

DISPLACEMENT QUALIFICATION OF W34ED-D

As shown in the included TVStudy interference analysis, the existing facility of W34ED-D on CH 34 will cause impermissible interference of 10.18% to WIDP (DT) and is predicted to receive an aggregate interference of 44.93%.

As demonstrated in the included TVStudy interference analysis the proposed W34ED-D facility in CH 32, at a new site 8 miles apart from the licensed site, is not predicted to cause interference to any existing Full Service or Class A TV stations in their pre-repack or post repack channels, thus this displacement application and its grant is NOT conditioned to the Puerto Rico TV stations having completed their transition to their post repack channels.

All the TVStudies included in this application were made with a cell size of 0.5 km and a Profile Increment of 0.1 km.

TVSTUDY LICENSED FACILITY OF W34ED-D, DISPLACED

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: BLDTL20140404AAY #1228, Model: Longley-Rice

Start: 2018.05.12 13:40:24

Study created: 2018.05.12 13:38:47

Study build station data: LMS TV 2018-05-11

Proposal: W34ED-D D34 LD LIC TRUJILLO ALTO, PR
File number: BLDTL20140404AAY
Facility ID: 181824
Station data: LMS TV 2018-05-11
Record ID: 8560ec20a6c042bebf38cf6212b6c0ea
Country: U.S.

Search options:

Baseline record excluded if station has CP

All records for new LPTV stations excluded

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WPRU-LP	N20z	TX	LIC	AQUADILLA, PR	BLTTL20101020ABE	116.0 km
No	WWKQ-LD	N26-	TX	LIC	QUEBRADILLAS, PR	BLTTL20140508ABB	95.9
No	W28EQ-D	N32+	TX	LIC	UTUADO, PR	BLTT19890703IC	69.2
No	W33CY-D	D33	LD	LIC	ANASCO, PR	BLDTL20140404AAX	117.1
Yes	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	12.7
No	WJWN-TV	D33	DT	CP	SAN SEBASTIAN, PR	BLANK0000027870	95.0
No	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	122.0
No	W33CY-D	D34	LD	APP	ANASCO, PR	BLANK0000053622	95.0
Yes	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	27.9
No	WWKQ-LD	D34-	LD	APP	QUEBRADILLAS, PR	BLANK0000051821	95.9
Yes	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	68.0
Yes	WCCV-TV	D35	DT	CP	ARECIBO, PR	BLANK0000026046	71.9
No	W36EP-D	D35	LD	APP	YAUCO, PR	BLANK0000053475	70.7
No	WIVE-LP	N42-	TX	LIC	CEIBA, PR	BLTTL20030128ABW	45.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D34
Mask: Full Service
Latitude: 18 9 22.80 N (NAD83)
Longitude: 66 5 1.50 W
Height AMSL: 660.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: ANT-ACS8DR (ID 17796) 30.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

50.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	8.66 kW	406.9 m	58.0 km
45.0	13.1	563.9	65.9
90.0	0.938	399.9	45.0
135.0	0.013	146.9	12.7
180.0	0.013	72.7	9.1
225.0	0.013	155.8	13.2
270.0	0.013	196.0	14.8
315.0	0.030	221.4	19.4

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 270 m

Distance to Canadian border: 2959.8 km

Distance to Mexican border: 3284.6 km

Conditions at FCC monitoring station: Santa Isabel PR

Bearing: 241.4 degrees Distance: 35.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 311.5 degrees Distance: 4462.6 km

Study cell size: 0.50 km

Profile point spacing: 0.10 km

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

Maximum new IX to LPTV: 2.00%

Interference to BLANK0000053906 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	
Undesireds:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	12.7 km
	WJWN-TV	D33	DT	CP	SAN SEBASTIAN, PR	BLANK0000027870	102.0
	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	114.1
	W33CY-D	D34	LD	APP	ANASCO, PR	BLANK0000053622	102.0
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	18.2
	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	63.1
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	1115.9	599,639	973.2	507,629	967.1	503,405	0.10 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
W34ED-D D34 LD LIC	1.7 2,282	1.0 548	
WJWN-TV D33 DT CP	1.2 1,773	0.5 39	
W33DD-D D33 LD LIC	2.2 233	0.7 114	
WIDP D34 DT CP	3.9 1,775	2.2 1,550	
W34DY-D D34 LD LIC	0.5 120	0.2 14	

