

tvstudy v2.2.5 (V91R41)

Database: localhost, Study: WQDE_ch24_15kW_ND, Model: Longley-Rice

Start: 2018.04.07 14:35:28

Study created: 2018.04.07 14:35:28

Study build station data: LMS TV 2018-03-19

Proposal: WQDE-LD D24 LD CP Indianapolis, IN

File number: BLANK000001737

Facility ID: 184101

Station data: User record

Record ID: 327

Country: U.S.

Build options:

Protect baseline records from LPTV

Search options:

Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WCIU-TV	D23	DT	CP	CHICAGO, IL	BLANK0000034608	251.2 km
No	WUSI-TV	D23	DT	CP	OLNEY, IL	BLANK0000034827	202.7
No	WDTI	D23	DT	CP	INDIANAPOLIS, IN	BLANK0000034481	0.0
No	WUEA-LD	D23	LD	LIC	South Bend, IN	BLANK0000004243	163.3
No	WUEA-LD	D23	LD	CP	South Bend, IN	BLANK0000036429	169.3
No	W23DZ-D	D23	LD	LIC	TERRE HAUTE, IN	BLANK0000010881	142.0
No	W23DZ-D	D23	LD	CP	TERRE HAUTE, IN	BLANK0000010909	148.4
No	WKZT-TV	D23	DT	CP	ELIZABETHTOWN, KY	BLANK0000034628	247.9
No	WWHO	D23	DT	CP	CHILLICOTHE, OH	BLANK0000027709	266.6
No	WWHO	D23	DT	APP	CHILLICOTHE, OH	BLANK0000034759	271.5
No	WRJK-LP	D24	LD	CP	ARLINGTON HEIGHTS, IL	BMPDTL20140211ACV	251.2
No	W39BH	D24	LD	CP	CHAMPAIGN, IL	BDCCDTL20150108ABN	174.4
Yes	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	251.2
No	WHOI	D24	DT	CP	PEORIA, IL	BLANK0000034285	298.9
No	NEW	D24	LD	APP	EVANSVILLE, IN	BNPDTL20090825BAF	241.4
Yes	WPTA	D24	DT	APP	FORT WAYNE, IN	BLANK0000035732	159.6
Yes	WPTA	D24	DT	LIC	FORT WAYNE, IN	BLCDT20031031AGU	159.6
No	WJTS-CD	D24	DC	CP	JASPER, IN	BLANK0000028094	177.8
No	WNKY	D24	DT	CP	BOWLING GREEN, KY	BLANK0000025367	317.9
No	WKON	D24	DT	CP	OWENTON, KY	BLANK0000034637	193.9
No	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	376.0
No	WPXD-TV	D24	DT	APP	ANN ARBOR, MI	BLANK0000034355	376.0
No	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	341.3
No	KMOV	D24	DT	LIC	ST. LOUIS, MO	BLCDT20090626ACG	383.7
No	WEAO	D24	DT	CP	AKRON, OH	BLANK0000034293	408.4
No	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK0000028258	271.0
No	WDEM-CD	D24	DC	APP	COLUMBUS, OH	BLANK0000034853	271.0
No	WOIO	D24	LD	LIC	SHAKER HEIGHTS, OH	BLCDT20110817AAW	411.9
No	WETP-TV	D24	DT	CP	SNEEDVILLE, TN	BLANK0000029748	471.6
No	WVAH-TV	D24	DT	CP	CHARLESTON, WV	BLANK0000027764	405.9
No	WTTW	D25	DT	CP	CHICAGO, IL	BLANK0000034877	251.2
No	WRTV	D25	DT	LIC	INDIANAPOLIS, IN	BLCDT20090623ACJ	0.7
No	WCWW-LD	D25	LD	LIC	SOUTH BEND, IN	BLDTL20121022ABV	191.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D24

Mask: Full Service

Latitude: 39 53 40.00 N (NAD83)

