

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Frost17dXFP, Model: Longley-Rice
Start: 2018.04.29 08:28:35

Study created: 2018.04.29 08:28:35

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

Proposal: K47MI-D D17 LD APP FROST, MN
Facility ID: 182390
Station data: User record
Record ID: 551
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	KDSM-TV	D16	DT	LIC	DES MOINES, IA	BLCDT20110609ABE	196.8 km
No	KPXM-TV	D16	DT	CP	ST. CLOUD, MN	BLANK0000034401	200.5
No	KPXM-TV	D16	DT	APP	ST. CLOUD, MN	BLANK0000041060	199.2
No	K16CG-D	D16	LD	LIC	ST. JAMES, MN	BLDTL20120625AAQ	79.0
No	K16HY-D	D16	LD	LIC	ST. PAUL, MN	BLDTL20100521ACA	163.1
No	K17MH-D	D17	LD	CP	CEDAR FALLS, IA	BNPDTL20101013ABB	130.8
No	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	362.2
No	KQCT-LP	D17	LD	CP	DAVENPORT, IA	BMPDTL20120206AAB	385.5
No	KDAO-CD	D17-	DC	CP	MARSHALLTOWN, IA	BLANK0000034815	187.3
No	KGLU-LD	D17	LD	LIC	OTTUMWA, IA	BLANK0000010561	330.3
No	KGLU-LD	D17	LD	CP	OTTUMWA, IA	BLANK0000010611	286.9
No	KQDS-TV	D17	DT	LIC	DULUTH, MN	BLCDT20060707ADN	383.7
No	WUMN-LD	D17	LD	LIC	MINNEAPOLIS, MN	BLDTL20141217AAM	162.9
No	K17BV-D	D17	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAY	135.4
No	K17MA-D	D17	LD	CP	RUSHMORE, MN	BNPDTL20100510AHY	147.5
No	K17FE	N17+	TX	LIC	WADENA, MN	BLTT20021223AAH	324.2
No	K17FA-D	D17	LD	LIC	WILLMAR, MN	BLDTT20100122ABO	196.7
No	KYNE-TV	D17	DT	LIC	OMAHA, NE	BLANK0000019249	305.9

No	KYNE-TV	D17	DT	APP	OMAHA, NE	BLANK0000035901	305.9
No	KDSD-TV	D17	DT	LIC	ABERDEEN, SD	BLEDT20110816AAM	364.9
No	K40FZ-D	D17+	LD	APP	BROOKINGS, SD	BLANK0000052874	242.1
No	WEAU	D17	DT	CP	EAU CLAIRE, WI	BLANK0000034098	265.4
No	WLAX	D17	DT	LIC	LA CROSSE, WI	BLCDT20081105ABY	207.0
Yes	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	99.2
No	K18KG-D	D18	LD	LIC	SPENCER, IA	BLDTL20130327AAU	92.1
No	KHVM-LD	D18	LD	APP	MINNEAPOLIS, MN	BLANK0000052068	175.4
No	KJNK-LD	D18	LD	APP	MINNEAPOLIS, MN	BLANK0000051592	163.1
No	K18IR-D	D18	LD	LIC	OLIVIA, MN	BLDTT20120213ABO	150.6

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: 43 35 9.00 N (NAD83)
 Longitude: 93 55 47.00 W
 Height AMSL: 433.0 m
 HAAT: 0.0 m
 Peak ERP: 3.00 kW
 Antenna: Omnidirectional
 Elev Pattn: Generic

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	3.00 kW	95.1 m	36.4 km
45.0	3.00	87.6	35.4
90.0	3.00	77.4	34.0
135.0	3.00	73.0	33.4
180.0	3.00	83.5	34.9
225.0	3.00	92.0	36.0
270.0	3.00	97.6	36.7
315.0	3.00	99.2	36.9

