tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Indy29d15kwFF, Model: Longley-Rice
Start: 2021.07.20 16:07:59

Study created: 2021.07.20 16:07:59

Study build station data: LMS TV 2021-07-20

    Proposal: W29EL-D D29 LD APP Indianapolis, IN
 Facility ID: 187439
Station data: User record
   Record ID: 681
     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
No	DDW22DE	N22+	TX	APP	DAYTON, OH	BLTTL20100511AAU	162.1 km
No	WYZZ-TV	D28	DT	LIC	BLOOMINGTON, IL	BLCDT20060609ABE	274.4
No	W28EB-D	D28	LD	CP	EFFINGHAM, IL	BMPDTL20111006ACQ	224.3
Yes	WIPX-TV	D28	DT	LIC	BLOOMINGTON, IN	BLANK0000106045	40.7
No	WEVV-TV	D28	DT	LIC	EVANSVILLE, IN	BLANK0000087480	241.1
No	W28EY-D	D28	LD	CP	FORT WAYNE, IN	BLANK0000071946	167.3
No	WJSJ-CD	D28	DC	LIC	INDIANAPOLIS, IN	BLANK0000086502	103.5
No	WMYS-LD	D28	LD	LIC	SOUTH BEND, IN	BLANK0000086895	205.1
No	WLEX-TV	D28	DT	LIC	LEXINGTON, KY	BLANK0000087372	245.9
No	WBQC-LD	D28	LD	LIC	CINCINNATI, OH	BLANK0000088128	159.3
No	WSYX	D28	DT	LIC	COLUMBUS, OH	BLANK0000129744	268.2
No	WAUR-LD	D29	LD	LIC	AURORA, IL	BLANK0000107754	293.1
No	WAUR-LD	D29	LD	CP	AURORA, IL	BLANK0000108665	281.1
Yes	WMAQ-TV	D29	DT	LIC	CHICAGO, IL	BLANK0000053194	265.4
No	W29ES-D	D29	LD	LIC	JACKSONVILLE, IL	BLANK0000150934	333.1
No	W29CI-D	D29	DC	LIC	SALEM, IL	BLDTA20120913AAP	279.2
No	WLEH-LD	D29	LD	LIC	ST. LOUIS, IL	BLANK0000080775	357.9
No	WEDX-LD	D29	LD	CP	FORT WAYNE, IN	BLANK0000036232	167.9

Yes	WJYL-CD	D29	DC	LIC	JEFFERSONVILLE, IN	BLANK0000087052	158.2
Yes	W51DU	D29-	LD	CP	LAFAYETTE, IN	BLANK0000054375	91.5
No	WSBT-TV	D29	DT	LIC	SOUTH BEND, IN	BLANK0000087455	205.3
No	W29FI-D	D29	LD	CP	TERRE HAUTE, IN	BLANK0000071923	119.4
No	WKGB-TV	D29	DT	LIC	BOWLING GREEN, KY	BLANK0000087457	300.8
No	WVTN-LD	D29	LD	LIC	CORBIN, KY	BLANK0000080149	356.3
No	NEW	D29	LD	CP	GLASGOW, KY	BNPDTL20090825AQM	295.9
No	WUHQ-LD	D29	LD	LIC	GRAND RAPIDS, MI	BLDTL20111121AAI	356.0
No	WLNM-LD	D29	LD	LIC	LANSING, MI	BLANK0000124986	354.8
No	WNEO	D29	DT	LIC	ALLIANCE, OH	BLANK0000120667	462.0
No	WAMS-LD	D29z	LD	LIC	MINSTER/NEW BREMEN, OH	BLANK0000106606	167.8
Yes	WPTO	D29	DT	LIC	OXFORD, OH	BLANK0000113643	157.7
No	WGTE-TV	D29	DT	LIC	TOLEDO, OH	BLEDT20031110AKO	311.0
No	WOOH-LD	D29	LD	LIC	ZANESVILLE, OH	BLANK0000114544	275.2
No	WOOH-LD	D29	LD	CP	ZANESVILLE, OH	BLANK0000116352	254.6
No	W29FR-D	D29	LD	LIC	ALGOOD, TN	BLANK0000151098	400.3
No	W29FR-D	D29	LD	CP	ALGOOD, TN	BLANK0000151263	402.4
No	WKOP-TV	D29	DT	LIC	KNOXVILLE, TN	BLANK0000081273	461.7
No	WDJT-TV	D29	DT	LIC	MILWAUKEE, WI	BLANK0000086892	399.7
No	WCHS-TV	D29	DT	LIC	CHARLESTON, WV	BLANK0000059340	396.9
No	WEIU-TV	D30	DT	LIC	CHARLESTON, IL	BLANK0000093935	185.3
No	W30DO-D	D30	LD	CP	BRAZIL, IN	BNPDTL20100510AFI	124.0
No	WSJV	D30	DT	LIC	ELKHART, IN	BLANK0000124380	205.3
No	W30EH-D	D30	LD	LIC	FORT WAYNE, IN	BLANK0000080842	170.8
Yes	WSDI-LD	D30	LD	LIC	Indianapolis, IN	BLANK0000107877	14.4
No	WKPC-TV	D30	DT	LIC	LOUISVILLE, KY	BLANK0000087420	158.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D29
       Mask: Full Service
   Latitude:  39 46 11.10 N (NAD83)
  Longitude:  86  9 25.90 W
Height AMSL: 459.3 m
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HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional
Elev Pattrn: Generic