Interference to BLANK0000025304 CP scenario 1

**IX: 10.18% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	
Undesireds:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	27.9 km
	WJWN-TV	D33	DT	CP	SAN SEBASTIAN, PR	BLANK0000027870	120.2
	WCCV-TV	D35	DT	CP	ARECIBO, PR	BLANK0000026046	95.9
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	24002.1	2,561,120	22035.7	2,348,498	21767.8	2,105,430	28.92 10.18
Undesired	Total IX		Unique IX, before		Unique IX, after		
W34ED-D D34 LD LIC	6296.3	238,718			6296.3	238,718	

WJWN-TV D33 DT CP	259.0	0	259.0	0	259.0	0
WCCV-TV D35 DT CP	8.9	4,350	8.9	4,350	8.9	4,350

Interference to BLANK0000010492 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	
Undesireds:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	68.0 km
	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	57.9
	W33CY-D	D34	LD	APP	ANASCO, PR	BLANK0000053622	162.9
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	46.5

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	5058.2	250,155	4863.6	212,816	4074.4
			187,634	3734.6	185,703
			8.34		1.03

Undesired	Total IX	Unique IX, before	Unique IX, after
W34ED-D D34 LD LIC	398.9	4,926	339.8
W33DD-D D33 LD LIC	161.9	45	120.0
WIDP D34 DT CP	629.4	25,137	609.2
			22,142

Interference to BLANK0000026046 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WCCV-TV	D35	DT	CP	ARECIBO, PR	BLANK0000026046	
Undesireds:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	71.9 km
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	95.9
	WIMN-CD	D36	DC	CP	ARECIBO, PR	BLANK0000036058	27.5
	WVOZ-TV	D36	DT	CP	PONCE, PR	BLANK0000028456	17.2

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	22589.5	3,419,212	18482.6	2,697,770	17850.4
			2,662,289	17840.1	2,657,432
			0.06		0.18

Undesired	Total IX	Unique IX, before	Unique IX, after
W34ED-D D34 LD LIC	11.6	5,232	10.3
WIDP D34 DT CP	6.4	5,382	5.2
WIMN-CD D36 DC CP	11.3	2,821	11.1
WVOZ-TV D36 DT CP	614.7	27,297	614.7
			27,297

Interference to BLANK0000026046 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WCCV-TV	D35	DT	CP	ARECIBO, PR	BLANK0000026046	
Undesireds:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	71.9 km
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	95.9
	WIMN-CD	D36	DC	LIC	ARECIBO, PR	BLDTA20140225AAJ	27.5
	WVOZ-TV	D36	DT	CP	PONCE, PR	BLANK0000028456	17.2
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	22589.5	3,419,212	18482.6	2,697,770	17832.2	2,649,756	0.06 0.18
Undesired				Total IX	Unique IX, before	Unique IX, after	
W34ED-D D34 LD LIC		11.6		5,232		10.1	4,857
WIDP D34 DT CP		6.4		5,382	6.2	5.2	5,007
WIMN-CD D36 DC LIC		29.5		10,497	29.3	29.0	10,478
WVOZ-TV D36 DT CP		614.7		27,297	614.7	614.7	27,297

Interference to proposal scenario 1

**MX: 44.93% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	
Undesireds:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	12.7 km
	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	122.0
	W33CY-D	D34	LD	APP	ANASCO, PR	BLANK0000053622	95.0
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	27.9
	WWKQ-LD	D34-	LD	APP	QUEBRADILLAS, PR	BLANK0000051821	95.9
	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	68.0
	Service area		Terrain-limited		IX-free	Percent IX	
	4302.1	1,865,709	3510.5	1,459,792	1525.4	56.55	44.93
Undesired				Total IX	Unique IX	Prcnt Unique IX	
W44DH-D D33 LD APP		0.2		577	0.0	0.00	0.00
W33DD-D D33 LD LIC		1.5		0	0.0	0.00	0.00
W33CY-D D34 LD APP		7.6		0	0.0	0.00	0.00
WIDP D34 DT CP		1928.0		652,839	1732.3	49.34	44.35
WWKQ-LD D34- LD APP		1.7		0	0.0	0.00	0.00
W34DY-D D34 LD LIC		244.0		7,992	57.1	1.63	0.21

