

ENGINEERING STATEMENT
IN SUPPORT OF AN APPLICATION FOR CONSTRUCTION PERMIT
FOR THE PROPOSED DIGITAL TV OPERATION OF
KSFY-TV, SIOUX FALLS, SOUTH DAKOTA
CHANNEL 13 22.7 KW 610 METERS
MARCH 2008

This engineering statement has been prepared on behalf of Hoak Media of Dakota License, LLC, licensee of TV station KSFY-TV, Sioux Falls, South Dakota, in support of its application for a construction permit for post-transition digital TV (DTV) operation on Channel 13.

At present KSFY-TV, Facility ID Number 48658, operates its analog TV facilities on Channel 13 (210-216 MHz) with 316 kW effective radiated power (ERP) and 610 meters antenna height above average terrain (HAAT) using a non-directional TV antenna. In the Seventh Report and Order (MB Docket No. 87-268) the Commission has allotted Channel 13 for the KSFY-TV's post-transition DTV operation. KSFY-TV is filing its application for a construction permit to operate following the DTV transition on DTV Channel 13 with 22.7 kW ERP and 610 meters HAAT using a non-directional TV antenna.

The following information provides pertinent data for the proposed KSFY-DT operation.

Name of the Licensee:	Hoak Media of Dakota License, LLC
Station Location:	SD-Sioux Falls
Channel:	13
Hours of Operation:	Unlimited
Transmitter:	Type Accepted
Antenna Type:	RCA, TF-12-AH
Beam Tilt:	0.7

Antenna Coordinates:	North Latitude:	43 deg	31 min	07 sec
	West Longitude:	96 deg	32 min	05 sec

Transmitter output power: As required to achieve authorized ERP

Maximum effective radiated power (Average):	22.7 kW
	13.56 dBk

Elevation of site above mean sea level:	444.8 meters
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Overall height of the tower above ground:	605 meters
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Height of radiation center above ground (meters):	595 meters
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Height of radiation center above mean sea level (meters):	1039.8 meters
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Height of radiation center above average terrain (meters):	610 meters
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Antenna Structure Registration Number:	1035413
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**Response to questions for Post Transition Expedited Processing listed on the
FCC Form 301, Section III-D-DTV Engineering**

Question 1. (a)

KSFY-TV will operate its DTV operation on Channel 13 as established in 47 C.F.R.
Section 73.622.

Question 1. (d)

KSFY-TV is proposing to operate its post-transition facilities which are slightly
different than established in Appendix B of the Seventh Report and Order (MB
Docket No. 87-268). The minor difference is due to the use of a non-directional DTV
antenna which is currently used for analog TV operation while the Appendix B
facilities specify a directional DTV antenna. The proposed noise-limited service
contour extends no more than 0.2 km in any direction beyond that established by

Appendix B of the Seventh Report and Order in MB Docket 87-268. In addition, an electromagnetic interference study conducted according FCC OET Bulletin 69 indicates the proposed KSFY-DT operation would not cause interference to other DTV stations above the levels specified in Appendix B. The attached Tables I and II show the results of these studies for the Appendix B and proposed KSFY-DT facilities, respectively.

Question 1. (e)

The population within the proposed DTV service area would not be less than 5% of the predicted population defined in the new DTV Table Appendix B.

Waiver Request for Questions 1. (d) and 1. (e)

The proposed KSFY-DT operation complies with the Commission's Filing Freeze Waiver Policy as described in paragraph 151 of the Report and Order in MB Docket 07-91 since it meets the following three conditions:

1. It would allow the station to use its analog TV antenna for its digital TV operation
2. The expansion in service area would be less than 5 miles in any direction than authorized service area as defined by Appendix B facilities
3. It would not cause impermissible interference to other stations. An electromagnetic interference study conducted according to FCC OET Bulletin 69 indicates the proposed KSFY-DT operation on DTV Channel 13 will not cause more than 0.5% new interference to other stations.

Question 2.

The attached environmental statement demonstrates that there will not be any significant environmental impact from the proposed DTV operation in accordance with 47 C.F.R. Section 73.1307.

Question 3.

The attached map shows the proposed KSFY-DT contour will encompass the allotted principal community of Sioux Falls, South Dakota.