50.2 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	231.6 m	52.5 km
45.0	15.0	214.0	51.5
90.0	15.0	208.4	51.2
135.0	15.0	210.8	51.3
180.0	15.0	236.2	52.7
225.0	15.0	240.9	53.0
270.0	15.0	226.9	52.2
315.0	15.0	223.8	52.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 224 m

Distance to Canadian border: 348.7 km

Distance to Mexican border: 1774.8 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 3.0 degrees Distance: 315.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 277.6 degrees Distance: 1621.9 km

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 BLANK0000106045 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WIPX-TV	D28	DT	LIC	BLOOMINGTON, IN	BLANK0000106045	
Undesireds:	W29EL-D	D29	LD	APP	Indianapolis, IN		40.7 km
	WTTV	D27	DT	LIC	BLOOMINGTON, IN	BLANK0000086972	0.4
	WYZZ-TV	D28	DT	LIC	BLOOMINGTON, IL	BLCDT20060609ABE	292.6
	WEVV-TV	D28	DT	LIC	EVANSVILLE, IN	BLANK0000087480	207.5
	WJSJ-CD	D28	DC	LIC	INDIANAPOLIS, IN	BLANK0000086502	141.3
	WLEX-TV	D28	DT	LIC	LEXINGTON, KY	BLANK0000087372	215.2
	WSYM-TV	D28	DT	LIC	LANSING, MI	BLANK0000105571	362.9
	WSYX	D28	DT	LIC	COLUMBUS, OH	BLANK0000129744	274.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
23046.9	2,308,392	22913.5	2,307,178	22391.9	2,279,683	22390.9	2,279,683	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
W29EL-D D29 LD APP	5.0	487				1.0	0
WTTV D27 DT LIC	56.1	2,844	45.0	2,667	41.0	2,180	
WYZZ-TV D28 DT LIC	89.5	1,258	41.8	677	41.8	677	
WEVV-TV D28 DT LIC	241.9	3,016	168.3	2,235	168.3	2,235	
WJSJ-CD D28 DC LIC	126.4	19,652	115.4	19,494	115.4	19,494	
WLEX-TV D28 DT LIC	41.8	303	12.0	41	12.0	41	
WSYX D28 DT LIC	62.4	1,499	52.5	1,349	52.5	1,349	

Interference to BLANK0000053194 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WMAQ-TV	D29	DT	LIC	CHICAGO, IL	BLANK0000053194	
Undesireds:	W29EL-D	D29	LD	APP	Indianapolis, IN		265.4 km
	WISN-TV	D28	DT	LIC	MILWAUKEE, WI	BLANK0000089554	139.1
	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	351.6
	WSBT-TV	D29	DT	LIC	SOUTH BEND, IN	BLANK0000087455	121.2

