

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: StJames22dXP, Model: Longley-Rice
Start: 2018.04.29 09:59:57

Study created: 2018.04.29 09:57:36

Study build station data: LMS TV 2018-04-27

Proposal: K45LJ-D D22 LD APP ST. JAMES, MN
Facility ID: 13841
Station data: User record
Record ID: 554
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	KBVK-LP	D21	LD	LIC	SPENCER, IA	BLDTL20130327AAK	99.5 km
No	K21KF-D	D21	LD	LIC	FROST, MN	BLDTL20130321ACF	79.0
No	K48KJ-D	D21	LD	APP	GENEVA, MN	BLANK0000051972	97.2
No	K21LF-D	D21	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACJ	109.8
No	WUMN-LD	D21	LD	APP	MINNEAPOLIS, MN	BLANK0000053279	142.6
No	K38OH-D	D21	LD	APP	Minneapolis, MN	BLANK0000051606	164.4
Yes	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	0.3
No	KDLT-TV	D21	DT	CP	SIOUX FALLS, SD	BLANK0000027512	170.7
No	WEUX	D21	DT	CP	CHIPPEWA FALLS, WI	BLANK0000034736	250.7
No	KPXR-TV	D22	DT	CP	CEDAR RAPIDS, IA	BLANK0000034353	298.1
No	K22LJ-D	D22	LD	CP	MASON CITY, IA	BNPDTL20100723AQR	152.5
No	K22DO-D	D22	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACP	109.8
Yes	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	156.8
Yes	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	57.2
No	K47JC-D	D22	LD	APP	WADENA, MN	BLANK0000053425	260.7
No	K22LG-D	D22	LD	CP	WELLS, MN	BNPDTL20100510AJO	85.3
No	K22HJ-D	D22	LD	LIC	WORTHINGTON, MN	BLDTL20131213AAJ	103.0
No	WOWT	D22	DT	LIC	OMAHA, NE	BLCDT20110509AAN	332.0

No	K22KJ-D	D22	LD	CP	ELK POINT, SD	BNPDTL20100505AEY	230.6
No	K22KI-D	D22	LD	CP	ROSHOLT, SD	BNPDTL20100505ADS	260.2
No	K22KD-D	D22	LD	CP	SIOUX FALLS, SD	BNPDTL20100111AFI	178.2
No	K22KF-D	D22	LD	CP	WATERTOWN, SD	BNPDTL20100331AFD	212.5
No	W22CI-D	D22	LD	LIC	BLOOMINGTON, WI	BLDTT20131122ALY	323.5
No	W22DT-D	D22	LD	CP	GALESVILLE, WI	BNPDTL20090825CBA	266.8
No	KCWI-TV	D23	DT	APP	AMES, IA	BPCDT20130205AAY	265.5
No	KCWI-TV	D23	DT	LIC	AMES, IA	BLCDT20090612AIO	265.5
No	K23FY-D	D23	LD	LIC	FROST, MN	BLDTT20090730ACT	79.0
No	K23FO-D	D23	LD	LIC	JACKSON, MN	BLDTT20090811AAW	64.3
No	K23FP-D	D23	LD	LIC	OLIVIA, MN	BLDTT20120213ABJ	75.6
No	K23MF-D	D23	LD	LIC	ST. JAMES, MN	BLDTL20120625AAW	0.0
No	KTCI-TV	D23	DT	LIC	ST. PAUL, MN	BLEDT20100326AAI	157.4
No	K56GF	D23	LD	CP	SIOUX FALLS, SD	BDISDTL20110829ABH	178.2
No	K23LI-D	D23	LD	CP	WATERTOWN, SD	BNPDTL20100331AFE	212.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D22
Mask: Stringent
Latitude: 44 6 28.00 N (NAD83)
Longitude: 94 35 56.00 W
Height AMSL: 496.0 m
HAAT: 0.0 m
Peak ERP: 0.500 kW
Antenna: Omnidirectional
Elev Pattn: Generic

49.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.500 kW	185.4 m	33.1 km
45.0	0.500	188.0	33.2
90.0	0.500	184.6	33.0
135.0	0.500	182.0	32.9

180.0	0.500	174.8	32.5
225.0	0.500	170.1	32.2
270.0	0.500	173.1	32.4
315.0	0.500	182.5	32.9

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 180 m

Distance to Canadian border: 488.2 km

Distance to Mexican border: 1702.5 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 222.9 degrees Distance: 473.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 247.0 degrees Distance: 979.0 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 BLDTL20091204ADE LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	
Undesireds:	K45LJ-D	D22	LD	APP	ST. JAMES, MN		0.3 km
	KMIK-LD	D21	LD	LIC	Cedar Rapids, IA	BLANK0000004384	254.7
	K21KF-D	D21	LD	LIC	FROST, MN	BLDTL20130321ACF	78.8
	K48KJ-D	D21	LD	APP	GENEVA, MN	BLANK0000051972	97.0

