DISPLACEMENT QUALIFICATION OF W44DH-D AND

WAIVER REQUEST FOR DISPLACEMENT APPLICATION

W44DH-D is currently licensed on out of the core channel 44, thus by definition displaced. As shown in the included TVStudy interference analysis, the proposed W44DH-D facility in CH 33 causes impermissible interference of 4.65% to Full Service station WRUA DT on CH 33.

As shown in the included Pre/Post Transition TVstudy interference analysis, the proposed W44DH-D facility in CH 33 is not predicted to cause impermissible interference to any Full Service or Class A TV stations in their post-repack channels, thus this displacement application and its grant is conditioned to WRUA DT having completed its transition to its post repack channel 16. A waiver of the FCC Rules is requested to make this application and its grant conditioned to WRUA DT transitioning to Post Transition channel.

The TVStudies of this application were done using a cell size of 0.5 km and Profile Increment of 0.1 km.

W44DH-D AMENDED FACILITY ON CH 33 PRE AND POST TRANSITION TVSTUDY, PSILP8BB ANT.

tvstudy v2.2.5 (4uoc83)
Database: 127.0.0.1, Study: BLANK0000053906 #1346, Model: Longley-Rice
Start: 2018.05.31 10:18:23

Study created: 2018.05.31 10:18:23

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

    Proposal: W44DH-D D33 LD APP CAGUAS, PR
 File number: BLANK0000053906
 Facility ID: 184034
Station data: User record
   Record ID: 576
     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	WWKQ-LD	N26-	TX	LIC	QUEBRADILLAS, PR	BLTTL20140508ABB	98.4 km
No	W29CB	N29	TX	LIC	ST. THOMAS, VI	BLTTL19971105II	112.1
No	W32DV-D	D32	LD	LIC	ARROYO, PR	BLANK0000010684	30.7
No	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	102.0
No	W32DZ-D	D32	LD	LIC	MAYAGUEZ, PR	BLDTL20140916ACJ	122.2
No	W34ED-D	D32	LD	APP	TRUJILLO ALTO, PR	BLANK0000054011	0.0
No	W28EQ-D	N32+	TX	LIC	UTUADO, PR	BLTT19890703IC	74.2
No	W33CY-D	D33	LD	LIC	ANASCO, PR	BLDTL20140404AAX	122.2
Yes	WRUA	D33	DT	LIC	FAJARDO, PR	BLCDT20090610ABH	24.9
Yes	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	WELU	D34	DT	LIC	AGUADILLA, PR	BLANK0000001308	102.7
No	W33CY-D	D34	LD	APP	ANASCO, PR	BLANK0000053622	102.0
Yes	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	18.2
No	WWKQ-LD	D34-	LD	APP	QUEBRADILLAS, PR	BLANK0000051821	98.4
Yes	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	12.7
No	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	63.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D33
       Mask: Full Service
   Latitude: 18 15 19.80 N (NAD83)
  Longitude: 66 1 24.50 W
Height AMSL: 161.5 m
       HAAT: 0.0 m
   Peak ERP: 5.00 kW
    Antenna: PSILP8BB 210.0 deg
Elev Pattrn: Generic

50.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.221 kW	86.9 m	20.1 km
45.0	0.265	15.5	12.3
90.0	0.265	5.9	12.3
135.0	1.92	17.6	20.3
180.0	4.61	-167.2	24.3
225.0	4.66	-120.0	24.4
270.0	3.96	-98.5	23.6
315.0	0.288	63.4	18.4

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 BLCDT20090610ABH LIC scenario 1 – WRUA PRE-TRANSITION LICENSED FACILITY
**IX: 4.65% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WRUA	D33	DT	LIC	FAJARDO, PR	BLCDT20090610ABH	
Undesireds:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	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	25630.7	2,506,100	0.41	4.65

Undesired	Total IX		Unique IX, before		Unique IX, after	
W44DH-D D33 LD APP	111.3	122,205			106.2	122,205
WELU D34 DT LIC	15.6	0	15.6	0	10.4	0

