

ENGINEERING STATEMENT
SUPPORTING REQUEST FOR WAIVER
TELEVISION STATION WLNY-TV (STA)
(FACILITY ID NO. 73206)
RIVERHEAD, NEW YORK
CHANNEL 28

Background

This statement was prepared on behalf of CBS LITV LLC, licensee of WLNY-TV, Riverhead, New York, in support of a request for waiver of the FCC's Phase Assignment, Testing Period, and Phase Completion Date for television station WLNY-TV in the New York DMA^{*}. WLNY-TV is licensed for operation on RF Channel 47 with a maximum directional effective radiated power (ERP) of 1000 kW and an antenna height above average terrain (HAAT) of 193 m.

As a result of the FCC's Incentive Auction repack process, the WLNY-TV facility was reassigned to RF Channel 29. WLNY-TV holds a construction permit (C.P.) for operation on Channel 29 with a maximum directional ERP of 1000 kW and an antenna HAAT of 193.9 m.[†]

It is proposed to make the early transition of WLNY-TV on Channel 28 using an identical antenna system as authorized in the construction permit based on a request for Special Temporary Authority (STA). An FCC engineering database summary sheet for the WLNY-TV STA facility to be proposed, with additional antenna information, is attached hereto for reference. This is the subject WLNY-TV early transition facility.

In coordination with the wireless carrier, T-Mobile, WLNY-TV seeks a waiver of the FCC's Phase Assignment, Testing Period, and Phase Completion Date to allow WLNY-TV to make the transition to Channel 28 under STA earlier than its given phase transition date, with a target commencement date of June 1, 2018. This will facilitate the early deployment of new 600 MHz band wireless broadband services.

^{*} Nielsen Designated Market Area abbreviated as DMA.

[†] See FCC File No. 0000034023.

This statement demonstrates that WLNY-TV can transition to Channel 28 under STA before its assigned phase date without any disruption to the FCC's transition plans.

Assigned Phase

WLNY-TV was assigned to transition Phase 4, with a testing begin date of June 22, 2019 and a phase completion date of August 2, 2019. This is based on the latest FCC Phase Assignment spreadsheet dated February 9, 2018.

Timing of STA Operation

The target date for WLNY-TV to transition to Channel 28 under STA is June 1, 2018. WLNY-TV will operate its Channel 28 STA facility until its assigned Phase 4 testing begin date of June 22, 2019, at which point it will transition to Channel 29 according to its given phase assignment.

Linked Station Sets and Linked Station Neighbor Stations

A study was conducted of the WLNY-TV proposed Channel 28 STA facility under the post-repack allocation environment utilizing the latest version[‡] of the FCC's *TVStudy* coverage and interference analysis prediction software. This was done to determine all post-repack stations that could possibly conflict with the WLNY-TV Channel 28 STA proposal.

As indicated in the attached summary results, there are potential post-repack conflicts with the following stations: WNYW (Facility ID 22206), WHPX-TV (Facility ID 51980), WEPT-CD (Facility ID 30429) and WCAU (Facility ID 63153).

An inspection of the latest FCC Phase Assignment spreadsheet indicates that all of the above listed stations are assigned to Phase 4. Therefore, the timing of the temporary Channel 28 STA operation for WLNY-TV to conclude at the beginning of Phase 4 will not create any new linked station set or linked station neighbor conflicts.

[‡] TVStudy Version 2.2.4

Interference Caused Analysis Under Current Allocation Environment

An interference analysis was conducted for the WLNY-TV Channel 28 STA early transition facility utilizing the latest version of the FCC's *TVStudy* software. The report of the results is attached hereto entitled 'Interference Caused Analysis for WLNY-TV Channel 28 Facility Under Current Allocation Environment.'

The results of the interference caused analysis indicate that all cases of predicted interference are within the FCC's permitted temporary transitional pairwise interference level of 2%.

Interference Received Analysis Under Current Allocation Environment

An interference analysis specifically for the 'received case' of interference was conducted for the WLNY-TV Channel 28 STA early transition facility utilizing the FCC's *TVStudy* prediction software. The report of the results is attached hereto entitled 'Interference Received Analysis for WLNY-TV Channel 28 Facility Under Current Allocation Environment.' The purpose of this study is to evaluate all current environment records in the received interference analysis.[§]

The results of the interference received analysis indicate that there are no cases of predicted interference to the proposed WLNY-TV Channel 28 STA facility.

Conclusion

It is concluded that the early transition of the WLNY-TV facility by means of STA on Channel 28, according to the timing described herein, will not result in any

[§] FCC Incentive Auction winning bidder stations were omitted from the analysis since operation of these stations will be terminated prior to the early transition date.

interference cases that would result in the creation of any new linked station sets established in the Incentive Auction repack process.

