

**Note:**  
**Study cell size: 1.00 km**  
**Profile point spacing: 0.10 km**

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: K16JN\_Ch17\_4x3\_Move\_Pre, Model: Longley-Rice  
Start: 2019.04.16 18:59:41

Study created: 2019.04.16 18:59:41

Study build station data: LMS TV 2019-04-14

Proposal: K16JN-D D17 LD APP SAINT CLOUD, MN  
File number: K16JN\_Ch17\_4x3\_Move  
Facility ID: 184637  
Station data: User record  
Record ID: 779  
Country: U.S.

Build options:  
Protect pre-transition records not on baseline channel  
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	K16CO-D	D16	LD	LIC	ALEXANDRIA, MN	BLDTL20120312ACF	74.5 km
No	K16KK-D	D16	LD	CP	BARNSVILLE, MN	BNPDTL20100505AKZ	173.9
No	K16KM-D	D16	LD	CP	BEMIDJI, MN	BDCCDTL20120409AAH	171.8
No	K16BQ	D16+	LD	CP	BRAINERD, MN	BLANK0000047348	83.2
No	K16BQ	N16+	TX	LIC	BRAINERD, MN	BLTT19880608IT	83.2
No	K16CP-D	D16	LD	LIC	GRANITE FALLS, MN	BLDTL20110824ADB	120.5
No	K16MV-D	D16	LD	LIC	REDWOOD FALLS, MN	BLANK0000063425	124.1
Yes	KPXM-TV	D16	DT	LIC	ST. CLOUD, MN	BLANK0000054906	98.8
No	K16CG-D	D16	LD	LIC	ST. JAMES, MN	BLDTL20120625AAQ	169.6
No	K17MH-D	D17	LD	CP	CEDAR FALLS, IA	BNPDTL20101013ABB	354.4
Yes	K17NW-D	D17	LD	LIC	ALEXANDRIA, MN	BLANK0000063269	74.5
Yes	KQDS-TV	D17	DT	LIC	DULUTH, MN	BLCDT20060707ADN	229.6
No	K17MX-D	D17	LD	LIC	FROST, MN	BLANK0000062750	233.4
No	K17MY-D	D17	LD	LIC	JACKSON, MN	BLANK0000064443	227.9
No	WUMN-LD	D17	LD	LIC	MINNEAPOLIS, MN	BLDTL20141217AAM	126.4
No	K17BV-D	D17	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAY	124.1
No	K17MA-D	D17	LD	CP	RUSHMORE, MN	BNPDTL20100510AHY	241.1
No	K17MW-D	D17	LD	LIC	ST. JAMES, MN	BLANK0000064441	169.6
No	K17FE	N17+	TX	LIC	WADENA, MN	BLTT20021223AAH	91.9
Yes	K17FA-D	D17	LD	LIC	WILLMAR, MN	BLDTT20100122ABO	63.0
No	K17LT-D	D17	LD	CP	FARGO, ND	BNPDTL20100902AAZ	213.1
No	NEW	D17	LD	APP	GRAFTON, ND	BNPDTL20100505AJP	377.1
No	K17HG	N17-	TX	LIC	GRAND FORKS, ND	BLTTL20051101ABL	318.8
Yes	KDSD-TV	D17	DT	LIC	ABERDEEN, SD	BLDTT20110816AAM	240.7
No	K17NF-D	D17+	LD	LIC	BROOKINGS, SD	BLANK0000059096	223.8
No	K17NF-D	D17+	LD	CP	BROOKINGS, SD	BLANK0000067617	223.8
Yes	WEAU	D17	DT	CP	EAU CLAIRE, WI	BLANK0000034098	304.0
No	WLAX	D17	DT	LIC	LA CROSSE, WI	BLCDT20081105ABY	325.2
No	K18DG-D	D18z	LD	LIC	ALEXANDRIA, MN	BLANK0000024529	74.5
No	KQDS-TV	D18	DT	CP	DULUTH, MN	BLANK0000027535	229.6
No	K18GF-D	D18	LD	LIC	LITTLE FALLS, MN	BLDTL20120523ADD	37.4
No	KHVM-LD	D18	LD	CP	MINNEAPOLIS, MN	BLANK0000052068	126.8
No	K18IR-D	D18	LD	LIC	OLIVIA, MN	BLDTT20120213ABO	99.7
No	K18NE-D	D18	LD	LIC	ST. JAMES, MN	BLANK0000068150	169.6
No	KKTW-LD	N19-	TX	LIC	Minneapolis, MN	BLTTL19870921IE	30.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D17  
Mask: Full Service

