tvstudy v2.2.2
Database: localhost, Study: PROPOSED 680 KW, Model: Longley-Rice
Start: 2017.06.20 17:33:30

Study created: 2017.06.20 17:33:22

Study build station data: LMS TV 2017-06-02 (11)

    Proposal: WAVE36D D36 DT LIC LOUISVILLE, KY
 File number: PROPOSED 680 KW
 Facility ID: 13989
Station data: User record
   Record ID: 500
     Country: U.S.
        Zone: I

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WTWO	D35	DT	BL	TERRE HAUTE, IN	DTVBL20426	166.5 km
WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	142.3
WPTD	D35	DT	BL	DAYTON, OH	DTVBL25067	202.9
WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	280.8
WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	158.2
WHME-TV	D36	DT	BL	SOUTH BEND, IN	DTVBL36117	359.7
WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	279.7
KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	344.4
WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	436.1
WRGT-TV	D36	DT	BL	DAYTON, OH	DTVBL411	202.9
WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	248.4
WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	304.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D36
   Latitude: 38 22 8.40 N (NAD83)
  Longitude: 85 49 47.60 W
Height AMSL: 582.2 m
       HAAT: 391.0 m
   Peak ERP: 680 kW
    Antenna: DIE-TUD-C5-14/70-2-T 0.0 deg

40.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	144 kW	382.0 m	89.0 km
45.0	457	432.3	101.6
90.0	296	428.6	97.4
135.0	480	440.7	102.7
180.0	457	442.0	102.4
225.0	109	326.2	81.8
270.0	333	336.3	91.4
315.0	195	341.4	87.7

Proposal service area is within baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 453.7 km

Distance to Mexican border: 1710.6 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 358.7 degrees   Distance: 471.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 282.7 degrees   Distance: 1677.5 km

Study cell size: 2.00 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 DTVBL20426 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL34207 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	142.3 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	142.3
	WKMJ-TV	D34	DT	BL	LOUISVILLE, KY	DTVBL34195	142.4
	WTWO	D35	DT	BL	TERRE HAUTE, IN	DTVBL20426	306.5
	WPTD	D35	DT	BL	DAYTON, OH	DTVBL25067	204.8
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	309.0
	WTAP-TV	D35	DT	BL	PARKERSBURG, WV	DTVBL4685	290.1
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	162.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
14129.4	837,269	13600.2	825,795	13293.0	820,801	13293.0	820,801	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WAVE D36 DT BL	7.9	148	4.0	37		
WAVE36D D36 DT LIC	7.9	148			4.0	37
WTWO D35 DT BL	12.0	224	4.0	0	4.0	0
WPTD D35 DT BL	291.3	4,547	263.4	4,030	263.4	4,030
WTCI D35 DT BL	12.0	167	0.0	0	0.0	0
WTAP-TV D35 DT BL	15.8	536	3.9	299	3.9	299

Interference to DTVBL25067 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL69544 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	280.8 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	280.8
	WTVP	D35	DT	BL	PEORIA, IL	DTVBL28311	144.1
	WTWO	D35	DT	BL	TERRE HAUTE, IN	DTVBL20426	127.1
	W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	243.0
	WMEC	D36	DT	BL	MACOMB, IL	DTVBL70537	238.6
	WQRF-TV	D36	DT	BL	ROCKFORD, IL	DTVBL52408	243.2
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	161.4
	WHME-TV	D36	DT	BL	SOUTH BEND, IN	DTVBL36117	205.1
	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	353.0
	WRGT-TV	D36	DT	BL	DAYTON, OH	DTVBL411	318.5
	WMKE-CD	D36	DC	BL	MILWAUKEE, WI	DTVBL35091	309.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
14558.6	395,101	14546.5	395,097	14530.4	394,933	14530.4	394,933	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WAVE D36 DT BL	4.0	15	0.0	0		
WAVE36D D36 DT LIC	4.0	15			0.0	0
WHME-TV D36 DT BL	16.1	164	12.0	149	12.0	149
WRGT-TV D36 DT BL	4.0	15	0.0	0	0.0	0

Interference to DTVBL70416 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL36117 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL34171 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	279.7 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	279.7

	WTAP-TV	D35	DT	BL	PARKERSBURG, WV	DTVBL4685	134.4
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	337.9
	WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	275.3
	WQHS-DT	D36	DT	BL	CLEVELAND, OH	DTVBL60556	333.9
	WRGT-TV	D36	DT	BL	DAYTON, OH	DTVBL411	198.9
	WMNT-CD	D36	DC	BL	TOLEDO, OH	DTVBL51913	363.1
	WWLM-CD	D36	DC	BL	WASHINGTON, PA	DTVBL267	281.1
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	260.7
	WSVF-CD	D36	DC	BL	HARRISONBURG, VA	DTVBL190915	335.3
	WFXR	D36	DT	BL	ROANOKE, VA	DTVBL24813	258.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
11954.0	503,774	11199.6	474,574	11076.4	472,122	11100.2	473,149	-0.22	-0.22

Undesired	Total IX		Unique IX, before		Unique IX, after	
WAVE D36 DT BL	51.8	1,737	39.9	1,491		
WAVE36D D36 DT LIC	24.0	609			16.0	464
WRGT-TV D36 DT BL	83.4	961	71.4	715	75.4	816