Question 4.

The proposed KSFY-DT facility complies with Section 73.1030 of the Commission's rules; therefore, notification to radio astronomy installations, radio receiving installations and FCC monitoring stations is not required.

Question 5.

The existing KSFY-DT tower is registered (ASR No. 1035413) by the Commission and no changes are proposed to require a change in the registration.

TABLE I

OET BULLETIN 69 INTERFERENCE STUDY

Census data selected 2000

Post Transition Data Base Selected
/space/software/cdbs/tvdb.sff_G
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Record Selected for Analysis

KSFY-TV USERRECORD-01 SIOUX FALLS SD US
Channel 13 ERP 22.7 kW HAAT 610. m RCAMSL 01040 m
Latitude 043-31-07 Longitude 0096-32-05
Status APP Zone 2 Border
Dir Antenna Make usr Model KSFY_FCC Beam tilt N Ref Azimuth 0.
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)	36.0 dBu F(50,90) (km)
0.0	22.383	609.1	120.2
45.0	22.271	602.0	119.8
90.0	22.203	593.9	119.2
135.0	22.271	602.5	119.8
180.0	22.609	622.6	121.0
225.0	22.677	626.0	121.2
270.0	22.293	603.3	119.8
315.0	22.609	622.9	121.0

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KSFY-TV 13 SIOUX FALLS SD USERRECORD01

and station

SHORT TO: KPLO-TV 13 RELIANCE SD BLCDT 20030519AER
043-57-57 0099-36-11
Req. separation 273.6 Actual separation 252.1 Short 21.5 km

SHORT TO: KSFY-TV 13 SIOUX FALLS SD BDTV 00000121
43-31-07 96-32-05
Req. separation 273.6 Actual separation 0.0 Short 273.6 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

KHANNA & GULL, Inc. – Consulting Engineers

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
13	KSFY-TV	SIOUX FALLS SD	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KEYC-TV	MANKATO MN	176.8	CP MOD	BMPCDT	-20010223AAQ
12	KTTM	HURON SD	161.4	CP	BPCDT	-19991029ADD
13	WHO-TV	DES MOINES IA	303.5	CP	BPCDT	-19990805LD
13	KFME	FARGO ND	391.8	CP	BDTV	-00000117
13	KPLO-TV	RELIANCE SD	251.3	LIC	BLCDT	-20030519AER

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KEYC-TV	MANKATO MN	BMPCDT	-20010223AAQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KARE	MINNEAPOLIS MN	160.6	LIC	BLCDT	-20010917ABZ
11	KELO-TV	SIOUX FALLS SD	176.8	LIC	BLCDT	-20030417AAE
12	KIIN	IOWA CITY IA	351.0	CP	BDTV	-00000107
12	KCCW-TV	WALKER MN	333.2	CP	BDTV	-00000097
12	KUON-TV	LINCOLN NE	353.2	CP	BDTV	-00000106
12	KTTM	HURON SD	313.4	CP	BPCDT	-19991029ADD
13	KSFY-TV	SIOUX FALLS SD	176.8	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KTTM	HURON SD	BPCDT	-19991029ADD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KQSD-TV	LOWRY SD	178.2	CP	BDTV	-00000083
11	KELO-TV	SIOUX FALLS SD	161.4	LIC	BLCDT	-20030417AAE
12	KEYC-TV	MANKATO MN	313.4	CP MOD	BMPCDT	-20010223AAQ
12	KCCW-TV	WALKER MN	427.7	CP	BDTV	-00000097
12	KXMB-TV	BISMARCK ND	329.4	CP	BDTV	-00000099
12	KUON-TV	LINCOLN NE	372.2	CP	BDTV	-00000106
12	KRNE-TV	MERRIMAN NE	321.5	CP	BDTV	-00000095
13	KPLO-TV	RELIANCE SD	105.7	LIC	BLCDT	-20030519AER
13	KSFY-TV	SIOUX FALLS SD	161.4	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	WHO-TV	DES MOINES IA	BPCDT	-19990805LD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KIIN	IOWA CITY IA	188.9	CP	BDTV	-00000107
13	WREXTV	ROCKFORD IL	364.7	LIC	BLCT	-1372
13	WCFN	SPRINGFIELD IL	412.7	CP	BPCDT	-19991026ABC
13	WIBW-TV	TOPEKA KS	375.4	CP	BDTV	-00000126
13	WEAU-TV	EAU CLAIRE WI	381.3	CP	BDTV	-00000125
13	KSFY-TV	SIOUX FALLS SD	303.5	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
 Scenario 1 Affected station 3
 Before Analysis

