

FIGURE 1 (5 Pages)

Census data selected: 2000

Post DTV Transition Database Selected

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 09-22-2009 Time: 12:27:45

Record Selected for Analysis

STJAMES USERRECORD-01 ST JAMES2 MN US
Channel 16 ERP 3. kW HAAT 191. m RCAMSL 00496 m
Latitude 044-06-28 Longitude 0094-35-55
Status APP Zone 2 Border Offset Z
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 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)	74.0 dBu F(50,50) (km)
0.0	3.000	189.8	14.7
45.0	3.000	191.1	14.8
90.0	3.000	183.8	14.5
135.0	3.000	180.8	14.4
180.0	3.000	177.2	14.2
225.0	3.000	174.3	14.1
270.0	3.000	179.5	14.3
315.0	3.000	189.4	14.7

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet 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
16	STJAMES	ST JAMES2 MN	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	KDSM-TV	DES MOINES IA	265.5	LIC	BLCDDT	-20041118ABZ
16	K70DR	BLUE EARTH MN	68.9	CP	BDISDTT	-20060331ACH
16	K16GL	JACKSON MN	64.3	LIC	BLTT	-20051005AAQ
16	K16CG	ST. JAMES MN	0.0	LIC	BLTTL	-19970507JJ
16	K16CG	ST. JAMES MN	0.0	CP	BPTTL	-20080602AHH

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	KDSM-TV	DES MOINES IA	BLCDDT	-20041118ABZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
15	KYOU-TV	OTTUMWA IA	155.2	CP MOD	BMPCDDT	-20090410ASK
15	KYOU-TV	OTTUMWA IA	155.2	PLN	DTVPLN	-DTVP0525
16	WTVO	ROCKFORD IL	370.3	LIC	BLCDDT	-20021024AAS
16	WTVO	ROCKFORD IL	370.3	PLN	DTVPLN	-DTVP0561
17	KYNE-TV	OMAHA NE	209.0	LIC	BLEDT	-20030409AAV
17	KYNE-TV	OMAHA NE	209.0	PLN	DTVPLN	-DTVP0605
16	STJAMES	ST JAMES2 MN	265.5	APP	USERRECORD-01	

Total scenarios = 4

Result key: 1

Scenario 1 Affected station 1 KDSM-TV

Before Analysis

Results for: 16A IA DES MOINES BLCDDT 20041118ABZ LIC
HAAT 612.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	975374	40625.9
not affected by terrain losses	974501	40512.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	109	24.4
lost to ATV IX only	109	24.4
lost to all IX	109	24.4

Potential Interfering Stations Included in above Scenario 1

15A IA OTTUMWA BMPCDDT 20090410ASK CP

16A IL ROCKFORD BLCDT 20021024AAS LIC

After Analysis

Results for: 16A IA DES MOINES BLCDT 20041118ABZ LIC
HAAT 612.0 m, ATV ERP 500.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	975374	40625.9
not affected by terrain losses	974501	40512.5
lost to NTSC IX	14	2.9
lost to additional IX by ATV	109	24.4
lost to ATV IX only	109	24.4
lost to all IX	123	27.4

Potential Interfering Stations Included in above Scenario 1

15A IA OTTUMWA	BMPCDT	20090410ASK	CP
16A IL ROCKFORD	BLCDT	20021024AAS	LIC
16N MN ST JAMES2	USERRECORD01		APP

Percent new IX = 0.0014%

Worst case new IX 0.0014% Scenario 1

(NOTE: WORST-CASE SCENARIO TO THIS AFFECTED STATION IS SHOWN-ALL OTHERS HAVE BEEN REMOVE. ALL REMOVED SCENARIOS SHOW THE SAME OR LESS NEW INTERFERENCE THAN SHOWN BY THE WORST-CASE SCENARIO.)