Interference to DTVBL19593 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	344.4 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	344.4
	KSDK	D35	DT	LIC	ST. LOUIS, MO	BLCDT19991202ABM	145.7
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	211.4
	KKAP	D36	DT	LIC	LITTLE ROCK, AR	BLEDT20090522AFW	391.6
	W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	174.8
	WMEC	D36	DT	BL	MACOMB, IL	DTVBL70537	347.6
	WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	353.0
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	395.6
	KBNS-CD	D36	DC	LIC	BRANSON, MO	BLDTL20100315ADB	328.4
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	346.5
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	277.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
35282.8	752,077	34888.3	750,581	34457.7	746,990	34457.7	746,990	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WAVE D36 DT BL	67.7	315	19.9	54		
WAVE36D D36 DT LIC	59.7	311			19.9	54
KSDK D35 DT LIC	19.7	200	19.7	200	19.7	200
WCCU D36 DT BL	4.0	16	0.0	0	0.0	0
WMAV-TV D36 DT LIC	4.0	18	0.0	0	0.0	0
WTVF D36 DT BL	391.0	3,337	339.2	3,058	347.2	3,062

Interference to DTVBL69114 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL411 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WRGT-TV	D36	DT	BL	DAYTON, OH	DTVBL411	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	202.9 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	202.9
	WPTD	D35	DT	BL	DAYTON, OH	DTVBL25067	0.6
	WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	318.5
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	162.6
	WHME-TV	D36	DT	BL	SOUTH BEND, IN	DTVBL36117	262.8
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	198.9
	WAQP	D36	DT	BL	SAGINAW, MI	DTVBL67792	389.1
	WQHS-DT	D36	DT	BL	CLEVELAND, OH	DTVBL60556	283.6
	WMNT-CD	D36	DC	BL	TOLEDO, OH	DTVBL51913	223.0
	WWLM-CD	D36	DC	BL	WASHINGTON, PA	DTVBL267	346.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
24104.9	3,251,805	23853.4	3,217,425	23425.5	3,136,905	23437.4	3,137,019	-0.05	-0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WAVE D36 DT BL	364.0	59,596	211.7	40,391		
WAVE36D D36 DT LIC	344.1	59,375			199.8	40,277
WPTD D35 DT BL	35.9	23,843	23.9	20,029	23.9	20,029
WCCU D36 DT BL	4.0	73	0.0	0	0.0	0

WHME-TV D36 DT BL	28.0	788	0.0	0	0.0	0	
WKAS D36 DT BL	47.9	8,233	19.9	392	19.9	392	
WQHS-DT D36 DT BL	140.5	8,363	16.1	249	20.1	279	
WMNT-CD D36 DC BL	12.0	388	0.0	0	0.0	0	

Interference to DTVBL36504 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	248.4 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	248.4
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	179.9
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	185.1
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	315.4
	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	352.8
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	393.1
	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	277.3
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	344.0
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	283.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
36441.7	2,365,383	35337.1	2,348,589	34524.3	2,331,492	34532.4	2,331,514	-0.02	-0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
WAVE D36 DT BL	352.1	4,214	220.0	2,871	
WAVE36D D36 DT LIC	312.1	4,075		212.0	2,849
WUPA D36 DT BL	28.2	713	16.2	207	16.2	207
KBSI D36 DT BL	492.4	11,507	404.3	10,785	436.3	10,902
WMAV-TV D36 DT LIC	8.0	14	8.0	14	8.0	14
WVLR D36 DT BL	72.2	2,498	28.1	1,452	28.1	1,452

Interference to DTVBL81750 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	
Undesireds:	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	304.8 km
	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	304.8
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	189.4
	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	280.0
	WFXG	D36	DT	BL	AUGUSTA, GA	DTVBL3228	355.7
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	260.7
	WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	161.7
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	283.1
	WFXR	D36	DT	BL	ROANOKE, VA	DTVBL24813	326.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
27295.1	1,412,728	22832.0	1,300,961	22416.1	1,292,592	22428.1	1,292,964	-0.05	-0.03

Undesired	Total IX	Unique IX, before		Unique IX, after	
WAVE D36 DT BL	215.6	4,355	95.8	1,783	
WAVE36D D36 DT LIC	175.7	3,102		83.9	1,411
WUPA D36 DT BL	24.2	0	12.1	0	12.1	0
WKAS D36 DT BL	8.0	0	4.0	0	4.0	0
WUNE-TV D36 DT BL	44.2	364	36.2	308	36.2	308
WTVF D36 DT BL	239.9	5,593	124.1	3,021	152.0	3,902
WFXR D36 DT BL	15.9	685	12.0	629	12.0	629

Interference to proposal, scenario 1
0.68% interference

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WAVE36D	D36	DT	LIC	LOUISVILLE, KY	PROPOSED 680 KW	
Undesireds:	WTWO	D35	DT	BL	TERRE HAUTE, IN	DTVBL20426	166.5 km
	WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	142.3
	W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	376.1
	WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	280.8
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	158.2
	WHME-TV	D36	DT	BL	SOUTH BEND, IN	DTVBL36117	359.7
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	279.7
	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	344.4
	WRGT-TV	D36	DT	BL	DAYTON, OH	DTVBL411	202.9
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	248.4
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	304.8

Service area		Terrain-limited		IX-free		Percent IX	
28244.4	1,809,033	27701.9	1,800,248	26884.7	1,787,927	2.95	0.68

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WCCU D36 DT BL	84.1	995	44.0	499	0.16	0.03
WKAS D36 DT BL	12.1	53	8.0	25	0.03	0.00
KBSI D36 DT BL	43.9	706	11.9	190	0.04	0.01
WRGT-TV D36 DT BL	284.0	5,375	256.1	5,122	0.92	0.28
WTVF D36 DT BL	481.1	6,348	421.2	5,602	1.52	0.31