Longitude: 86 12 21.00 W

Height AMSL: 374.5 m

HAAT: 0.0 m
 Peak ERP: 15.0 kW
 Antenna: Omnidirectional
 Elev Pattn: Generic

49.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	100.7 m	44.2 km
45.0	15.0	124.7	46.4
90.0	15.0	137.2	47.3
135.0	15.0	140.9	47.5
180.0	15.0	151.3	48.3
225.0	15.0	127.2	46.6
270.0	15.0	107.8	45.0
315.0	15.0	100.4	44.2

Database HAAT does not agree with computed HAAT
 Database HAAT: 0 m Computed HAAT: 124 m

Distance to Canadian border: 342.6 km

Distance to Mexican border: 1779.8 km

Conditions at FCC monitoring station: Allegan MI
 Bearing: 3.9 degrees Distance: 302.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 277.2 degrees Distance: 1616.0 km

Study cell size: 0.50 km
 Profile point spacing: 0.10 km

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

 Interference to BLANK0000034486 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	251.2 km
	W23BW-D	D23	DC	APP	MADISON, WI	BLANK0000035876	199.6
	WHOI	D24	DT	CP	PEORIA, IL	BLANK0000034285	212.4
	WPTA	D24	DT	APP	FORT WAYNE, IN	BLANK0000035732	221.6
	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	362.4
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	186.0
	WHRM-TV	D24	DT	APP	WAUSAU, WI	BLANK0000035674	376.6
	WTTW	D25	DT	CP	CHICAGO, IL	BLANK0000034877	0.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33272.6 9,979,961	33152.7 9,975,370	31979.7 9,908,510	31979.7 9,908,510	0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after	
WQDE-LD D24 LD CP	0.7	0	0.0 0	
WHOI D24 DT CP	787.0	30,320	716.5 28,487	716.5 28,487
WPTA D24 DT APP	366.7	33,144	331.7 30,902	331.7 30,902
WTLJ D24 DT LIC	75.8	4,098	7.4 236	7.4 236
WHRM-TV D24 DT APP	10.6	79	0.7 0	0.7 0
WTTW D25 DT CP	26.6	3,244	25.9 3,213	25.9 3,213

 Interference to BLANK0000034486 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	

Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	251.2 km
	W23BW-D	D23	DC	APP	MADISON, WI	BLANK0000035876	199.6
	WHOI	D24	DT	CP	PEORIA, IL	BLANK0000034285	212.4
	WPTA	D24	DT	APP	FORT WAYNE, IN	BLANK0000035732	221.6
	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	362.4
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	186.0
	WHRM-TV	D24	DT	LIC	WAUSAU, WI	BLEDT20051014AAW	376.6
	WTTW	D25	DT	CP	CHICAGO, IL	BLANK0000034877	0.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33272.6 9,979,961	33152.7 9,975,370	31980.2 9,908,510	31980.2 9,908,510	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WQDE-LD D24 LD CP	0.7 0		0.0 0
WHOI D24 DT CP	787.0 30,320	721.2 28,542	721.2 28,542
WPTA D24 DT APP	366.7 33,144	331.7 30,902	331.7 30,902
WTLJ D24 DT LIC	75.8 4,098	8.2 236	8.2 236
WHRM-TV D24 DT LIC	4.0 21	0.2 0	0.2 0
WTTW D25 DT CP	26.6 3,244	25.9 3,213	25.9 3,213

Interference to BLANK0000034486 CP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	251.2 km
	W23BW-D	D23	DC	APP	MADISON, WI	BLANK0000035876	199.6
	WHOI	D24	DT	CP	PEORIA, IL	BLANK0000034285	212.4
	WPTA	D24	DT	LIC	FORT WAYNE, IN	BLC DT20031031AGU	221.6
	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	362.4
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	186.0
	WHRM-TV	D24	DT	APP	WAUSAU, WI	BLANK0000035674	376.6
	WTTW	D25	DT	CP	CHICAGO, IL	BLANK0000034877	0.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33272.6 9,979,961	33152.7 9,975,370	32064.1 9,911,570	32064.1 9,911,570	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WQDE-LD D24 LD CP	0.7 0		0.0 0
WHOI D24 DT CP	787.0 30,320	719.4 28,489	719.4 28,489
WPTA D24 DT LIC	279.2 30,082	247.3 27,842	247.3 27,842
WTLJ D24 DT LIC	75.8 4,098	7.4 236	7.4 236
WHRM-TV D24 DT APP	10.6 79	0.7 0	0.7 0
WTTW D25 DT CP	26.6 3,244	26.1 3,213	26.1 3,213

