

OET-69 Interference Analysis (KOTA-TV, Rapid City, SD, Channel 2)

Percent allowed new interference: 0.500
Percent allowed new interference to Class A: 0.500
TW Census data selected 2000
Post Transition Data Base Selected /export/home/cdbs/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 12-07-2009

Record Selected for Analysis

KOTA-TV USERRECORD-01 RAPID CITY SD US
Channel 02 ERP 45. kW HAAT 205. m RCAMSL 01314 m
Latitude 044-04-08 Longitude 0103-15-03
Status APP Zone 2 Border
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	28.0 dBu F(50,90) (km)
0.0	45.000	261.7	119.4
45.0	45.000	330.5	124.7
90.0	45.000	339.8	125.1
135.0	45.000	321.0	124.1
180.0	45.000	161.3	107.8
225.0	45.000	67.5	89.5
270.0	45.000	46.7	84.2
315.0	45.000	110.5	98.9

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

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

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
02	KOTA-TV	RAPID CITY SD	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	379.2	PLN	DTVPLN	-DTVP0003
02	KNOP-TV	NORTH PLATTE NE	379.2	CP	BPCDT	-20080603ABQ
02	K02NT	SCOTTSBLUFF NE	247.5	LIC	BLTVA	-20040622AAO

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	DTVPLN	-DTVP0003

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KOTA-TV	RAPID CITY SD	379.2	PLN	DTVPLN	-DTVP0005
02	KOTA-TV	RAPID CITY SD	379.2	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 2A NE NORTH PLATTE DTVPLN DTVP0003 PLN
HAAT 192.0 m, ATV ERP 6.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	68319	27507.0
not affected by terrain losses	67854	27033.6
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: 2A NE NORTH PLATTE DTVPLN DTVP0003 PLN
HAAT 192.0 m, ATV ERP 6.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	68319	27507.0
not affected by terrain losses	67854	27033.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7	92.3
lost to ATV IX only	7	92.3
lost to all IX	7	92.3

Potential Interfering Stations Included in above Scenario 1

2A SD RAPID CITY USERRECORD01 APP

Percent new IX = 0.0103%

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Worst case new IX 0.0103% Scenario 1

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	BPCDT	-20080603ABQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KOTA-TV	RAPID CITY SD	379.2	PLN	DTVPLN	-DTVP0005
02	KOTA-TV	RAPID CITY SD	379.2	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2
Scenario 1 Affected station 2
Before Analysis

Results for: 2A NE NORTH PLATTE BPCDT 20080603ABQ CP
 HAAT 196.0 m, ATV ERP 16.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	88108	32475.6
not affected by terrain losses	87629	32074.4
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: 2A NE NORTH PLATTE BPCDT 20080603ABQ CP
 HAAT 196.0 m, ATV ERP 16.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	88108	32475.6
not affected by terrain losses	87629	32074.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5	128.4
lost to ATV IX only	5	128.4
lost to all IX	5	128.4

Potential Interfering Stations Included in above Scenario 1

2A SD RAPID CITY	USERRECORD01	APP
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Percent new IX = 0.0057%

Worst case new IX 0.0057% Scenario 1

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
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OET-69 Interference Analysis (KOTA-TV, Rapid City, SD, Channel 2)

02 K02NT SCOTTSBLUFF NE BLTVA -20040622AAO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	254.3	PLN	DTVPLN	-DTVP0003
02	KNOP-TV	NORTH PLATTE NE	254.3	CP	BPCDT	-20080603ABQ
02	KOTA-TV	RAPID CITY SD	247.5	PLN	DTVPLN	-DTVP0005
02	KOTA-TV	RAPID CITY SD	247.5	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.
02	KOTA-TV	RAPID CITY SD	USERRECORD-01	

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	379.2	PLN	DTVPLN	-DTVP0003
02	KNOP-TV	NORTH PLATTE NE	379.2	CP	BPCDT	-20080603ABQ

Total scenarios = 1

Result key: 3
Scenario 1 Affected station 4
Before Analysis

Results for: 2A SD RAPID CITY USERRECORD01 APP

	POPULATION	AREA (sq km)
HAAT 205.0 m, ATV ERP 45.0 kW		
within Noise Limited Contour	169401	38432.5
not affected by terrain losses	168055	37483.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17	28.0
lost to ATV IX only	17	28.0
lost to all IX	17	28.0

Potential Interfering Stations Included in above Scenario 1

2A NE NORTH PLATTE BPCDT 20080603ABQ CP

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