tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Tyrone16d1kwDir0F, Model: Longley-Rice
Start: 2021.05.04 12:11:41

Study created: 2021.05.04 12:11:41

Study build station data: LMS TV 2021-05-04

    Proposal: W16EJ-D D16 LD APP Tyrone, PA
 Facility ID: 187454
Station data: User record
   Record ID: 2135
     Country: U.S.

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

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WPSU-TV	D15	DD	LIC	CLEARFIELD, PA	BLEDT20130614ACC	44.5 km
No	WFDC-DT	D15	DT	LIC	ARLINGTON, VA	BLANK0000041206	225.7
No	WCPB	D16	DT	CP	SALISBURY, MD	BLANK0000143851	350.5
No	WCPB	D16	DT	LIC	SALISBURY, MD	BLANK0000080044	350.5
No	WNYO-TV	D16	DT	LIC	BUFFALO, NY	BLANK0000136976	259.8
No	W16DR-D	D16	LD	CP	ELMIRA, NY	BNPDTL20100513ABR	188.1
No	WFNY-CD	D16	DC	LIC	GLOVERSVILLE, NY	BLANK0000068459	419.9
No	W16BE-D	D16	LD	LIC	HORNELL, ALFRED, NY	BLDTL20120216ADJ	181.7
No	WNYS-CD	D16	DC	LIC	ITHACA, NY	BLANK0000001083	242.4
No	WZLH-LD	D16	LD	LIC	SYRACUSE, NY	BLANK0000118420	314.3
No	WRAP-LP	D16-	LD	CP	CLEVELAND, OH	BLANK0000137492	291.6
No	WOSU-TV	D16	DT	LIC	COLUMBUS, OH	BLANK0000111772	394.0
No	WHLZ-LD	D16	LD	CP	Harrisburg, PA	BLANK0000104818	124.9
No	WDUM-LD	D16	LD	LIC	Philadelphia, PA	BLANK0000124581	272.6
Yes	WINP-TV	D16	DT	LIC	PITTSBURGH, PA	BLANK0000098050	141.9
No	WVAW-LD	D16	LD	LIC	CHARLOTTESVILLE, VA	BLDTL20090218AEG	305.7
No	WTKR	D16	DT	LIC	NORFOLK, VA	BLANK0000118339	463.7
No	WUSV-LD	D16	LD	CP	Fairmont, WV	BLANK0000072244	233.1

No	WUSV-LD	D16	LD	LIC	Fairmont, WV	BLDTL20140616AEQ	233.1
No	W41DK-D	D16	LD	CP	KEYSER, WV	BLANK0000035614	163.2
No	W16CV-D	D16	LD	LIC	PARKERSBURG, WV	BLDTL20140527AHW	304.7
No	W50ES-D	D17	LD	CP	ELMIRA, NY	BLANK0000071860	188.1
No	W16BE-D	D17	LD	CP	HORNELL, ALFRED, NY	BLANK0000052817	205.3
No	WJMB-CD	D17	DC	LIC	BUTLER, PA	BLDTA20121108ALX	133.6
No	WJMB-CD	D17	DC	CP	BUTLER, PA	BLANK0000131009	133.6
No	W17DU-D	D17	LD	LIC	DUBOIS, PA	BLANK0000143862	88.7
No	W17DU-D	D17	LD	CP	DUBOIS, PA	BLANK0000144003	42.3
No	WPHL-TV	D17	DT	LIC	PHILADELPHIA, PA	BLANK0000040408	272.3
No	WPHL-TV	D17	DT	CP	PHILADELPHIA, PA	BLANK0000127575	272.3
No	W30CO-D	D17	LD	CP	WHEELING, WV	BLANK0000054635	218.5