Interference to BLANK0000034486 CP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	251.2 km
	W23BW-D	D23	DC	APP	MADISON, WI	BLANK0000035876	199.6
	WHOI	D24	DT	CP	PEORIA, IL	BLANK0000034285	212.4
	WPTA	D24	DT	LIC	FORT WAYNE, IN	BLC DT20031031AGU	221.6
	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	362.4
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	186.0
	WHRM-TV	D24	DT	LIC	WAUSAU, WI	BLEDT20051014AAW	376.6
	WTTW	D25	DT	CP	CHICAGO, IL	BLANK0000034877	0.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33272.6 9,979,961	33152.7 9,975,370	32064.6 9,911,570	32064.6 9,911,570	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WQDE-LD D24 LD CP	0.7 0		0.0 0
WHOI D24 DT CP	787.0 30,320	724.1 28,544	724.1 28,544
WPTA D24 DT LIC	279.2 30,082	247.3 27,842	247.3 27,842
WTLJ D24 DT LIC	75.8 4,098	8.2 236	8.2 236

WHRM-TV D24 DT LIC	4.0	21	0.2	0	0.2	0
WTTW D25 DT CP	26.6	3,244	26.1	3,213	26.1	3,213

Interference to BLANK0000035732 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPTA	D24	DT	APP	FORT WAYNE, IN	BLANK0000035732	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	159.6 km
	WNWO-TV	D23	DT	CP	TOLEDO, OH	BLANK0000024772	164.9
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	221.6
	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	218.3
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	214.5
	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK0000028258	221.4
Service area		Terrain-limited		IX-free, before		IX-free, after	
21910.6	1,154,563	21902.7	1,153,842	21818.7	1,151,067	21812.8	1,150,641
						Percent New IX	
						0.03 0.04	

Undesired	Total IX	Unique IX, before	Unique IX, after
WQDE-LD D24 LD CP	7.8 524		5.9 426
WFLD D24 DT CP	6.9 621	2.2 290	1.9 290
WPXD-TV D24 DT CP	6.4 422	1.2 49	0.8 2
WTLJ D24 DT LIC	78.7 2,380	73.9 2,044	73.7 2,036

Interference to BLANK0000035732 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPTA	D24	DT	APP	FORT WAYNE, IN	BLANK0000035732	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	159.6 km
	WNWO-TV	D23	DT	CP	TOLEDO, OH	BLANK0000024772	164.9
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	221.6
	WPXD-TV	D24	DT	APP	ANN ARBOR, MI	BLANK0000034355	218.3
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	214.5
	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK0000028258	221.4
Service area		Terrain-limited		IX-free, before		IX-free, after	
21910.6	1,154,563	21902.7	1,153,842	21814.7	1,150,510	21809.6	1,150,409
						Percent New IX	
						0.02 0.01	

Undesired	Total IX	Unique IX, before	Unique IX, after
WQDE-LD D24 LD CP	7.8 524		5.1 101
WFLD D24 DT CP	6.9 621	0.7 2	0.5 2
WPXD-TV D24 DT APP	17.1 1,312	5.2 606	4.0 234
WTLJ D24 DT LIC	78.7 2,380	68.9 1,999	68.6 1,991

Interference to BLCDT20031031AGU LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPTA	D24	DT	LIC	FORT WAYNE, IN	BLCDT20031031AGU	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	159.6 km
	WNWO-TV	D23	DT	CP	TOLEDO, OH	BLANK0000024772	164.9
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK0000034486	221.6
	WHOI	D24	DT	CP	PEORIA, IL	BLANK0000034285	373.3
	WPXD-TV	D24	DT	CP	ANN ARBOR, MI	BLANK0000027025	218.3
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	214.5
	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK0000028258	221.4
Service area		Terrain-limited		IX-free, before		IX-free, after	
20161.5	1,076,580	20156.8	1,076,416	20047.6	1,073,911	20042.5	1,073,860
						Percent New IX	
						0.03 0.00	

