

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Redwood29dP, Model: Longley-Rice
Start: 2018.05.03 09:32:51

Study created: 2018.05.03 09:12:57

Study build station data: LMS TV 2018-05-01

Proposal: K48GQ-D D29 LD APP REDWOOD FALLS, MN
Facility ID: 55442
Station data: User record
Record ID: 604
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	KSIN-TV	D28	DT	LIC	SIOUX CITY, IA	BLEDT20050726AMC	250.5 km
No	K44GH-D	D28	LD	APP	ALEXANDRIA, MN	BLANK0000053422	158.1
No	KAWB	D28	DT	LIC	BRAINERD, MN	BLEDT20101012ADI	211.9
No	KILW-LD	D28	LD	LIC	Minneapolis, MN	BLANK0000004615	154.6
No	KILW-LD	D28	LD	CP	Minneapolis, MN	BLANK0000036435	113.3
No	K28LL-D	D28	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAU	0.0
No	K28MU-D	D28	LD	CP	WELLS, MN	BNPDTL20100510AJQ	139.6
No	K28IF-D	D28	LD	LIC	WILLMAR, MN	BLDTL20110203ACI	68.8
No	K42FI-D	D28+	LD	APP	WATERTOWN, SD	BLANK0000034776	173.0
No	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	352.9
No	K29KM-D	D29	LD	CP	ASHBY, MN	BNPDTL20100505AKS	182.5
No	K29LE-D	D29	LD	CP	DULUTH, MN	BNPDTL20100513ABM	332.7
No	K29IF-D	D29	LD	LIC	FROST, MN	BLDTL20080505ABD	135.4
No	K29EB-D	D29-	LD	LIC	GRAND RAPIDS, MN	BLANK0000016819	333.0
No	K29EB-D	N29-	TX	LIC	GRAND RAPIDS, MN	BLTT20021011AAW	333.0
Yes	K29JW-D	D29	LD	LIC	GRANITE FALLS, MN	BLDTT20110824ACG	56.2
Yes	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	155.9
Yes	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLDTT20090817ACY	57.2

No	K29KN-D	D29	LD	CP	CASSELTON, ND	BNPDTL20100505ALD	317.6
No	K29KK-D	D29	LD	CP	NORFOLK, NE	BDCCDTL20120206AAL	357.4
No	KXVO	D29	DT	CP	OMAHA, NE	BLANK0000034544	400.0
No	KPTH	D30	DT	CP	SIOUX CITY, IA	BLANK0000033734	240.5
No	K30NI-D	D30	LD	CP	ALBERT LEO, MN	BNPDTL20100510AJS	156.2
No	K30AF-D	D30	LD	LIC	ALEXANDRIA, MN	BLDTL20120313ABL	158.3
No	K30KQ-D	D30	LD	LIC	JACKSON, MN	BLDTL20130321ACB	105.2
No	KSTC-TV	D30	DT	CP	MINNEAPOLIS, MN	BLANK0000034690	155.0
Yes	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLDTL20100416AAI	57.4
No	K30FZ-D	D30	LD	LIC	WILLMAR, MN	BLDTT20141107AAY	68.8
No	K30LU-D	D30	LD	CP	WATERTOWN, SD	BNPDTL20100505AEA	168.6
No	K30LV-D	D30	LD	CP	WENTWORTH, SD	BNPDTL20100505AEL	168.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D29
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: 0.500 kW
Antenna: Omnidirectional
Elev Pattn: Generic

50.2 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.500 kW	86.8 m	24.8 km
45.0	0.500	85.0	24.5
90.0	0.500	93.8	25.6
135.0	0.500	124.1	28.5
180.0	0.500	94.4	25.7
225.0	0.500	92.2	25.4
270.0	0.500	121.6	28.3

315.0 0.500 93.5 25.6

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

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 BLDTT20110824ACG LIC scenario 1

**IX: 2.04% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K29JW-D	D29	LD	LIC	GRANITE FALLS, MN	BLDTT20110824ACG	
Undesireds:	K48GQ-D	D29	LD	APP	REDWOOD FALLS, MN		56.2 km
	K29EB-D	D29-	LD	LIC	GRAND RAPIDS, MN	BLANK0000016819	328.2
	K30FZ-D	D30	LD	LIC	WILLMAR, MN	BLDTT20141107AAY	58.3
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
3194.5	24,172	3192.5		24,172	3180.4	24,121	2.86 2.04

Undesired		Total IX	Unique IX, before	Unique IX, after
K48GQ-D D29 LD APP	91.0	492		91.0 492
K30FZ-D D30 LD LIC	12.2	51	12.2 51	12.2 51

