

tvstudy v2.2.5 (4uoc83)  
Database: 127.0.0.1, Study: BLANK0000140666 #1237, Model: Longley-Rice  
Start: 2023.05.29 18:41:12

Study created: 2023.05.29 18:41:11

Study build station data: LMS TV 2023-05-27

Proposal: W16CW-D D16 LD APP VILLALBA, W16CW-D CP, PR  
File number: BLANK0000140666  
Facility ID: 181874  
Station data: User record  
Record ID: 746  
Country: U.S.

Individual records excluded:  
0000143636 W16EG-D D16 LD CP CIDRA, PR BLANK0000143636

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WMTJ	D15	DT	LIC	FAJARDO, PR	BLANK0000065487	82.0 km
No	WKHD-LD	D15	LD	LIC	Mayaguez, PR	BLANK0000126646	69.5
Yes	WUSP-LD	D15	LD	LIC	PONCE, PR	BLANK0000113352	0.0
Yes	W16DX-D	D16	LD	LIC	AGUADA, PR	BLANK0000080992	67.8
Yes	WRUA	D16	DT	LIC	FAJARDO, PR	BLANK0000185617	82.0
Yes	WVEO	D17	DT	LIC	AGUADILLA, PR	BLANK0000125650	67.8
No	W17EA-D	D17	LD	LIC	ARROYO, PR	BLANK0000156040	47.9
No	W17DL-D	D17	LD	LIC	TOA BAJA, PR	BLANK0000130803	50.5
No	W17EP-D	D17	LD	CP	YABUCOA, PR	BLANK0000131123	50.5
No	WVXF	D17	DT	LIC	CHARLOTTE AMALIE, VI	BLCDT20090623ABB	171.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D16  
Mask: Full Service  
Latitude: 18 9 7.40 N (NAD83)  
Longitude: 66 33 13.40 W  
Height AMSL: 1241.0 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: PSIUP6NC-15/16 Custom 0 deg  
Elev Pattn: Generic  
Elec Tilt: 1.50

48.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.012 kW	630.2 m	26.7 km
45.0	0.015	563.4	27.0
90.0	3.38	680.0	62.6
135.0	15.0	963.6	78.9
180.0	14.1	1048.7	80.4
225.0	15.0	938.1	78.3
270.0	3.50	500.9	58.4
315.0	0.012	707.5	27.8

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m Computed HAAT: 754 m

Distance to Canadian border: 2959.5 km

Distance to Mexican border: 3238.4 km

\*\*Proposal exceeds field strength limit at FCC monitoring station  
Conditions at FCC monitoring station: Santa Isabel PR  
Bearing: 130.8 degrees Distance: 24.9 km

ERP: 14.7 kW HAAT: 907.7 m Field strength: 84.2 dBu, 16.2 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 311.7 degrees Distance: 4425.8 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

Study cell size: 0.50 km  
Profile point spacing: 0.05 km

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

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Interference to BLANK0000065487 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WMTJ	D15	DT	LIC	FAJARDO, PR	BLANK0000065487	
Undesireds:	W16CW-D	D16	LD	APP	VILLALBA, W16CW-D CP, PR	BLANK0000140666	82.0 km
	WTIN-TV	D14	DT	LIC	PONCE, PR	BLANK0000148086	84.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
34026.4	3,142,708	32843.3	2,916,480	31635.8	2,837,481	31627.9 2,835,485	0.02 0.07
Undesired		Total IX		Unique IX, before		Unique IX, after	
W16CW-D	D16 LD APP	741.0	48,287			7.9 1,996	
WTIN-TV	D14 DT LIC	1207.5	78,999	1207.5	78,999	474.4 32,708	

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Interference to BLANK0000113352 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WUSP-LD	D15	LD	LIC	PONCE, PR	BLANK0000113352	
Undesireds:	W16CW-D	D16	LD	APP	VILLALBA, W16CW-D CP, PR	BLANK0000140666	0.0 km
	WVQS-LD	D14	LD	LIC	ISABEL SEGUNDA, PR	BLANK0000155001	82.0
	WTIN-TV	D14	DT	LIC	PONCE, PR	BLANK0000148086	2.9
	WMTJ	D15	DT	LIC	FAJARDO, PR	BLANK0000065487	82.0
	WKHD-LD	D15	LD	LIC	Mayaguez, PR	BLANK0000126646	69.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
7646.4	626,047	7423.3	550,973	6615.5	533,497	6615.2 533,497	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
W16CW-D	D16 LD APP	0.5	0			0.2 0	
WTIN-TV	D14 DT LIC	146.2	15,982	131.4	14,014	131.1 14,014	
WMTJ	D15 DT LIC	674.9	3,461	660.2	1,493	660.2 1,493	
WKHD-LD	D15 LD LIC	3.5	12	1.0	1	1.0 1	

