

DISPLACEMENT QUALIFICATION OF W23EM-D

As shown in the included TVStudy interference analysis, the existing facility of W23EM-D on CH 23 will cause impermissible interference of 1.02% to WWSN (DT) and 2.06% to WCVI-TV.

As demonstrated in the included TVStudy interference analysis the proposed W23EM-D facility in CH 32, at a new site 23 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 W23EM-D, DISPLACED

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: BLANK0000010679 #1206, Model: Longley-Rice

Start: 2018.05.10 17:11:08

Study created: 2018.05.10 17:11:08

Study build station data: LMS TV 2018-05-10

Proposal: W23EM-D D23 LD LIC CEIBA, PR
 File number: BLANK0000010679
 Facility ID: 181818
 Station data: LMS TV 2018-05-10
 Record ID: 25076f9153aedc3a0153b5b3f02e05d2
 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
Yes	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
No	W32DZ-D	D22	LD	APP	MAYAGUEZ, PR	BLANK0000053151	159.1
Yes	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	52.0
Yes	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	74.1
No	WMNS-LD	N22+	TX	LIC	CHARLOTTE AMALIE, VI	BLTTL20041015ABV	77.2
Yes	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
Yes	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
No	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	159.5
Yes	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	116.3
Yes	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	116.3
Yes	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLCDT20090625AAH	116.3
No	WSJX-LP	N24z	TX	LIC	AQUADILLA, PR	BLTTL20050407AAH	156.5
Yes	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
Yes	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	62.6
Yes	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8
No	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000034790	115.9
No	W24DO-D	D24	LD	LIC	SION FARM, ST CROIX, VI	BLANK0000010845	109.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D23
Mask: Stringent
Latitude: 18 16 57.00 N (NAD83)
Longitude: 65 40 27.00 W
Height AMSL: 297.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: ANT-ACS8A (ID 17788) 110.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

49.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	8.89 kW	270.8 m	52.7 km
45.0	14.4	293.4	56.5
90.0	13.8	296.6	56.4
135.0	13.4	290.5	55.9
180.0	14.7	260.9	54.7
225.0	7.35	235.3	49.7
270.0	0.662	-270.0	16.3
315.0	0.726	184.6	34.8

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 195 m

Distance to Canadian border: 2947.0 km

Distance to Mexican border: 3320.1 km

Conditions at FCC monitoring station: Santa Isabel PR

Bearing: 247.5 degrees Distance: 80.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 311.2 degrees Distance: 4485.8 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 BLDTL20131108AIF LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	18.9 km
	W21DD-D	D21	LD	LIC	NAGUABO, PR	BLANK0000008490	18.9
	WJPX	D21	DT	LIC	SAN JUAN, PR	BLANK0000030022	0.1
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	33.1
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	92.9
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	27.8
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	0.1
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	132.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
10091.0 1,196,771	9153.1 1,131,245	5624.0 533,019	5613.9 533,019	0.18 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC 246.7	398	10.1 0	
W21DD-D D21 LD LIC 214.8	345	57.8 0	
WJPX D21 DT LIC 511.6	553,136	41.9 20,603	
WSJN-CD D22 DC CP 3112.2	397,400	2739.4 30,389	
WMNS-LD D22 LD LIC 233.6	145,181	11.8 1,425	
WXWZ-LD D23 LD LIC 64.8	84,260	1.2 211	
WVSN D23 DT CP 330.2	478,344	34.8 7,125	

Interference to BLDTL20131108AIF LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	18.9 km
	W21DD-D	D21	LD	LIC	NAGUABO, PR	BLANK0000008490	18.9
	WJPX	D21	DT	LIC	SAN JUAN, PR	BLANK0000030022	0.1

WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	33.1
WMNS-LD	N22+	TX	LIC	CHARLOTTE AMALIE, VI	BLTTTL20041015ABV	96.0
WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	27.8
WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	0.1
WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	132.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
10091.0	1,196,771	9153.1	1,131,245	5630.2	533,186	5619.3	533,186	0.19	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W23EM-D D23 LD LIC	246.7	398			10.9	0
W21DD-D D21 LD LIC	214.8	345	72.3	0	2.2	0
WJPX D21 DT LIC	511.6	553,136	43.1	20,648	42.6	20,648
WSJN-CD D22 DC CP	3112.2	397,400	2750.2	30,389	2749.9	30,389
WMNS-LD N22+ TX LIC	145.2	3,632	5.7	1,258	5.4	1,258
WXWZ-LD D23 LD LIC	64.8	84,260	1.2	211	1.2	211
WVSN D23 DT CP	330.2	478,344	35.0	7,125	14.3	7,125

Interference to BLANK0000034542 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	52.0 km
	WJPX	D21	DT	LIC	SAN JUAN, PR	BLANK0000030022	33.1
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	33.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
8030.9	2,312,859	7620.6	2,088,222	7545.2	2,049,620	7532.7	2,049,620	0.17	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W23EM-D D23 LD LIC	12.5	0			12.5	0
WJPX D21 DT LIC	71.4	37,724	51.2	26,572	51.2	26,572
WVSN D23 DT CP	24.1	12,030	3.9	878	3.9	878

Interference to BLANK000008100 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK000008100	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	74.1 km

W21DD-D	D21	LD	LIC	NAGUABO, PR	BLANK0000008490	74.1
WZVI	D21	DT	CP	CHARLOTTE AMALIE, VI	BLANK0000034334	7.4
WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	92.9
WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	125.8
WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	119.0
WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	72.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
9770.9	63,966	9373.8	63,298	9260.6	62,221	9246.8	62,157	0.15	0.10

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	53.2	250	13.8 64
W21DD-D D21 LD LIC	39.9	186	38.6 0
WZVI D21 DT CP	42.3	891	42.3 891
WVDO-LD D22 LD LIC	12.8	0	12.8 0
WSJN-CD D22 DC CP	18.9	186	18.2 0
WXWZ-LD D23 LD LIC	0.5	0	0.0 0

Interference to BLDTL20100324ABD LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	45.5 km
	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	27.8
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	17.4
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	119.0
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	27.9
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	117.6
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	150.4
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	13.8
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	24.4
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	84.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4587.5	1,688,039	3744.4	1,375,096	1852.3	678,775	1755.0	674,817	5.25	0.58

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	598.4	4,781	97.3 3,958
WVDO-LD D22 LD LIC	209.3	12,218	0.0 0
WSJN-CD D22 DC CP	101.1	69,304	0.0 0
WMNS-LD D22 LD LIC	102.0	171	1.2 5

WVSN D23 DT CP	1763.3	680,033	1229.5	268,868	986.7	268,293
WQSJ-CD D23 DC CP	0.5	0	0.0	0	0.0	0
WCVI-TV D23 DT CP	13.0	0	0.0	0	0.0	0
WUJA D24 DT CP	556.2	422,546	15.8	12,239	14.0	12,239
W24EI-D D24 LD LIC	1.0	0	0.0	0	0.0	0
W24DW-D D24 LD LIC	116.8	178	20.2	0	3.7	0

Interference to BLDLTL20100324ABD LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDLTL20100324ABD	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK00000010679	45.5 km
	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDLTL20131108AIF	27.8
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK00000034542	17.4
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK00000008100	119.0
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK00000034762	27.9
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK00000034540	117.6
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK00000053850	150.4
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK00000034758	13.8
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK00000004264	24.4
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK00000010481	84.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4587.5	1,688,039	3744.4	1,375,096	1852.3	678,775	1755.0	674,817	5.25	0.58

Undesired		Total IX	Unique IX, before		Unique IX, after	
W23EM-D D23 LD LIC	598.4	4,781	97.3	3,958		
WVDO-LD D22 LD LIC	209.3	12,218	0.0	0	0.0	0
WSJN-CD D22 DC CP	101.1	69,304	0.0	0	0.0	0
WMNS-LD D22 LD LIC	102.0	171	1.2	5	1.0	5
WVSN D23 DT CP	1763.3	680,033	1229.5	268,868	986.7	268,293
WQSJ-CD D23 DC CP	0.5	0	0.0	0	0.0	0
WCVI-TV D23 DT LIC	13.0	0	0.0	0	0.0	0
WUJA D24 DT CP	556.2	422,546	15.8	12,239	14.0	12,239
W24EI-D D24 LD LIC	1.0	0	0.0	0	0.0	0
W24DW-D D24 LD LIC	116.8	178	20.2	0	3.7	0