Interference to BLCDT20100809CJF LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	
Undesireds:	K48GQ-D	D29	LD	APP	REDWOOD FALLS, MN		155.9 km
	WXOW	D28	DT	CP	LA CROSSE, WI	BLANK0000027474	197.0
	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	321.3
	KSTC-TV	D30	DT	CP	MINNEAPOLIS, MN	BLANK0000034690	1.3
Service area		Terrain-limited		IX-free, before		IX-free, after	
36050.2	3,786,936	35475.6	3,771,055	35117.6	3,756,615	35116.6	3,756,615
						Percent New IX	
						0.00 0.00	

Undesired		Total IX	Unique IX, before	Unique IX, after
K48GQ-D D29 LD APP	1.0	0		1.0 0
KGAN D29 DT LIC	152.0	5,363	151.0 5,363	151.0 5,363
KSTC-TV D30 DT CP	207.0	9,077	206.0 9,077	206.0 9,077

Interference to BLCDT20100809CJF LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	
Undesireds:	K48GQ-D	D29	LD	APP	REDWOOD FALLS, MN		155.9 km
	WXOW	D28	DT	CP	LA CROSSE, WI	BLANK0000027474	197.0
	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	321.3
	KSTC-TV	D30	DT	BL	MINNEAPOLIS, MN	DTVBL35843	1.3
Service area		Terrain-limited		IX-free, before		IX-free, after	
36050.2	3,786,936	35475.6	3,771,055	35196.0	3,760,951	35195.0	3,760,951
						Percent New IX	
						0.00 0.00	

Undesired		Total IX	Unique IX, before	Unique IX, after
K48GQ-D D29 LD APP	1.0	0		1.0 0
KGAN D29 DT LIC	152.0	5,363	152.0 5,363	152.0 5,363
KSTC-TV D30 DT BL	127.6	4,741	127.6 4,741	127.6 4,741

Interference to BLDDTT20090817ACY LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLDDTT20090817ACY	
Undesireds:	K48GQ-D	D29	LD	APP	REDWOOD FALLS, MN		57.2 km
	K29IF-D	D29	LD	LIC	FROST, MN	BLDDTL20080505ABD	79.0
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	157.4
	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLDDTL20100416AAI	0.3
Service area		Terrain-limited		IX-free, before		IX-free, after	
4956.2	53,760	4954.2	53,758	3636.0	41,570	3635.0	41,570
						Percent New IX	
						0.03 0.00	

Undesired		Total IX	Unique IX, before	Unique IX, after
K48GQ-D D29 LD APP	125.3	393		1.0 0
K29IF-D D29 LD LIC	1.0	0	0.0 0	0.0 0
WFTC D29 DT LIC	11.1	47	2.0 26	2.0 26
K30FN-D D30 LD LIC	1316.2	12,162	1306.2 12,141	1182.8 11,748

Interference to BLDDTL20100416AAI LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLDDTL20100416AAI	
Undesireds:	K48GQ-D	D29	LD	APP	REDWOOD FALLS, MN		57.4 km
	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLDDTT20090817ACY	0.3
	KPTH	D30	DT	CP	SIOUX CITY, IA	BLANK0000033734	214.1
	K30KQ-D	D30	LD	LIC	JACKSON, MN	BLDDTL20130321ACB	64.4
	KSTC-TV	D30	DT	CP	MINNEAPOLIS, MN	BLANK0000034690	156.8
	K31KV-D	D31	LD	LIC	ST. JAMES, MN	BLDDTL20120625AAY	0.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
9512.4 157,384	9504.4 155,270	8931.1 142,398	8910.1 142,369	0.24 0.02

Undesired	Total IX	Unique IX, before	Unique IX, after
K48GQ-D D29 LD APP	21.0 29	21.0 29	21.0 29
K29IE-D D29 LD LIC	5.0 2,596	2.0 70	2.0 70
KPTH D30 DT CP	6.0 1,218	1.0 1,197	1.0 1,197
K30KQ-D D30 LD LIC	422.8 5,366	383.3 3,721	383.3 3,721
KSTC-TV D30 DT CP	183.9 7,883	142.5 3,692	142.5 3,692
K31KV-D D31 LD LIC	2.0 2,494	0.0 0	0.0 0

Interference to proposal scenario 1
7.05% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K48GQ-D	D29	LD	APP	REDWOOD FALLS, MN		
Undesireds:	K29JW-D	D29	LD	LIC	GRANITE FALLS, MN	BLD TT20110824ACG	56.2 km
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	155.9
	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLD TT20090817ACY	57.2
	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLD TL20100416AAI	57.4

Service area	Terrain-limited	IX-free	Percent IX
2119.9 15,195	2115.9 15,193	1718.1 14,122	18.80 7.05

Undesired	Total IX	Unique IX	Prcnt Unique IX
K29JW-D D29 LD LIC	80.9 176	72.9 170	3.45 1.12
WFTC D29 DT LIC	14.0 29	8.0 23	0.38 0.15
K29IE-D D29 LD LIC	311.8 872	306.8 872	14.50 5.74
K30FN-D D30 LD LIC	2.0 0	0.0 0	0.00 0.00