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 88 m

Distance to Canadian border: 528.1 km

Distance to Mexican border: 1671.9 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 232.9 degrees Distance: 473.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 251.6 degrees Distance: 1008.7 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 BLEDT20090612AHJ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	
Undesireds:	K47MI-D	D17	LD	APP	FROST, MN		99.2 km
	KDAO-CD	D17-	DC	CP	MARSHALLTOWN, IA	BLANK0000034815	157.0
	KQDS-TV	D18	DT	CP	DULUTH, MN	BLANK0000027535	371.7
	WMSN-TV	D18	DT	CP	MADISON, WI	BLANK0000034381	261.0
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	197.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
29725.1	576,628	29657.7	573,062	29448.9	570,364	29319.1	569,901	0.44	0.08

Undesired		Total IX		Unique IX, before		Unique IX, after	
K47MI-D D17 LD APP	129.7	463			129.7	463	
KQDS-TV D18 DT CP	21.1	675		17.1	466	17.1	466
WMSN-TV D18 DT CP	191.7	2,232		187.7	2,023	187.7	2,023

Interference to BLEDT20090612AHJ LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	
Undesireds:	K47MI-D	D17	LD	APP	FROST, MN		99.2 km
	KDAO-CD	D17-	DC	CP	MARSHALLTOWN, IA	BLANK0000034815	157.0
	KQDS-TV	D18	DT	BL	DULUTH, MN	DTVBL35525	371.7
	WMSN-TV	D18	DT	CP	MADISON, WI	BLANK0000034381	261.0
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	197.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
29725.1	576,628	29657.7	573,062	29448.9	568,645	29319.1	568,182	0.44	0.08

Undesired		Total IX		Unique IX, before		Unique IX, after	
K47MI-D D17 LD APP	129.7	463			129.7	463	
KQDS-TV D18 DT BL	21.1	2,394		17.1	2,185	17.1	2,185
WMSN-TV D18 DT CP	191.7	2,232		187.7	2,023	187.7	2,023

Interference to BLEDT20090612AHJ LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	
Undesireds:	K47MI-D	D17	LD	APP	FROST, MN		99.2 km
	KDAO-CD	D17-	DC	CP	MARSHALLTOWN, IA	BLANK0000034815	157.0
	KQDS-TV	D18	DT	CP	DULUTH, MN	BLANK0000027535	371.7

WMSN-TV	D18	DT	BL	MADISON, WI	DTVBL10221	261.0
KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	197.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
29725.1	576,628	29657.7	573,062	29555.5	571,049	29425.7	570,586	0.44 0.08

Undesired		Total IX		Unique IX, before		Unique IX, after
K47MI-D D17 LD APP	129.7	463		129.7	463	
KQDS-TV D18 DT CP	21.1	675	18.1	466	18.1 466	
WMSN-TV D18 DT BL	84.1	1,547	81.1	1,338	81.1 1,338	

Interference to BLEDT20090612AHJ LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	
Undesireds:	K47MI-D	D17	LD	APP	FROST, MN		99.2 km
	KDAO-CD	D17-	DC	CP	MARSHALLTOWN, IA	BLANK0000034815	157.0
	KQDS-TV	D18	DT	BL	DULUTH, MN	DTVBL35525	371.7
	WMSN-TV	D18	DT	BL	MADISON, WI	DTVBL10221	261.0
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	197.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
29725.1	576,628	29657.7	573,062	29555.5	569,330	29425.7	568,867	0.44 0.08

Undesired		Total IX		Unique IX, before		Unique IX, after
K47MI-D D17 LD APP	129.7	463		129.7	463	
KQDS-TV D18 DT BL	21.1	2,394	18.1	2,185	18.1 2,185	
WMSN-TV D18 DT BL	84.1	1,547	81.1	1,338	81.1 1,338	

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K47MI-D	D17	LD	APP	FROST, MN		
Undesireds:	KGLU-LD	D17	LD	LIC	OTTUMWA, IA	BLANK0000010561	330.3 km

KYNE-TV D17 DT LIC OMAHA, NE

BLANK00000019249

305.9

Service area		Terrain-limited		IX-free		Percent IX	
3979.2	22,531	3979.2	22,531	3979.2	22,531	0.00	0.00