Interference to BLDTL20100324ABD LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	45.5 km
	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	27.8
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	17.4
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	119.0
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	27.9
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	117.6
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	13.8
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	24.4
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	84.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
4587.5	1,688,039	3744.4	1,375,096	1852.3	678,775	1755.0 674,817	5.25 0.58
Undesired		Total IX		Unique IX, before		Unique IX, after	
W23EM-D	D23 LD LIC	598.4	4,781			97.3 3,958	
WVDO-LD	D22 LD LIC	209.3	12,218	0.0	0	0.0 0	
WSJN-CD	D22 DC CP	101.1	69,304	0.0	0	0.0 0	
WMNS-LD	D22 LD LIC	102.0	171	1.2	5	1.0 5	
WVSN	D23 DT CP	1763.3	680,033	1229.5	268,868	986.7 268,293	
WQSJ-CD	D23 DC CP	0.5	0	0.0	0	0.0 0	
WUJA	D24 DT CP	556.2	422,546	15.8	12,239	14.0 12,239	
W24EI-D	D24 LD LIC	1.0	0	0.0	0	0.0 0	
W24DW-D	D24 LD LIC	116.8	178	23.9	0	3.7 0	

Interference to BLDTL20100324ABD LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	45.5 km
	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	27.8
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	17.4
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	27.9
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	117.6
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	150.4
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	13.8
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	24.4
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	84.8

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
4587.5 1,688,039	3744.4 1,375,096	1853.6 678,780	1756.0 674,822	5.26 0.58

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	598.4 4,781	97.5 3,958	
WVDO-LD D22 LD LIC	209.3 12,218	0.0 0	
WSJN-CD D22 DC CP	101.1 69,304	0.0 0	
WVSN D23 DT CP	1763.3 680,033	1229.5 268,868	986.7 268,293
WQ SJ-CD D23 DC CP	0.5 0	0.0 0	0.0 0
WCVI-TV D23 DT CP	13.0 0	0.0 0	0.0 0
WUJA D24 DT CP	556.2 422,546	15.8 12,239	14.0 12,239
W24EI-D D24 LD LIC	1.0 0	0.0 0	0.0 0
W24DW-D D24 LD LIC	116.8 178	85.0 0	20.2 0

Interference to BLDTL20100324ABD LIC scenario 5

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	
Undesireds: W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	45.5 km
WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	27.8
WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	17.4
WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	27.9
WQ SJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	117.6
WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	150.4
WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	13.8
W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	24.4
W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	84.8

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
4587.5 1,688,039	3744.4 1,375,096	1853.6 678,780	1756.0 674,822	5.26 0.58

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	598.4 4,781	97.5 3,958	
WVDO-LD D22 LD LIC	209.3 12,218	0.0 0	
WSJN-CD D22 DC CP	101.1 69,304	0.0 0	
WVSN D23 DT CP	1763.3 680,033	1229.5 268,868	986.7 268,293
WQ SJ-CD D23 DC CP	0.5 0	0.0 0	0.0 0
WCVI-TV D23 DT LIC	13.0 0	0.0 0	0.0 0
WUJA D24 DT CP	556.2 422,546	15.8 12,239	14.0 12,239
W24EI-D D24 LD LIC	1.0 0	0.0 0	0.0 0
W24DW-D D24 LD LIC	116.8 178	85.0 0	20.2 0

Interference to BLDTL20100324ABD LIC scenario 6

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	45.5 km
	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	27.8
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	17.4
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	27.9
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	117.6
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	13.8
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	24.4
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	84.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4587.5	1,688,039	3744.4	1,375,096	1853.6	678,780	1756.0	674,822	5.26	0.58