A handwritten signature in black ink, appearing to read "Louis R. du Treil, Jr.", written in a cursive style.

Louis R. du Treil, Jr., P.E.

du Treil, Lundin & Rackley, Inc.
3135 Southgate Circle
Sarasota, Florida 34239

February 23, 2018

TV Inquiry

Early Transition STA Facility for WLNY-TV

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida



Callsign: WLNY-TV **Service:** DT **Status:** CP MOD **App. Status:** GRANT **Border Code:** **Rec. Type:** C
Channel: 29.28 Offset: **Zone:** 1 **Docket Number:** **DTV Type:** POSTTRAN
Fac. ID: 73206 **Assoc. ID:** **Application File No.:** BLANK-0000034023 **DT Emission Mask:**
City: RIVERHEAD **State:** NY **Country:** US **CP Expiration Date:**
Party Name: CBS LITV LLC **Last Change Date:** 2/12/2018

Latitude (NAD 83): 40-53-50.3 **Height AGL (m):** 189 **Polarization:** C
Longitude (NAD 83): 072-54-54.2 **Overall Height AGL (m):** 195.6 **Electrical Tilt (°):** 0.75
ERP (kW): 1000 **Mechanical Tilt (°):**
Maximum ERP (kW): **Mechanical Tilt Azimuth (°):**
Maximum ERP (dBk): 30 **Degrees True (°):**
Maximum ERP at any Angle (kW): **Antenna Make:**
Antenna Model:

Antenna Type: D **Antenna ID:** 1002181 **Rotation (°):** 0

0° 0.301 90° 0.279 180° 0.217 270° 0.965 15° 0.342
 10° 0.337 100° 0.197 190° 0.215 280° 0.867 145° 0.342
 20° 0.337 110° 0.142 200° 0.276 290° 0.723
 30° 0.289 120° 0.203 210° 0.399 300° 0.557
 40° 0.203 130° 0.289 220° 0.557 310° 0.399
 50° 0.142 140° 0.337 230° 0.723 320° 0.276
 60° 0.197 150° 0.337 240° 0.867 330° 0.215
 70° 0.279 160° 0.301 250° 0.965 340° 0.217
 80° 0.313 170° 0.254 260° 1.000 350° 0.254

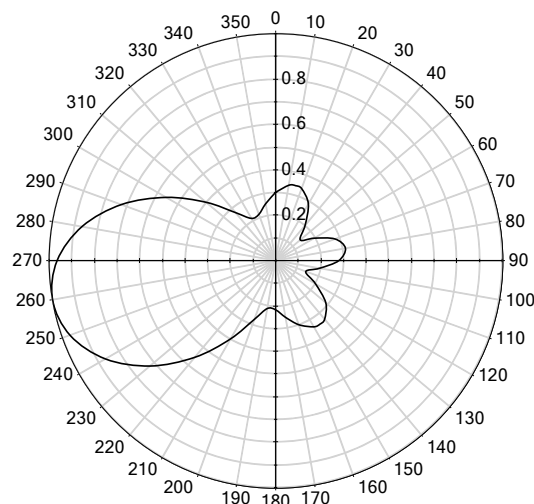
Standard Pattern:

Antenna Make: JAM

Antenna Model: ~~JSM-16/D29-TCCP~~ JSM-16/D28-TCCP*

Last Change Date:

Note: Rotation or tilt is not applied to the pattern shown



Type: TOWER **ASRN:** 1006717 **FAA Study No.:** 2006-AEA-2617-OE **Structure Height (m):** 183.9
Latitude (NAD 27): 040-53-49.9 **Date Received:** 06/23/2016 **Structure Height (ft):** 603.3
Longitude (NAD 27): 072-54-55.8 **Date Entered:** 06/23/2016 **Ground Elevation (m):** 27.4
Latitude (NAD 83): 40-53-50.3 **Date Issued:** 06/23/2016 **Ground Elevation (ft):** 89.9
Longitude (NAD 83): 072-54-54.2 **Date Constructed:** 01/01/1985 **Overall Height AGL (m):** 195.6
Struct. Address: **Date Dismantled:** **Overall Height AGL (ft):** 641.7
 1.1 Km NNE OF INT OF Wading River Hollow Road &
 Brookhaven Town NY **Overall Height AMSL (m):** 223.0
Entity Name: CBS Communications Services Inc. **Overall Height AMSL (ft):** 731.6

*See attached antenna information.

JAMPRO ANTENNAS, INC.

