TVSTUDY ANALYSIS FOR PROPOSED KSTP-TV, ST. PAUL, MINNESOTA (CHANNEL 35)

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tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: kstp_tv2,  Model: Longley-Rice

Study build station data: LMS TV 2021-09-01

    Proposal: KSTP-TV2 D35 DT APP ST. PAUL, MN
 File number: kstp_tv2
 Facility ID: 28010
Station data: User record
   Record ID: 4131
     Country: U.S.
        Zone: II

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX   Call      Chan       Svc Status  City, State              File Number             Distance
Yes  KTCA-TV   D34        DT  LIC     ST. PAUL, MN             BLEDT20060802AAO          1.3 km
No   KHIN      D35        DT  LIC     RED OAK, IA              BLANK0000030114         447.4
Yes  KRIN      D35        DT  LIC     WATERLOO, IA             BLEDT20050218ABQ        322.1
No   WLUC-TV   D35        DT  CP      MARQUETTE, MI            BLANK0000036029         434.3
No   WLUC-TV   D35        DT  LIC     MARQUETTE, MI            BLCDT20040202ALY        434.3
Yes  KAAL      D36        DT  LIC     AUSTIN, MN               BLCDT20091110AAF        165.1
No   WLEF-TV   D36        DT  LIC     PARK FALLS, WI           BLANK0000157767         243.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D35
   Latitude:  45  3 44.00 N (NAD83)
  Longitude:  93  8 22.00 W
Height AMSL: 730.9 m
       HAAT: 454.0 m
   Peak ERP: 1000 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
  Elec Tilt: 1.50

40.8 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg   1000 kW   457.3 m  111.8 km
 45.0       1000      451.1    111.3
 90.0       1000      441.6    110.5
135.0       1000      450.8    111.2
180.0       1000      457.0    111.8
225.0       1000      462.2    112.2
270.0       1000      460.8    112.1
315.0       1000      453.9    111.5

ERP exceeds maximum
ERP: 1000 kW   ERP maximum: 649 kW (Proposal is compliant with largest station in the market criteria. See Technical Summary exhibit.)

Proposal 25.77 dBu contour does not cross Canadian border
Distance to Canadian border: 352.5 km

Distance to Mexican border: 1847.0 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 224.9 degrees   Distance: 629.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 245.3 degrees   Distance: 1127.6 km

Study cell size: 2.00 km
Profile point spacing: 1.00 km

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

Interference to BLEDT20060802AAO LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTCA-TV	D34	DT	LIC	ST. PAUL, MN	BLEDT20060802AAO	
Undesireds:	KSTP-TV	D35	DT	BL	ST. PAUL, MN	DTVBL28010	1.2 km
	KSTP-TV2	D35	DT	APP	ST. PAUL, MN	kstp_tv2	1.3
	K33LN-D	D33	DC	LIC	MINNEAPOLIS, MN	BLDTA20111219AEB	14.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
31301.1	3,693,877	30922.2	3,684,081	30606.9	3,674,642	30291.5	3,661,122	1.03	0.37

Undesired	Total IX		Unique IX, before		Unique IX, after	
KSTP-TV D35 DT BL	307.3	9,397	303.3	8,992		
KSTP-TV2 D35 DT APP	622.8	22,917			618.8	22,512
K33LN-D D33 DC LIC	11.9	447	8.0	42	8.0	42

Interference to BLEDT20050218ABQ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KRIN	D35	DT	LIC	WATERLOO, IA	BLEDT20050218ABQ	
Undesireds:	KSTP-TV	D35	DT	BL	ST. PAUL, MN	DTVBL28010	322.1 km
	KSTP-TV2	D35	DT	APP	ST. PAUL, MN	kstp_tv2	322.1
	KHIN	D35	DT	LIC	RED OAK, IA	BLANK0000030114	301.4
	WGBO-DT	D35	DT	LIC	JOLIET, IL	BLANK0000124507	352.3
	WTVP	D35	DT	LIC	PEORIA, IL	BLANK0000110583	267.4
	KFPX-TV	D36	DT	LIC	NEWTON, IA	BLANK0000063434	156.0
	KAAL	D36	DT	LIC	AUSTIN, MN	BLCDT20091110AAF	157.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
36428.2	949,313	36012.2	923,735	35728.3	918,562	35708.4	918,490	0.06	0.01

Undesired	Total IX		Unique IX, before		Unique IX, after	
KSTP-TV D35 DT BL	51.7	817	43.8	742		
KSTP-TV2 D35 DT APP	79.5	907			63.6	814
KHIN D35 DT LIC	20.2	334	20.2	334	20.2	334
WGBO-DT D35 DT LIC	76.1	1,554	28.1	392	28.1	392
WTVP D35 DT LIC	84.3	3,190	36.3	2,028	36.3	2,028
KFPX-TV D36 DT LIC	40.0	272	40.0	272	40.0	272
KAAL D36 DT LIC	67.6	243	59.6	168	51.7	150

Interference to BLCDT20091110AAF LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KAAL	D36	DT	LIC	AUSTIN, MN	BLCDT20091110AAF	
Undesireds:	KSTP-TV	D35	DT	BL	ST. PAUL, MN	DTVBL28010	165.1 km
	KSTP-TV2	D35	DT	APP	ST. PAUL, MN	kstp_tv2	165.1
	KRIN	D35	DT	LIC	WATERLOO, IA	BLEDT20050218ABQ	157.1
	KFPX-TV	D36	DT	LIC	NEWTON, IA	BLANK0000063434	222.5
	WQRF-TV	D36	DT	LIC	ROCKFORD, IL	BLANK0000107925	311.7
	KWSD	D36	DT	LIC	SIOUX FALLS, SD	BLCDT20100201AFD	326.1
	WLEF-TV	D36	DT	LIC	PARK FALLS, WI	BLANK0000157767	311.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
29029.8	589,502	28386.7	568,169	28187.3	565,370	28155.4	564,638	0.11	0.13

Undesired	Total IX		Unique IX, before		Unique IX, after	
KSTP-TV D35 DT BL	75.7	773	71.7	748		
KSTP-TV2 D35 DT APP	107.5	1,505			103.6	1,480
KRIN D35 DT LIC	68.0	1,840	68.0	1,840	68.0	1,840
KFPX-TV D36 DT LIC	19.9	59	15.9	51	15.9	51
WQRF-TV D36 DT LIC	27.9	70	23.9	62	23.9	62
WLEF-TV D36 DT LIC	16.0	90	12.0	65	12.0	65

Interference to proposal scenario 1

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Undesireds:	KTCA-TV	D34	DT	LIC	ST. PAUL, MN	BLEDT20060802AAO	1.3 km
	KRIN	D35	DT	LIC	WATERLOO, IA	BLEDT20050218ABQ	322.1
	KAAL	D36	DT	LIC	AUSTIN, MN	BLCDT20091110AAF	165.1

Service area		Terrain-limited		IX-free		Percent IX	
39081.9	3,855,074	38487.5	3,847,481	38359.6	3,846,084	0.33	0.04

Undesired	Total IX		Unique IX		Prcnt Unique IX	
KTCA-TV D34 DT LIC	12.0	57	12.0	57	0.03	0.00
KRIN D35 DT LIC	55.9	871	35.9	406	0.09	0.01
KAAL D36 DT LIC	80.0	934	60.0	469	0.16	0.01