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:  40 43 54.40 N (NAD83)
  Longitude:  78 19 31.90 W
Height AMSL: 802.0 m
       HAAT: 0.0 m
   Peak ERP: 1.00 kW
    Antenna: Scala-2 Skewed 4DR4s (ID 1008142) 0.0 deg
Elev Pattrn: Generic
```

48.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.706 kW	297.4 m	41.3 km
45.0	0.509	172.8	33.2
90.0	1.00	334.0	45.0
135.0	0.446	426.9	43.6
180.0	0.007	392.0	19.6
225.0	0.003	103.1	8.5
270.0	0.202	279.4	33.7

315.0 0.897 302.3 42.8

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 288 m

Proposal 23.94 dBu contour does not cross Canadian border
Distance to Canadian border: 235.4 km

Distance to Mexican border: 2371.9 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 143.2 degrees Distance: 216.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 277.2 degrees Distance: 2267.5 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

Study cell size: 1.00 km
Profile point spacing: 1.00 km

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

Interference to BLEDT20130614ACC LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPSU-TV	D15	DD	LIC	CLEARFIELD, PA	BLEDT20130614ACC	
Undesireds:	W16EJ-D	D16	LD	APP	Tyrone, PA		44.5 km
	WBNF-CD	D15	DC	LIC	BUFFALO, NY	BLDTA20111130LWW	215.3

	Call	Chan	Svc	Status	City, State	File Number	Distance
	DWNYS-TV	D15	DT	BL	SYRACUSE, NY	DTVBL58725	269.2
	WEWS-TV	D15	DT	LIC	CLEVELAND, OH	BLCDT20091211ACS	275.2
	WFDC-DT	D15	DT	LIC	ARLINGTON, VA	BLANK0000041206	268.8
	WINP-TV	D16	DT	LIC	PITTSBURGH, PA	BLANK0000098050	148.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
36330.0	1,055,800	32728.3	876,646	31793.2	853,581	31790.2	851,842	0.01	0.20

Undesired		Total IX	Unique IX, before		Unique IX, after	
W16EJ-D D16 LD APP	3.0	1,739			3.0	1,739
WBNF-CD D15 DC LIC	6.0	542	1.0	365	1.0	365
DWNYS-TV D15 DT BL	132.4	568	95.2	435	95.2	435
WEWS-TV D15 DT LIC	470.4	13,201	397.7	10,472	397.7	10,472
WFDC-DT D15 DT LIC	364.6	8,649	312.5	8,201	312.5	8,201
WINP-TV D16 DT LIC	73.6	3,030	21.9	783	21.9	783

Interference to BLANK0000098050 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WINP-TV	D16	DT	LIC	PITTSBURGH, PA	BLANK0000098050	
Undesireds:	W16EJ-D	D16	LD	APP	Tyrone, PA		141.9 km
	WPSU-TV	D15	DD	LIC	CLEARFIELD, PA	BLEDT20130614ACC	148.5
	WNYO-TV	D16	DT	LIC	BUFFALO, NY	BLANK0000136976	299.3
	WOSU-TV	D16	DT	LIC	COLUMBUS, OH	BLANK0000111772	252.8
	WJMB-CD	D17	DC	LIC	BUTLER, PA	BLDTA20121108ALX	53.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
23334.8	2,935,783	22216.1	2,876,325	21852.1	2,851,109	21842.2	2,850,884	0.05	0.01

Undesired		Total IX	Unique IX, before		Unique IX, after	
W16EJ-D D16 LD APP	17.0	274			10.0	225
WPSU-TV D15 DD LIC	8.0	190	8.0	190	7.0	188
WNYO-TV D16 DT LIC	24.2	520	9.0	284	7.0	279
WOSU-TV D16 DT LIC	290.1	21,254	278.0	21,040	278.0	21,040
WJMB-CD D17 DC LIC	59.8	3,539	53.8	3,466	52.8	3,454