WLNY-TV

CBS CORPORATION

JSM-16/D28-TCCP, CH.28





ANTENNA SPECIFICATIONS

MODEL JSM-16/D28 TCCP

ELECTRICAL SPECIFICATIONS

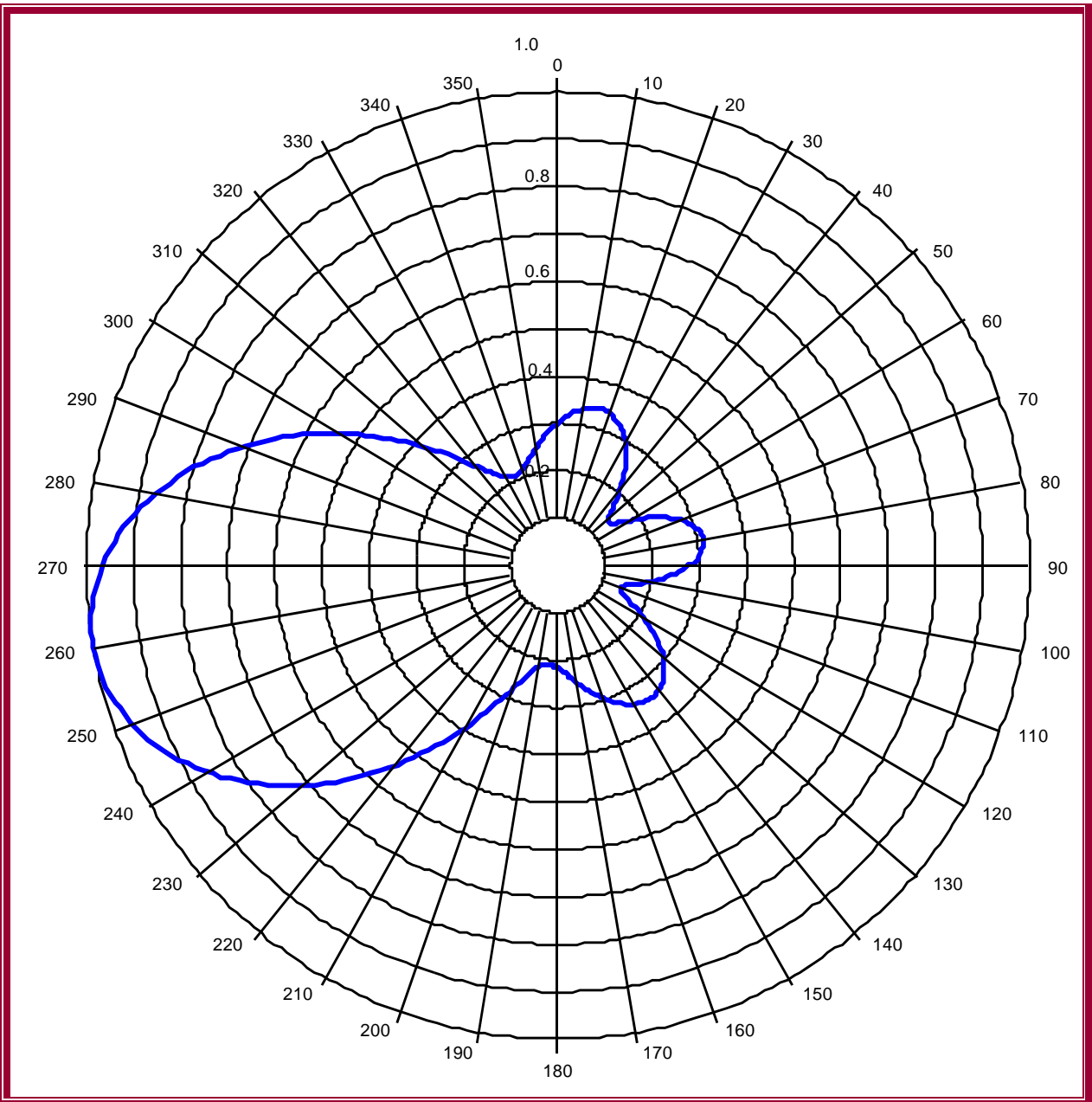
CHANNEL:	28 (554-560 MHz)
POLARIZATION:	Circular
AZIMUTH PATTERN:	Lobe
PEAK GAIN (H-pol):	33 (x) / 15.19 dBd
PEAK GAIN (V-pol):	33 (x) / 15.19 dBd
H-POL HRP DIRECTIVITY :	4.46 (x) over isotropic radiator / 6.49 dB
V-POL HRP DIRECTIVITY :	3.17(x) over isotropic radiator / 5.01 dB
ELEVATION DIRECTIVITY :	16 (x) over Half-Wave Dipole / 12.04 dBd
BEAM TILT:	-0.75°
NULL FILL:	18%
INPUT IMPEDANCE:	50 ohms, nominal
MAXIMUM VSWR:	1.1:1 or better over ch.28
MAX Input Power:	60 kW (Avg.)
Antenna Input Connector:	6-1/8" EIA, female