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	K70DR	BLUE EARTH MN	BDISDTT	-20060331ACH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	KDSM-TV	DES MOINES IA	203.6	LIC	BLCDT	-20041118ABZ
16	KDSM-TV	DES MOINES IA	203.6	PLN	DTVPLN	-DTVP0560
16	K19ER	ST. PAUL MN	161.2	CP	BDISDTL	-20090420AAF
16	K16HM-D	OMAHA NE	315.9	CP	BDCCDTL	-20061030APQ
16	K16HO-D	MITCHELL SD	321.9	CP	BDCCDTT	-20061030APJ
17	K17IR-D	SPENCER IA	86.3	CP	BDCCDTL	-20070504ABQ
17	K17HZ-D	GRANITE FALLS MN	178.6	CP	BDCCDTL	-20061018ADH
17	K17IS-D	JACKSON MN	76.5	CP	BDCCDTL	-20070517AAF
17	K17FA	WILLMAR MN	187.8	CP	BDFCDTT	-20090617ACJ
16	STJAMES	ST JAMES2 MN	68.9	APP	USERRECORD-01	

Total scenarios = 2

Result key: 5
Scenario 1 Affected station 2 K70DR

Before Analysis

Results for: 16A MN BLUE EARTH BDISDTT 20060331ACH CP
 HAAT 1.0 m, ATV ERP 0.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	13741	2273.9
not affected by terrain losses	13741	2273.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 16A MN BLUE EARTH BDISDTT 20060331ACH CP
 HAAT 1.0 m, ATV ERP 0.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	13741	2273.9
not affected by terrain losses	13741	2273.9
lost to NTSC IX	5	4.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	5	4.0

Potential Interfering Stations Included in above Scenario 1

16N MN ST JAMES2 USERRECORD01 APP

Percent new IX = 0.0364%

Worst case new IX 0.0364% Scenario 1

(NOTE: WORST-CASE SCENARIO TO THIS AFFECTED STATION IS SHOWN—ALL OTHERS HAVE BEEN REMOVE. ALL REMOVED SCENARIOS SHOW THE SAME OR LESS NEW INTERFERENCE THAN SHOWN BY THE WORST-CASE SCENARIO.)

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	K16GL	JACKSON MN	BLTT	-20051005AAQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
15	KSMN	WORTHINGTON MN	83.3	CP	BPEDT	-20080620ALP
15	KSMN	WORTHINGTON MN	83.3	PLN	DTVPLN	-DTVP0531
15	KSMN	WORTHINGTON MN	83.3	LIC	BLEDT	-20051219AGX
16	KDSM-TV	DES MOINES IA	226.9	LIC	BLCDT	-20041118ABZ
16	KDSM-TV	DES MOINES IA	226.9	PLN	DTVPLN	-DTVP0560

16	K70DR	BLUE EARTH MN	76.5	CP	BDISDTT	-20060331ACH
16	K16CP	GRANITE FALLS MN	141.5	LIC	BLTTTL	-19910227JZ
16	K16CG	ST. JAMES MN	64.3	CP	BPTTL	-20080602AHH
16	K19ER	ST. PAUL MN	205.0	CP	BDISDTL	-20090420AAF
16	K16HM-D	OMAHA NE	279.7	CP	BDCCDTL	-20061030APQ
16	K16HO-D	MITCHELL SD	245.8	CP	BDCCDTT	-20061030APJ
17	K17IR-D	SPENCER IA	38.7	CP	BDCCDTL	-20070504ABQ
17	K17HZ-D	GRANITE FALLS MN	141.5	CP	BDCCDTL	-20061018ADH
17	K17IS-D	JACKSON MN	0.0	CP	BDCCDTL	-20070517AAF
17	K17FA	WILLMAR MN	173.8	CP	BDFCDTT	-20090617ACJ
24	KCSD-TV	SIOUX FALLS SD	133.9	LIC	BLEDT	-20040112ACM
24	KCSD-TV	SIOUX FALLS SD	133.9	PLN	DTVPLN	-DTVP0898
24	KCSD-TV	SIOUX FALLS SD	133.9	CP	BPEDT	-20080618ABO
31	K31EF-D	FROST MN	85.6	LIC	BLDTT	-20090730ACQ
31	NEW	ST. JAMES MN	64.3	APP	BNPDTL	-20090825BEK
16	STJAMES	ST JAMES2 MN	64.3	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	K16CG	ST. JAMES MN	BLTTTL	-19970507JJ

(NOTE: AFFECTED STATION IS THE STATION BEING MODIFIED BY THIS PROPOSAL. THE STUDIES TO THIS AFFECTED STATION ARE, THEREFORE, REMOVED.)

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	K16CG	ST. JAMES MN	BPTTL	-20080602AHH

(NOTE: AFFECTED STATION IS THE STATION BEING MODIFIED BY THIS PROPOSAL. THE STUDIES TO THIS AFFECTED STATION ARE, THEREFORE, REMOVED.)

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