

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 11-17-2005 Time: 11:12:18

Record Selected for Analysis

K05LH BMPTVL -20030311ARQ SIOUX CITY IA US
 Channel 05 ERP 3. kW HAAT 00204 m RCAMSL 00541 m
 Latitude 042-29-26 Longitude 0096-18-21
 Status CP MOD Zone Border Offset Z
 Dir Antenna Make CDB Model 00000000065775 Beam tilt N Ref Azimuth 250.0
 Last update 00000000 Cutoff date 20030311 Docket
 Comments
 Applicant VENTURE TECHNOLOGIES GROUP, LLC

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station

Facility meets maximum power limit

Azimuth (Deg)	ERP (kW)	HAAT (m)	62.0 dBu F(50,50) (km)
0.0	0.011	166.7	6.8
45.0	0.030	153.1	8.4
90.0	0.030	166.9	8.9
135.0	0.009	176.4	6.7
180.0	0.173	198.3	14.8
225.0	2.142	198.1	27.4
270.0	2.430	203.4	28.5
315.0	0.270	156.8	14.7

Contour Overlap Evaluation from LPTV Station to Full Service TV & DTV

Contour overlap to station
 WOI-TV 5 AMES IA BLCT 2151

Contour overlap to station
 KHAS-TV 5 HASTINGS NE BLCT 2417

Contour overlap to station
 KDLV-TV 5 MITCHELL SD BLCT 20020501AAL

Station inside contour of station

WOWT-TV 6 OMAHA NE BLCT 19831024KI

Contour Overlap Evaluation from LPTV to Full Service TV & DTV Complete

Contour Overlap Evaluation from LPTV Station to LPTV Stations

No Spacing violations or contour overlap from LPTV station

Contour Overlap Evaluation from LPTV to LPTV Stations Complete

Contour Overlap to Proposed Station

Contour Overlap Evaluation to Proposed Station Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN	
05	K05LH	SIOUX CITY IA	BMPTVL	20030311ARQ

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WOI-TV	AMES IA	234.3	LIC	BLCT	-2151
05	KHAS-TV	HASTINGS NE	267.7	LIC	BLCT	-2417
05	KDLV-TV	MITCHELL SD	221.5	LIC	BLCT	-20020501AAL
06	WOWT-TV	OMAHA NE	133.1	LIC	BLCT	-19831024KI

Analysis of Interference to Affected Station 1

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
05	WOITV	AMES IA	DTVPLN	-NPLN0349

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KSTPTV	ST. PAUL MN	363.6	PLN	DTVPLN	-NPLN0357
05	KCTV	KANSAS CITY MO	315.2	PLN	DTVPLN	-NPLN0358
05	KHASTV	HASTINGS NE	418.9	PLN	DTVPLN	-NPLN0364
05	KDLT	MITCHELL SD	367.7	PLN	DTVPLN	-NPLN0378
06	KAAL	AUSTIN MN	205.7	PLN	DTVPLN	-NPLN0419
06	WOWT	OMAHA NE	208.1	PLN	DTVPLN	-NPLN0428

Results for:	5N IA AMES	DTVPLN	NPLN0349	PLN
		POPULATION	AREA (sq km)	
within Noise Limited Contour		996992	49612.0	
not affected by terrain losses		956620	47972.4	
lost to NTSC IX		72623	7570.8	
lost to additional IX by ATV		0	0.0	
lost to all IX		72623	7570.8	

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
05	WOI-TV	AMES IA	BLCT	-2151

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	K05LH	SIOUX CITY IA	234.3	CP MOD	BMPTVL	-20030311ARQ
05	KSTP-TV	ST. PAUL MN	363.6	LIC	BLCT	-20011126AAK
05	KCTV	KANSAS CITY MO	315.2	LIC	BMLCT	-19951020KE
05	KHAS-TV	HASTINGS NE	418.9	LIC	BLCT	-2417
06	KAAL	AUSTIN MN	205.7	LIC	BLCT	-2236
06	WOWT-TV	OMAHA NE	208.1	LIC	BLCT	-19831024KI

Total scenarios = 1

Result key: 1
 Scenario 1 Affected station 1
 Before Analysis

Results for:	5N IA AMES	BLCT	2151	LIC
		POPULATION	AREA (sq km)	
within Noise Limited Contour		996992	49612.0	
not affected by terrain losses		956620	47972.4	
lost to NTSC IX		66003	6522.0	
lost to additional IX by ATV		0	0.0	
lost to all IX		66003	6522.0	

Potential Interfering Stations Included in above Scenario 1

5N MN ST. PAUL	BLCT	20011126AAK	LIC
5N MO KANSAS CITY	BMLCT	19951020KE	LIC
5N NE HASTINGS	BLCT	2417	LIC
6N MN AUSTIN	BLCT	2236	LIC
6N NE OMAHA	BLCT	19831024KI	LIC

