tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WPBI-LD 17 AP for Mod CP SWR Ant, Model: Longley-Rice
Start: 2019.10.31 15:50:08

Study created: 2019.10.31 15:50:08

Study build station data: LMS TV 2019-10-30 #441

    Proposal: WPBI-LD D17 LD APP LAFAYETTE, IN
 File number: WPBI-LD 17 AP for Mod CP SWR Ant
 Facility ID: 184193
Station data: User record
   Record ID: 1168
     Country: U.S.

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

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WRSP-TV	D16	DT	CP	SPRINGFIELD, IL	BLANK0000034422	231.7 km
No	WFWC-CD	D16	DC	LIC	FORT WAYNE, IN	BLANK0000087020	163.1
No	WDNI-CD	D16	DC	LIC	INDIANAPOLIS, IN	BLANK0000086458	93.7
No	WBKI	D16	DT	CP	SALEM, IN	BLANK0000060323	243.7
No	WEID-LD	D16	LD	LIC	SOUTH BEND, IN	BLDTL20141105ADE	156.5
No	W16CZ-D	D16	LD	CP	TERRE HAUTE, IN	BNPDTL20100128AHQ	138.2
No	WAAA-LP	D16-	LD	CP	VALPARAISO, IN	BLANK0000053965	125.2
No	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	329.9
No	KQCT-LP	D17	LD	CP	DAVENPORT, IA	BMPDTL20120206AAB	313.5
No	WLCF-LD	D17	LD	CP	DECATUR, IL	BLANK0000029606	178.6
Yes	WAND	D17	DT	LIC	DECATUR, IL	BLCDT20130709ABN	175.6
No	WTCT	D17	DT	LIC	MARION, IL	BLCDT20060629ACN	367.8
No	W17EH-D	D17	LD	CP	QUINCY, IL	BLANK0000071890	383.2
No	WIDN-LD	D17	LD	LIC	ROCKFORD, IL	BLANK0000008118	279.4
No	WEIJ-LD	D17	LD	CP	FORT WAYNE, IN	BLANK0000054397	159.9
Yes	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	115.0
No	WISH-TV	D17	LD	LIC	INDIANAPOLIS, IN	BLCDT20110207ACU	79.0
Yes	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	77.4
No	WKPC-TV	D17	DT	LIC	LOUISVILLE, KY	BMLEDT20120625ABZ	242.5
No	WKMU	D17	DT	LIC	MURRAY, KY	BLANK0000087481	437.6
No	WKMU	D17	DT	CP	MURRAY, KY	BLANK0000034644	437.6
No	WKOH	D17	DT	CP	OWENSBORO, KY	BLANK0000086473	286.5
No	WKOH	D17	DT	LIC	OWENSBORO, KY	BLANK0000087401	286.5
No	WKSO-TV	D17	DT	LIC	SOMERSET, KY	BLANK0000087465	400.0
No	WKSO-TV	D17	DT	CP	SOMERSET, KY	BLANK0000086468	400.0
Yes	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	267.1
No	WFFC-LD	D17	LD	LIC	MIDLAND, MI	BLANK0000087273	411.1
No	WBNX-TV	D17	DT	CP	AKRON, OH	BLANK0000028072	446.5
No	WCET	D17	DT	LIC	CINCINNATI, OH	BLANK0000087307	244.4
No	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	244.4
No	WKYC	D17	DT	LIC	CLEVELAND, OH	BLCDT20090619ADC	447.1
No	W44DC-D	D17	LD	CP	COLUMBUS, OH	BLANK0000054287	328.0
No	WOIW-LD	D17	LD	LIC	Lima, OH	BLANK0000068365	228.6
No	WQCW	D17	DT	LIC	PORTSMOUTH, OH	BLCDT20100422ABY	450.5
No	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000075004	314.2
No	WBME-CD	D17	DC	LIC	MILWAUKEE, WI	BLANK0000086894	314.2
No	WBXC-CD	D18	DC	CP	CHAMPAIGN/URBANA, IL	BLANK0000034661	122.5
No	WMEU-CD	D18	DC	LIC	CHICAGO, IL	BLANK0000086889	176.8
No	NEW	D18	LD	APP	DELPHI, IN	BNPDTL20100510ADO	40.4
No	WFWA	D18	DT	LIC	FORT WAYNE, IN	BLANK0000063130	159.9
No	WAWV-TV	D18	DT	LIC	TERRE HAUTE, IN	BLANK0000087258	136.9
No	WSTR-TV	D18	DT	CP	CINCINNATI, OH	BLANK0000034777	239.4
No	WKEF	D18	DT	LIC	DAYTON, OH	BLANK0000004293	233.2

