

INTERFERENCE ANALYSIS FOR KDIT-CD, (FACILITY ID 46753) MARSHALLTOWN, IOWA (CHANNEL 17)

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: kdit002 #5063, Model: Longley-Rice

Study build station data: LMS TV 2021-11-17

Proposal: KDIT002 D17 DC APP MARSHALLTOWN, IA
File number: kdit002
Facility ID: 46753
Station data: User record
Record ID: 4207
Country: U.S.

Build options:

Protect LPTV records from Class A

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KDSM-TV	D16	DT	LIC	DES MOINES, IA	BLCDT20110609ABE	0.0 km
Yes	K17MH-D	D17	LD	CP	CEDAR FALLS, IA	BLANK0000162737	119.8
Yes	KWQC-TV	D17	DT	LIC	DAVENPORT, IA	BLANK0000097891	262.3
No	KPWT-LD	D17	LD	CP	FORT DODGE, IA	BLANK0000168370	145.8
No	W17EH-D	D17	LD	CP	QUINCY, IL	BLANK0000154571	279.1
No	W17EH-D	D17	LD	APP	QUINCY, IL	BLANK0000169061	279.1
No	KAAS-TV	D17	DT	CP	SALINA, KS	BLANK0000035657	439.9
No	KAAS-TV	D17	DT	LIC	SALINA, KS	BLCDT20021120AAP	439.9
No	K17MX-D	D17	LD	LIC	FROST, MN	BLANK0000062750	196.8
No	K17MY-D	D17	LD	LIC	JACKSON, MN	BLANK0000064443	226.9
No	K17BV-D	D17	LD	LIC	REDWOOD FALLS, MN	BLDTT20120604AAY	321.5
No	KMWE-LD	D17	LD	LIC	SAINT CLOUD, MN	BLANK0000163947	368.1
No	K17MW-D	D17	LD	LIC	ST. JAMES, MN	BLANK0000064441	265.5
No	KMIZ	D17	DT	CP	COLUMBIA, MO	BLANK0000127487	351.1
No	KMIZ	D17	DT	LIC	COLUMBIA, MO	BLANK0000089534	351.1
No	KAJF-LD	D17	LD	LIC	Kansas city, MO	BLANK0000124483	321.8
Yes	KYNE-TV	D17	DT	LIC	OMAHA, NE	BLANK0000123806	208.7
No	K17PB-D	D17	LD	CP	BRERESFORD, SD	BLANK0000157103	296.0
No	K17NF-D	D17+	LD	LIC	BROOKINGS, SD	BLANK0000059096	378.5
No	K17NF-D	D17+	LD	CP	BROOKINGS, SD	BLANK0000067617	378.5
No	NEW	D17	LD	CP	SIOUX FALLS, SD	BNPDTL20090825AWE	313.2
No	WEAU	D17	DT	LIC	EAU CLAIRE, WI	BLANK0000120880	381.2
No	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	197.4
No	K18GU-D	D18	LD	LIC	OTTUMWA, IA	BLDTT20091229AES	141.7
No	K18KG-D	D18	LD	LIC	SPENCER, IA	BLDTL20130327AAU	193.7

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: Stringent
Latitude: 41 49 48.00 N (NAD83)
Longitude: 93 36 54.60 W
Height AMSL: 850.7 m
HAAT: 557.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.50

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	544.5 m	68.5 km
45.0	15.0	562.2	69.2
90.0	15.0	580.6	69.8
135.0	15.0	552.2	68.8
180.0	15.0	557.3	69.0
225.0	15.0	571.7	69.5
270.0	15.0	555.0	68.9
315.0	15.0	535.7	68.3

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Distance to Canadian border: 709.1 km

Distance to Mexican border: 1511.4 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 257.5 degrees Distance: 413.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 263.0 degrees Distance: 990.9 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 BLCDT20110609ABE LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KDSM-TV	D16	DT	LIC	DES MOINES, IA	BLCDT20110609ABE	
Undesireds:	KDIT-CD	D17	DC	BL	MARSHALLTOWN, IA	DTVBL46753	63.3 km
	KDIT002	D17	DC	APP	MARSHALLTOWN, IA	kdit002	0.0
	KYOU-TV	D15	DT	LIC	OTTUMWA, IA	BLANK0000001581	155.2
	WTVO	D16	DT	LIC	ROCKFORD, IL	BLCDT20021024AAS	370.2
	WRSP-TV	D16	DT	LIC	SPRINGFIELD, IL	BLANK0000117317	415.6
	KTKA-TV	D16	DT	LIC	TOPEKA, KS	BLANK0000122453	367.5
	KPXM-TV	D16	DT	LIC	ST. CLOUD, MN	BLANK0000054906	390.2
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	45439.2	1,098,955	45228.6	1,098,414	45132.1	1,096,794	45134.1 1,098,071 -0.00 -0.12

Undesired	Total IX		Unique IX, before		Unique IX, after	
KDIT-CD D17 DC BL	2.0	1,277	2.0	1,277		
KDIT002 D17 DC APP	0.0	0			0.0	0
KYOU-TV D15 DT LIC	68.5	254	68.5	254	68.5	254
WTVO D16 DT LIC	11.0	71	11.0	71	11.0	71
KTKA-TV D16 DT LIC	4.0	0	4.0	0	4.0	0
KPXM-TV D16 DT LIC	11.1	18	11.1	18	11.1	18

