tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Jackson29DXP, Model: Longley-Rice
Start: 2018.04.28 11:18:35

Study created: 2018.04.28 11:14:44

Study build station data: LMS TV LMSonApril122018

    Proposal: K45EH-D D29 LD APP JACKSON, MN
 Facility ID: 21282
Station data: User record
   Record ID: 545
     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	161.2 km
No	KILW-LD	D28	LD	CP	Minneapolis, MN	BLANK0000036435	156.7
No	K28LL-D	D28	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAU	105.2
No	K28MU-D	D28	LD	CP	WELLS, MN	BNPDTL20100510AJQ	100.8
No	K28IF-D	D28	LD	LIC	WILLMAR, MN	BLDTL20110203ACI	173.8
No	KGAN	D29	DT	LIC	CEDAR RAPIDS, IA	BLCDT20140416AAI	292.3
No	K29KM-D	D29	LD	CP	ASHBY, MN	BNPDTL20100505AKS	282.2
No	K29LE-D	D29	LD	CP	DULUTH, MN	BNPDTL20100513ABM	419.3
No	K29IF-D	D29	LD	LIC	FROST, MN	BLDTL20080505ABD	85.6
No	K29JW-D	D29	LD	LIC	GRANITE FALLS, MN	BLDTT20110824ACG	141.5
No	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	219.6
Yes	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLDTT20090817ACY	64.3
No	K29KK-D	D29	LD	CP	NORFOLK, NE	BDCCDTL20120206AAL	268.7
No	KXVO	D29	DT	CP	OMAHA, NE	BLANK0000034544	299.1
No	KPTH	D30	DT	CP	SIOUX CITY, IA	BLANK0000033734	150.7
No	KCAU-TV	D30	LD	APP	SIOUX CITY, IA	BLCDT20090903AAI	168.3
No	K30NI-D	D30	LD	CP	ALBERT LEO, MN	BNPDTL20100510AJS	127.0
No	K30KQ-D	D30	LD	LIC	JACKSON, MN	BLDTL20130321ACB	0.0

No	KSTC-TV	D30	DT	CP	MINNEAPOLIS, MN	BLANK0000034690	219.1
No	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLDTL20100416AAI	64.4
No	K30FZ-D	D30	LD	LIC	WILLMAR, MN	BLDTT20141107AAY	173.8
No	K30LV-D	D30	LD	CP	WENTWORTH, SD	BNPDTL20100505AEL	158.6

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:  43 36 12.00 N (NAD83)
  Longitude:  94 59 34.00 W
Height AMSL: 526.0 m
       HAAT: 0.0 m
   Peak ERP: 3.10 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
```

50.2 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	3.10 kW	89.3 m	34.5 km
45.0	3.10	102.3	36.0
90.0	3.10	103.9	36.2
135.0	3.10	104.9	36.3
180.0	3.10	90.4	34.6
225.0	3.10	89.3	34.5
270.0	3.10	77.1	32.8
315.0	3.10	69.5	31.7

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 91 m

Distance to Canadian border: 551.7 km

Distance to Mexican border: 1638.6 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 224.7 degrees Distance: 410.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 249.1 degrees Distance: 928.8 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 BLDTT20090817ACY LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLDTT20090817ACY	
Undesireds:	K45EH-D	D29	LD	APP	JACKSON, MN		64.3 km
	K29IF-D	D29	LD	LIC	FROST, MN	BLDTL20080505ABD	79.0
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	157.4
	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLDTL20100416AAI	0.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4956.2	53,760	4954.2	53,758	3636.0	41,570	3625.8	41,535	0.28	0.08

Undesired	Total IX		Unique IX, before		Unique IX, after	
K45EH-D D29 LD APP	150.9	943			10.1	35
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	1165.4	11,233

Interference to proposal scenario 1
4.28% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K45EH-D	D29	LD	APP	JACKSON, MN		
Undesireds:	K29IF-D	D29	LD	LIC	FROST, MN	BLDTL20080505ABD	85.6 km
	WFTC	D29	DT	LIC	MINNEAPOLIS, MN	BLCDT20100809CJF	219.6
	K29IE-D	D29	LD	LIC	ST. JAMES, MN	BLDTT20090817ACY	64.3
	K30KQ-D	D30	LD	LIC	JACKSON, MN	BLDTL20130321ACB	0.0
	K30FN-D	D30	LD	LIC	ST. JAMES, MN	BLDTL20100416AAI	64.4

Service area		Terrain-limited		IX-free		Percent IX	
3820.3	43,618	3820.3	43,618	3414.4	41,753	10.63	4.28

Undesired	Total IX		Unique IX		Prcnt Unique IX	
K29IF-D D29 LD LIC	2.0	0	1.0	0	0.03	0.00
WFTC D29 DT LIC	2.0	7	2.0	7	0.05	0.02
K29IE-D D29 LD LIC	402.0	1,858	397.9	1,858	10.42	4.26
K30KQ-D D30 LD LIC	1.0	0	1.0	0	0.03	0.00
K30FN-D D30 LD LIC	3.0	0	0.0	0	0.00	0.00