Interference to proposal scenario 2

**MX: 44.93% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	
Undesireds:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	12.7 km
	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	122.0
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	27.9
	WWKQ-LD	D34-	LD	APP	QUEBRADILLAS, PR	BLANK0000051821	95.9
	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	68.0

Service area		Terrain-limited		IX-free		Percent IX	
4302.1	1,865,709	3510.5	1,459,792	1525.4	803,872	56.55	44.93

Undesired	Total IX		Unique IX		Prcnt Unique IX	
W44DH-D D33 LD APP	0.2	577	0.0	0	0.00	0.00
W33DD-D D33 LD LIC	1.5	0	0.0	0	0.00	0.00
WIDP D34 DT CP	1928.0	652,839	1739.1	647,351	49.54	44.35
WWKQ-LD D34- LD APP	1.7	0	0.0	0	0.00	0.00
W34DY-D D34 LD LIC	244.0	7,992	57.1	3,081	1.63	0.21

TVSTUDY PRE-REPACK W34ED-D ON CH 32, NEW SITE AT 8 MILES

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: BLDTL20140404AAY #1229, Model: Longley-Rice

Start: 2018.05.12 13:40:48

Study created: 2018.05.12 13:39:37

Study build station data: LMS TV 2018-05-11

Proposal: W34ED-D D32 LD LIC TRUJILLO ALTO, PR

File number: BLDTL20140404AAY

Facility ID: 181824

Station data: User record

Record ID: 506

Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Baseline record excluded if station has CP

All records for new LPTV stations excluded

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	W29CB	N29	TX	LIC	ST. THOMAS, VI	BLTTL19971105II	112.1 km
Yes	W31DV-D	D31	LD	CP	GUAYAMA, PR	BLANK0000036801	6.6
No	W31DV-D	D31	LD	LIC	GUAYAMA, PR	BLANK0000007268	30.7
No	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	102.0
No	W31DL-D	D31	LD	LIC	PONCE, PR	BLDTL20090810ABM	68.1
Yes	WSJU-TV	D31	DT	LIC	SAN JUAN, PR	BLCDT20090217AEH	7.6
No	W33DD-D	D31	LD	APP	TUTU, ST THOMAS, VI	BLANK0000053904	114.1
No	W32DV-D	D32	LD	LIC	ARROYO, PR	BLANK0000010684	30.7
Yes	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	102.0
No	W32DZ-D	D32	LD	LIC	MAYAGUEZ, PR	BLDTL20140916ACJ	122.2
No	W28EQ-D	N32+	TX	LIC	UTUADO, PR	BLTT19890703IC	74.2
No	W33CY-D	D33	LD	LIC	ANASCO, PR	BLDTL20140404AAX	122.2
No	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	0.0
Yes	WRUA	D33	DT	LIC	FAJARDO, PR	BLCDT20090610ABH	24.9
No	WJWN-TV	D33	DT	CP	SAN SEBASTIAN, PR	BLANK0000027870	102.0
No	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	114.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D32
Mask: Full Service
Latitude: 18 15 19.80 N (NAD83)
Longitude: 66 1 24.60 W
Height AMSL: 161.5 m
HAAT: 0.0 m
Peak ERP: 5.00 kW
Antenna: PSILP8BB 210.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

50.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.221 kW	86.9 m	20.2 km
45.0	0.265	15.5	12.3
90.0	0.265	6.0	12.3
135.0	1.92	17.6	20.4
180.0	4.61	-167.2	24.4
225.0	4.66	-120.0	24.5
270.0	3.96	-98.6	23.7
315.0	0.288	63.5	18.5