Undesired		Total IX	Unique IX, before		Unique IX, after	
W23EM-D D23 LD LIC	598.4	4,781			97.5	3,958
WVDO-LD D22 LD LIC	209.3	12,218	0.0	0	0.0	0
WSJN-CD D22 DC CP	101.1	69,304	0.0	0	0.0	0
WVSN D23 DT CP	1763.3	680,033	1229.5	268,868	986.7	268,293
WQSJ-CD D23 DC CP	0.5	0	0.0	0	0.0	0
WUJA D24 DT CP	556.2	422,546	15.8	12,239	14.0	12,239
W24EI-D D24 LD LIC	1.0	0	0.0	0	0.0	0
W24DW-D D24 LD LIC	116.8	178	98.0	0	20.2	0

Interference to BLANK0000034762 CP scenario 1

**IX: 1.02% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	18.8 km
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	33.2
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	140.7
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	132.6
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	27.1
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000034790	97.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
26313.6	2,947,873	24025.7	2,626,806	23786.1	2,598,049	16242.7	2,571,637	31.71	1.02

Undesired					Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	7646.6				26,456		7543.4 26,412
WSJN-CD D22 DC CP	49.9				8,409	10.3 5,078	10.3 5,078
WQSJ-CD D23 DC CP	23.2				4,216	10.3 4,148	10.3 4,148
WCVI-TV D23 DT CP	23.6				148	4.7 80	3.0 80
WUJA D24 DT CP	97.6				19,383	57.8 16,052	22.6 16,008
WQQZ-CD D24 DC CP	116.4				0	107.5 0	75.1 0

Interference to BLANK0000034762 CP scenario 2

**IX: 1.02% interference caused

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	18.8 km
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	33.2
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	140.7
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	132.6
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	27.1
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000034790	97.4
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	26313.6 2,947,873	24025.7	2,626,806	23786.1	2,598,049	16242.7 2,571,637	31.71 1.02

Undesired					Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	7646.6				26,456		7543.4 26,412
WSJN-CD D22 DC CP	49.9				8,409	10.3 5,078	10.3 5,078
WQSJ-CD D23 DC CP	23.2				4,216	10.3 4,148	10.3 4,148
WCVI-TV D23 DT LIC	23.6				148	4.7 80	3.0 80
WUJA D24 DT CP	97.6				19,383	57.8 16,052	22.6 16,008
WQQZ-CD D24 DC CP	116.4				0	107.5 0	75.1 0

Interference to BLANK0000034762 CP scenario 3

**IX: 1.02% interference caused

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	18.8 km
	WSJN-CD	D22	DC	CP	SAN JUAN, PR	BLANK0000034542	33.2
	WQSJ-CD	D23	DC	CP	QUEBRADILLAS, PR	BLANK0000034540	140.7

WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLCDT20090625AAH	132.6
WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	27.1
WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000034790	97.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26313.6 2,947,873	24025.7 2,626,806	23790.6 2,598,129	16245.7 2,571,717	31.71 1.02

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC 7646.6	26,456	7544.9 26,412	
WSJN-CD D22 DC CP 49.9	8,409	10.3 5,078	
WQSJ-CD D23 DC CP 23.2	4,216	10.6 4,216	
WCVI-TV D23 DT LIC 1.0	0	0.2 0	
WUJA D24 DT CP 97.6	19,383	58.1 16,052	
WQQZ-CD D24 DC CP 116.4	0	107.5 0	

Interference to BLANK0000035961 CP scenario 1
**IX: 2.06% interference caused

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	
Undesireds: W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	116.3 km
WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	132.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
8249.1 50,601	7811.8 50,397	7374.1 50,397	6313.9 49,358	14.38 2.06

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC 1120.7	1,039	1060.2 1,039	
WVSN D23 DT CP 437.7	0	437.7 0	

Interference to BLANK0000053850 LIC scenario 1
**IX: 2.06% interference caused

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	
Undesireds: W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	116.3 km
WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	132.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
8249.1 50,601	7811.8 50,397	7374.1 50,397	6313.9 49,358	14.38 2.06