Latitude: 45 37 59.60 N (NAD83)  
Longitude: 94 35 15.00 W  
Height AMSL: 449.0 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: SIRA 4x3 30.0 deg  
Elev Pattn: Generic

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	12.2 kW	64.1 m	38.8 km
45.0	10.3	91.8	42.1
90.0	11.1	89.1	42.1
135.0	13.9	78.3	41.6
180.0	1.42	84.5	31.3
225.0	0.320	72.6	22.0
270.0	7.95	80.9	39.3
315.0	9.91	65.7	38.1

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m Computed HAAT: 78 m

Distance to Canadian border: 326.0 km

Distance to Mexican border: 1848.6 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 212.0 degrees Distance: 608.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 238.6 degrees Distance: 1057.5 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: 0.10 km

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

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Interference to BLANK0000054906 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KPKM-TV	D16	DT	LIC	ST. CLOUD, MN	BLANK0000054906	
Undesireds:	K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3 Move	98.8 km
	KDSM-TV	D16	DT	LIC	DES MOINES, IA	BLCDT20110609ABE	390.2
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
23066.2	3,506,696	22992.0	3,504,741	22991.0	3,504,741	22979.0 3,503,608	0.05 0.03
Undesired				Total IX	Unique IX, before	Unique IX, after	
K16JN-D D17 LD APP				12.0 1,133		12.0 1,133	
KDSM-TV D16 DT LIC				1.0 0	1.0 0	1.0 0	

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Interference to BLANK0000063269 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K17NW-D	D17	LD	LIC	ALEXANDRIA, MN	BLANK0000063269	
Undesireds:	K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3 Move	74.5 km
	K16CO-D	D16	LD	LIC	ALEXANDRIA, MN	BLDTL20120312ACF	0.0
	K16BQ	D16+	LD	CP	BRAINERD, MN	BLANK0000047348	107.8
	K17FE	N17+	TX	LIC	WADENA, MN	BLTT20021223AAH	58.6
	K17NF-D	D17+	LD	LIC	BROOKINGS, SD	BLANK0000059096	205.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
3333.8 47,282	3319.7 46,981	3241.7 45,794	3173.7 45,596	2.10 0.43
Undesired	Total IX	Unique IX, before	Unique IX, after	
K16JN-D D17 LD APP	69.0 198		68.0 198	
K16CO-D D16 LD LIC	11.1 44	10.1 44	9.1 44	
K17FE N17+ TX LIC	67.9 1,143	66.9 1,143	66.9 1,143	

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Interference to BLCDT20060707ADN LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KQDS-TV	D17	DT	LIC	DULUTH, MN	BLCDT20060707ADN	
Undesireds: K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3_Move	229.6 km
WLAX	D17	DT	LIC	LA CROSSE, WI	BLCDT20081105ABY	337.3
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
31161.5 305,899	30660.9 302,061	30589.1 300,776	30587.1 300,776	0.01 0.00		
Undesired	Total IX	Unique IX, before	Unique IX, after			
K16JN-D D17 LD APP	3.0 0		2.0 0			
WLAX D17 DT LIC	71.8 1,285	71.8 1,285	70.8 1,285			

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Interference to BLDTT20100122ABO LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: K17FA-D	D17	LD	LIC	WILLMAR, MN	BLDTT20100122ABO	
Undesireds: K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3_Move	63.0 km
K17NF-D	D17+	LD	LIC	BROOKINGS, SD	BLANK0000059096	164.3
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
3190.7 47,139	3190.7 47,139	3190.7 47,139	3178.6 47,059	0.38 0.17		
Undesired	Total IX	Unique IX, before	Unique IX, after			
K16JN-D D17 LD APP	12.1 80		12.1 80			

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Interference to BLEDT20110816AAM LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KDSD-TV	D17	DT	LIC	ABERDEEN, SD	BLEDT20110816AAM	
Undesireds: K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3_Move	240.7 km
KBMY	D17	DT	LIC	BISMARCK, ND	BLCDT20090701ADJ	270.2
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
17740.1 64,404	17021.8 60,144	17020.8 60,144	17002.7 60,120	0.11 0.04		
Undesired	Total IX	Unique IX, before	Unique IX, after			
K16JN-D D17 LD APP	18.1 24		18.1 24			
KBMY D17 DT LIC	1.0 0	1.0 0	1.0 0			