Results for: 13A IA DES MOINES BPCDT 19990805LD CP
 HAAT 609.0 m, ATV ERP 36.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1077046	49353.0
not affected by terrain losses	1062380	48200.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	23201	297.3
lost to ATV IX only	23201	297.3
lost to all IX	23201	297.3

Potential Interfering Stations Included in above Scenario 1

13A IL ROCKFORD	BLCT	1372	LIC
13A KS TOPEKA	BDTV	00000126	CP
13A WI EAU CLAIRE	BDTV	00000125	CP

After Analysis

Results for: 13A IA DES MOINES BPCDT 19990805LD CP
 HAAT 609.0 m, ATV ERP 36.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1077046	49353.0
not affected by terrain losses	1062380	48200.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	23841	494.1
lost to ATV IX only	23841	494.1
lost to all IX	23841	494.1

Potential Interfering Stations Included in above Scenario 1

13A IL ROCKFORD	BLCT	1372	LIC
13A KS TOPEKA	BDTV	00000126	CP
13A WI EAU CLAIRE	BDTV	00000125	CP
13A SD SIOUX FALLS	USERRECORD01		APP

Percent new IX = 0.0616%

Worst case new IX 0.0616% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

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Channel	Call	City/State	Application Ref. No.
13	KFME	FARGO ND	BDTV -00000117

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	KCCW-TV	WALKER MN	207.7	CP	BDTV -00000097
12	KNRR	PEMBINA ND	220.9	CP	BPCDT -19991101AKT
13	WIRT	HIBBING MN	322.7	CP	BPCDT -19991027ABC
13	KXMC-TV	MINOT ND	331.9	CP	BDTV -00000127
13	KPLO-TV	RELIANCE SD	387.2	LIC	BLCDT -20030519AER
13	KSFY-TV	SIOUX FALLS SD	391.8	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KPLO-TV	RELIANCE SD	BLCDT -20030519AER

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	KRNE-TV	MERRIMAN NE	222.6	CP	BDTV -00000095
12	KTTM	HURON SD	105.7	CP	BPCDT -19991029ADD
13	KFME	FARGO ND	387.2	CP	BDTV -00000117
13	KTNE-TV	ALLIANCE NE	367.1	CP	BDTV -00000118
13	KPSD-TV	EAGLE BUTTE SD	243.0	CP	BDTV -00000119
13	KSFY-TV	SIOUX FALLS SD	251.3	APP	USERRECORD-01

Total scenarios = 1

Result key: 2
 Scenario 1 Affected station 5
 Before Analysis

Results for: 13A SD RELIANCE BLCDT 20030519AER LIC
 HAAT 318.0 m, ATV ERP 40.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	56183	31241.4
not affected by terrain losses	53474	30097.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1669	1754.1
lost to ATV IX only	1669	1754.1
lost to all IX	1669	1754.1

Potential Interfering Stations Included in above Scenario 1

12A SD HURON	BPCDT	19991029ADD	CP
13A ND FARGO	BDTV	00000117	CP
13A NE ALLIANCE	BDTV	00000118	CP
13A SD EAGLE BUTTE	BDTV	00000119	CP

After Analysis

Results for: 13A SD RELIANCE BLCDT 20030519AER LIC
 HAAT 318.0 m, ATV ERP 40.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	56183	31241.4
not affected by terrain losses	53474	30097.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3553	2797.8
lost to ATV IX only	3553	2797.8
lost to all IX	3553	2797.8

Potential Interfering Stations Included in above Scenario 1

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12A SD HURON	BPCDT	19991029ADD	CP
13A ND FARGO	BDTV	00000117	CP
13A NE ALLIANCE	BDTV	00000118	CP
13A SD EAGLE BUTTE	BDTV	00000119	CP
13A SD SIOUX FALLS	USERRECORD01		APP

The following station failed the de minimis interference criteria.

