

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Redwood15d370wP, Model: Longley-Rice
Start: 2018.04.24 09:42:07

Study created: 2018.04.24 09:42:06

Study build station data: LMS TV 2018-04-19

Proposal: K39CH-D D15 LD APP REDWOOD FALLS, MN
Facility ID: 55441
Station data: User record
Record ID: 487
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	KTIV	D14	DT	CP	SIOUX CITY, IA	BLANK0000034419	240.5 km
No	K14LZ-D	D14	LD	LIC	ALEXANDRIA, MN	BLDTL20120312ABZ	158.3
No	K14KD-D	D14	LD	LIC	FROST, MN	BLDTL20090730ACO	135.4
No	K14OL-D	D14	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACI	56.2
No	K33LN-D	D14	DC	APP	MINNEAPOLIS, MN	BDFCDTA20090721ACH	141.9
No	K14PU-D	D14	LD	CP	OAKLAND, MN	BNPDTL20100510AJW	179.7
Yes	K14KE-D	D14	LD	LIC	ST. JAMES, MN	BLDTL20100113ACZ	57.4
No	K14LF-D	D14	LD	LIC	WILLMAR, MN	BLDTT20100218ADS	68.8
No	KYOU-TV	D15	DT	LIC	OTTUMWA, IA	BLANK0000001581	446.3
No	NEW	D15	LD	APP	DULUTH, MN	BNPDTL20090825AQV	332.9
No	K15GT-D	D15-	LD	LIC	HIBBING, MN	BLANK0000016503	350.9
No	K15GT-D	N15-	TX	LIC	HIBBING, MN	BLTT20040909ABE	350.9
Yes	K43JE-D	D15	LD	APP	LAKE CRYSTAL, MN	BLANK0000051902	76.7
No	KWJM-LD	D15	LD	LIC	Minneapolis, MN	BLANK0000004612	154.6
No	KWJM-LD	D15	LD	CP	Minneapolis, MN	BLANK0000004719	141.9
No	K15JF-D	D15	LD	CP	SAUK CENTRE, MN	BNPDTL20100505AKL	139.4
No	K15IS-D	D15	LD	CP	WILLMAR, MN	BNPDTL20100504ALT	68.8
Yes	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	106.5

No	KGFE	D15	DT	LIC	GRAND FORKS, ND	BLEDT20090619ADI	401.2
No	KFXL-TV	D15	DT	LIC	LINCOLN, NE	BLANK0000001045	434.0
No	KFXL-TV	D15	DT	APP	LINCOLN, NE	BLANK0000035803	445.6
No	K15IR-D	D15	LD	CP	ABERDEEN, SD	BNPDTL20100331AEY	302.1
No	K15JW-D	D15	LD	CP	PLANKINTON, SD	BNPDTL20100510AJD	292.6
No	WQOW	D15	DT	LIC	EAU CLAIRE, WI	BLCDT20090706AGH	278.1
No	WHLA-TV	D15	DT	CP	LA CROSSE, WI	BLANK0000031829	298.6
No	NEW	D15	LD	APP	LA CROSSE, WI	BNPDTL20100201AET	298.6
No	K16CO-D	D16	LD	LIC	ALEXANDRIA, MN	BLDTL20120312ACF	158.3
No	K16BQ	D16+	LD	CP	BRAINERD, MN	BLANK0000047348	206.7
No	K16CP-D	D16	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ADB	56.2
No	K16JN-D	D16	LD	CP	SAINT CLOUD, MN	BLANK0000013921	123.6
No	KPXM-TV	D16	DT	CP	ST. CLOUD, MN	BLANK0000034401	135.6
No	KPXM-TV	D16	DT	APP	ST. CLOUD, MN	BLANK0000041060	151.7
No	K16CG-D	D16	LD	LIC	ST. JAMES, MN	BLDTL20120625AAQ	57.2
No	K16HY-D	D16	LD	LIC	ST. PAUL, MN	BLDTL20100521ACA	141.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D15
 Mask: Stringent
 Latitude: 44 32 58.90 N (NAD83)
 Longitude: 94 58 1.00 W
 Height AMSL: 406.3 m
 HAAT: 0.0 m
 Peak ERP: 0.370 kW
 Antenna: MCI-955114 (ID 20050) 0.0 deg
 Elev Pattn: Generic

48.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.370 kW	86.8 m	24.9 km
45.0	0.322	85.0	23.9
90.0	0.370	93.8	25.7

135.0	0.322	124.1	27.8
180.0	0.370	94.4	25.8
225.0	0.322	92.2	24.8
270.0	0.370	121.6	28.4
315.0	0.322	93.5	25.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 99 m

Distance to Canadian border: 449.9 km

Distance to Mexican border: 1735.5 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 216.2 degrees Distance: 492.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 243.4 degrees Distance: 973.0 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 BLDTL20100113ACZ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K14KE-D	D14	LD	LIC	ST. JAMES, MN	BLDTL20100113ACZ	