	WGTU	D29	DT	CP	TRAVERSE CITY, MI	BLANK0000035794	380.5
	WDJT-TV	D29	DT	LIC	MILWAUKEE, WI	BLANK0000086892	139.1
	WSJV	D30	DT	LIC	ELKHART, IN	BLANK0000124380	121.2
	WPXE-TV	D30	DT	LIC	KENOSHA, WI	BLANK0000087614	136.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
32461.2	9,915,207	32416.8	9,913,662	22442.8	9,217,741	22442.8	9,217,741	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W29EL-D D29 LD APP	1.0	6			0.0	0
WISN-TV D28 DT LIC	63.6	4,232	0.0	0	0.0	0
KGAN D29 DT LIC	73.6	4,723	0.0	0	0.0	0
WSBT-TV D29 DT LIC	6113.5	304,183	4280.1	199,396	4280.1	199,396
WDJT-TV D29 DT LIC	5456.2	470,206	3803.1	381,122	3803.1	381,122
WSJV D30 DT LIC	631.9	34,925	0.0	0	0.0	0
WPXE-TV D30 DT LIC	102.9	11,782	0.0	0	0.0	0

Interference to BLANK0000087052 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJYL-CD	D29	DC	LIC	JEFFERSONVILLE, IN	BLANK0000087052	
Undesireds:	W29EL-D	D29	LD	APP	Indianapolis, IN		158.2 km
	WKGB-TV	D29	DT	LIC	BOWLING GREEN, KY	BLANK0000087457	158.8
	WPTO	D29	DT	LIC	OXFORD, OH	BLANK0000113643	141.1
	WKPC-TV	D30	DT	LIC	LOUISVILLE, KY	BLANK0000087420	0.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7564.7	1,193,444	7283.2	1,183,789	7086.4	1,174,462	7084.4	1,174,460	0.03	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
W29EL-D D29 LD APP	5.0	22			2.0	2
WKGB-TV D29 DT LIC	4.0	7	2.0	2	2.0	2
WPTO D29 DT LIC	137.4	4,853	123.4	3,352	120.4	3,332
WKPC-TV D30 DT LIC	70.4	5,968	57.4	4,472	57.4	4,472

Interference to BLANK0000054375 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W51DU	D29-	LD	CP	LAFAYETTE, IN	BLANK0000054375	
Undesireds:	W29EL-D	D29	LD	APP	Indianapolis, IN		91.5 km
	WAUR-LD	D29	LD	LIC	AURORA, IL	BLANK0000107754	201.7
	WSBT-TV	D29	DT	LIC	SOUTH BEND, IN	BLANK0000087455	146.8
	W29FI-D	D29	LD	CP	TERRE HAUTE, IN	BLANK0000071923	133.6
	WOOH-LD	D29	LD	LIC	ZANESVILLE, OH	BLANK0000114544	337.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
5868.6	285,830	5866.6	285,761	5646.5	275,040	5540.2	273,933	1.88	0.40

Undesired	Total IX		Unique IX, before		Unique IX, after	
W29EL-D D29 LD APP	106.2	1,107			106.2	1,107
WSBT-TV D29 DT LIC	220.1	10,721	219.1	10,694	219.1	10,694
W29FI-D D29 LD CP	1.0	27	0.0	0	0.0	0

Interference to BLANK0000113643 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPTO	D29	DT	LIC	OXFORD, OH	BLANK0000113643	
Undesireds:	W29EL-D	D29	LD	APP	Indianapolis, IN		157.7 km
	WIPX-TV	D28	DT	LIC	BLOOMINGTON, IN	BLANK0000106045	143.4
	WLEX-TV	D28	DT	LIC	LEXINGTON, KY	BLANK0000087372	121.7
	WSYX	D28	DT	LIC	COLUMBUS, OH	BLANK0000129744	157.2
	WJYL-CD	D29	DC	LIC	JEFFERSONVILLE, IN	BLANK0000087052	141.1
	WSBT-TV	D29	DT	LIC	SOUTH BEND, IN	BLANK0000087455	312.0
	WKGB-TV	D29	DT	LIC	BOWLING GREEN, KY	BLANK0000087457	292.0
	WNEO	D29	DT	LIC	ALLIANCE, OH	BLANK0000120667	365.6
	WGTE-TV	D29	DT	LIC	TOLEDO, OH	BLEDT20031110AKO	296.3
	WCHS-TV	D29	DT	LIC	CHARLESTON, WV	BLANK0000059340	240.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
21977.5	2,961,080	21713.4	2,949,597	20776.5	2,921,011	20610.8	2,918,142	0.80	0.10