MECHANICAL/ENVIRONMENTAL SPECIFICATIONS

PRESSURIZATION:	10 psi max, 3–5 psi operating
ANTI-ICING PROTECTION:	Radome



AZIMUTH PATTERN PLOT





AZIMUTH PATTERN PLOT TABULATION – H-POL

AZIMUTH	FIELD	dB		AZIMUTH	FIELD	dB
0	0.301	-10.42		180	0.217	-13.29
5	0.322	-9.84		185	0.209	-13.58
10	0.337	-9.46		190	0.215	-13.34
15	0.342	-9.31		195	0.237	-12.50
20	0.337	-9.45		200	0.276	-11.17
25	0.319	-9.92		205	0.331	-9.60
30	0.289	-10.79		210	0.399	-7.99
35	0.248	-12.10		215	0.475	-6.46
40	0.203	-13.87		220	0.557	-5.08
45	0.161	-15.86		225	0.641	-3.86
50	0.142	-16.97		230	0.723	-2.82
55	0.157	-16.06		235	0.799	-1.94
60	0.197	-14.12		240	0.867	-1.24
65	0.241	-12.35		245	0.923	-0.69
70	0.279	-11.08		250	0.965	-0.31
75	0.304	-10.34		255	0.991	-0.08
80	0.313	-10.10		260	1.000	0.00
85	0.304	-10.34		265	0.991	-0.08
90	0.279	-11.08		270	0.965	-0.31
95	0.241	-12.35		275	0.923	-0.69
100	0.197	-14.12		280	0.867	-1.24
105	0.157	-16.06		285	0.799	-1.94
110	0.142	-16.97		290	0.723	-2.82
115	0.161	-15.86		295	0.641	-3.86
120	0.203	-13.87		300	0.557	-5.08
125	0.248	-12.10		305	0.475	-6.46
130	0.289	-10.79		310	0.399	-7.99
135	0.319	-9.92		315	0.331	-9.60
140	0.337	-9.45		320	0.276	-11.17
145	0.342	-9.31		325	0.237	-12.50
150	0.337	-9.46		330	0.215	-13.34
155	0.322	-9.84		335	0.209	-13.58
160	0.301	-10.42		340	0.217	-13.29
165	0.278	-11.13		345	0.232	-12.68
170	0.254	-11.91		350	0.254	-11.91
175	0.232	-12.68		355	0.278	-11.13

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER POST REPACK ALLOCATION ENVIRONMENT (SUMMARY)

tvstudy v2.2.4 (Z2Qqz3)

Database: localhost, Study: wlny28e2, Model: Longley-Rice

Study build station data: LMS TV 2018-02-22 (141)

Proposal: WLNY28E2 D28 DT APP RIVERHEAD, NY
File number: wlny28e2
Facility ID: 73206
Station data: User record
Record ID: 2249
Country: U.S.
Zone: I

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	203.1 km
No	WUNI	D27	DT	APP	MARLBOROUGH, MA	BLANK0000035720	210.5
Yes	WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	94.6
Yes	WNYW	D27	DT	BL	NEW YORK, NY	DTVBL22206	91.6
Yes	WHPX-TV	D28	DT	CP	NEW LONDON, CT	BLANK0000026995	83.3
Yes	WHPX-TV	D28	DT	APP	NEW LONDON, CT	BLANK0000034398	83.3
Yes	WHPX-TV	D28	DT	BL	NEW LONDON, CT	DTVBL51980	83.3
No	WFTT	D28	DT	CP	FREDERICK, MD	BLANK0000029876	415.8
Yes	WEPT-CD	D28	DC	CP	NEWBURGH, NY	BLANK0000034537	128.4
Yes	WEPT-CD	D28	DC	BL	NEWBURGH, NY	DTVBL30429	164.8
No	WUHF	D28	DT	LIC	ROCHESTER, NY	BLCDT20050316AAK	458.8
No	WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	311.6
No	WWDG-CD	D28	DC	APP	UTICA, NY	BLANK0000035669	311.9
Yes	WCAU	D28	DT	CP	PHILADELPHIA, PA	BLANK0000034346	218.1
Yes	WCAU	D28	DT	BL	PHILADELPHIA, PA	DTVBL63153	218.1
No	WVTB	D28	DT	CP	ST. JOHNSBURY, VT	BLANK0000029682	416.7
No	WVTB	D28	DT	BL	ST. JOHNSBURY, VT	DTVBL69940	416.8
No	WNEU	D29	DT	CP	MERRIMACK, NH	BLANK0000026884	256.6
No	WNEU	D29	DT	APP	MERRIMACK, NH	BLANK0000034700	210.0
No	WNEU	D29	DT	BL	MERRIMACK, NH	DTVBL51864	256.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D28

