WNYZ-LP MINOR CHANGE APPLICATION FOR CP 0000151259 CH 6 LPTV DTV
3 kW MAX DA NEW YORK, NEW YORK
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
AUGUST 2021

The facilities proposed herein are believed to fully qualify as a minor change as the proposed site location is 2.7 kilometers from the licensed site and there is substantial contour overlap between the proposed and licensed facilities. The permittee/licensee requested a CP to relocate to the current CP site but encountered issues requiring return to the licensed site location.

The applicant proposes herein to return to the previous analog rooftop site in Long island City, Queens, NY. The proposed antenna system consists of a PSI PSILV5CLOG-6 Custom, log periodic, 2 bay , low band VHF antenna, with 0.5 degrees of electrical beam tilt. The maximum relative field in the elevation pattern is based on 1.0 as a fully conservative value. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 1.0 has been used to calculate the power density 2 meters above ground. The antenna RC AGL is 208.1 meters. The maximum power density is 4.7 uw/cm squared calculated for an ERP of 3,000 watts H. polarization and 3,000 watts V. polarization. This value is 2.36% of the Public Exposure MPE per section 1.1310. Based on this analysis it is believed that the proposed facility is in compliance with OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Guidelines.

The proposed structure is existing.

Below is a copy of the TVStudy interference analysis for CH 6 based on the facilities described above with the antenna orientation of 100 degrees true. As can be seen at the conclusion of the report there is no impermissible ISIX or co-channel received interference above 2%. It is believed that the proposed facility provides full protection to other television facilities.

TVStudy Report

Study created: 2021.08.21 17:07:41

Study build station data: LMS TV 2021-08-20

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    Proposal: WNYZ-LP D6 LD CP NEW YORK, NY
 File number: BLANK0000151259
 Facility ID: 56043
Station data: User record
   Record ID: 934
     Country: U.S.
```

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	270.7 km
No	WNYX-LD	D5	LD	LIC	NEW YORK, NY	BLANK0000060581	0.0
No	WXNJ-LD	D5+	LD	LIC	PORT JERVIS, NY	BLANK0000121300	26.6
No	WRGB	D5	LD	LIC	SCHENECTADY, NY	BLANK0000129768	207.0
No	WOWZ-LP	N6	TX	APP	SALISBURY, MD	BLANK0000071750	286.6
No	WOWZ-LP	D6z	LD	LIC	SALISBURY, MD	BLTVL20090326ADA	286.6
No	WOWZ-LP	N6z	TX	CP	SALISBURY, MD	BPTVL20140210ABX	287.9
No	WVCC-LD	D6	LD	CP	WESTMORELAND, NH	BLANK0000153588	285.2
No	WVCC-LD	D6	LD	LIC	WESTMORELAND, NH	BLANK0000151954	277.2
No	WNDR-LP	N6z	TX	LIC	AUBURN, NY	BLTVL20120312AAI	328.5
No	WXXW-LP	D6-	LD	CP	BINGHAMTON, NY	BLANK0000144350	223.2
No	WXXW-LP	N6-	TX	LIC	BINGHAMTON, NY	BLTVL20060515AAC	222.3
No	WVOA-LP	D6+	LD	CP	WESTVALE, NY	BLANK0000150238	315.9
No	WVOA-LP	N6+	TX	LIC	WESTVALE, NY	BLTVL20090622AAX	315.9
No	WKBS-TV	D6	DT	LIC	ALTOONA, PA	BLANK0000084211	379.6
Yes	WPVI-TV	D6	DT	APP	PHILADELPHIA, PA	BLANK0000035671	134.7
Yes	WPVI-TV	D6	DT	LIC	PHILADELPHIA, PA	BLCDT20111019ACJ	135.0
No	WDCN-LP	N6	TX	APP	FAIRFAX, VA	BLANK0000071752	341.4
No	WDCN-LP	D6	LD	CP	FAIRFAX, VA	BLANK0000149663	348.9
No	WDCN-LP	D6z	LD	LIC	FAIRFAX, VA	BLTVL20070410ACR	341.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D6
       Mask: Full Service
   Latitude:  40 44 50.30 N (NAD83)
  Longitude:  73 56 37.50 W
Height AMSL: 213.0 m
       HAAT: 0.0 m
   Peak ERP: 3.00 kW
    Antenna: PSI-PSILV5CLOG-6 Custom (ID 1008350) 100.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.50
```