Interference to BLANK0000098050 LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WINP-TV	D16	DT	LIC	PITTSBURGH, PA	BLANK0000098050	
Undesireds:	W16EJ-D	D16	LD	APP	Tyrone, PA		141.9 km
	WPSU-TV	D15	DD	LIC	CLEARFIELD, PA	BLEDT20130614ACC	148.5
	WNYO-TV	D16	DT	LIC	BUFFALO, NY	BLANK0000136976	299.3
	WOSU-TV	D16	DT	LIC	COLUMBUS, OH	BLANK0000111772	252.8
	WJMB-CD	D17	DC	CP	BUTLER, PA	BLANK0000131009	53.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
23334.8	2,935,783	22216.1	2,876,325	21829.6	2,851,962	21818.6	2,851,725	0.05	0.01

Undesired		Total IX		Unique IX, before		Unique IX, after	
W16EJ-D D16 LD APP	17.0	274				11.0	237
WPSU-TV D15 DD LIC	8.0	190	8.0	190		7.0	188
WNYO-TV D16 DT LIC	24.2	520	11.0	304		9.0	299
WOSU-TV D16 DT LIC	290.1	21,254	276.0	21,015		276.0	21,015
WJMB-CD D17 DC CP	86.5	2,778	76.3	2,613		76.3	2,613

Interference to proposal scenario 1
24.96% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W16EJ-D	D16	LD	APP	Tyrone, PA		
Undesireds:	WPSU-TV	D15	DD	LIC	CLEARFIELD, PA	BLEDT20130614ACC	44.5 km
	WNYO-TV	D16	DT	LIC	BUFFALO, NY	BLANK0000136976	259.8
	WHLZ-LD	D16	LD	CP	Harrisburg, PA	BLANK0000104818	124.9
	WINP-TV	D16	DT	LIC	PITTSBURGH, PA	BLANK0000098050	141.9
	WUSV-LD	D16	LD	CP	Fairmont, WV	BLANK0000072244	233.1
	W41DK-D	D16	LD	CP	KEYSER, WV	BLANK0000035614	163.2
	WJMB-CD	D17	DC	LIC	BUTLER, PA	BLDTA20121108ALX	133.6
	W17DU-D	D17	LD	LIC	DUBOIS, PA	BLANK0000143862	88.7

Service area		Terrain-limited		IX-free		Percent IX	
3912.7	190,853	3114.9	137,084	2814.2	102,862	9.65	24.96

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WPSU-TV D15 DD LIC	245.0	31,958	132.6	3,569	4.26	2.60	
WNYO-TV D16 DT LIC	3.0	0	0.0	0	0.00	0.00	
WHLZ-LD D16 LD CP	1.0	0	0.0	0	0.00	0.00	
WINP-TV D16 DT LIC	166.1	30,641	51.7	2,130	1.66	1.55	
W41DK-D D16 LD CP	8.0	339	1.0	12	0.03	0.01	

Interference to proposal scenario 2
24.96% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W16EJ-D	D16	LD	APP	Tyrone, PA		
Undesireds:	WPSU-TV	D15	DD	LIC	CLEARFIELD, PA	BLEDT20130614ACC	44.5 km
	WNYO-TV	D16	DT	LIC	BUFFALO, NY	BLANK0000136976	259.8
	WHLZ-LD	D16	LD	CP	Harrisburg, PA	BLANK0000104818	124.9
	WINP-TV	D16	DT	LIC	PITTSBURGH, PA	BLANK0000098050	141.9
	WUSV-LD	D16	LD	CP	Fairmont, WV	BLANK0000072244	233.1
	W41DK-D	D16	LD	CP	KEYSER, WV	BLANK0000035614	163.2
	WJMB-CD	D17	DC	LIC	BUTLER, PA	BLDTA20121108ALX	133.6
	W17DU-D	D17	LD	CP	DUBOIS, PA	BLANK0000144003	42.3

Service area		Terrain-limited		IX-free		Percent IX	
3912.7	190,853	3114.9	137,084	2813.2	102,862	9.69	24.96

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WPSU-TV D15 DD LIC	245.0	31,958	132.6	3,569	4.26	2.60	
WNYO-TV D16 DT LIC	3.0	0	0.0	0	0.00	0.00	
WHLZ-LD D16 LD CP	1.0	0	0.0	0	0.00	0.00	
WINP-TV D16 DT LIC	166.1	30,641	51.7	2,130	1.66	1.55	
W41DK-D D16 LD CP	8.0	339	1.0	12	0.03	0.01	
W17DU-D D17 LD CP	3.0	16	1.0	0	0.03	0.00	