Latitude: 40 53 50.30 N (NAD83)

Longitude: 72 54 54.20 W

Height AMSL: 216.4 m

HAAT: 193.9 m

Peak ERP: 1000 kW

Antenna: JAM-JSM-16/D28-TCCP (ID 1002181) 0.0 deg

Elev Pattn: Generic

Elec Tilt: 0.75

40.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	90.6 kW	203.1 m	71.3 km
45.0	29.8	195.1	65.2
90.0	77.8	196.3	70.1
135.0	98.0	198.7	71.4
180.0	47.1	202.7	68.0
225.0	410	183.1	77.8
270.0	931	179.2	82.5
315.0	114	193.1	71.8

Distance to Canadian border: 440.7 km

Distance to Mexican border: 2761.0 km

Conditions at FCC monitoring station: Laurel MD

Bearing: 241.2 degrees Distance: 384.1 km

Proposal is not within the West Virginia quiet zone area

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER POST REPACK ALLOCATION ENVIRONMENT (SUMMARY)

Conditions at Table Mountain receiving zone:
Bearing: 279.0 degrees Distance: 2715.5 km

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 BLANK0000034611 CP scenario 1
**IX: 1.74% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	
Undesireds:	WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlny28e2	94.6 km
	WQAV-CD	D26	DC	CP	GLASSBORO, NJ	BLANK0000034526	129.5
	WFUT-DT	D26	DT	APP	NEWARK, NJ	BLANK0000034667	4.6
	WYLN-LP	D26+	DC	CP	HAZLETON, PA	BLANK0000034698	165.9
	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	280.1
	WMAR-TV	D27	DT	CP	BALTIMORE, MD	BLANK0000026796	271.8
	WPSJ-CD	D27	DC	CP	HAMMONTON, NJ	BLANK0000033831	127.9
	WIVT	D27	DT	CP	BINGHAMTON, NY	BLANK0000028447	219.9
	WIXT-CD	D27	DC	CP	DEWITT, NY	BLANK0000034942	307.7
	WHPX-TV	D28	DT	CP	NEW LONDON, CT	BLANK0000026995	171.1
	WEPT-CD	D28	DC	CP	NEWBURGH, NY	BLANK0000034537	111.8
	WCAU	D28	DT	CP	PHILADELPHIA, PA	BLANK0000034346	127.6

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	26350.9	20,037,164	24703.3	19,738,630	23335.3	19,438,091	22980.7 19,100,393 1.52 1.74

Undesired	Total IX	Unique IX, before	Unique IX, after
WLNY28E2 D28 DT APP	362.6	340,705	354.5 337,698
WFUT-DT D26 DT APP	173.6	57,615	157.5 51,610
WUNI D27 DT LIC	28.3	8,277	8.0 4,392
WMAR-TV D27 DT CP	409.3	47,151	192.5 19,722
WPSJ-CD D27 DC CP	603.5	164,802	153.0 77,936
WIVT D27 DT CP	144.7	29,129	44.1 9,052
WHPX-TV D28 DT CP	4.0	1,926	0.0 0
WEPT-CD D28 DC CP	190.1	30,454	137.5 24,392
WCAU D28 DT CP	546.7	93,870	92.2 9,855

Interference to DTVBL22206 BL scenario 1
**IX: 2.02% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WNYW	D27	DT	BL	NEW YORK, NY	DTVBL22206	
Undesireds:	WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlny28e2	91.6 km
	WGGB-TV	D26	DT	CP	SPRINGFIELD, MA	BLANK0000024834	199.8
	WQAV-CD	D26	DC	CP	GLASSBORO, NJ	BLANK0000034526	134.0
	WFUT-DT	D26	DT	APP	NEWARK, NJ	BLANK0000034667	0.0
	WYLN-LP	D26+	DC	CP	HAZLETON, PA	BLANK0000034698	167.5
	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	275.7
	WMAR-TV	D27	DT	CP	BALTIMORE, MD	BLANK0000026796	275.9
	WPSJ-CD	D27	DC	CP	HAMMONTON, NJ	BLANK0000033831	132.1
	WIVT	D27	DT	CP	BINGHAMTON, NY	BLANK0000028447	218.9
	WIXT-CD	D27	DC	CP	DEWITT, NY	BLANK0000034942	305.7
	WHPX-TV	D28	DT	CP	NEW LONDON, CT	BLANK0000026995	167.2
	WEPT-CD	D28	DC	CP	NEWBURGH, NY	BLANK0000034537	107.9
	WCAU	D28	DT	CP	PHILADELPHIA, PA	BLANK0000034346	131.8