Undesired		Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	1120.7	1,039		1060.2 1,039
WVSN D23 DT CP	437.7	0	437.7 0	377.2 0

Interference to BLCDT20090625AAH LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLCDT20090625AAH	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	116.3 km
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	132.6
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	5563.7 50,601	5080.3	49,360	4932.6 49,360	4384.4 49,345	11.11	0.03

Undesired		Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	578.6	15		548.2 15
WVSN D23 DT CP	147.6	0	147.6 0	117.2 0

Interference to BLANK0000034758 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	45.9 km
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	27.1
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	157.4
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000034790	71.3
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	19638.5 2,698,877	16376.7	2,479,017	15514.6 2,466,382	14553.0 2,459,005	6.20	0.30

Undesired		Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	1550.0	11,623		961.5 7,377
WVSN D23 DT CP	825.1	12,635	369.4 12,635	125.7 8,389
WQQZ-CD D24 DC CP	492.7	0	37.0 0	8.4 0

Interference to BLANK0000004264 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	

Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	62.6 km
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	24.4
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	43.8
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	16.7
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	102.1
	W24DO-D	D24	LD	LIC	SION FARM, ST CROIX, VI	BLANK0000010845	166.3
	W25EF-D	D25	LD	CP	TOA BAJA, PR	BLANK0000036602	19.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4457.4	2,242,611	4154.0	2,088,260	3141.9	1,168,078	3141.9	1,168,078	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W23EM-D D23 LD LIC	0.5	665			0.0	0
WXWZ-LD D23 LD LIC	20.9	3,998	3.2	568	3.2	568
WVSN D23 DT CP	7.9	2,617	1.5	472	1.5	472
WUJA D24 DT CP	1002.8	917,061	962.4	897,129	962.4	897,129
W24DW-D D24 LD LIC	14.5	3,500	2.5	694	2.5	694
W24DO-D D24 LD LIC	2.2	916	0.0	0	0.0	0
W25EF-D D25 LD CP	15.5	15,061	1.2	703	1.2	703

Interference to BLANK0000004264 LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	62.6 km
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	24.4
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	43.8
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	16.7
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	102.1
	W24DO-D	D24	LD	LIC	SION FARM, ST CROIX, VI	BLANK0000010845	166.3
	W25EF-D	D25	LD	LIC	TOA BAJA, PR	BLDTL20140611AAU	0.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4457.4	2,242,611	4154.0	2,088,260	3108.4	1,145,893	3108.4	1,145,893	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W23EM-D D23 LD LIC	0.5	665			0.0	0
WXWZ-LD D23 LD LIC	20.9	3,998	3.4	703	3.4	703
WVSN D23 DT CP	7.9	2,617	1.5	472	1.5	472
WUJA D24 DT CP	1002.8	917,061	680.3	715,422	680.3	715,422

W24DW-D D24 LD LIC	14.5	3,500	2.5	694	2.5	694
W24DO-D D24 LD LIC	2.2	916	0.0	0	0.0	0
W25EF-D D25 LD LIC	325.4	218,084	34.7	22,888	34.7	22,888

Interference to BLANK0000010481 LIC scenario 1

**IX: 2.90% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	
Undesireds:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	39.8 km
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	84.8
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	87.7
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	85.5
	W24EI-D	D24	LD	LIC	CAYEY, PR	BLANK0000004264	102.1
	W24DO-D	D24	LD	LIC	SION FARM, ST CROIX, VI	BLANK0000010845	82.2
	W25EF-D	D25	LD	CP	TOA BAJA, PR	BLANK0000036602	83.1

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	5216.7	149,537	5113.3	140,101	3910.8
					130,457
					3870.9
					126,678
					1.02
					2.90

Undesired	Total IX	Unique IX, before	Unique IX, after
W23EM-D D23 LD LIC	175.0	6,426	39.9
WXWZ-LD D23 LD LIC	0.2	0	0.0
WUJA D24 DT CP	895.2	8,439	449.5
W24EI-D D24 LD LIC	113.6	31	6.4
W24DO-D D24 LD LIC	641.3	1,289	300.9