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Interference to BLANK0000080992 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W16DX-D	D16	LD	LIC	AGUADA, PR	BLANK0000080992	
Undesireds:	W16CW-D	D16	LD	APP	VILLALBA, W16CW-D CP, PR	BLANK0000140666	67.8 km
	WMTJ	D15	DT	LIC	FAJARDO, PR	BLANK0000065487	145.1
	WRUA	D16	DT	LIC	FAJARDO, PR	BLANK0000185617	145.1
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
9010.6	870,132	8313.2	711,967	7201.5	675,539	6633.3 672,297	7.89 0.48
Undesired		Total IX		Unique IX, before		Unique IX, after	
W16CW-D	D16 LD APP	717.6	3,247			568.2 3,242	

WMTJ D15 DT LIC	0.2	306	0.0	0	0.0	0
WRUA D16 DT LIC	1111.7	36,428	1111.5	36,122	962.0	36,117

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Interference to BLANK0000185617 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WRUA	D16	DT	LIC	FAJARDO, PR	BLANK0000185617	
Undesireds:	W16CW-D	D16	LD	APP	VILLALBA, W16CW-D CP, PR	BLANK0000140666	82.0 km
	WMTJ	D15	DT	LIC	FAJARDO, PR	BLANK0000065487	0.1
	WVEO	D17	DT	LIC	AGUADILLA, PR	BLANK0000125650	145.1
	WVXF	D17	DT	LIC	CHARLOTTE AMALIE, VI	BLCDT20090623ABB	89.6
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
31561.4 2,983,068		30358.0 2,740,335		30338.8 2,738,123		27079.0 2,724,821	10.74 0.49
Undesired		Total IX		Unique IX, before		Unique IX, after	
W16CW-D D16 LD APP		3270.9 13,826				3259.8 13,302	
WMTJ D15 DT LIC		16.5 1,669		16.5 1,669		5.9 1,669	
WVEO D17 DT LIC		0.5 0		0.5 0		0.2 0	
WVXF D17 DT LIC		2.2 543		2.2 543		2.0 19	

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Interference to BLANK0000125650 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WVEO	D17	DT	LIC	AGUADILLA, PR	BLANK0000125650	
Undesireds:	W16CW-D	D16	LD	APP	VILLALBA, W16CW-D CP, PR	BLANK0000140666	67.8 km
	WRUA	D16	DT	LIC	FAJARDO, PR	BLANK0000185617	145.1
	WECN	D18	DT	LIC	NARANJITO, PR	BLCDT20090610ABG	95.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
15133.2 1,094,285		14518.1 954,076		14399.8 946,453		14358.1 945,816	0.29 0.07
Undesired		Total IX		Unique IX, before		Unique IX, after	
W16CW-D D16 LD APP		41.7 637				41.7 637	
WRUA D16 DT LIC		13.3 2,920		6.4 1,550		6.4 1,550	
WECN D18 DT LIC		111.9 6,073		105.0 4,703		105.0 4,703	

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Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W16CW-D	D16	LD	APP	VILLALBA, W16CW-D CP, PR	BLANK0000140666	
Undesireds:	WMTJ	D15	DT	LIC	FAJARDO, PR	BLANK0000065487	82.0 km
	W16DX-D	D16	LD	LIC	AGUADA, PR	BLANK0000080992	67.8
	WRUA	D16	DT	LIC	FAJARDO, PR	BLANK0000185617	82.0
	WVEO	D17	DT	LIC	AGUADILLA, PR	BLANK0000125650	67.8
	W17EA-D	D17	LD	LIC	ARROYO, PR	BLANK0000156040	47.9
	W17DL-D	D17	LD	LIC	TOA BAJA, PR	BLANK0000130803	50.5
Service area		Terrain-limited		IX-free		Percent IX	
11036.5 1,185,745		10304.6 954,493		9639.2 940,722		6.46 1.44	
Undesired		Total IX		Unique IX		Prct Unique IX	
WMTJ D15 DT LIC		7.4 3,346		0.0 0		0.00 0.00	
W16DX-D D16 LD LIC		34.8 1,525		27.6 1,392		0.27 0.15	
WRUA D16 DT LIC		631.4 11,199		617.6 7,797		5.99 0.82	
WVEO D17 DT LIC		0.7 3		0.0 0		0.00 0.00	
W17EA-D D17 LD LIC		6.4 1,180		6.4 1,180		0.06 0.12	
W17DL-D D17 LD LIC		0.2 5		0.0 0		0.00 0.00	