43.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.011 kW	195.0 m	21.3 km
45.0	0.337	207.7	43.8
90.0	2.82	198.6	59.4
135.0	1.49	197.9	54.6
180.0	0.000	200.9	2.3
225.0	0.000	211.5	2.3
270.0	0.000	204.2	2.3
315.0	0.002	197.8	14.4

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 202 m

Distance to Canadian border: 397.4 km

Distance to Mexican border: 2677.7 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 235.3 degrees Distance: 301.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 278.9 degrees Distance: 2632.6 km

Study cell size: 1.00 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%

---- Below is IX received by proposal BLANK0000151259 ----

**MX with BLANK0000035671 APP scenario 1, 15.80% interference received
Proposal receives 14.68% interference from scenario 2

ISIX

tvstudy v2.2.5 (4uoc83)
Database: 127.0.0.1, Study: BLANK0000151259 #1210, Model: Longley-Rice
Start: 2021.08.21 17:07:42

Study created: 2021.08.21 17:07:41

Study build station data: LMS TV 2021-08-20

    Proposal: WNYZ-LP D6 LD CP NEW YORK, NY
 File number: BLANK0000151259
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No	WXNJ-LD	D5+	LD	LIC	PORT JERVIS, NY	BLANK0000121300	26.6
No	WRGB	D5	LD	LIC	SCHENECTADY, NY	BLANK0000129768	207.0

No	WOWZ-LP	N6	TX	APP	SALISBURY, MD	BLANK0000071750	286.6
No	WOWZ-LP	D6z	LD	LIC	SALISBURY, MD	BLTVL20090326ADA	286.6
No	WOWZ-LP	N6z	TX	CP	SALISBURY, MD	BPTVL20140210ABX	287.9
No	WVCC-LD	D6	LD	CP	WESTMORELAND, NH	BLANK0000153588	285.2
No	WVCC-LD	D6	LD	LIC	WESTMORELAND, NH	BLANK0000151954	277.2
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No	WXXW-LP	D6-	LD	CP	BINGHAMTON, NY	BLANK0000144350	223.2
No	WXXW-LP	N6-	TX	LIC	BINGHAMTON, NY	BLTVL20060515AAC	222.3
No	WVOA-LP	D6+	LD	CP	WESTVALE, NY	BLANK0000150238	315.9
No	WVOA-LP	N6+	TX	LIC	WESTVALE, NY	BLTVL20090622AAX	315.9
No	WKBS-TV	D6	DT	LIC	ALTOONA, PA	BLANK0000084211	379.6
Yes	WPVI-TV	D6	DT	APP	PHILADELPHIA, PA	BLANK0000035671	134.7
Yes	WPVI-TV	D6	DT	LIC	PHILADELPHIA, PA	BLCDT20111019ACJ	135.0
No	WDCN-LP	N6	TX	APP	FAIRFAX, VA	BLANK0000071752	341.4
No	WDCN-LP	D6	LD	CP	FAIRFAX, VA	BLANK0000149663	348.9
No	WDCN-LP	D6z	LD	LIC	FAIRFAX, VA	BLTVL20070410ACR	341.4