After Analysis

Results for: 5N IA AMES	BLCT	2151	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	996992	49612.0	
not affected by terrain losses	956620	47972.4	
lost to NTSC IX	67882	6823.4	
lost to additional IX by ATV	0	0.0	
lost to all IX	67882	6823.4	

Potential Interfering Stations Included in above Scenario 1

5N MN ST. PAUL	BLCT	20011126AAK	LIC
5N MO KANSAS CITY	BMLCT	19951020KE	LIC
5N NE HASTINGS	BLCT	2417	LIC
6N MN AUSTIN	BLCT	2236	LIC
6N NE OMAHA	BLCT	19831024KI	LIC
5N IA SIOUX CITY	BMPTVL	20030311ARQ	CP

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Analysis of Interference to Affected Station 2

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
05	KHASTV	HASTINGS NE	DTVPLN	-NPLN0364

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WOITV	AMES IA	418.9	PLN	DTVPLN	-NPLN0349
05	KBSD-DT	ENSIGN KS	374.8	PLN	DTVPLN	-DTVP0020
05	KCTV	KANSAS CITY MO	368.9	PLN	DTVPLN	-NPLN0358
05	KDLT	MITCHELL SD	341.6	PLN	DTVPLN	-NPLN0378
06	KWNBTV	HAYES CENTER NE	223.4	PLN	DTVPLN	-NPLN0427
06	WOWT	OMAHA NE	211.0	PLN	DTVPLN	-NPLN0428

Results for: 5N NE HASTINGS	DTVPLN	NPLN0364	PLN
	POPULATION	AREA (sq km)	
within Noise Limited Contour	220934	28815.4	
not affected by terrain losses	219889	28327.9	
lost to NTSC IX	6989	2054.0	
lost to additional IX by ATV	383	163.8	

lost to all IX 7372 2217.8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
05	KHAS-TV	HASTINGS NE	BLCT	-2417

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WOI-TV	AMES IA	418.9	LIC	BLCT	-2151
05	K05LH	SIOUX CITY IA	267.7	CP MOD	BMPTVL	-20030311ARQ
05	KBSD-TV	ENSIGN KS	374.8	CP	BPCDT	-19991015ABG
05	KBSD-DT	ENSIGN KS	374.8	PLN	DTVPLN	-DTVP0020
05	KCTV	KANSAS CITY MO	368.9	LIC	BMLCT	-19951020KE
05	KDLV-TV	MITCHELL SD	345.4	LIC	BLCT	-20020501AAL
06	KWNB-TV	HAYES CENTER NE	223.1	LIC	BLCT	-20000828AHT
06	WOWT-TV	OMAHA NE	211.0	LIC	BLCT	-19831024KI

Total scenarios = 2

Result key: 2
 Scenario 1 Affected station 2
 Before Analysis

Results for: 5N NE HASTINGS	BLCT	2417	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	220934	28815.4	
not affected by terrain losses	219889	28327.9	
lost to NTSC IX	5376	1558.5	
lost to additional IX by ATV	818	347.7	
lost to all IX	6194	1906.1	

Potential Interfering Stations Included in above Scenario 1

5N MO KANSAS CITY	BMLCT	19951020KE	LIC
5N SD MITCHELL	BLCT	20020501AAL	LIC
5A KS ENSIGN	BPCDT	19991015ABG	CP

After Analysis

Results for: 5N NE HASTINGS	BLCT	2417	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	220934	28815.4	
not affected by terrain losses	219889	28327.9	
lost to NTSC IX	5376	1558.5	
lost to additional IX by ATV	818	347.7	
lost to all IX	6194	1906.1	

Potential Interfering Stations Included in above Scenario 1

5N MO KANSAS CITY	BMLCT	19951020KE	LIC
5N SD MITCHELL	BLCT	20020501AAL	LIC
5A KS ENSIGN	BPCDT	19991015ABG	CP

5N IA SIOUX CITY BMPTVL 20030311ARQ CP

Result key: 3
 Scenario 2 Affected station 2
 Before Analysis

Results for: 5N NE HASTINGS	BLCT	2417	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	220934	28815.4	
not affected by terrain losses	219889	28327.9	
lost to NTSC IX	5376	1558.5	
lost to additional IX by ATV	383	163.8	
lost to all IX	5759	1722.3	

Potential Interfering Stations Included in above Scenario 2

5N MO KANSAS CITY	BMLCT	19951020KE	LIC
5N SD MITCHELL	BLCT	20020501AAL	LIC
5A KS ENSIGN	DTVPLN	DTVP0020	PLN

After Analysis

Results for: 5N NE HASTINGS	BLCT	2417	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	220934	28815.4	
not affected by terrain losses	219889	28327.9	
lost to NTSC IX	5376	1558.5	
lost to additional IX by ATV	383	163.8	
lost to all IX	5759	1722.3	