13D SD SIOUX FALLS USERRECORD01
 ERP 22.70 kW HAAT 610.0 m RCAMSL 1040.0 m
 Antenna usr KSFY_FCC

Due to interference to the following station and scenario: 1
 13D SD RELIANCE BLCDT 20030519AER
 ERP 40.00 kW HAAT 318.0 m RCAMSL 844.0 m
 Antenna CDB 00000000045870

Percent Service lost without proposal:	0.0	to BLCDT	20030519AER
Percent Service lost with proposal:	3.6	to BLCDT	20030519AER

Worst case new IX 3.6367% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KSFY-TV	SIOUX FALLS SD	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
12	KEYC-TV	MANKATO MN	176.8	CP MOD	BMPCDT -20010223AAQ
12	KTTM	HURON SD	161.4	CP	BPCDT -19991029ADD
13	WHO-TV	DES MOINES IA	303.5	CP	BPCDT -19990805LD
13	KFME	FARGO ND	391.8	CP	BDTV -00000117
13	KPLO-TV	RELIANCE SD	251.3	LIC	BLCDT -20030519AER

Total scenarios = 1

Result key: 3
 Scenario 1 Affected station 6
 Before Analysis

Results for: 13A SD SIOUX FALLS USERRECORD01 APP

HAAT 610.0 m, ATV ERP 22.7 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	618420	45418.7
not affected by terrain losses	580289	43695.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	37875	2579.5
lost to ATV IX only	37875	2579.5
lost to all IX	37875	2579.5

Potential Interfering Stations Included in above Scenario 1

12A MN MANKATO	BMPCDT	20010223AAQ	CP
12A SD HURON	BPCDT	19991029ADD	CP
13A IA DES MOINES	BPCDT	19990805LD	CP
13A ND FARGO	BDTV	00000117	CP
13A SD RELIANCE	BLCDT	20030519AER	LIC

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

TABLE I

OET BULLETIN 69 INTERFERENCE STUDY

Census data selected 2000

Post Transition Data Base Selected
/space/software/cdbs/tvdb.sff_G
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Record Selected for Analysis

KSFY-TV USERRECORD-01 SIOUX FALLS SD US
Channel 13 ERP 22.7 kW HAAT 610. m RCAMSL 01040 m
Latitude 043-31-07 Longitude 0096-32-05
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)	36.0 dBu F(50,90) (km)
0.0	22.700	609.1	120.3
45.0	22.700	602.0	120.0
90.0	22.700	593.9	119.5
135.0	22.700	602.5	120.0
180.0	22.700	622.6	121.0
225.0	22.700	626.0	121.2
270.0	22.700	603.3	120.0
315.0	22.700	622.9	121.1

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KSFY-TV 13 SIOUX FALLS SD USERRECORD01

and station

SHORT TO: KPLO-TV 13 RELIANCE SD BLCDT 20030519AER
043-57-57 0099-36-11
Req. separation 273.6 Actual separation 252.1 Short 21.5 km

SHORT TO: KSFY-TV 13 SIOUX FALLS SD BDTV 00000121
43-31-07 96-32-05
Req. separation 273.6 Actual separation 0.0 Short 273.6 km

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

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Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Call	City/State	ARN
13	KSFY-TV	SIOUX FALLS SD	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KEYC-TV	MANKATO MN	176.8	CP MOD	BMPCDT	-20010223AAQ
12	KTTM	HURON SD	161.4	CP	BPCDT	-19991029ADD
13	WHO-TV	DES MOINES IA	303.5	CP	BPCDT	-19990805LD
13	KFME	FARGO ND	391.8	CP	BDTV	-00000117
13	KPLO-TV	RELIANCE SD	251.3	LIC	BLCDT	-20030519AER