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	28008.7	20,305,773	26312.6	19,956,119	25158.5	19,623,141	24501.3 19,227,163 2.61 2.02

Undesired	Total IX	Unique IX, before	Unique IX, after
-----------	----------	-------------------	------------------

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER POST REPACK ALLOCATION ENVIRONMENT (SUMMARY)

WLNY28E2 D28 DT APP	661.1	395,978			657.2	395,978
WFUT-DT D26 DT APP	28.2	9,640	24.2	9,561	24.2	9,561
WUNI D27 DT LIC	32.3	10,662	12.1	7,055	12.1	7,055
WMAR-TV D27 DT CP	316.8	37,305	104.3	13,734	104.3	13,734
WPSJ-CD D27 DC CP	458.2	227,428	56.3	32,421	56.3	32,421
WIVT D27 DT CP	196.7	24,993	56.1	7,693	56.1	7,693
WHPX-TV D28 DT CP	4.0	0	4.0	0	0.0	0
WEPT-CD D28 DC CP	311.1	47,634	226.2	34,962	226.2	34,962
WCAU D28 DT CP	542.2	210,629	112.3	13,516	112.3	13,516

Interference to BLANK0000026995 CP scenario 8

****IX: 26.30% interference caused**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WHPX-TV	D28	DT	CP	NEW LONDON, CT	BLANK0000026995	
Undesireds:	WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlly28e2	83.3 km
	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	122.2
	WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	171.1
	WEPT-CD	D28	DC	BL	NEWBURGH, NY	DTVBL30429	174.3
	WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	311.0
	WCAU	D28	DT	BL	PHILADELPHIA, PA	DTVBL63153	298.1
	WNEU	D29	DT	CP	MERRIMACK, NH	BLANK0000026884	181.2
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
25188.4	4,851,456	24634.2	4,682,252	24232.6	4,576,854	19462.8 3,373,200	19.68 26.30

Undesired		Total IX	Unique IX, before		Unique IX, after	
WLNY28E2 D28 DT APP	5018.8	1,240,762			4769.8	1,203,654
WUNI D27 DT LIC	184.2	69,937	184.2	69,937	88.1	53,768
WEPT-CD D28 DC BL	169.3	29,543	145.2	26,144	60.5	14,413
WCAU D28 DT BL	72.2	9,317	48.1	5,918	0.0	0

Interference to BLANK0000034398 APP scenario 3

****MX: 25.21% interference caused**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WHPX-TV	D28	DT	APP	NEW LONDON, CT	BLANK0000034398	
Undesireds:	WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlly28e2	83.3 km
	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	122.2
	WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	171.1
	WEPT-CD	D28	DC	BL	NEWBURGH, NY	DTVBL30429	174.3
	WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	311.0
	WCAU	D28	DT	CP	PHILADELPHIA, PA	BLANK0000034346	298.1
	WVTB	D28	DT	CP	ST. JOHNSBURY, VT	BLANK0000029682	351.3
	WNEU	D29	DT	CP	MERRIMACK, NH	BLANK0000026884	181.2
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
28066.9	5,316,615	27356.4	5,103,678	26810.4	4,948,250	21869.4 3,700,851	18.43 25.21

Undesired		Total IX	Unique IX, before		Unique IX, after	
WLNY28E2 D28 DT APP	5234.1	1,313,452			4941.0	1,247,399
WUNI D27 DT LIC	288.3	116,540	288.3	116,540	144.1	71,627
WEPT-CD D28 DC BL	233.7	34,347	197.4	29,577	92.6	16,723
WCAU D28 DT CP	52.2	8,010	19.9	4,249	0.0	0
WVTB D28 DT CP	8.0	1,301	4.0	292	4.0	292

Interference to DTVBL51980 BL scenario 8

****IX: 26.24% interference caused**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WHPX-TV	D28	DT	BL	NEW LONDON, CT	DTVBL51980	
Undesireds:	WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlly28e2	83.3 km
	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	122.2

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER POST REPACK ALLOCATION ENVIRONMENT (SUMMARY)

WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	171.1
WEPT-CD	D28	DC	BL	NEWBURGH, NY	DTVBL30429	174.3
WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	311.0
WCAU	D28	DT	BL	PHILADELPHIA, PA	DTVBL63153	298.1
WNEU	D29	DT	CP	MERRIMACK, NH	BLANK0000026884	181.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
25200.4 4,852,560	24650.3 4,684,221	24244.7 4,577,554	19486.9 3,376,583	19.62 26.24

Undesired	Total IX	Unique IX, before	Unique IX, after
WLNY28E2 D28 DT APP	5010.8 1,239,364	4757.8 1,200,971	
WUNI D27 DT LIC	188.3 70,291	92.1 54,429	
WEPT-CD D28 DC BL	165.2 28,866	56.4 13,736	
WCAU D28 DT BL	76.2 10,909	0.0 0	

Interference to BLANK0000034537 CP scenario 2

****IX: 3.06% interference caused**

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WEPT-CD	D28	DC	CP	NEWBURGH, NY	BLANK0000034537	
Undesireds: WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlly28e2	128.4 km
WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	111.8
WHPX-TV	D28	DT	CP	NEW LONDON, CT	BLANK0000026995	153.2
WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	185.5
WCAU	D28	DT	BL	PHILADELPHIA, PA	DTVBL63153	213.5
WVTB	D28	DT	CP	ST. JOHNSBURY, VT	BLANK0000029682	359.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
13110.3 1,547,918	10600.6 1,117,420	10100.4 1,060,876	9894.2 1,028,365	2.04 3.06

Undesired	Total IX	Unique IX, before	Unique IX, after
WLNY28E2 D28 DT APP	476.5 69,783	206.2 32,511	
WHPX-TV D28 DT CP	391.1 41,574	149.1 10,525	
WCAU D28 DT BL	189.7 28,124	68.6 8,237	

Interference to DTVBL30429 BL scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WEPT-CD	D28	DC	BL	NEWBURGH, NY	DTVBL30429	
Undesireds: WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlly28e2	164.8 km
WIVT	D27	DT	CP	BINGHAMTON, NY	BLANK0000028447	152.1
WNYW	D27	DT	CP	NEW YORK, NY	BLANK0000034611	152.7
WHPX-TV	D28	DT	CP	NEW LONDON, CT	BLANK0000026995	174.3
WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	146.9
WCAU	D28	DT	CP	PHILADELPHIA, PA	BLANK0000034346	246.3
WVTB	D28	DT	CP	ST. JOHNSBURY, VT	BLANK0000029682	328.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
12604.1 851,640	9510.2 712,933	9429.8 710,743	9405.6 710,202	0.26 0.08

Undesired	Total IX	Unique IX, before	Unique IX, after
WLNY28E2 D28 DT APP	44.3 1,551	24.2 541	
WHPX-TV D28 DT CP	56.2 1,617	48.1 627	
WCAU D28 DT CP	32.2 1,563	24.1 573	

Interference to BLANK0000034346 CP scenario 1

****IX: 2.40% interference caused**

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WCAU	D28	DT	CP	PHILADELPHIA, PA	BLANK0000034346	
Undesireds: WLNY28E2	D28	DT	APP	RIVERHEAD, NY	wlly28e2	218.1 km
WMAR-TV	D27	DT	CP	BALTIMORE, MD	BLANK0000026796	144.3
WPSJ-CD	D27	DC	CP	HAMMONTON, NJ	BLANK0000033831	0.3

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28
FACILITY UNDER POST REPACK ALLOCATION ENVIRONMENT (SUMMARY)

WNYW D27 DT BL	490.9	2,386,122	71.8	234,979	0.44	3.14
WHPX-TV D28 DT APP	4366.0	2,683,457	3854.0	546,723	23.60	7.31
WEPT-CD D28 DC CP	181.8	210,150	60.6	32,134	0.37	0.43
WCAU D28 DT CP	348.3	1,241,759	24.1	15,883	0.15	0.21

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

tvstudy v2.2.4 (Z2Qqz3)

Database: localhost, Study: wlly28e1, Model: Longley-Rice

Study build station data: LMS TV 2018-02-22 (141)

Proposal: WLNY28E1 D28 DT APP RIVERHEAD, NY
File number: wlly28e1
Facility ID: 73206
Station data: User record
Record ID: 2248
Country: U.S.
Zone: I

Build options:
Protect pre-transition records not on baseline channel

Search options:
All post-transition APP, CP, and baseline records excluded

Individual records excluded:
0000003184 WNBC D28 DT LIC NEW YORK, NY BLANK0000003184