Interference to proposal scenario 1

11.83% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	
Undesireds:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	74.1
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	116.3
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8

Service area		Terrain-limited		IX-free	Percent IX	
7512.3	349,261	7295.9	314,496	4204.2	277,277	42.38 11.83

Undesired	Total IX	Unique IX	Prcnt Unique IX
WVDO-LD D22 LD LIC 44.4	1,810	0	0.00 0.00
WMNS-LD D22 LD LIC 167.3	3,206	1,810	0.44 0.58
WXWZ-LD D23 LD LIC 1386.5	2,233	2,130	8.19 0.68
WVSN D23 DT CP 2224.6	31,793	27,845	20.88 8.85
WCVI-TV D23 DT CP 120.4	49	4	0.19 0.00
WUJA D24 DT CP 14.1	607	23	0.01 0.01
W24DW-D D24 LD LIC 183.8	2,286	1,279	0.26 0.41

Interference to proposal scenario 2
11.83% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	

Undesireds:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	74.1
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	116.3
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8

Service area		Terrain-limited		IX-free	Percent IX	
7512.3	349,261	7295.9	314,496	4204.2	277,277	42.38 11.83

Undesired	Total IX	Unique IX	Prcnt Unique IX
WVDO-LD D22 LD LIC 44.4	1,810	0	0.00 0.00
WMNS-LD D22 LD LIC 167.3	3,206	1,810	0.44 0.58
WXWZ-LD D23 LD LIC 1386.5	2,233	2,130	8.19 0.68
WVSN D23 DT CP 2224.6	31,793	27,845	20.88 8.85
WCVI-TV D23 DT LIC 120.4	49	4	0.19 0.00
WUJA D24 DT CP 14.1	607	23	0.01 0.01
W24DW-D D24 LD LIC 183.8	2,286	1,279	0.26 0.41

Interference to proposal scenario 3
11.83% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	
Undesireds:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
	WMNS-LD	D22	LD	LIC	CHARLOTTE AMALIE, VI	BLANK0000008100	74.1
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLCDT20090625AAH	116.3
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8

	Service area	Terrain-limited	IX-free	Percent IX
7512.3	349,261	7295.9	314,496	4218.2
			277,281	42.18 11.83

Undesired	Total IX	Unique IX	Prcnt Unique IX
WVDO-LD D22 LD LIC	44.4 1,810	0.0 0	0.00 0.00
WMNS-LD D22 LD LIC	167.3 3,206	35.3 1,810	0.48 0.58
WXWZ-LD D23 LD LIC	1386.5 2,233	601.5 2,130	8.24 0.68
WVSN D23 DT CP	2224.6 31,793	1524.2 27,887	20.89 8.87
WCVI-TV D23 DT LIC	6.2 0	0.0 0	0.00 0.00
WUJA D24 DT CP	14.1 607	0.5 23	0.01 0.01
W24DW-D D24 LD LIC	183.8 2,286	33.0 1,279	0.45 0.41

Interference to proposal scenario 4
11.26% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	
Undesireds:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
	WCVI-TV	D23	DT	CP	CHRISTIANSTED, VI	BLANK0000035961	116.3
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8

	Service area	Terrain-limited	IX-free	Percent IX
7512.3	349,261	7295.9	314,496	4236.5
			279,087	41.93 11.26

Undesired	Total IX	Unique IX	Prcnt Unique IX
WVDO-LD D22 LD LIC	44.4 1,810	0.0 0	0.00 0.00
WXWZ-LD D23 LD LIC	1386.5 2,233	603.7 2,130	8.27 0.68

WVSN D23 DT CP	2224.6	31,793	1533.4	29,075	21.02	9.24
WCVI-TV D23 DT CP	120.4	49	17.0	4	0.23	0.00
WUJA D24 DT CP	14.1	607	10.9	23	0.15	0.01
W24DW-D D24 LD LIC	183.8	2,286	39.0	1,445	0.53	0.46

Interference to proposal scenario 5
11.26% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	
Undesireds:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	116.3
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8

	Service area	Terrain-limited	IX-free	Percent IX
	7512.3	349,261	7295.9	314,496
			4236.5	279,087
				41.93
				11.26