Undesired		Total IX	Unique IX, before		Unique IX, after	
W29EL-D D29 LD APP	338.9	4,460			165.7	2,869
WIPX-TV D28 DT LIC	10.9	15	5.0	10	0.0	0
WLEX-TV D28 DT LIC	12.0	73	2.0	0	2.0	0
WSYX D28 DT LIC	1.0	0	0.0	0	0.0	0
WJYL-CD D29 DC LIC	520.4	4,954	499.5	4,687	363.2	3,522
WSBT-TV D29 DT LIC	24.0	5,127	17.0	311	4.0	141
WKGB-TV D29 DT LIC	1.0	0	0.0	0	0.0	0
WNEO D29 DT LIC	4.0	495	0.0	0	0.0	0
WGTE-TV D29 DT LIC	2.0	495	0.0	0	0.0	0
WCHS-TV D29 DT LIC	405.6	23,573	374.5	18,422	363.5	18,283

Interference to BLANK0000107877 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WSDI-LD	D30	LD	LIC	Indianapolis, IN	BLANK0000107877	
Undesireds:	W29EL-D	D29	LD	APP	Indianapolis, IN		14.4 km
	WEIU-TV	D30	DT	LIC	CHARLESTON, IL	BLANK0000093935	183.2
	WDCI-LD	D30	LD	CP	CHICAGO, IL	BLANK0000106360	252.6
	WSJV	D30	DT	LIC	ELKHART, IN	BLANK0000124380	191.5
	WKPC-TV	D30	DT	LIC	LOUISVILLE, KY	BLANK0000087420	172.8
	W30EX-D	D30	LD	LIC	LIMA, OH	BLANK0000152175	297.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7026.8	1,673,457	7022.9	1,673,260	7017.9	1,673,151	7005.1	1,672,975	0.18	0.01

Undesired		Total IX	Unique IX, before		Unique IX, after	
W29EL-D D29 LD APP	12.9	176			12.9	176
WEIU-TV D30 DT LIC	2.0	30	0.0	0	0.0	0
WSJV D30 DT LIC	4.9	109	2.0	62	2.0	62
WKPC-TV D30 DT LIC	3.0	47	0.0	0	0.0	0

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	W29EL-D	D29	LD	APP	Indianapolis, IN		
Undesireds:	WIPX-TV	D28	DT	LIC	BLOOMINGTON, IN	BLANK0000106045	40.7 km
	WAUR-LD	D29	LD	LIC	AURORA, IL	BLANK0000107754	293.1
	W51DU	D29-	LD	CP	LAFAYETTE, IN	BLANK0000054375	91.5
	WSBT-TV	D29	DT	LIC	SOUTH BEND, IN	BLANK0000087455	205.3
	W29FI-D	D29	LD	CP	TERRE HAUTE, IN	BLANK0000071923	119.4
	WPTO	D29	DT	LIC	OXFORD, OH	BLANK0000113643	157.7
	WOOH-LD	D29	LD	LIC	ZANESVILLE, OH	BLANK0000114544	275.2

Service area		Terrain-limited		IX-free		Percent IX	
8550.0	1,742,705	8525.2	1,741,909	8169.9	1,727,935	4.17	0.80

Undesired		Total IX		Unique IX		Prcnt Unique IX	
WIPX-TV D28 DT LIC	144.6	10,865	122.8	6,137	1.44	0.35
W51DU D29- LD CP	195.7	2,751	194.7	2,749	2.28	0.16
WSBT-TV D29 DT LIC	10.9	1,675	2.0	59	0.02	0.00
W29FI-D D29 LD CP	15.0	3,039	11.0	229	0.13	0.01
WPTO D29 DT LIC	17.8	424	2.0	70	0.02	0.00