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Interference to BLANK0000034098 CP scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WEAU	D17	DT	CP	EAU CLAIRE, WI	BLANK0000034098	
Undesireds: K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3_Move	304.0 km
WJFW-TV	D16	DT	LIC	RHINELANDER, WI	BLCDT20070222AOP	177.0
KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	348.7
WBME-CD	D17	DC	CP	MILWAUKEE, WI	BLANK0000034630	297.8
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
50028.0 1,046,760	49084.3 1,004,595	48583.1 1,001,651	48579.0 1,001,537	0.01 0.01		
Undesired	Total IX	Unique IX, before	Unique IX, after			
K16JN-D D17 LD APP	4.0 114		4.0 114			
WJFW-TV D16 DT LIC	442.4 983	442.4 983	442.4 983			
KWQC-TV D17 DT CP	56.7 1,935	52.7 1,770	52.7 1,770			
WBME-CD D17 DC CP	6.1 191	2.0 26	2.0 26			

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Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3_Move	
Undesireds:	K16BQ	D16+	LD	CP	BRAINERD, MN	BLANK0000047348	83.2 km
	KPXM-TV	D16	DT	LIC	ST. CLOUD, MN	BLANK0000054906	98.8
	K17NW-D	D17	LD	LIC	ALEXANDRIA, MN	BLANK0000063269	74.5
	WUMN-LD	D17	LD	LIC	MINNEAPOLIS, MN	BLDTL20141217AAM	126.4
	K17FA-D	D17	LD	LIC	WILLMAR, MN	BLDTT20100122ABO	63.0
	K17NF-D	D17+	LD	LIC	BROOKINGS, SD	BLANK0000059096	223.8
	WEAU	D17	DT	CP	EAU CLAIRE, WI	BLANK0000034098	304.0
	K18GF-D	D18	LD	LIC	LITTLE FALLS, MN	BLDTL20120523ADD	37.4
Service area		Terrain-limited		IX-free		Percent IX	
4517.3	190,748	4509.3	190,598	4378.7	188,184	2.90	1.27

Undesired	Total IX	Unique IX	Prcnt Unique IX
K16BQ D16+ LD CP	1.0 36	0.0 0	0.00 0.00
KPXM-TV D16 DT LIC	5.0 62	1.0 0	0.02 0.00
K17NW-D D17 LD LIC	64.0 398	64.0 398	1.42 0.21
WUMN-LD D17 LD LIC	28.2 1,089	22.1 995	0.49 0.52
K17FA-D D17 LD LIC	28.2 517	27.2 517	0.60 0.27
WEAU D17 DT CP	6.0 94	1.0 0	0.02 0.00
K18GF-D D18 LD LIC	9.2 410	8.1 374	0.18 0.20

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Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K16JN-D	D17	LD	APP	SAINT CLOUD, MN	K16JN_Ch17_4x3_Move	
Undesireds:	KPXM-TV	D16	DT	LIC	ST. CLOUD, MN	BLANK0000054906	98.8 km
	K17NW-D	D17	LD	LIC	ALEXANDRIA, MN	BLANK0000063269	74.5
	WUMN-LD	D17	LD	LIC	MINNEAPOLIS, MN	BLDTL20141217AAM	126.4
	K17FA-D	D17	LD	LIC	WILLMAR, MN	BLDTT20100122ABO	63.0
	K17NF-D	D17+	LD	LIC	BROOKINGS, SD	BLANK0000059096	223.8
	WEAU	D17	DT	CP	EAU CLAIRE, WI	BLANK0000034098	304.0
	K18GF-D	D18	LD	LIC	LITTLE FALLS, MN	BLDTL20120523ADD	37.4
Service area		Terrain-limited		IX-free		Percent IX	
4517.3	190,748	4509.3	190,598	4378.7	188,184	2.90	1.27
Undesired	Total IX		Unique IX		Prcnt Unique IX		
KPXM-TV D16 DT LIC	5.0	62	1.0	0	0.02	0.00	
K17NW-D D17 LD LIC	64.0	398	64.0	398	1.42	0.21	
WUMN-LD D17 LD LIC	28.2	1,089	22.1	995	0.49	0.52	
K17FA-D D17 LD LIC	28.2	517	27.2	517	0.60	0.27	
WEAU D17 DT CP	6.0	94	1.0	0	0.02	0.00	
K18GF-D D18 LD LIC	9.2	410	9.2	410	0.20	0.22	