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	203.1 km
No	WUNI	D27	DT	APP	MARLBOROUGH, MA	BLANK0000035720	210.5
Yes	WFXQ-CD	D28	DC	LIC	SPRINGFIELD, MA	BLDTA20100126ADA	152.2
No	WFPT	D28	DT	CP	FREDERICK, MD	BLANK0000029876	415.8
No	WFPT	D28	DT	LIC	FREDERICK, MD	BLEDT20090330AFA	415.8
No	WCPB	D28	DT	LIC	SALISBURY, MD	BLEDT20090209AEM	361.1
No	WUHF	D28	DT	LIC	ROCHESTER, NY	BLCDT20050316AAK	458.8
No	WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	311.6
No	WWDG-CD	D28	DC	APP	UTICA, NY	BLANK0000035669	311.9
Yes	WFFA-CD	D28	DC	LIC	PHILADELPHIA, PA	BLANK0000001669	218.1
No	WUTF-TV	D29	DT	LIC	WORCESTER, MA	BLANK0000001072	188.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D28
Latitude: 40 53 50.30 N (NAD83)
Longitude: 72 54 54.20 W
Height AMSL: 216.4 m
HAAT: 193.9 m
Peak ERP: 1000 kW
Antenna: JAM-JSM-16/D28-TCCP (ID 1002181) 0.0 deg
Elev Pattn: Generic
Elec Tilt: 0.75

40.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	90.6 kW	203.1 m	71.3 km
45.0	29.8	195.1	65.2
90.0	77.8	196.3	70.1
135.0	98.0	198.7	71.4
180.0	47.1	202.7	68.0
225.0	410	183.1	77.8
270.0	931	179.2	82.5
315.0	114	193.1	71.8

Distance to Canadian border: 440.7 km

Distance to Mexican border: 2761.0 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 241.2 degrees Distance: 384.1 km

Proposal is not within the West Virginia quiet zone area

INTERFERENCE CAUSED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

Conditions at Table Mountain receiving zone:
Bearing: 279.0 degrees Distance: 2715.5 km

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 BLDTA20100126ADA LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	WFXQ-CD	D28	DC	LIC	SPRINGFIELD, MA	BLDTA20100126ADA				
Undesireds:	WLNY28E1	D28	DT	APP	RIVERHEAD, NY	wlny28e1	152.2 km			
	WUNI	D27	DT	LIC	MARLBOROUGH, MA	BLANK0000030092	95.8			
	WWDG-CD	D28	DC	LIC	UTICA, NY	BLANK0000001609	229.3			
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX			
586.7	233,534	530.9		226,597	530.9	226,597	526.9	226,217	0.75	0.17
Undesired				Total IX		Unique IX, before		Unique IX, after		
WLNY28E1	D28	DT	APP	4.0	380	4.0	380			

Interference to BLANK0000001669 LIC scenario 1

Desired:	Call WFPA-CD	Chan D28	Svc DC	Status LIC	City, State PHILADELPHIA, PA	File Number BLANK0000001669	Distance	
Undesireds:	WLNY28E1	D28	DT	APP	RIVERHEAD, NY	wlny28e1	218.1 km	
	WFPT	D28	DT	CP	FREDERICK, MD	BLANK0000029876	197.7	
	WCPB	D28	DT	LIC	SALISBURY, MD	BLEDT20090209AEM	186.6	
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
5762.7	4,086,937	5714.4	4,074,264	5710.3	4,073,896	5686.2	4,066,515	0.42
Undesired				Total IX	Unique IX, before	Unique IX, after		
WLNY28E1	D28 DT APP	24.1		7,381		24.1	7,381	
WCPB	D28 DT LIC	4.0		368	4.0 368	4.0	368	

INTERFERENCE RECEIVED ANALYSIS FOR WLNY-TV CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

tvstudy v2.2.4 (Z2Qqz3)

Database: localhost
Station Data: LMS TV 2018-01-24 (122)
Study: LMS180123
Model: Longley-Rice
Scenario: wlny28elr

Desired station	Service area		Terrain-limited		Interference-free	
Undesired station	Total interference		Unique interference			
WLNY28E1 D28 DT APP RIVERHEAD, NY	16472.7	7,565,825	16331.2	7,480,191	16331.2	7,480,191
WFXQ-CD D28 DC LIC SPRINGFIELD, MA	0.0		0	0.0	0	
WCPB D28 DT LIC SALISBURY, MD	0.0		0	0.0	0	
WWDG-CD D28 DC LIC UTICA, NY	0.0		0	0.0	0	
WFPA-CD D28 DC LIC PHILADELPHIA, PA	0.0		0	0.0	0	