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KEYC-TV	MANKATO MN	BMPCDT	-20010223AAQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KARE	MINNEAPOLIS MN	160.6	LIC	BLCDT	-20010917ABZ
11	KELO-TV	SIOUX FALLS SD	176.8	LIC	BLCDT	-20030417AAE
12	KIIN	IOWA CITY IA	351.0	CP	BDTV	-00000107
12	KCCW-TV	WALKER MN	333.2	CP	BDTV	-00000097
12	KUON-TV	LINCOLN NE	353.2	CP	BDTV	-00000106
12	KTTM	HURON SD	313.4	CP	BPCDT	-19991029ADD
13	KSFY-TV	SIOUX FALLS SD	176.8	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KTTM	HURON SD	BPCDT	-19991029ADD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
11	KQSD-TV	LOWRY SD	178.2	CP	BDTV	-00000083
11	KELO-TV	SIOUX FALLS SD	161.4	LIC	BLCDT	-20030417AAE
12	KEYC-TV	MANKATO MN	313.4	CP MOD	BMPCDT	-20010223AAQ
12	KCCW-TV	WALKER MN	427.7	CP	BDTV	-00000097
12	KXMB-TV	BISMARCK ND	329.4	CP	BDTV	-00000099
12	KUON-TV	LINCOLN NE	372.2	CP	BDTV	-00000106
12	KRNE-TV	MERRIMAN NE	321.5	CP	BDTV	-00000095
13	KPLO-TV	RELIANCE SD	105.7	LIC	BLCDT	-20030519AER
13	KSFY-TV	SIOUX FALLS SD	161.4	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 3

KHANNA & GULL, Inc. – Consulting Engineers

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	WHO-TV	DES MOINES IA	BPCDT	-19990805LD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KIIN	IOWA CITY IA	188.9	CP	BDTV	-00000107
13	WREXTV	ROCKFORD IL	364.7	LIC	BLCT	-1372
13	WCFN	SPRINGFIELD IL	412.7	CP	BPCDT	-19991026ABC
13	WIBW-TV	TOPEKA KS	375.4	CP	BDTV	-00000126
13	WEAU-TV	EAU CLAIRE WI	381.3	CP	BDTV	-00000125
13	KSFY-TV	SIOUX FALLS SD	303.5	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
 Scenario 1 Affected station 3
 Before Analysis

Results for: 13A IA DES MOINES BPCDT 19990805LD CP

HAAT 609.0 m, ATV ERP 36.1 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	1077046	49353.0
not affected by terrain losses	1062380	48200.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	23201	297.3
lost to ATV IX only	23201	297.3
lost to all IX	23201	297.3

Potential Interfering Stations Included in above Scenario 1

13A IL ROCKFORD	BLCT	1372	LIC
13A KS TOPEKA	BDTV	00000126	CP
13A WI EAU CLAIRE	BDTV	00000125	CP

After Analysis

Results for: 13A IA DES MOINES BPCDT 19990805LD CP

HAAT 609.0 m, ATV ERP 36.1 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	1077046	49353.0
not affected by terrain losses	1062380	48200.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	23871	510.2
lost to ATV IX only	23871	510.2
lost to all IX	23871	510.2

Potential Interfering Stations Included in above Scenario 1

13A IL ROCKFORD	BLCT	1372	LIC
13A KS TOPEKA	BDTV	00000126	CP
13A WI EAU CLAIRE	BDTV	00000125	CP
13A SD SIOUX FALLS	USERRECORD01		APP

Percent new IX = 0.0645%

Worst case new IX 0.0645% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	KFME	FARGO ND	BDTV	-00000117

Stations Potentially Affecting This Station

KHANNA & GULL, Inc. – Consulting Engineers

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KCCW-TV	WALKER MN	207.7	CP	BDTV	-00000097
12	KNRR	PEMBINA ND	220.9	CP	BPCDT	-19991101AKT
13	WIRT	HIBBING MN	322.7	CP	BPCDT	-19991027ABC
13	KXMC-TV	MINOT ND	331.9	CP	BDTV	-00000127
13	KPLO-TV	RELIANCE SD	387.2	LIC	BLCDDT	-20030519AER
13	KSFY-TV	SIOUX FALLS SD	391.8	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	KPLO-TV	RELIANCE SD	BLCDDT	-20030519AER

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KRNE-TV	MERRIMAN NE	222.6	CP	BDTV	-00000095
12	KTTM	HURON SD	105.7	CP	BPCDT	-19991029ADD
13	KFME	FARGO ND	387.2	CP	BDTV	-00000117
13	KTNE-TV	ALLIANCE NE	367.1	CP	BDTV	-00000118
13	KPSD-TV	EAGLE BUTTE SD	243.0	CP	BDTV	-00000119
13	KSFY-TV	SIOUX FALLS SD	251.3	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2
 Scenario 1 Affected station 5
 Before Analysis