Interference to BLANK0000027870 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJWN-TV	D33	DT	CP	SAN SEBASTIAN, PR	BLANK0000027870	
Undesireds:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	102.0 km
	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	0.0
	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	120.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
35366.6	1,959,488	34990.5	1,740,406	34953.5	1,722,048	34948.3	1,716,043	0.01	0.35

Undesired	Total IX		Unique IX, before		Unique IX, after	
W44DH-D D33 LD APP	5.9	7,402			5.2	6,005
WIPM-TV D32 DT CP	29.8	1,346	29.8	1,346	29.8	1,346
WIDP D34 DT CP	7.1	17,012	7.1	17,012	6.4	15,615

Interference to BLANK0000025304 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WIDP	D34	DT	CP	GUAYAMA, PR	BLANK0000025304	
Undesireds:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	18.2 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	2,344,148	21765.6	2,341,032	0.01	0.13

Undesired	Total IX		Unique IX, before		Unique IX, after	
W44DH-D D33 LD APP	2.2	3,116			2.2	3,116
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 BLDTL20140404AAY LIC scenario 1

	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, before		IX-free, after		Percent New IX	
4302.1	1,865,709	3510.5	1,459,792	1525.4	803,872	1525.4	803,872	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
W44DH-D D33 LD APP	0.2	577			0.0	0
W33DD-D D33 LD LIC	1.5	0	0.0	0	0.0	0
W33CY-D D34 LD APP	7.6	0	0.0	0	0.0	0
WIDP D34 DT CP	1928.0	652,839	1732.5	647,928	1732.3	647,351
WWKQ-LD D34- LD APP	1.7	0	0.0	0	0.0	0
W34DY-D D34 LD LIC	244.0	7,992	57.1	3,081	57.1	3,081

Interference to BLDTL20140404AAY LIC scenario 2

	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, before		IX-free, after		Percent New IX	
4302.1	1,865,709	3510.5	1,459,792	1525.4	803,872	1525.4	803,872	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
W44DH-D D33 LD APP	0.2	577			0.0	0
W33DD-D D33 LD LIC	1.5	0	0.0	0	0.0	0
WIDP D34 DT CP	1928.0	652,839	1739.4	647,928	1739.1	647,351
WWKQ-LD D34- LD APP	1.7	0	0.0	0	0.0	0
W34DY-D D34 LD LIC	244.0	7,992	57.1	3,081	57.1	3,081

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	
Undesireds:	W34ED-D	D32	LD	APP	TRUJILLO ALTO, PR	BLANK0000054011	0.0 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		Percent IX	
1247.5	990,421	1081.0	803,727	1074.8	801,168	0.57	0.32

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WJWN-TV D33 DT CP	1.5	770	1.5	770	0.14	0.10
W33DD-D D33 LD LIC	2.0	119	0.5	0	0.05	0.00
WIDP D34 DT CP	3.9	1,775	2.2	1,550	0.21	0.19
W34DY-D D34 LD LIC	0.5	120	0.2	14	0.02	0.00

Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W44DH-D	D33	LD	APP	CAGUAS, PR	BLANK0000053906	
Undesireds:	WJWN-TV	D33	DT	CP	SAN SEBASTIAN, PR	BLANK0000027870	102.0 km
	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
	W34ED-D	D34	LD	LIC	TRUJILLO ALTO, PR	BLDTL20140404AAY	12.7
	W34DY-D	D34	LD	LIC	VIEQUES, PR	BLANK0000010492	63.1

Service area		Terrain-limited		IX-free		Percent IX	
1247.5	990,421	1081.0	803,727	1073.6	800,620	0.68	0.39

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WJWN-TV D33 DT CP	1.5	770	0.7	54	0.07	0.01
W33DD-D D33 LD LIC	2.0	119	0.5	0	0.05	0.00
WIDP D34 DT CP	3.9	1,775	2.2	1,550	0.21	0.19

W34ED-D D34 LD LIC	2.0	1,264	1.2	548	0.11	0.07
W34DY-D D34 LD LIC	0.5	120	0.2	14	0.02	0.00