Undesired	Total IX	Unique IX, before	Unique IX, after
WQDE-LD D24 LD CP	5.9 53		5.1 51
WFLD D24 DT CP	7.1 76	1.0 2	0.7 0
WHOI D24 DT CP	0.2 0	0.0 0	0.0 0
WPXD-TV D24 DT CP	7.5 29	1.5 22	1.5 22
WTLJ D24 DT LIC	105.8 2,481	95.9 2,400	95.9 2,400

Interference to BLCDT20031031AGU LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WPTA	D24	DT	LIC	FORT WAYNE, IN	BLCDT20031031AGU	
Undesireds:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	159.6 km
	WNWO-TV	D23	DT	CP	TOLEDO, OH	BLANK00000024772	164.9
	WFLD	D24	DT	CP	CHICAGO, IL	BLANK00000034486	221.6
	WHOI	D24	DT	CP	PEORIA, IL	BLANK00000034285	373.3
	WPXD-TV	D24	DT	APP	ANN ARBOR, MI	BLANK00000034355	218.3
	WTLJ	D24	DT	LIC	MUSKEGON, MI	BLANK0000001674	214.5
	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK00000028258	221.4
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	20161.5	1,076,580	20156.8	1,076,416	20042.3	1,073,672	20037.2 1,073,621 0.03 0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WQDE-LD D24 LD CP	5.9	53			5.1	51
WFLD D24 DT CP	7.1	76	0.2	2	0.0	0
WHOI D24 DT CP	0.2	0	0.0	0	0.0	0
WPXD-TV D24 DT APP	21.0	312	6.7	261	6.7	261
WTLJ D24 DT LIC	105.8	2,481	88.4	2,356	88.4	2,356

Interference to proposal scenario 1

**MX: 18.09% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	
Undesireds:	WDTI	D23	DT	CP	INDIANAPOLIS, IN	BLANK00000034481	0.0 km
	W23DZ-D	D23	LD	LIC	TERRE HAUTE, IN	BLANK00000010881	142.0
	WPTA	D24	DT	APP	FORT WAYNE, IN	BLANK00000035732	159.6
	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK00000028258	271.0
	WRTV	D25	DT	LIC	INDIANAPOLIS, IN	BLCDT20090623ACJ	0.7

	Service area	Terrain-limited		IX-free		Percent IX	
	6732.6	1,653,117	6727.6	1,652,973	2658.9	1,353,921	60.48 18.09

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WDTI D23 DT CP	3.2	105	0.0	0	0.00	0.00
WPTA D24 DT APP	37.0	678	1.0	0	0.01	0.00
WRTV D25 DT LIC	4067.8	299,052	4030.3	298,374	59.91	18.05

Interference to proposal scenario 2

18.09% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WQDE-LD	D24	LD	CP	Indianapolis, IN	BLANK0000001737	
Undesireds:	WDTI	D23	DT	CP	INDIANAPOLIS, IN	BLANK00000034481	0.0 km
	W23DZ-D	D23	LD	LIC	TERRE HAUTE, IN	BLANK00000010881	142.0
	WPTA	D24	DT	LIC	FORT WAYNE, IN	BLCDT20031031AGU	159.6
	WDEM-CD	D24	DC	CP	COLUMBUS, OH	BLANK00000028258	271.0
	WRTV	D25	DT	LIC	INDIANAPOLIS, IN	BLCDT20090623ACJ	0.7

	Service area	Terrain-limited		IX-free		Percent IX	
	6732.6	1,653,117	6727.6	1,652,973	2659.6	1,353,921	60.47 18.09

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WDTI D23 DT CP	3.2	105	0.0	0	0.00	0.00
WPTA D24 DT LIC	10.4	172	0.2	0	0.00	0.00
WRTV D25 DT LIC	4067.8	299,052	4054.9	298,797	60.27	18.08