Results for: 13A SD RELIANCE BLCDDT 20030519AER LIC
 HAAT 318.0 m, ATV ERP 40.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	56183	31241.4
not affected by terrain losses	53474	30097.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1669	1754.1
lost to ATV IX only	1669	1754.1
lost to all IX	1669	1754.1

Potential Interfering Stations Included in above Scenario 1

12A SD HURON	BPCDT	19991029ADD	CP
13A ND FARGO	BDTV	00000117	CP
13A NE ALLIANCE	BDTV	00000118	CP
13A SD EAGLE BUTTE	BDTV	00000119	CP

After Analysis

Results for: 13A SD RELIANCE BLCDDT 20030519AER LIC
 HAAT 318.0 m, ATV ERP 40.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	56183	31241.4
not affected by terrain losses	53474	30097.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3561	2801.8
lost to ATV IX only	3561	2801.8
lost to all IX	3561	2801.8

Potential Interfering Stations Included in above Scenario 1

12A SD HURON	BPCDT	19991029ADD	CP
13A ND FARGO	BDTV	00000117	CP
13A NE ALLIANCE	BDTV	00000118	CP

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13A SD EAGLE BUTTE BDTV 00000119 CP
 13A SD SIOUX FALLS USERRECORD01 APP

The following station failed the de minimis interference criteria.

13D SD SIOUX FALLS USERRECORD01
 ERP 22.70 kW HAAT 610.0 m RCAMSL 1040.0 m
 Antenna none

Due to interference to the following station and scenario: 1

13D SD RELIANCE BLCDT 20030519AER
 ERP 40.00 kW HAAT 318.0 m RCAMSL 844.0 m
 Antenna CDB 00000000045870

Percent Service lost without proposal: 0.0 to BLCDT 20030519AER
 Percent Service lost with proposal: 3.7 to BLCDT 20030519AER

Worst case new IX 3.6522% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KSFY-TV	SIOUX FALLS SD	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
12	KEYC-TV	MANKATO MN	176.8	CP MOD	BMPCDT	-20010223AAQ
12	KTTM	HURON SD	161.4	CP	BPCDT	-19991029ADD
13	WHO-TV	DES MOINES IA	303.5	CP	BPCDT	-19990805LD
13	KFME	FARGO ND	391.8	CP	BDTV	-00000117
13	KPLO-TV	RELIANCE SD	251.3	LIC	BLCDT	-20030519AER

Total scenarios = 1

Result key: 3
 Scenario 1 Affected station 6
 Before Analysis

Results for: 13A SD SIOUX FALLS USERRECORD01 APP

HAAT 610.0 m, ATV ERP 22.7 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	620582	45506.4
not affected by terrain losses	575089	43758.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	42087	2583.5
lost to ATV IX only	42087	2583.5
lost to all IX	42087	2583.5

Potential Interfering Stations Included in above Scenario 1

12A MN MANKATO	BMPCDT	20010223AAQ	CP
12A SD HURON	BPCDT	19991029ADD	CP
13A IA DES MOINES	BPCDT	19990805LD	CP
13A ND FARGO	BDTV	00000117	CP
13A SD RELIANCE	BLCDT	20030519AER	LIC