K21LF-D	D21	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACJ	110.1
WUMN-LD	D21	LD	APP	MINNEAPOLIS, MN	BLANK0000053279	142.5
KDLT-TV	D21	DT	CP	SIOUX FALLS, SD	BLANK0000027512	170.9
K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	57.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
6773.0	78,248	6768.0	78,227	6737.7	76,622	6736.7	76,621	0.01	0.00

Undesired				Total IX	Unique IX, before		Unique IX, after	
K45LJ-D	D22	LD	APP	1.0	1		1.0	1
K21KF-D	D21	LD	LIC	14.2	54	13.2	40	13.2
K48KJ-D	D21	LD	APP	11.1	626	6.0	383	6.0
K21LF-D	D21	LD	LIC	1.0	0	0.0	0	0.0
WUMN-LD	D21	LD	APP	1.0	186	0.0	0	0.0
KDLT-TV	D21	DT	CP	8.1	996	4.0	939	4.0
K22KU-D	D22	LD	LIC	2.0	0	1.0	0	1.0

Interference to BLCDDT20060405AAI LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDDT20060405AAI	
Undesireds:	K45LJ-D	D22	LD	APP	ST. JAMES, MN		156.8 km
	WEUX	D21	DT	CP	CHIPPEWA FALLS, WI	BLANK0000034736	116.2
	KPXR-TV	D22	DT	CP	CEDAR RAPIDS, IA	BLANK0000034353	323.6
	KTCI-TV	D23	DT	LIC	ST. PAUL, MN	BLEDT20100326AAI	1.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
34024.4	3,665,135	33508.0	3,655,132	32807.3	3,636,047	32485.5	3,633,021	0.98	0.08

Undesired				Total IX	Unique IX, before		Unique IX, after	
K45LJ-D	D22	LD	APP	323.8	3,037	321.8	3,026	
WEUX	D21	DT	CP	629.3	17,951	615.2	17,689	615.2
KPXR-TV	D22	DT	CP	46.3	952	33.2	739	31.2
KTCI-TV	D23	DT	LIC	39.2	444	38.2	395	38.2

Interference to BLCDT20060405AAI LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	
Undesireds:	K45LJ-D	D22	LD	APP	ST. JAMES, MN		156.8 km
	WEUX	D21	DT	CP	CHIPPEWA FALLS, WI	BLANK0000034736	116.2
	KPXR-TV	D22	DT	BL	CEDAR RAPIDS, IA	DTVBL21156	324.5
	KTCI-TV	D23	DT	LIC	ST. PAUL, MN	BLEDT20100326AAI	1.3
Service area		Terrain-limited		IX-free, before		IX-free, after	
34024.4	3,665,135	33508.0	3,655,132	32809.3	3,636,038	32487.5	3,633,012
Percent New IX		0.98	0.08				
Undesired		Total IX		Unique IX, before		Unique IX, after	
K45LJ-D	D22 LD APP	323.8	3,037	321.8	3,026		
WEUX	D21 DT CP	629.3	17,951	619.2	17,783		
KPXR-TV	D22 DT BL	40.2	867	31.2	748		
KTCI-TV	D23 DT LIC	39.2	444	38.2	395		

Interference to BLDTT20120604AAW LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAW	
Undesireds:	K45LJ-D	D22	LD	APP	ST. JAMES, MN		57.2 km
	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	57.4
	K22DO-D	D22	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACP	56.2
	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	155.0
	K23FP-D	D23	LD	LIC	OLIVIA, MN	BLDTT20120213ABJ	24.4
Service area		Terrain-limited		IX-free, before		IX-free, after	
1806.5	13,256	1802.5	13,254	1720.5	13,115	1632.3	12,885
Percent New IX		5.13	1.75				
Undesired		Total IX		Unique IX, before		Unique IX, after	
K45LJ-D	D22 LD APP	90.3	230	88.3	230		
K21DG-D	D21 LD LIC	1.0	0	1.0	0		
K22DO-D	D22 LD LIC	67.9	126	54.9	99		

WUCW D22 DT LIC	24.0	40	11.0	13	11.0	13
K23FP-D D23 LD LIC	2.0	0	2.0	0	2.0	0

Interference to proposal scenario 1
9.02% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K45LJ-D	D22	LD	APP	ST. JAMES, MN		
Undesireds:	K21DG-D	D21	LD	LIC	ST. JAMES, MN	BLDTL20091204ADE	0.3 km
	WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	156.8
	K22KU-D	D22	LD	LIC	REDWOOD FALLS, MN	BLD TT20120604AAW	57.2

Service area	Terrain-limited	IX-free	Percent IX
3373.3 42,037	3371.3 42,031	3253.7 38,238	3.49 9.02

Undesired	Total IX	Unique IX	Prcnt Unique IX
K21DG-D D21 LD LIC 111.6	3,759	100.5	3,557 2.98 8.46
WUCW D22 DT LIC 8.1	151	3.0	7 0.09 0.02
K22KU-D D22 LD LIC 9.0	85	3.0	27 0.09 0.06