

INTERFERENCE ANALYSIS FOR PROPOSED WTIN-TV PONCE, PR (CHANNEL 14)

tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: wtin14am3, Model: Longley-Rice

Study build station data: LMS TV 2018-02-04 (129)

Proposal: WTIN14AM3 D14 DT APP PONCE, PR
File number: wtin14am3
Facility ID: 26681
Station data: User record
Record ID: 2141
Country: U.S.
Zone: II

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WMTJ	D15	DT	CP	FAJARDO, PR	BLANK0000028080	84.0 km
Yes	WMTJ	D15	DT	BL	FAJARDO, PR	DTVBL2174	83.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D14
Latitude: 18 10 2.80 N (NAD83)
Longitude: 66 34 34.60 W
Height AMSL: 1353.0 m
HAAT: 848.0 m
Peak ERP: 750 kW
Antenna: DIE-TFU-24JSC S180 0.0 deg
Elev Pattn: Generic
Elec Tilt: 1.75

38.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	295 kW	808.5 m	123.3 km
45.0	595	753.4	128.4
90.0	750	517.8	118.0
135.0	595	994.7	138.4
180.0	295	1163.9	136.3
225.0	210	948.5	124.5
270.0	270	627.4	114.5
315.0	210	966.9	125.1

ERP exceeds maximum

ERP: 750 kW ERP maximum: 180 kW (Proposal is compliant with 'largest station in the market' rule.)

Distance to Canadian border: 2957.8 km

Distance to Mexican border: 3235.6 km

**Proposal is within coordination distance of FCC monitoring station
**Proposal exceeds field strength limit at FCC monitoring station
Conditions at FCC monitoring station: Santa Isabel PR
Bearing: 130.3 degrees Distance: 27.9 km
ERP: 625 kW HAAT: 899.2 m Field strength: 97.9 dBu, 78.5 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 311.7 degrees Distance: 4422.9 km

No land mobile station failures found

Study cell size: 1.00 km (Higher resolution cell size requested.)

Profile point spacing: 0.50 km (Higher resolution terrain profile point spacing is requested.)

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

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----- Interference to BLANK0000028080 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMTJ	D15	DT	CP	FAJARDO, PR	BLANK0000028080	
Undesireds:	WTIN-TV	D14	DT	BL	PONCE, PR	DTVBL26681	84.0 km
	WTIN14AM3	D14	DT	APP	PONCE, PR	wtin14am3	84.0
	WRUA	D16	DT	CP	FAJARDO, PR	BLANK0000025646	0.1
	WQQZ-CD	D16	DC	BL	PONCE, PR	DTVBL32142	104.1
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
34024.7	3,143,320	32799.6	2,887,154	31514.6	2,797,682	31205.6 2,787,599	0.98 0.36
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTIN-TV D14 DT BL		1279.0	87,818	571.2	55,489		
WTIN14AM3 D14 DT APP		1589.0	98,169			880.3 65,572	
WRUA D16 DT CP		3.0	326	3.0	326	3.0 326	
WQQZ-CD D16 DC BL		710.7	33,657	3.0	1,328	2.0 1,060	

----- Interference to BLANK0000028080 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMTJ	D15	DT	CP	FAJARDO, PR	BLANK0000028080	
Undesireds:	WTIN-TV	D14	DT	BL	PONCE, PR	DTVBL26681	84.0 km
	WTIN14AM3	D14	DT	APP	PONCE, PR	wtin14am3	84.0
	WRUA	D16	DT	BL	FAJARDO, PR	DTVBL15320	0.1
	WQQZ-CD	D16	DC	BL	PONCE, PR	DTVBL32142	104.1
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
34024.7	3,143,320	32799.6	2,887,154	31514.6	2,797,682	31205.6 2,787,599	0.98 0.36
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTIN-TV D14 DT BL		1279.0	87,818	571.2	55,489		
WTIN14AM3 D14 DT APP		1589.0	98,169			880.3 65,572	
WRUA D16 DT BL		3.0	326	3.0	326	3.0 326	
WQQZ-CD D16 DC BL		710.7	33,657	3.0	1,328	2.0 1,060	

----- Interference to DTVBL2174 BL scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMTJ	D15	DT	BL	FAJARDO, PR	DTVBL2174	
Undesireds:	WTIN-TV	D14	DT	BL	PONCE, PR	DTVBL26681	83.9 km
	WTIN14AM3	D14	DT	APP	PONCE, PR	wtin14am3	83.9
	WRUA	D16	DT	CP	FAJARDO, PR	BLANK0000025646	0.1
	WQQZ-CD	D16	DC	BL	PONCE, PR	DTVBL32142	104.1
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
34012.7	3,143,157	32788.6	2,885,227	31498.8	2,793,939	31189.8 2,783,257	0.98 0.38
Undesired			Total IX		Unique IX, before	Unique IX, after	
WTIN-TV D14 DT BL		1283.0	88,788	572.2	56,012		
WTIN14AM3 D14 DT APP		1593.0	99,738			881.2 66,694	
WRUA D16 DT CP		3.9	1,172	3.9	1,172	3.9 1,172	
WQQZ-CD D16 DC BL		713.7	34,104	3.0	1,328	2.0 1,060	

----- Interference to DTVBL2174 BL scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMTJ	D15	DT	BL	FAJARDO, PR	DTVBL2174	
Undesireds:	WTIN-TV	D14	DT	BL	PONCE, PR	DTVBL26681	83.9 km
	WTIN14AM3	D14	DT	APP	PONCE, PR	wtin14am3	83.9
	WRUA	D16	DT	BL	FAJARDO, PR	DTVBL15320	0.1
	WQQZ-CD	D16	DC	BL	PONCE, PR	DTVBL32142	104.1
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
34012.7	3,143,157	32788.6	2,885,227	31498.8	2,793,939	31189.8 2,783,257	0.98 0.38
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WTIN-TV D14 DT BL		1283.0	88,788	572.2	56,012		
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WRUA D16 DT BL		3.9	1,172	3.9	1,172	3.9 1,172	
WQQZ-CD D16 DC BL		713.7	34,104	3.0	1,328	2.0 1,060	