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Consulting Engineer

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: WUJA PRO-120KW-ANT44 AMSL533.4 1X.1, Model: Longley-Rice
Start: 2022.03.29 22:16:13

Study created: 2022.03.29 22:16:13

Study build station data: LMS TV 2022-03-29

Proposal: WUJA-PROP D24 DT APP CAGUAS, PR
File number: WUJA PRO-120KW-ANT44 AMSL533.4 OTC
Facility ID: 8156
Station data: User record
Record ID: 760
Country: U.S.
Zone: II

Search options:

Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WWSN	D23	DT	LIC	HUMACAO, PR	BLANK0000077885	27.1 km
No	WQSJ-CD	D23	DC	LIC	QUEBRADILLAS, PR	BLANK0000060641	113.7
No	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	157.4
No	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	71.3
No	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	71.3
Yes	WQHA	D25	DT	LIC	AGUADA, PR	BLANK0000145869	69.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D24
Latitude: 18 16 40.80 N (NAD83)
Longitude: 66 6 31.60 W
Height AMSL: 533.4 m
HAAT: 314.9 m
Peak ERP: 120 kW
Antenna: DIE TLP-24W/VP-R (SP) 44.0 deg
Elev Pattn: Generic
Elec Tilt: 1.50

39.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	106 kW	469.1 m	93.9 km
45.0	120	418.6	91.7
90.0	108	418.8	90.9
135.0	100	381.9	88.2
180.0	36.0	127.0	61.4
225.0	7.04	99.3	51.6
270.0	38.6	163.6	64.7
315.0	103	441.2	91.8

Distance to Canadian border: 2946.2 km

Distance to Mexican border: 3277.4 km

Conditions at FCC monitoring station: Santa Isabel PR
Bearing: 222.9 degrees Distance: 41.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 311.4 degrees Distance: 4451.7 km

Study cell size: 1.00 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 BLANK0000077885 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVSN	D23	DT	LIC	HUMACAO, PR	BLANK0000077885	
Undesireds:	WUJA	D24	DT	BL	CAGUAS, PR	DTVBL8156	27.1 km
	WUJA-PROP	D24	DT	APP	CAGUAS, PR	WUJA PRO-120KW-ANT44 A	27.1
	WSJN-CD	D22	DC	LIC	SAN JUAN, PR	BLANK0000160694	33.2
	WQSJ-CD	D23	DC	LIC	QUEBRADILLAS, PR	BLANK0000060641	140.7
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	132.6
	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	97.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26309.7 2,945,963	24050.4 2,634,755	23830.5 2,610,078	23812.7 2,600,068	0.07 0.38

Undesired	Total IX	Unique IX, before	Unique IX, after
WUJA D24 DT BL	87.6	17,179	46.2 11,752
WUJA-PROP D24 DT APP	105.3	27,189	64.0 21,762
WSJN-CD D22 DC LIC	48.2	8,937	7.9 3,510
WQSJ-CD D23 DC LIC	19.7	3,988	9.8 3,920
WCVI-TV D23 DT LIC	20.7	68	0.0 0
WQQZ-CD D24 DC LIC	113.6	0	107.7 0

Interference to BLANK0000077885 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVSN	D23	DT	LIC	HUMACAO, PR	BLANK0000077885	
Undesireds:	WUJA	D24	DT	BL	CAGUAS, PR	DTVBL8156	27.1 km
	WUJA-PROP	D24	DT	APP	CAGUAS, PR	WUJA PRO-120KW-ANT44 A	27.1
	WSJN-CD	D22	DC	LIC	SAN JUAN, PR	BLANK0000160694	33.2
	WQSJ-CD	D23	DC	LIC	QUEBRADILLAS, PR	BLANK0000060641	140.7
	WCVI-TV	D23	DT	LIC	CHRISTIANSTED, VI	BLANK0000053850	132.6
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	97.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26309.7 2,945,963	24050.4 2,634,755	23778.1 2,610,078	23760.4 2,600,068	0.07 0.38

Undesired	Total IX	Unique IX, before	Unique IX, after
WUJA D24 DT BL	87.6	17,179	46.2 11,752
WUJA-PROP D24 DT APP	105.3	27,189	64.0 21,762
WSJN-CD D22 DC LIC	48.2	8,937	7.9 3,510
WQSJ-CD D23 DC LIC	19.7	3,988	9.8 3,920
WCVI-TV D23 DT LIC	20.7	68	0.0 0
WQQZ-CD D24 DC CP	166.0	0	160.0 0

