 m Field strength: 93.7 dBu, 48.3 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 281.3 degrees Distance: 2433.3 km

Study cell size: 2.00 km

Profile point spacing: 0.20 km

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

Maximum new IX to LPTV: 2.00%

Interference to BLANK0000034446 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	117.4

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 3

WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8
WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	157.5
WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
13172.9 653,240	13172.9 653,240	13037.1 651,172	13021.1 650,332	0.12 0.13

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	115.8 1,319	51.9 948	
WNUV D25 DT STA	139.8 2,171		67.9 1,788
WDCO-CD D24 DC CP	83.9 1,120	20.0 749	12.0 737

Interference to BLANK0000034446 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	117.4 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	117.4
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	271.8
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	157.5
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	141.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
13172.9 653,240	13172.9 653,240	12921.7 633,971	12905.7 633,131	0.12 0.13

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	115.8 1,319	51.9 948	
WNUV D25 DT STA	139.8 2,171		67.9 1,788
WPHA-CD D24 DC CP	115.4 17,201	115.4 17,201	115.4 17,201
WDCO-CD D24 DC CP	83.9 1,120	20.0 749	12.0 737

Interference to BLANK0000041691 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	199.2
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	66.9
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	928.0 162,602	928.0 162,602	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	67.4 9,430	67.4 9,430
WNYE-TV D24 DT APP	4.0 0	4.0 0	4.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC LIC	4.0 764	0.0 0	0.0 0

Interference to BLANK0000041691 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	199.2

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
Channel 25 - 750 kW - Page 4

WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	66.9
W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	928.0 162,602	928.0 162,602	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	67.4 9,430	67.4 9,430
WNYE-TV D24 DT LIC	4.0 0	4.0 0	4.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC LIC	4.0 764	0.0 0	0.0 0

Interference to BLANK0000041691 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	199.2
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	66.9
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	908.2 158,865	908.2 158,865	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	35.7 4,121	35.7 4,121
WNYE-TV D24 DT APP	4.0 0	0.0 0	0.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC CP	59.5 9,810	19.8 3,737	19.8 3,737

Interference to BLANK0000041691 CP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWDD-LD	D24	LD	CP	HAVRE DE GRACE, MD	BLANK0000041691	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	77.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	77.6
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	115.9
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BLEDT20071228ABM	199.2
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	240.4
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	66.9
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	75.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1019.2 174,424	1007.3 173,031	908.2 158,865	908.2 158,865	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 235	0.0 0	
WNUV D25 DT STA	4.0 235		0.0 0
WDPB D24 DT CP	75.3 10,429	35.7 4,121	35.7 4,121
WNYE-TV D24 DT LIC	4.0 0	0.0 0	0.0 0
WTAJ-TV D24 DT CP	4.0 764	0.0 0	0.0 0
WPHA-CD D24 DC CP	59.5 9,810	19.8 3,737	19.8 3,737

Interference to BLANK0000034546 CP scenario 1

Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
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	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	71.3 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	71.3
	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	141.9
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	346.5
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	215.0
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	214.3
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	154.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
5805.2	4,808,309	5757.2	4,803,315	5465.9	4,680,056	5457.9	4,678,539	0.15	0.03
Undesired		Total IX		Unique IX, before		Unique IX, after			
WNUV D25 DT BL		163.6	107,881	79.8	53,995				
WNUV D25 DT STA		175.6	110,362			87.8	55,512		
WDPB D24 DT CP		16.0	780	4.0	177	4.0	177		
WTAJ-TV D24 DT CP		12.0	575	0.0	0	0.0	0		
WRLH-TV D24 DT CP		207.5	69,087	107.8	14,405	103.8	13,441		

Interference to BLANK0000054340 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	W42CK	D25+	LD	CP	HAGERSTOWN, MD	BLANK0000054340				
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	101.8 km			
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	101.8			
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	214.2			
Service area		Terrain-limited			IX-free, before		IX-free, after		Percent New IX	
2745.1	306,710	2470.8	294,026		2439.0	292,362		2439.0	292,362	0.00 0.00
Undesired				Total IX		Unique IX, before		Unique IX, after		
WNUV	D25	DT	BL	27.8	1,606	23.9	1,482			
WNUV	D25	DT	STA	27.8	1,606		23.9	1,482		
KDKA-TV	D25	DT	LIC	7.9	182	4.0	58	4.0	58	