Undesireds:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		57.4 km
	KBBA-LD	D14	LD	LIC	Cedar Rapids, IA	BLANK0000004383	254.7
	KTIV	D14	DT	CP	SIOUX CITY, IA	BLANK00000034419	214.1
	K14KD-D	D14	LD	LIC	FROST, MN	BLDTL20090730ACO	78.8
	K14OL-D	D14	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ACI	110.1
	K43JE-D	D15	LD	APP	LAKE CRYSTAL, MN	BLANK00000051902	24.4
	KWJM-LD	D15	LD	LIC	Minneapolis, MN	BLANK0000004612	140.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
6585.5 75,310	6582.5 75,289	6560.3 75,118	6558.3 75,118	0.03 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K39CH-D D15 LD APP	4.0 0	2.0 0	
KTIV D14 DT CP	4.0 118	3.0 51	
K14KD-D D14 LD LIC	17.2 53	17.2 53	
K14OL-D D14 LD LIC	1.0 0	0.0 0	
K43JE-D D15 LD APP	1.0 67	0.0 0	

Interference to BLANK0000051902 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K43JE-D	D15	LD	APP	LAKE CRYSTAL, MN	BLANK0000051902	
Undesireds:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		76.7 km
	K14KE-D	D14	LD	LIC	ST. JAMES, MN	BLDTL20100113ACZ	24.4
	KWJM-LD	D15	LD	LIC	Minneapolis, MN	BLANK0000004612	124.1
	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	132.9
	K16CG-D	D16	LD	LIC	ST. JAMES, MN	BLDTL20120625AAQ	24.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
2831.8 109,489	2826.8 109,225	2794.5 107,152	2792.5 107,034	0.07 0.11

Undesired	Total IX	Unique IX, before	Unique IX, after
K39CH-D D15 LD APP	2.0 118	2.0 118	
K14KE-D D14 LD LIC	21.2 89	20.2 64	
KSMN D15 DT LIC	11.1 2,009	10.1 1,984	

K16CG-D D16 LD LIC 1.0 0 1.0 0 1.0 0

Interference to BLEDT20051219AGX LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	
Undesireds:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		106.5 km
	KTIV	D14	DT	CP	SIOUX CITY, IA	BLANK00000034419	147.4
	KFXL-TV	D15	DT	LIC	LINCOLN, NE	BLANK00000001045	343.7
	WHLA-TV	D15	DT	CP	LA CROSSE, WI	BLANK00000031829	367.2
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
20299.9	320,421	20288.9		320,403	20204.8	320,113	19803.4 318,606 1.99 0.47
Undesired		Total IX		Unique IX, before		Unique IX, after	
K39CH-D D15 LD APP		401.4		1,507		401.4	1,507
KTIV D14 DT CP		84.1		290	84.1	290	84.1 290

Interference to BLEDT20051219AGX LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	
Undesireds:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		106.5 km
	KTIV	D14	DT	CP	SIOUX CITY, IA	BLANK00000034419	147.4
	KFXL-TV	D15	DT	APP	LINCOLN, NE	BLANK00000035803	356.6
	WHLA-TV	D15	DT	CP	LA CROSSE, WI	BLANK00000031829	367.2
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
20299.9	320,421	20288.9		320,403	20203.8	320,113	19802.4 318,606 1.99 0.47
Undesired		Total IX		Unique IX, before		Unique IX, after	
K39CH-D D15 LD APP		401.4		1,507		401.4	1,507
KTIV D14 DT CP		84.1		290	84.1	290	84.1 290
KFXL-TV D15 DT APP		1.0		0	1.0	0	1.0 0

Interference to BLEDT20051219AGX LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	
Undesireds:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		106.5 km
	KTIV	D14	DT	BL	SIOUX CITY, IA	DTVBL66170	147.4
	KFXL-TV	D15	DT	LIC	LINCOLN, NE	BLANK0000001045	343.7
	WHLA-TV	D15	DT	CP	LA CROSSE, WI	BLANK0000031829	367.2
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	20299.9	320,421	20288.9	320,403	20258.9	318,805	1.98 0.47
Undesired				Total IX	Unique IX, before	Unique IX, after	
K39CH-D D15 LD APP		401.4		1,507		401.4	1,507
KTIV D14 DT BL		30.0		91	30.0 91	30.0	91

Interference to BLEDT20051219AGX LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	
Undesireds:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		106.5 km
	KTIV	D14	DT	BL	SIOUX CITY, IA	DTVBL66170	147.4
	KFXL-TV	D15	DT	APP	LINCOLN, NE	BLANK0000035803	356.6
	WHLA-TV	D15	DT	CP	LA CROSSE, WI	BLANK0000031829	367.2
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	20299.9	320,421	20288.9	320,403	20257.9	318,805	1.98 0.47
Undesired				Total IX	Unique IX, before	Unique IX, after	
K39CH-D D15 LD APP		401.4		1,507		401.4	1,507
KTIV D14 DT BL		30.0		91	30.0 91	30.0	91
KFXL-TV D15 DT APP		1.0		0	1.0 0	1.0	0

Interference to proposal scenario 1

**MX: 15.12% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K39CH-D	D15	LD	APP	REDWOOD FALLS, MN		
Undesireds:	K43JE-D	D15	LD	APP	LAKE CRYSTAL, MN	BLANK00000051902	76.7 km
	KWJM-LD	D15	LD	LIC	Minneapolis, MN	BLANK00000004612	154.6
	KSMN	D15	DT	LIC	WORTHINGTON, MN	BLEDT20051219AGX	106.5

Service area		Terrain-limited		IX-free		Percent IX	
1901.6	13,661	1899.6	13,659	1063.3	11,594	44.03	15.12

Undesired	Total IX			Unique IX		Prcnt Unique IX	
K43JE-D D15 LD APP	6.0	14	6.0	14	0.32	0.10	
KSMN D15 DT LIC	830.3	2,051	830.3	2,051	43.71	15.02	