Interference to BLANK0000162737 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K17MH-D	D17	LD	CP	CEDAR FALLS, IA	BLANK0000162737	
Undesireds:	KDIT-CD	D17	DC	BL	MARSHALLTOWN, IA	DTVBL46753	73.7 km
	KDIT002	D17	DC	APP	MARSHALLTOWN, IA	kdit002	119.8
	KWQC-TV	D17	DT	LIC	DAVENPORT, IA	BLANK0000097891	233.0
	W17EH-D	D17	LD	CP	QUINCY, IL	BLANK0000154571	329.4
	WEAU	D17	DT	LIC	EAU CLAIRE, WI	BLANK0000120880	261.4
	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	83.4
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	5864.5	147,457	5863.5	147,457	5813.3	140,224	5506.4 138,181 5.28 1.46

Undesired	Total IX		Unique IX, before		Unique IX, after	
KDIT-CD D17 DC BL	4.1	6	4.1	6		
KDIT002 D17 DC APP	316.0	2,064			310.9	2,049
KWQC-TV D17 DT LIC	6.1	1,147	5.1	1,147	2.0	1,132
WEAU D17 DT LIC	3.0	38	1.0	0	0.0	0
KYIN D18 DT LIC	39.1	6,080	38.1	6,042	38.1	6,042

Interference to BLANK0000097891 LIC scenario 1

INTERFERENCE ANALYSIS FOR KDJT-CD, (FACILITY ID 46753) MARSHALLTOWN, IOWA (CHANNEL 17)

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KWQC-TV	D17	DT	LIC	DAVENPORT, IA	BLANK0000097891	
Undesireds:	KDJT-CD	D17	DC	BL	MARSHALLTOWN, IA	DTVBL46753	210.8 km
	KDJT002	D17	DC	APP	MARSHALLTOWN, IA	kdt002	262.3
	WTVO	D16	DT	LIC	ROCKFORD, IL	BLCDT20021024AAS	135.8
	WYIN	D17	DT	LIC	GARY, IN	BLEDT20040206AAA	257.3
	KMIZ	D17	DT	CP	COLUMBIA, MO	BLANK0000127487	355.1
	WEAU	D17	DT	LIC	EAU CLAIRE, WI	BLANK0000120880	348.7
	WBME-CD	D17	DC	LIC	MILWAUKEE, WI	BLANK0000086894	272.1
	WMSN-TV	D18	DT	LIC	MADISON, WI	BLANK0000113879	184.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
35475.6 1,065,792	35124.0 1,052,414	34719.8 1,033,091	34710.8 1,032,897	0.03 0.02

Undesired	Total IX	Unique IX, before	Unique IX, after
KDJT-CD D17 DC BL	0.0 0	0.0 0	
KDJT002 D17 DC APP	15.9 287		9.0 194
WTVO D16 DT LIC	41.8 264	28.9 201	28.9 201
WYIN D17 DT LIC	271.7 13,143	243.7 12,588	243.7 12,588
KMIZ D17 DT CP	5.0 16	4.0 16	2.0 1
WEAU D17 DT LIC	117.8 6,420	98.8 5,963	93.8 5,885
WBME-CD D17 DC LIC	4.0 118	0.0 0	0.0 0
WMSN-TV D18 DT LIC	2.0 11	0.0 0	0.0 0

Interference to BLANK0000123806 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KYNE-TV	D17	DT	LIC	OMAHA, NE	BLANK0000123806	
Undesireds:	KDJT-CD	D17	DC	BL	MARSHALLTOWN, IA	DTVBL46753	271.2 km
	KDJT002	D17	DC	APP	MARSHALLTOWN, IA	kdt002	208.7
	KAAS-TV	D17	DT	CP	SALINA, KS	BLANK0000035657	270.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
17083.2 971,280	17001.0 970,781	17001.0 970,781	16979.9 970,266	0.12 0.05

Undesired	Total IX	Unique IX, before	Unique IX, after
KDJT-CD D17 DC BL	0.0 0	0.0 0	
KDJT002 D17 DC APP	21.1 515		21.1 515

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KDJT002	D17	DC	APP	MARSHALLTOWN, IA	kdt002	
Undesireds:	KDSM-TV	D16	DT	LIC	DES MOINES, IA	BLCDT20110609ABE	0.0 km
	KWQC-TV	D17	DT	LIC	DAVENPORT, IA	BLANK0000097891	262.3
	KMIZ	D17	DT	CP	COLUMBIA, MO	BLANK0000127487	351.1

Service area	Terrain-limited	IX-free	Percent IX
14952.6 774,127	14946.6 774,095	14828.3 770,244	0.79 0.50

Undesired	Total IX	Unique IX	Prcnt Unique IX
KDSM-TV D16 DT LIC	115.3 3,849	115.3 3,849	0.77 0.50
KWQC-TV D17 DT LIC	3.0 2	3.0 2	0.02 0.00