Interference to BLANK0000054140 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140				
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km			
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6			
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	5.3			
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6			
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	212.6			
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2			
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6			
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX		
25364.9	19,853,836	23971.7	19,614,553	23673.2	19,518,009	23661.1	19,517,414	0.05	0.00	
Undesired				Total IX	Unique IX, before		Unique IX, after			
WNUV	D25	DT	BL	28.0	1,372	24.0	1,264			
WNUV	D25	DT	STA	40.1	1,967			36.1	1,859	
WNYE-TV	D24	DT	APP	12.1	5,145	0.0	0	0.0	0	
WMHT	D25	DT	CP	133.2	24,591	97.0	16,508	97.0	16,508	
WJAR	D25	DT	CP	125.2	56,420	97.0	48,445	97.0	48,445	
WFUT-DT	D26	DT	CP	48.2	22,244	32.2	17,099	32.2	17,099	

Interference to BLANK0000054140 LIC scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
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Appendix B - Interference Analysis
WNUV - Baltimore, Maryland
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Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BL EDT20071228ABM	5.3
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	212.6
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25364.9 19,853,836	23971.7 19,614,553	23673.2 19,518,009	23661.1 19,517,414	0.05 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	28.0 1,372	24.0 1,264	
WNUV D25 DT STA	40.1 1,967		36.1 1,859
WNYE-TV D24 DT LIC	12.1 5,145	0.0 0	0.0 0
WMHT D25 DT CP	133.2 24,591	97.0 16,508	97.0 16,508
WJAR D25 DT CP	125.2 56,420	97.0 48,445	97.0 48,445
WFUT-DT D26 DT CP	48.2 22,244	32.2 17,099	32.2 17,099

Interference to BLANK0000054140 LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km		
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6		
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	5.3		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6		
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	212.6		
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2		
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25364.9	19,853,836	23971.7	19,614,553	23632.8	19,509,687	23620.7	19,509,092	0.05	0.00

Interference to BLANK0000054140 LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	271.6 km		
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	271.6		
	WNYE-TV	D24	DT	LIC	NEW YORK, NY	BL EDT20071228ABM	5.3		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	127.6		
	WMHT	D25	DT	APP	SCHENECTADY, NY	BLANK0000035673	212.6		
	WJAR	D25	DT	CP	PROVIDENCE, RI	BLANK0000034380	261.2		
	WFUT-DT	D26	DT	CP	NEWARK, NJ	BLANK0000034667	4.6		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25364.9	19,853,836	23971.7	19,614,553	23632.8	19,509,687	23620.7	19,509,092	0.05	0.00

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WJAR D25 DT CP	125.2	56,420	93.0	45,508	93.0	45,508
WFUT-DT D26 DT CP	48.2	22,244	32.2	17,099	32.2	17,099

Interference to BLANK0000051674 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	144.1 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	144.1
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	0.0
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	66.1
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	127.6
	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	117.4
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	304.8
	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	60.6
	W26DB-D	D26--	LD	LIC	West Orange, NJ	BLANK0000049187	117.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1405.7 2,603,512	1397.6 2,593,635	1328.9 2,536,077	1324.9 2,533,234	0.30 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 9,365	4.0 9,365	
WNUV D25 DT STA	8.1 12,208		8.1 12,208
WPHA-CD D24 DC LIC	8.1 10,123	8.1 10,123	8.1 10,123
WWOR-TV D25 DT LIC	12.1 14,637	8.1 14,298	8.1 14,298
WTFX-TV D25 LD APP	48.6 23,772	44.5 23,433	44.5 23,433

Interference to BLANK0000051674 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	144.1 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	144.1
	WPHA-CD	D24	DC	CP	PHILADELPHIA, PA	BLANK0000036105	0.0
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	66.1
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	127.6
	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	117.4
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	304.8
	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	60.6
	W26DB-D	D26--	LD	LIC	West Orange, NJ	BLANK0000049187	117.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1405.7 2,603,512	1397.6 2,593,635	1308.7 2,514,744	1304.7 2,511,901	0.31 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
WNUV D25 DT BL	4.0 9,365	4.0 9,365	
WNUV D25 DT STA	8.1 12,208		8.1 12,208
WPHA-CD D24 DC CP	44.4 49,934	28.2 31,456	28.2 31,456
WWOR-TV D25 DT LIC	12.1 14,637	0.0 0	0.0 0
WTFX-TV D25 LD APP	48.6 23,772	40.5 19,592	40.5 19,592