Potential Interfering Stations Included in above Scenario 2

5N MO KANSAS CITY	BMLCT	19951020KE	LIC
5N SD MITCHELL	BLCT	20020501AAL	LIC
5A KS ENSIGN	DTVPLN	DTVP0020	PLN
5N IA SIOUX CITY	BMPTVL	20030311ARQ	CP

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Analysis of Interference to Affected Station 3

NTSC Baseline Analysis

Channel	Call	City/State	Application Ref. No.
05	KDLT	MITCHELL SD	DTVPLN -NPLN0378

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
05	WOITV	AMES IA	367.7	PLN	DTVPLN -NPLN0349
05	KSTPTV	ST. PAUL MN	372.1	PLN	DTVPLN -NPLN0357
05	KFYRTV	BISMARCK ND	426.3	PLN	DTVPLN -NPLN0363
05	KHASTV	HASTINGS NE	341.6	PLN	DTVPLN -NPLN0364

06 KPLOTV RELIANCE SD 182.7 PLN DTVPLN -NPLN0439

Results for: 5N SD MITCHELL DTVPLN NPLN0378 PLN

	POPULATION	AREA (sq km)
within Noise Limited Contour	380167	42640.9
not affected by terrain losses	377056	41862.4
lost to NTSC IX	36971	3565.1
lost to additional IX by ATV	0	0.0
lost to all IX	36971	3565.1

Analysis of current record

Channel	Call	City/State	Application Ref. No.
05	KDLV-TV	MITCHELL SD	BLCT -20020501AAL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
05	K05LH	SIOUX CITY IA	221.5	CP MOD	BMPTVL -20030311ARQ
05	KFYR-TV	BISMARCK ND	367.8	LIC	BLCT -2276
05	KHAS-TV	HASTINGS NE	352.7	APP	BPCT -20001121AIA
05	KHAS-TV	HASTINGS NE	345.4	LIC	BLCT -2417
06	KPLO-TV	RELIANCE SD	98.1	LIC	BLCT -1436

Total scenarios = 2

Result key: 4
 Scenario 1 Affected station 3
 Before Analysis

Results for: 5N SD MITCHELL BLCT 20020501AAL LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	107155	33406.2
not affected by terrain losses	103037	32045.1
lost to NTSC IX	8792	5214.7
lost to additional IX by ATV	0	0.0
lost to all IX	8792	5214.7

Potential Interfering Stations Included in above Scenario 1

5N ND BISMARCK	BLCT	2276	LIC
5N NE HASTINGS	BLCT	2417	LIC
6N SD RELIANCE	BLCT	1436	LIC

After Analysis

Results for: 5N SD MITCHELL BLCT 20020501AAL LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	107155	33406.2
not affected by terrain losses	103037	32045.1
lost to NTSC IX	9011	5263.0
lost to additional IX by ATV	0	0.0
lost to all IX	9011	5263.0

Potential Interfering Stations Included in above Scenario 1

5N ND BISMARCK	BLCT	2276	LIC
5N NE HASTINGS	BLCT	2417	LIC
6N SD RELIANCE	BLCT	1436	LIC
5N IA SIOUX CITY	BMPTVL	20030311ARQ	CP

Result key: 5
 Scenario 2 Affected station 3
 Before Analysis

Results for: 5N SD MITCHELL	BLCT	20020501AAL	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	107155	33406.2	
not affected by terrain losses	103037	32045.1	
lost to NTSC IX	10067	5206.6	
lost to additional IX by ATV	0	0.0	
lost to all IX	10067	5206.6	

Potential Interfering Stations Included in above Scenario 2

5N ND BISMARCK	BLCT	2276	LIC
5N NE HASTINGS	BPCT	20001121AIA	APP
6N SD RELIANCE	BLCT	1436	LIC

After Analysis

Results for: 5N SD MITCHELL	BLCT	20020501AAL	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	107155	33406.2	
not affected by terrain losses	103037	32045.1	
lost to NTSC IX	10454	5263.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	10454	5263.0	

Potential Interfering Stations Included in above Scenario 2

5N ND BISMARCK	BLCT	2276	LIC
5N NE HASTINGS	BPCT	20001121AIA	APP
6N SD RELIANCE	BLCT	1436	LIC
5N IA SIOUX CITY	BMPTVL	20030311ARQ	CP

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Analysis of Interference to Affected Station 4

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
06	WOWT	OMAHA NE	DTVPLN	-NPLN0428