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: -25 m

Distance to Canadian border: 2948.9 km

Distance to Mexican border: 3286.7 km

Conditions at FCC monitoring station: Santa Isabel PR

Bearing: 233.2 degrees Distance: 46.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 311.4 degrees Distance: 4460.1 km

Study cell size: 0.50 km
 Profile point spacing: 0.10 km

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

 Interference to BLANK0000036801 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W31DV-D	D31	LD	CP	GUAYAMA, PR	BLANK0000036801	
Undesireds:	W34ED-D	D32	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	6.6 km
	WRFB	D30	DT	CP	CAROLINA, PR	BLANK0000034795	1.4
	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	95.7
	W33DD-D	D31	LD	APP	TUTU, ST THOMAS, VI	BLANK0000053904	120.4
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	2898.4	1,186,380	1982.7	991,531	1595.4	753,025	1595.1 752,877 0.02 0.02
Undesired				Total IX	Unique IX, before	Unique IX, after	
W34ED-D D32 LD LIC		0.7		148		0.2	148
WRFB D30 DT CP		224.2		234,731	164.1	226,857	163.6 226,857
WNJX-TV D31 DT CP		28.8		3,994	2.5	1,433	2.5 1,433
W33DD-D D31 LD APP		214.1		8,749	158.7	2,335	158.7 2,335

 Interference to BLCDT20090217AEH LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WSJU-TV	D31	DT	LIC	SAN JUAN, PR	BLCDT20090217AEH	
Undesireds:	W34ED-D	D32	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	7.6 km
	WDWL	D30	DT	LIC	BAYAMON, PR	BLCDT20091124ADX	1.8
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	15501.9	2,664,895	13284.4	2,443,217	13260.5	2,412,485	13259.6 2,409,588 0.01 0.12
Undesired				Total IX	Unique IX, before	Unique IX, after	
W34ED-D D32 LD LIC		1.2		2,956		1.0	2,897

WDWL D30 DT LIC	23.9	30,732	23.9	30,732	23.6	30,673
-----------------	------	--------	------	--------	------	--------

Interference to BLANK0000024551 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	
Undesireds:	W34ED-D	D32	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	102.0 km
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	44277.1	2,196,114		43851.3	1,871,899	43844.1	1,863,562
							0.02
							0.45
Undesired				Total IX	Unique IX, before	Unique IX, after	
W34ED-D D32 LD LIC				7.1	8,337	7.1	8,337

Interference to BLCDT20090610ABH LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WRUA	D33	DT	LIC	FAJARDO, PR	BLCDT20090610ABH	
Undesireds:	W34ED-D	D32	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	24.9 km
	WELU	D34	DT	LIC	AGUADILLA, PR	BLANK0000001308	127.4
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	27225.3	2,904,974		25752.4	2,628,305	25731.4	2,622,048
							0.02
							0.24
Undesired				Total IX	Unique IX, before	Unique IX, after	
W34ED-D D32 LD LIC				5.4	6,257	5.4	6,257
WELU D34 DT LIC				15.6	0	15.6	0

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W34ED-D	D32	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	
Undesireds:	W31DV-D	D31	LD	CP	GUAYAMA, PR	BLANK0000036801	6.6 km
	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	102.0
	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	114.1
	Service area			Terrain-limited	IX-free	Percent IX	

1256.3	998,593	1089.3	811,397	1079.5	803,918	0.90	0.92	
Undesired			Total IX		Unique IX		Prcnt Unique IX	
W31DV-D D31 LD CP			9.6	7,479	8.4	6,722	0.77	0.83
WIPM-TV D32 DT CP			1.5	757	0.2	0	0.02	0.00

Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W34ED-D	D32	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	
Undesireds:	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	102.0 km
	W33DD-D	D33	LD	LIC	TUTU, ST THOMAS, VI	BLANK0000010483	114.1

Service area		Terrain-limited		IX-free		Percent IX		
1256.3	998,593	1089.3	811,397	1087.9	810,640	0.14	0.09	
Undesired			Total IX		Unique IX		Prcnt Unique IX	
WIPM-TV D32 DT CP			1.5	757	1.5	757	0.14	0.09