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

ENVIRONMENTAL PROTECTION ACT

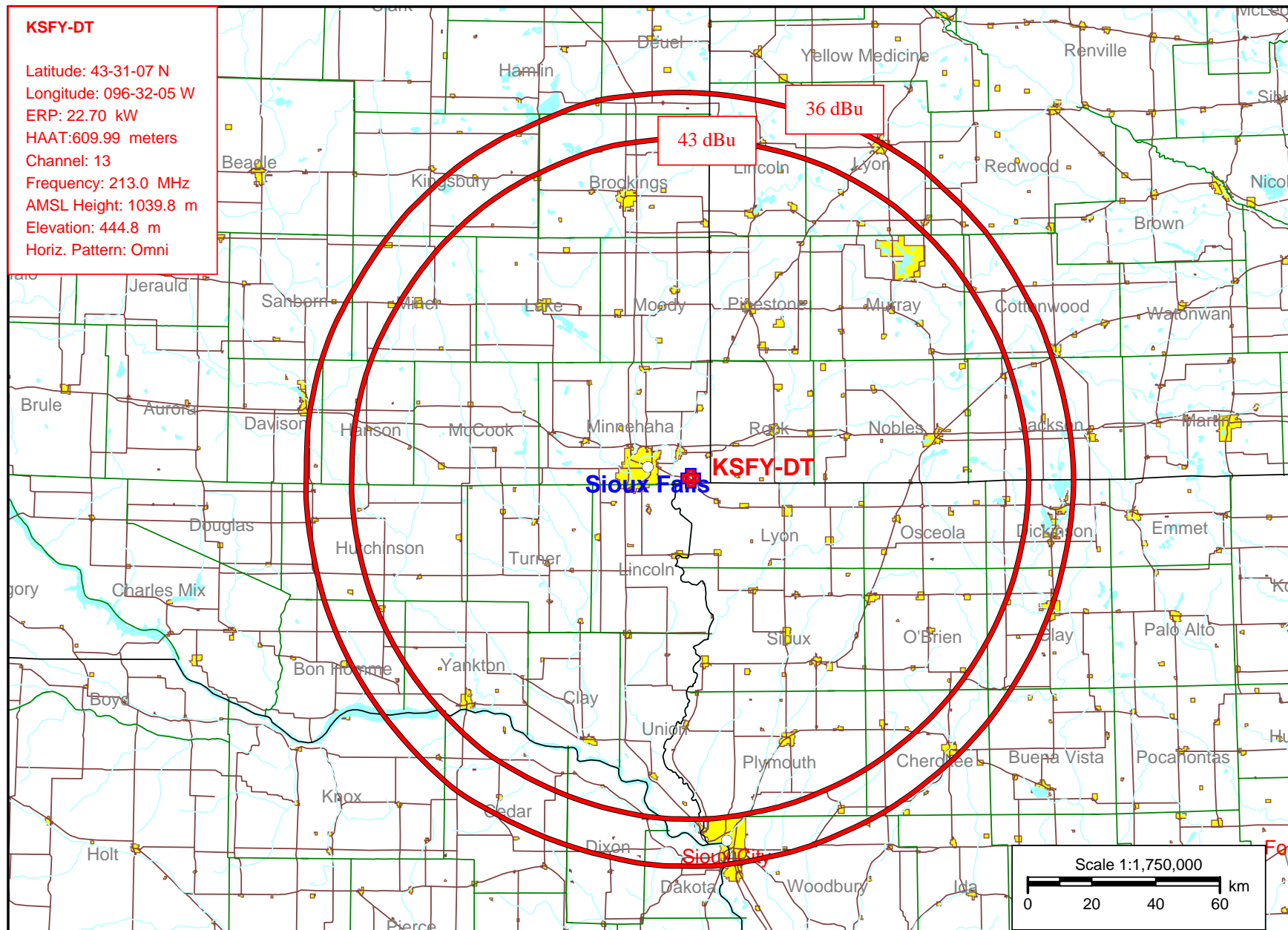
Since KSFY-TV will be using its currently licensed analog TV antenna, located on tower (ASR No. 1035413), for the DTV operation the environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent; therefore, those issues have not been addressed.

An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 22.7 kW and a radiation center of 595 meters above ground level, the proposed Channel 13 DTV operation would have less than 1 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field at 2 meters above the base of tower assuming an antenna field factor of 0.5 in the downward direction.

The Commission's guidelines for the Channel 13 TV are $1000 \mu\text{W}/\text{cm}^2$ for the occupational/controlled, and $200 \mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

The above analysis indicates that members of the public and personnel working around the KSFY-DT tower would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, KSFY-DT will establish procedures to ensure that workers are not exposed to RF fields above the Commission's guidelines, by reducing or turning off the power, as appropriate.

For the reasons stated above, it is believed this proposal complies with Section 1.1307(a) and (b) of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from environmental processing.



COMPUTED NOISE LIMITED CONTOURS FOR THE PROPOSED DTV OPERATION OF KSFY-DT, SIOUX FALLS, SOUTH DAKOTA