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WOITV	AMES IA	208.1	PLN	DTVPLN	-NPLN0349
05	KHASTV	HASTINGS NE	211.0	PLN	DTVPLN	-NPLN0364
06	KAAL	AUSTIN MN	349.0	PLN	DTVPLN	-NPLN0419
06	KMOSTV	SEDALIA MO	368.9	PLN	DTVPLN	-NPLN0420
06	KWNBTV	HAYES CENTER NE	426.9	PLN	DTVPLN	-NPLN0427
06	KPLOTV	RELIANCE SD	415.3	PLN	DTVPLN	-NPLN0439

Results for: 6N NE OMAHA DTVPLN NPLN0428 PLN

	POPULATION	AREA (sq km)
within Noise Limited Contour	1144400	40095.1
not affected by terrain losses	1129759	38761.9
lost to NTSC IX	12994	2314.0
lost to additional IX by ATV	0	0.0
lost to all IX	12994	2314.0

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	WOWT-TV	OMAHA NE	BLCT	-19831024KI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	WOI-TV	AMES IA	208.1	LIC	BLCT	-2151
05	K05LH	SIOUX CITY IA	133.1	CP MOD	BMPTVL	-20030311ARQ
05	KHAS-TV	HASTINGS NE	211.0	LIC	BLCT	-2417
06	NEW	HUTCHINSON KS	423.7	APP	BPRM	-20011009AEG
06	KAAL	AUSTIN MN	349.0	LIC	BLCT	-2236
06	KMOS-TV	SEDALIA MO	401.8	LIC	BLET	-20010926ACE
06	KWNB-TV	HAYES CENTER NE	426.6	LIC	BLCT	-20000828AHT
06	KPLO-TV	RELIANCE SD	415.3	LIC	BLCT	-1436

Total scenarios = 1

Result key: 6
 Scenario 1 Affected station 4
 Before Analysis

Results for: 6N NE OMAHA BLCT 19831024KI LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	1365055	59859.8
not affected by terrain losses	1351198	57998.5
lost to NTSC IX	42012	5171.8
lost to additional IX by ATV	0	0.0
lost to all IX	42012	5171.8

Potential Interfering Stations Included in above Scenario 1

5N IA AMES	BLCT	2151	LIC
5N NE HASTINGS	BLCT	2417	LIC
6N MN AUSTIN	BLCT	2236	LIC
6N MO SEDALIA	BLET	20010926ACE	LIC
6N NE HAYES CENTER	BLCT	20000828AHT	LIC

6N SD RELIANCE BLCT 1436 LIC

After Analysis

Results for: 6N NE OMAHA BLCT 19831024KI LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	1365055	59859.8
not affected by terrain losses	1351198	57998.5
lost to NTSC IX	107468	5844.3
lost to additional IX by ATV	0	0.0
lost to all IX	107468	5844.3

Potential Interfering Stations Included in above Scenario 1

5N IA AMES	BLCT	2151	LIC
5N NE HASTINGS	BLCT	2417	LIC
6N MN AUSTIN	BLCT	2236	LIC
6N MO SEDALIA	BLET	20010926ACE	LIC
6N NE HAYES CENTER	BLCT	20000828AHT	LIC
6N SD RELIANCE	BLCT	1436	LIC
5N IA SIOUX CITY	BMPTVL	20030311ARQ	CP

The following station failed the de minimis interference criteria.

5N IA SIOUX CITY BMPTVL 20030311ARQ
 ERP 3.00 kW HAAT 204.0 m RCAMSL 541.0 m
 Antenna CDB 00000000065775

Due to interference to the following station and scenario: 1

6N NE OMAHA BLCT 19831024KI
 ERP 100.00 kW HAAT 816.0 m RCAMSL 1159.0 m
 Antenna CDB 999999999999999

Percent Service lost without proposal:	3.1	to BLCT	19831024KI
Percent Service lost with proposal:	7.9	to BLCT	19831024KI

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
05	K05LH	SIOUX CITY IA	BMPTVL -20030311ARQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
05	WOI-TV	AMES IA	234.3	LIC	BLCT -2151
05	KSTP-TV	ST. PAUL MN	382.4	LIC	BLCT -20011126AAK
05	KHAS-TV	HASTINGS NE	297.4	APP	BPCT -20001121AIA
05	KHAS-TV	HASTINGS NE	267.7	LIC	BLCT -2417
05	KDLV-TV	MITCHELL SD	221.5	LIC	BLCT -20020501AAL

06 WOWT-TV OMAHA NE 133.1 LIC BLCT -19831024KI

Total scenarios = 1

Result key: 7
 Scenario 1 Affected station 5
 Before Analysis

Results for: 5N IA SIOUX CITY	BMPTVL	20030311ARQ	CP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	103480	865.1	
not affected by terrain losses	103480	865.1	
lost to NTSC IX	5136	305.8	
lost to additional IX by ATV	0	0.0	
lost to all IX	5136	305.8	

Potential Interfering Stations Included in above Scenario 1

5N IA AMES BLCT 2151 LIC

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