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    Channel: D6
       Mask: Full Service
   Latitude:  40 44 50.30 N (NAD83)
  Longitude:  73 56 37.50 W
Height AMSL: 213.0 m
       HAAT: 0.0 m
   Peak ERP: 3.00 kW
    Antenna: PSI-PSILV5CLOG-6 Custom (ID 1008350) 100.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.50
```

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180.0	0.000	200.9	2.3
225.0	0.000	211.5	2.3
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Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 278.9 degrees Distance: 2632.6 km

Study cell size: 1.00 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 BLANK0000035671 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPVI-TV	D6	DT	APP	PHILADELPHIA, PA	BLANK0000035671	
Undesireds:	WNYZ-LP	N6+	TX	LIC	NEW YORK, NY	BLTVL20080128ACC	134.8 km
	WNYZ-LP	D6	LD	CP	NEW YORK, NY	BLANK0000151259	134.7
	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	141.4
	WKBS-TV	D6	DT	LIC	ALTOONA, PA	BLANK0000084211	277.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51079.3	15,643,549	49606.0	15,280,960	47647.3	13,894,508	48085.8	15,036,277	-0.92	-8.22

Undesired		Total IX		Unique IX, before		Unique IX, after	
WNYZ-LP N6+ TX LIC	1069.9	1,241,729	1069.9	1,241,729			
WNYZ-LP D6 LD CP	631.3	99,960			631.3	99,960	
WMDE D5 DT LIC	223.6	8,088	220.7	4,923	220.7	4,923	
WKBS-TV D6 DT LIC	668.2	139,800	665.2	136,635	665.2	136,635	

Interference to BLCDT20111019ACJ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPVI-TV	D6	DT	LIC	PHILADELPHIA, PA	BLCDT20111019ACJ	
Undesireds:	WNYZ-LP	N6+	TX	LIC	NEW YORK, NY	BLTVL20080128ACC	135.0 km
	WNYZ-LP	D6	LD	CP	NEW YORK, NY	BLANK0000151259	135.0
	WMDE	D5	DT	LIC	DOVER, DE	BLANK0000001038	141.2
	WKBS-TV	D6	DT	LIC	ALTOONA, PA	BLANK0000084211	277.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
46069.8	13,939,050	44703.1	13,639,170	43444.7	13,199,536	43805.3	13,456,480	-0.83	-1.95

Undesired	Total IX		Unique IX, before		Unique IX, after	
WNYZ-LP N6+ TX LIC	587.8	311,983	587.8	311,983		
WNYZ-LP D6 LD CP	227.2	55,039			227.2	55,039
WMDE D5 DT LIC	71.5	7,410	68.5	5,776	68.5	5,776
WKBS-TV D6 DT LIC	602.1	121,875	599.1	120,241	599.1	120,241

Interference to proposal scenario 1
**MX: 15.80% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WNYZ-LP	D6	LD	CP	NEW YORK, NY	BLANK0000151259	
Undesireds:	WNYX-LD	D5	LD	LIC	NEW YORK, NY	BLANK0000060581	0.0 km
	WOWZ-LP	N6	TX	APP	SALISBURY, MD	BLANK0000071750	286.6
	WVCC-LD	D6	LD	CP	WESTMORELAND, NH	BLANK0000153588	285.2
	WXXW-LP	D6-	LD	CP	BINGHAMTON, NY	BLANK0000144350	223.2
	WVOA-LP	D6+	LD	CP	WESTVALE, NY	BLANK0000150238	315.9
	WPVI-TV	D6	DT	APP	PHILADELPHIA, PA	BLANK0000035671	134.7

Service area		Terrain-limited		IX-free		Percent IX	
3676.5	8,156,619	3664.6	8,144,538	3306.3	6,857,483	9.78	15.80

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WNYX-LD D5 LD LIC	72.5	1,018,112	67.5	980,921	1.84	12.04
WPVI-TV D6 DT APP	290.9	306,134	285.9	268,943	7.80	3.30

Interference to proposal scenario 2
14.68% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WNYZ-LP	D6	LD	CP	NEW YORK, NY	BLANK0000151259	
Undesireds:	WNYX-LD	D5	LD	LIC	NEW YORK, NY	BLANK0000060581	0.0 km
	WOWZ-LP	N6	TX	APP	SALISBURY, MD	BLANK0000071750	286.6
	WVCC-LD	D6	LD	CP	WESTMORELAND, NH	BLANK0000153588	285.2
	WXXW-LP	D6-	LD	CP	BINGHAMTON, NY	BLANK0000144350	223.2
	WVOA-LP	D6+	LD	CP	WESTVALE, NY	BLANK0000150238	315.9
	WPVI-TV	D6	DT	LIC	PHILADELPHIA, PA	BLCDT20111019ACJ	135.0

Service area		Terrain-limited		IX-free		Percent IX	
3676.5	8,156,619	3664.6	8,144,538	3427.4	6,948,778	6.47	14.68

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WNYX-LD D5 LD LIC	72.5	1,018,112	71.5	1,005,166	1.95	12.34
WPVI-TV D6 DT LIC	165.7	190,594	164.7	177,648	4.50	2.18

The foregoing was prepared on behalf of Sound of Long Island, Inc. by Clarence M. Beverage of Communications Technologies, Inc., Medford, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



Clarence M. Beverage
for Communications Technologies, Inc.
Medford, New Jersey
August 21, 2021