Interference to BLANK0000054623 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTFX-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	171.0 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	171.0
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	124.4
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	60.6
	W24CS-D	D24	LD	LIC	READING, PA	BLANK0000001522	45.3
	WASA-LD	D25	LD	LIC	Greenwich, CT	BLDTL20091222AQB	124.4
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	121.5

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WNUV - Baltimore, Maryland
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W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	102.9
WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	258.1
W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	60.6
W26DB-D	D26-	LD	LIC	West Orange, NJ	BLANK0000049187	102.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
5352.8	1,565,219	4679.5	1,358,376	4495.0	1,319,598	4495.0	1,319,598	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after		
WNUV D25 DT BL		12.0	1,051	8.0	866			
WNUV D25 DT STA		16.0	1,156			8.0	866	
WASA-LD D25 LD LIC		20.0	1,202	0.0	0	0.0	0	
WWOR-TV D25 DT LIC		148.3	25,334	116.3	21,480	112.3	21,375	
W36DO-D D25 LD APP		36.2	15,045	28.1	12,578	28.1	12,578	

Interference to BLANK0000054623 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTXF-TV	D25	LD	APP	PHILADELPHIA, PA	BLANK0000054623	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	171.0 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	171.0
	WNYE-TV	D24	DT	APP	NEW YORK, NY	BLANK0000035705	124.4
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	60.6
	W24CS-D	D24	LD	APP	READING, PA	BLANK0000059171	45.3
	WASA-LD	D25	LD	LIC	Greenwich, CT	BLDTL20091222AQB	124.4
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	121.5
	W25FA-D	D25	LD	LIC	West Orange, NJ	BLANK0000053181	102.9
	WMHT	D25	DT	CP	SCHENECTADY, NY	BLANK0000028390	258.1
	W36DO-D	D25	LD	APP	DARBY, PA	BLANK0000051674	60.6
	W26DB-D	D26-	LD	LIC	West Orange, NJ	BLANK0000049187	102.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
5352.8	1,565,219	4679.5	1,358,376	4438.9	1,315,109	4438.9	1,315,109	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after		
WNUV D25 DT BL		12.0	1,051	8.0	866			
WNUV D25 DT STA		16.0	1,156			8.0	866	
W24CS-D D24 LD APP		56.1	4,489	56.1	4,489	56.1	4,489	
WASA-LD D25 LD LIC		20.0	1,202	0.0	0	0.0	0	
WWOR-TV D25 DT LIC		148.3	25,334	116.3	21,480	112.3	21,375	
W36DO-D D25 LD APP		36.2	15,045	28.1	12,578	28.1	12,578	

Interference to BLCDT20041004ACS LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	314.7 km
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	314.7
	WEAO	D24	DT	CP	AKRON, OH	BLANK0000034293	150.8
	WTAJ-TV	D24	DT	CP	ALTOONA, PA	BLANK0000034754	133.5
	WXYZ-TV	D25	DT	CP	DETROIT, MI	BLANK0000034678	347.3
	WGPT	D26	DT	CP	OAKLAND, MD	BLANK0000034106	136.0
	WOSC-CD	D26	DC	CP	PITTSBURGH, PA	BLANK0000029678	7.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
31466.0	3,611,796	30277.0	3,503,139	30181.0	3,496,085	30168.9	3,495,387	0.04 0.02
Undesired		Total IX		Unique IX, before		Unique IX, after		
WNUV D25 DT BL		12.0	507	12.0	507			
WNUV D25 DT STA		24.1	1,205			24.1	1,205	
WEAO D24 DT CP		8.0	131	0.0	0	0.0	0	
WTAJ-TV D24 DT CP		12.0	244	12.0	244	12.0	244	
WXYZ-TV D25 DT CP		68.0	6,227	60.0	6,096	60.0	6,096	
WGPT D26 DT CP		4.0	76	4.0	76	4.0	76	

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WNUV - Baltimore, Maryland
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Interference to BLANK0000051589 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WWBK-LD	D25	LD	CP	RICHMOND, VA	BLANK0000051589			
Undesireds:	WNUV	D25	DT	BL	BALTIMORE, MD	DTVBL7933	219.0 km		
	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75	219.0		
	WRLH-TV	D24	DT	CP	RICHMOND, VA	BLANK0000034147	0.0		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
9364.4 1,174,143		9356.5 1,174,116		9050.0 1,168,021		9050.0 1,168,021	0.00 0.00		
Undesired				Total IX	Unique IX, before	Unique IX, after			
WNUV D25 DT BL				7.9 37	7.9 37				
WNUV D25 DT STA				7.9 37		7.9 37			
WRLH-TV D24 DT CP				298.5 6,058	298.5 6,058	298.5 6,058			