Non-directional AM stations within 0.8 km:
WASK 1450 L ND1 U LAFAYETTE, IN BL

WASK 1450 L ND2 D LAFAYETTE, IN BL20151103BCZ
WASK 1450 L ND2 N LAFAYETTE, IN BL20151103BCZ

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D17
       Mask: Stringent
   Latitude:  40 24  8.13 N (NAD83)
  Longitude:  86 50 59.03 W
Height AMSL: 252.0 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: SWR EDL12MC 17 CP 0.0 deg
Elev Pattrn: Generic
```

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	14.2 kW	71.2 m	40.7 km
45.0	7.53	57.4	35.4
90.0	0.731	49.0	22.3
135.0	1.33	39.1	22.7
180.0	2.02	41.0	25.2
225.0	9.73	47.3	34.2
270.0	14.9	81.9	42.5
315.0	15.0	50.0	37.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 55 m

Distance to Canadian border: 355.7 km

Distance to Mexican border: 1769.8 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 16.6 degrees Distance: 256.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 275.0 degrees Distance: 1555.7 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 BLCDT20130709ABN LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WAND	D17	DT	LIC	DECATUR, IL	BLCDT20130709ABN	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	175.6 km
	WTCT	D17	DT	LIC	MARION, IL	BLCDT20060629ACN	266.7
	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	196.6
	WKPC-TV	D17	DT	LIC	LOUISVILLE, KY	BMLEDT20120625ABZ	312.9
	WKOH	D17	DT	LIC	OWENSBORO, KY	BLANK0000087401	267.2
	KMIZ	D17	DT	LIC	COLUMBIA, MO	BLCDT20110722ADS	345.7
	WCET	D17	DT	LIC	CINCINNATI, OH	BLANK0000087307	380.8
	WAWV-TV	D18	DT	LIC	TERRE HAUTE, IN	BLANK0000087258	146.5

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX

37326.9	1,400,159	37241.3	1,393,966	35193.7	1,372,045	35095.5	1,367,990	0.28	0.30

Undesired	Total IX	Unique IX, before		Unique IX, after	
WPBI-LD D17 LD APP	123.1	4,268		98.2	4,055
WTCT D17 DT LIC	498.3	6,814	476.5	6,683	476.5	6,683
WYIN D17 DT LIC	1369.2	12,604	1367.2	12,590	1344.2	12,391
WKPC-TV D17 DT LIC	1.0	8	0.0	0	0.0	0
WKOH D17 DT LIC	4.0	8	0.0	0	0.0	0
KMIZ D17 DT LIC	2.0	1	1.0	1	1.0	1
WCET D17 DT LIC	2.0	14	0.0	0	0.0	0
WAWV-TV D18 DT LIC	198.9	2,641	180.1	2,510	180.1	2,510

Interference to BLEDT20040206AAA LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	115.0 km
	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	257.3
	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	188.4
	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	209.6
	WCET	D17	DT	LIC	CINCINNATI, OH	BLANK0000087307	347.5
	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000075004	200.7
	WMEU-CD	D18	DC	LIC	CHICAGO, IL	BLANK0000086889	62.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
17929.0	6,961,382	17929.0	6,961,382	17816.8	6,898,246	17781.1	6,896,936	0.20	0.02

Undesired	Total IX	Unique IX, before		Unique IX, after	
WPBI-LD D17 LD APP	38.7	4,068		35.7	1,310
KWQC-TV D17 DT CP	51.2	15,515	48.2	12,757	48.2	12,757
WALV-CD D17 DC CP	1.0	953	0.0	0	0.0	0
WOTV D17 DT CP	40.1	3,196	37.1	1,364	37.1	1,364
WBME-CD D17 DC CP	1.0	953	0.0	0	0.0	0
WMEU-CD D18 DC LIC	26.9	49,015	22.9	46,230	22.9	46,230

Interference to BLEDT20040206AAA LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	115.0 km
	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	257.3
	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	188.4
	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	209.6
	WCET	D17	DT	LIC	CINCINNATI, OH	BLANK0000087307	347.5
	WBME-CD	D17	DC	LIC	MILWAUKEE, WI	BLANK0000086894	200.7
	WMEU-CD	D18	DC	LIC	CHICAGO, IL	BLANK0000086889	62.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
17929.0	6,961,382	17929.0	6,961,382	17816.8	6,898,246	17781.1	6,896,936	0.20	0.02

Undesired	Total IX	Unique IX, before		Unique IX, after	
WPBI-LD D17 LD APP	38.7	4,068		35.7	1,310
KWQC-TV D17 DT CP	51.2	15,515	48.2	12,757	48.2	12,757
WALV-CD D17 DC CP	1.0	953	0.0	0	0.0	0
WOTV D17 DT CP	40.1	3,196	37.1	1,364	37.1	1,364
