tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: W31DV-D AZ=120 15K .5X.14, Model: Longley-Rice
Start: 2018.09.15 21:58:53

Study created: 2018.09.15 21:58:53

Study build station data: LMS TV 2018-09-14

    Proposal: W31DV-D D31 LD APP GUAYAMA, PR
 File number: W31DV-D AZ=120 15K
 Facility ID: 188711
Station data: User record
   Record ID: 386
     Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WSJX-LP	N24z	TX	LIC	AQUADILLA, PR	BLTTL20050407AAH	113.6 km
Yes	WRFB	D30	DT	CP	CAROLINA, PR	BLANK0000034795	1.4
No	W44CS-D	D30	LD	CP	GUAYAMA, PR	BLANK0000053624	26.2
No	W30DB-D	D30	LD	CP	MAYAGUEZ, PR	BNPDTL20090828ADX	108.3
No	WNTE-LD	D30	LD	APP	MAYAGUEZ, PR	BLANK0000053300	95.7
Yes	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	95.7
No	W31DL-D	D31	LD	LIC	PONCE, PR	BLDTL20090810ABM	62.7
Yes	W33DD-D	D31	LD	CP	TUTU, ST THOMAS, VI	BLANK0000053904	120.4
No	W32DV-D	D32	LD	LIC	ARROYO, PR	BLANK0000010684	30.5
Yes	W23EM-D	D32	LD	CP	CEIBA, PR	BLANK0000054704	6.6
Yes	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	95.7
No	W32DZ-D	D32	LD	LIC	MAYAGUEZ, PR	BLDTL20140916ACJ	115.7
No	W28EQ-D	N32+	TX	LIC	UTUADO, PR	BLTT19890703IC	67.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D31
       Mask: Full Service
   Latitude:  18 15 54.00 N (NAD83)
  Longitude:  66  5  6.00 W
Height AMSL: 450.0 m
       HAAT: 236.6 m
   Peak ERP: 15.0 kW
    Antenna: PSI-PSILP12APR (ID 20357) 120.0 deg
Elev Pattrn: Generic
  Elec Tilt: 1.50
```

50.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	4.23 kW	369.5 m	52.9 km
45.0	14.5	382.2	60.1
90.0	10.9	377.6	58.3
135.0	8.94	310.5	53.9
180.0	14.8	49.2	35.2
225.0	8.09	16.0	27.1
270.0	0.481	59.0	20.6
315.0	0.542	328.8	39.3

Distance to Canadian border: 2947.7 km

Distance to Mexican border: 3280.2 km

Conditions at FCC monitoring station: Santa Isabel PR
Bearing: 226.8 degrees Distance: 42.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 311.4 degrees Distance: 4454.5 km

Study cell size: 0.50 km
Profile point spacing: 0.14 km

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

Interference to BLANK0000034795 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WRFB	D30	DT	CP	CAROLINA, PR	BLANK0000034795	
Undesireds:	W31DV-D	D31	LD	APP	GUAYAMA, PR	W31DV-D AZ=120 15K	1.4 km
	WORA-TV	D29	DD	LIC	MAYAGUEZ, PR	BLANK0000003621	95.4
	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	94.8

Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
21013.8	2,706,681	16883.3	2,436,723	16879.6	2,436,711	16877.6	2,435,710	0.01	0.04

Undesired	Total IX		Unique IX, before		Unique IX, after	
W31DV-D D31 LD APP	2.0	1,001			2.0	1,001
WORA-TV D29 DD LIC	3.0	0	0.5		0	0.5	0
WNJX-TV D31 DT CP	3.2	12	0.7		12	0.7	12

Interference to BLANK0000029719 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	
Undesireds:	W31DV-D	D31	LD	APP	GUAYAMA, PR	W31DV-D AZ=120 15K WIP	95.7 km
	WRFB	D30	DT	CP	CAROLINA, PR	BLANK0000034795	94.8
	WIPM-TV	D32	DT	CP	MAYAGUEZ, PR	BLANK0000024551	0.1

Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
39378.4	1,629,023	38907.4	1,455,965	38893.9	1,447,409	38836.6	1,446,709	0.15	0.05

Undesired	Total IX		Unique IX, before		Unique IX, after	
W31DV-D D31 LD APP	57.8	700			57.3	700
WRFB D30 DT CP	6.6	6,037	6.6	6,037	6.2	6,037
WIPM-TV D32 DT CP	6.9	2,519	6.9	2,519	6.9	2,519

Interference to BLANK0000053904 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W33DD-D	D31	LD	CP	TUTU, ST THOMAS, VI	BLANK0000053904	
Undesireds:	W31DV-D	D31	LD	APP	GUAYAMA, PR	W31DV-D AZ=120 15K	120.4 km

Service area	Terrain-limited		IX-free, before		X-free, after		Percent New IX	
9242.3	66,791	8996.0	66,250	8996.0	66,250	8985.0	65,435	0.12	1.23

Undesired	Total IX		Unique IX, before		Unique IX, after	
W31DV-D D31 LD APP	11.1	815			11.1	815

Interference to BLANK0000054704 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W23EM-D	D32	LD	CP	CEIBA, PR	BLANK0000054704	
Undesireds:	W31DV-D	D31	LD	APP	GUAYAMA, PR	W31DV-D AZ=120 15K	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, before		IX-free, after		Percent New IX	
1256.3	998,593	1079.7	791,178	1078.0	90,713	1060.0	781,105	1.67	1.22

Undesired	Total IX	Unique IX, before		Unique IX, after	
W31DV-D D31 LD APP	19.5	10,073	18.0	9,608	
WIPM-TV D32 DT CP	1.7	465	1.7	465	0.2	0

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:	W31DV-D	D31	LD	APP	GUAYAMA, PR	W31DV-D AZ=120 15K	95.7 km
	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	0.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
44277.1	2,196,114	43858.9	1,885,205	43858.4	1,884,279	43854.0	1,879,269	0.01	0.27

Undesired	Total IX	Unique IX, before		Unique IX, after	
W31DV-D D31 LD APP	4.4	5,010		4.4	5,010
WNJX-TV D31 DT CP	0.5	926	0.5	926	0.5	926

Interference to proposal scenario 1
6.50% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W31DV-D	D31	LD	APP	GUAYAMA, PR	W31DV-D AZ=120 15K WIP	
Undesireds:	WRFB	D30	DT	CP	CAROLINA, PR	BLANK0000034795	1.4 km
	WNJX-TV	D31	DT	CP	MAYAGUEZ, PR	BLANK0000029719	95.7
	W31DL-D	D31	LD	LIC	PONCE, PR	BLDTL20090810ABM	62.7
	W33DD-D	D31	LD	CP	TUTU, ST THOMAS, VI	BLANK0000053904	120.4
	W32DV-D	D32	LD	LIC	ARROYO, PR	BLANK0000010684	30.5

Service area		Terrain-limited		IX-free		Percent IX	
6624.0	2,226,291	5311.0	2,052,996	4542.9	1,919,547	14.46	6.50

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WRFB D30 DT CP	145.9	124,911	104.6	122,243	1.97	5.95
WNJX-TV D31 DT CP	362.7	4,745	345.2	2,251	6.50	0.11
W31DL-D D31 LD LIC	0.5	224	0.2	3	0.00	0.00
W33DD-D D31 LD CP	315.8	6,458	265.1	6,063	4.99	0.30
W32DV-D D32 LD LIC	0.2	0	0.2	0	0.00	0.00