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WNUV	D25	DT	STA	BALTIMORE, MD	WNUV 25 STA TUDC5SP 75			
Undesireds:	WDPB	D24	DT	CP	SEAFORD, DE	BLANK0000034446	117.4 km		
	WPHA-CD	D24	DC	LIC	PHILADELPHIA, PA	BLDTA20130920ADK	144.1		
	WDCO-CD	D24	DC	CP	Woodstock, VA	BLANK0000034546	71.3		
	WWOR-TV	D25	DT	LIC	SECAUCUS, NJ	BLANK0000054140	271.6		
	KDKA-TV	D25	DT	LIC	PITTSBURGH, PA	BLCDT20041004ACS	314.7		
	WAZT-CD	D26	DC	BL	WOODSTOCK, VA	DTVBL168449	150.8		
Service area		Terrain-limited		IX-free		Percent IX			
28961.1 9,046,435		27864.7 8,858,948		27824.6 8,844,164		0.14 0.17			
Undesired				Total IX	Unique IX	Prcnt Unique IX			
WDPB D24 DT CP				4.0 78	4.0 78	0.01 0.00			
WDCO-CD D24 DC CP				12.0 8,070	12.0 8,070	0.04 0.09			
WWOR-TV D25 DT LIC				8.1 5,145	8.1 5,145	0.03 0.06			
KDKA-TV D25 DT LIC				8.1 674	8.1 674	0.03 0.01			
WAZT-CD D26 DC BL				8.0 817	8.0 817	0.03 0.01			



ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The predicted emissions of WNUV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WNUV, which will operate on television Channel 25 (536-542 MHz), the MPE is 359.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and 1,796.7 $\mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed WNUV facility will operate with a maximum ERP of 750 kW from a horizontally polarized directional transmitting antenna with a centerline height of 374.8 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WNUV facility is predicted to produce a power density at two meters above ground level of 19.905 $\mu\text{W}/\text{cm}^2$, which is 5.54% of the FCC guideline value for an “uncontrolled” environment, and 1.108% of the FCC’s guideline value for “controlled” environments. There are four other full-power DTV facilities, four LPFM facilities and three FM radio stations that are located at, or within relevant proximity of, the WNUV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 49.13% of the limit applicable to “uncontrolled” environments, and 9.826% of the limit for “controlled” environments. (See Appendix A)

APPENDIX A

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WNUV, Baltimore, MD
Channel 25, 750 kW, 372.8 m HAAT
September, 2018

CALL	SERVICE	CHANNEL	FREQUENCY	POLAR- IZATION	ANTENNA HEIGHT	ERP (kW)	VERT. RELATIVE FIELD FACTOR	WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)	FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)	PERCENT OF UNCONTROLLED LIMIT
WNUV	DT	25	539	H	374.8	920.000	0.300	19.905	359.33	5.54%
WBFF	DT	26	545	H	374.8	440.000	0.300	9.520	363.33	2.62%
WJZ-TV	DT	11	201	H & V	295	30.000	0.300	2.102	200.00	1.05%
WBAL-TV	DT	12	207	H & V	295	27.200	0.300	1.905	200.00	0.95%
WMAR-TV	DT	27	551	H & V	294.6	830.000	0.300	58.301	367.33	15.87%
WTIZ-LP	FM	228	93.5	H	152	0.004	1.000	0.006	200.00	0.00%
W248AO	FM	248	97.5	H	210	0.250	1.000	0.193	200.00	0.10%
WIYY	FM	250	97.9	H & V	275	13.500	1.000	12.104	200.00	6.05%
WLIF (AUX)	FM	270	101.9	H & V	273	2.600	1.000	2.366	200.00	1.18%
WZFT	FM	282	104.3	H & V	296	13.000	1.000	10.050	200.00	5.02%
WJZ-FM (AUX)	FM	289	105.7	H & V	273	0.430	1.000	0.391	200.00	0.20%
W291BA	FM	291	106.1	H & V	273	0.250	1.000	0.227	200.00	0.11%
WWMX (AUX)	FM	293	106.5	H & V	210	13.500	1.000	20.850	200.00	10.43%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 49.13%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.