WBME-CD D17 DC LIC	1.0	953	0.0	0	0.0	0
WMEU-CD D18 DC LIC	26.9	49,015	22.9	46,230	22.9	46,230

Interference to BLANK0000028083 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	77.4 km
	WDNI-CD	D16	DC	LIC	INDIANAPOLIS, IN	BLANK0000086458	16.8
	WKOH	D17	DT	CP	OWENSBORO, KY	BLANK0000086473	251.2

	WKSO-TV	D17	DT	LIC	SOMERSET, KY	BLANK0000087465	328.8
	WCET	D17	DT	LIC	CINCINNATI, OH	BLANK0000087307	168.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
8754.9	1,788,544	8752.9	1,788,544	8684.5	1,775,219	8656.5	1,774,802	0.32	0.02

Undesired	Total IX		Unique IX, before		Unique IX, after	
WPBI-LD D17 LD APP	28.0	417			28.0	417
WDNI-CD D16 DC LIC	67.4	13,325	66.4	13,304	66.4	13,304
WCET D17 DT LIC	2.0	21	1.0	0	1.0	0

Interference to BLANK0000028083 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	77.4 km
	WDNI-CD	D16	DC	LIC	INDIANAPOLIS, IN	BLANK0000086458	16.8
	WKOH	D17	DT	CP	OWENSBORO, KY	BLANK0000086473	251.2
	WKSO-TV	D17	DT	LIC	SOMERSET, KY	BLANK0000087465	328.8
	WCET	D17	DT	CP	CINCINNATI, OH	BLANK0000026835	168.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
8754.9	1,788,544	8752.9	1,788,544	8684.5	1,775,219	8656.5	1,774,802	0.32	0.02

Undesired	Total IX		Unique IX, before		Unique IX, after	
WPBI-LD D17 LD APP	28.0	417			28.0	417
WDNI-CD D16 DC LIC	67.4	13,325	66.4	13,304	66.4	13,304
WCET D17 DT CP	2.0	21	1.0	0	1.0	0

Interference to BLANK0000034787 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	267.1 km
	WOBC-CD	D16	DC	CP	BATTLE CREEK, MI	BLANK0000083865	40.1
	WSMH	D16	DT	LIC	FLINT, MI	BLCDT20090804ABG	134.7
	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	209.6
	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000075004	209.4
	WEYI-TV	D18	DT	LIC	SAGINAW, MI	BLANK0000075003	159.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
27508.6	2,368,326	27495.6	2,368,069	27332.8	2,357,750	27332.8	2,357,750	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WPBI-LD D17 LD APP	2.0	14			0.0	0
WSMH D16 DT LIC	47.2	1,105	45.2	1,079	45.2	1,079
WYIN D17 DT LIC	107.6	9,091	101.6	8,986	100.6	8,986
WBME-CD D17 DC CP	14.0	228	8.0	123	8.0	123
WEYI-TV D18 DT LIC	2.0	26	0.0	0	0.0	0

Interference to BLANK0000034787 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WOTV	D17	DT	CP	BATTLE CREEK, MI	BLANK0000034787	
Undesireds:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	267.1 km
	WOBC-CD	D16	DC	CP	BATTLE CREEK, MI	BLANK0000083865	40.1
	WSMH	D16	DT	LIC	FLINT, MI	BLCDT20090804ABG	134.7
	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	209.6
	WBME-CD	D17	DC	LIC	MILWAUKEE, WI	BLANK0000086894	209.4
	WEYI-TV	D18	DT	LIC	SAGINAW, MI	BLANK0000075003	159.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
27508.6	2,368,326	27495.6	2,368,069	27332.8	2,357,750	27332.8	2,357,750	0.00	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after

WPBI-LD D17 LD APP	2.0	14			0.0	0
WSMH D16 DT LIC	47.2	1,105	45.2	1,079	45.2	1,079
WYIN D17 DT LIC	107.6	9,091	101.6	8,986	100.6	8,986
WBME-CD D17 DC LIC	14.0	228	8.0	123	8.0	123
WEYI-TV D18 DT LIC	2.0	26	0.0	0	0.0	0

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPBI-LD	D17	LD	APP	LAFAYETTE, IN	WPBI-LD 17 AP for Mod	
Undesireds:	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	115.0 km
	WISH-TV	D17	LD	LIC	INDIANAPOLIS, IN	BLCDT20110207ACU	79.0
	WALV-CD	D17	DC	CP	INDIANAPOLIS, IN	BLANK0000028083	77.4
	WKOH	D17	DT	CP	OWENSBORO, KY	BLANK0000086473	286.5
	WCET	D17	DT	LIC	CINCINNATI, OH	BLANK0000087307	244.4
	WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000075004	314.2
	NEW	D18	LD	APP	DELPHI, IN	BNPDTL20100510ADO	40.4

Service area		Terrain-limited		IX-free		Percent IX	
3449.4	217,067	3443.4	216,912	3293.2	215,239	4.36	0.77

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WYIN D17 DT LIC	122.3	1,419	77.6	512	2.25	0.24
WISH-TV D17 LD LIC	2.0	2	0.0	0	0.00	0.00
WALV-CD D17 DC CP	20.0	243	15.0	204	0.44	0.09
NEW D18 LD APP	55.7	955	10.9	48	0.32	0.02