Undesired	Total IX	Unique IX	Prcnt Unique IX
WVDO-LD D22 LD LIC	44.4	1,810	0.0
WXWZ-LD D23 LD LIC	1386.5	2,233	603.7
WVSN D23 DT CP	2224.6	31,793	1533.4
WCVI-TV D23 DT LIC	120.4	49	17.0
WUJA D24 DT CP	14.1	607	10.9
W24DW-D D24 LD LIC	183.8	2,286	39.0

Interference to proposal scenario 6
11.26% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W23EM-D	D23	LD	LIC	CEIBA, PR	BLANK0000010679	
Undesireds:	WVDO-LD	D22	LD	LIC	CAROLINA, PR	BLDTL20131108AIF	18.9 km
	WXWZ-LD	D23	LD	LIC	GUAYAMA, PR	BLDTL20100324ABD	45.5
	WVSN	D23	DT	CP	HUMACAO, PR	BLANK0000034762	18.8
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLCDT20090625AAH	116.3
	WUJA	D24	DT	CP	CAGUAS, PR	BLANK0000034758	45.9
	W24DW-D	D24	LD	LIC	CULEBRA, PR	BLANK0000010481	39.8

Service area		Terrain-limited		IX-free		Percent IX	
7512.3	349,261	7295.9	314,496	4253.5	279,091	41.70	11.26
Undesired		Total IX		Unique IX		Prcnt Unique IX	
WVDO-LD D22 LD LIC	44.4	1,810	0.0	0	0.00	0.00	
WXWZ-LD D23 LD LIC	1386.5	2,233	625.4	2,130	8.57	0.68	
WVSN D23 DT CP	2224.6	31,793	1533.9	29,117	21.02	9.26	
WCVI-TV D23 DT LIC	6.2	0	0.0	0	0.00	0.00	
WUJA D24 DT CP	14.1	607	10.9	23	0.15	0.01	
W24DW-D D24 LD LIC	183.8	2,286	59.7	1,445	0.82	0.46	

TVSTUDY PRE-REPACK W23EM-D ON CH 32, NEW SITE AT 23 MILES FROM LICENSED SITE

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: BLANK0000010679 #1324, Model: Longley-Rice

Start: 2018.05.30 15:00:59

Study created: 2018.05.30 15:00:58

Study build station data: LMS TV 2018-05-30

Proposal: W23EM-D D32 LD LIC CEIBA, PR

File number: BLANK0000010679

Facility ID: 181818

Station data: User record

Record ID: 554

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

Individual records excluded:

0000054011 W34ED-D D32 LD APP *P TRUJILLO ALTO, PR BLANK0000054011 - Amended to Ch. 35, New Site on 5/30/18

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:	W23EM-D	D32	LD	LIC	CEIBA, PR	BLANK0000010679	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	
W23EM-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:	W23EM-D	D32	LD	LIC	CEIBA, PR	BLANK0000010679	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
W23EM-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

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	
Undesireds:	W23EM-D	D32	LD	LIC	CEIBA, PR	BLANK0000010679	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	43851.3	1,871,899	43844.1 1,863,562	0.02 0.45

Undesired		Total IX	Unique IX, before	Unique IX, after
W23EM-D D32 LD LIC	7.1	8,337		7.1 8,337

Interference to BLCDT20090610ABH LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRUA	D33	DT	LIC	FAJARDO, PR	BLCDT20090610ABH	
Undesireds:	W23EM-D	D32	LD	LIC	CEIBA, PR	BLANK0000010679	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	25736.8	2,628,305	25731.4 2,622,048	0.02 0.24

Undesired		Total IX	Unique IX, before	Unique IX, after
W23EM-D D32 LD LIC	5.4	6,257		5.4 6,257
WELU D34 DT LIC	15.6	0	15.6 0	15.6 0

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W23EM-D	D32	LD	LIC	CEIBA, PR	BLANK0000010679	
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

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	W23EM-D	D32	LD	LIC	CEIBA, PR	BLANK0000010679	
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
0.14	0.09					1.5	757