Interference to BLANK0000145869 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WQHA	D25	DT	LIC	AGUADA, PR	BLANK0000145869	
Undesireds:	WUJA	D24	DT	BL	CAGUAS, PR	DTVBL8156	69.1 km
	WUJA-PROP	D24	DT	APP	CAGUAS, PR	WUJA PRO-120KW-ANT44 A	69.1
	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	17.3
	WIPR-TV	D26	DT	CP	SAN JUAN, PR	BLANK0000034681	76.3
Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
16924.2	3,238,028	12639.1	2,487,395	11811.6	2,007,094	11803.7	1,997,127 0.07 0.50
Undesired			Total IX		Unique IX, before	Unique IX, after	
WUJA D24 DT BL	122.1		313,731		34.5	69,568	
WUJA-PROP D24 DT APP	169.3		418,546			42.3 79,535	
WQQZ-CD D24 DC LIC	611.9		30,959		123.3	18,476 123.3 18,476	
WIPR-TV D26 DT CP	669.7		392,257		93.5	135,611 54.2 40,763	

Interference to BLANK0000145869 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WQHA	D25	DT	LIC	AGUADA, PR	BLANK0000145869	
Undesireds:	WUJA	D24	DT	BL	CAGUAS, PR	DTVBL8156	69.1 km
	WUJA-PROP	D24	DT	APP	CAGUAS, PR	WUJA PRO-120KW-ANT44 A	69.1
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	17.3
	WIPR-TV	D26	DT	CP	SAN JUAN, PR	BLANK0000034681	76.3
Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
16924.2	3,238,028	12639.1	2,487,395	11805.7	2,007,094	11797.8	1,997,127 .07 0.50
Undesired			Total IX		Unique IX, before	Unique IX, after	
WUJA D24 DT BL	122.1		313,731		34.5	69,568	
WUJA-PROP D24 DT APP	169.3		418,546			42.3 79,535	
WQQZ-CD D24 DC CP	631.6		31,982		129.2	18,476 129.2 18,476	
WIPR-TV D26 DT CP	669.7		392,257		79.7	134,588 40.4 39,740	

Interference to proposal scenario 1
0.50% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WUJA-PROP	D24	DT	APP	CAGUAS, PR	WUJA PRO-120KW-ANT44 A	
Undesireds:	WVSN	D23	DT	LIC	HUMACAO, PR	BLANK0000077885	27.1 km
	WQQZ-CD	D24	DC	LIC	PONCE, PR	BLANK0000058704	71.3
	WQHA	D25	DT	LIC	AGUADA, PR	BLANK0000145869	69.1
Service area	Terrain-limited		IX-free		Percent IX		
20419.4	2,772,777	17374.2	2,553,886	16577.7	2,541,096	4.58	0.50
Undesired			Total IX		Unique IX	Prcnt Unique IX	
WVSN D23 DT LIC	742.2		12,499		318.6	12,499 1.83 0.49	
WQQZ-CD D24 DC LIC	469.0		0		45.4	0 0.26 0.00	
WQHA D25 DT LIC	8.9		291		8.9	291 0.05 0.01	

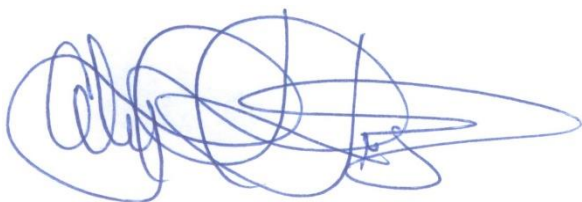
Interference to proposal scenario 2
0.50% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WUJA-PROP	D24	DT	APP	CAGUAS, PR	WUJA PRO-120KW-ANT44 A	

Undesireds:	WWSN	D23	DT	LIC	HUMACAO, PR	BLANK0000077885	27.1 km
	WQQZ-CD	D24	DC	CP	PONCE, PR	BLANK0000127578	71.3
	WQHA	D25	DT	LIC	AGUADA, PR	BLANK0000145869	69.1

Service area		Terrain-limited		IX-free		Percent IX	
20419.4	2,772,777	17374.2	2,553,886	16536.3	2,541,096	4.82	0.50

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WWSN	D23 DT LIC	742.2	12,499	270.3	12,499	1.56	0.49
WQQZ-CD	D24 DC CP	558.8	0	86.8	0	0.50	0.00
WQHA	D25 DT LIC	8.9	291	8.9	291	0.05	0.01



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