

ENGINEERING STATEMENT  
IN SUPPORT OF A  
SPECIAL TEMPORARY AUTHORIZATION (STA)  
FOR THE PROPOSED DIGITAL TV OPERATION OF  
KWNB-DT, HAYES CENTER, NEBRASKA  
FEBRUARY 2009

This engineering statement has been prepared on behalf of Pappas Telecasting of Central Nebraska, L.P., (“Pappas”), licensee of television station KWNB-TV, Hayes Center, Nebraska in support of an application for a Special Temporary Authorization (STA) for the station’s digital TV (DTV) operation on Channel 6.

At present KWNB-TV, Facility ID Number 21162, is authorized to operate its analog TV facilities on Channel 6 (82-88 MHz) with 100 kW effective radiated power (ERP) and 221 meters antenna height above average terrain (HAAT) using a non-directional TV antenna. In MB Docket 08-193, RM-11489, the Commission has substituted TV Channel 6 for its assigned Channel 18 at Hayes Center, Nebraska. The allotted Channel 6 DTV operation is with 3 kW ERP and 221 meters HAAT from the station’s licensed site. Pappas is requesting a Special Temporary Authorization (STA) on Channel 6 with 3 kW ERP and 221 meters HAAT.

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

Name of the Licensee:	Pappas Telecasting of Central Nebraska, L.P.
Station Location:	NE-Hayes Center
Channel:	6
Hours of Operation:	Unlimited
Transmitter:	Type Accepted
Antenna Type:	GE, TY-60-F
Beam Tilt:	None

Antenna Coordinates:	North Latitude:	40 deg	37 min	32 sec
	West Longitude:	101 deg	01 min	45 sec

Transmitter output power: As required to achieve authorized ERP

Maximum effective radiated power (Average): 3 kW  
4.77 dBk

Elevation of site above mean sea level: 995.0 meters

Overall height of the tower above ground: 178.8 meters

Height of radiation center above ground (meters): 165 meters

Height of radiation center above mean sea level (meters): 1160 meters

Height of radiation center above average terrain (meters): 221 meters

Antenna Structure Registration No.: 1026527

KWNB-TV is seeking a Special Temporary Authorization (STA) to operate its DTV facilities as allotted in MB Docket No. 08-193, RM-11496. The noise limited contour (28 dBu) will not extend beyond that established by Report and Order, MB Docket No. 08-193, RM-11496.

An interference study conducted (see attached Table I) according to the FCC OET Bulletin 69 indicates the proposed KWNB-DT operation on Channel 6 would not cause any interference to other analog TV and DTV stations exceeding the Commission's guidelines. The proposed STA operation would serve 100% population listed in Report and Order, MB Docket No. 08-193, RM-11496.

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.

The attached map shows the proposed KWNB-DT 35 dBu contour will encompass the allotted principal community of Hayes Center, Nebraska (see Figure 1).

The proposed KWNB-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.

KWNB-DT would be operating from the existing tower which is registered (ASR No. 1026527) by the Commission and no changes are proposed to require a change in the registration.

Table I

Census data selected 2000

## TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 01-30-2009 Time: 09:54:22

Record Selected for Analysis

KWNB-TV USERRECORD-01 HAYES CENTER NE US  
 Channel 06 ERP 3. kW HAAT 221. m RCAMSL 01160 m  
 Latitude 040-37-32 Longitude 0101-01-45  
 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	3.000	220.6	89.1
45.0	3.000	231.8	90.0
90.0	3.000	242.0	90.8
135.0	3.000	251.7	91.6
180.0	3.000	237.6	90.4
225.0	3.000	214.9	88.7
270.0	3.000	190.8	86.8
315.0	3.000	180.7	86.0

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KWNB-TV 06 HAYES CENTER NE USERRECORD01

and station

SHORT TO: KWNB-TV 06 HAYES CENTER NE BLCT 20000828AHT  
 040-37-32 0101-01-45  
 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 quite zone

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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
06	KWNB-TV	HAYES CENTER NE	USERRECORD01

## Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KHAS-TV	HASTINGS NE	223.1	LIC	BLCT	-2417
06	KRMA-TV	DENVER CO	371.1	CP	BPET	-19990107KE
06	KRMA-TV	DENVER CO	372.0	APP	BSTA	-20090105AHL
06	KRMA-TV	DENVER CO	372.0	LIC	BLET	-19950504KE
06	KBSD-TV	ENSIGN KS	336.9	LIC	BMLCT	-20040826AAG
06	NEW	HUTCHINSON KS	380.2	APP	BPRM	-20011009AEG
06	WOWT-TV	OMAHA NE	426.6	LIC	BLCT	-19831024KI
06	KPLO-TV	RELIANCE SD	389.3	LIC	BLCT	-1436

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## Analysis of Interference to Affected Station 1

### 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		230175	28847.4	
not affected by terrain losses		229283	28375.8	
lost to NTSC IX		6576	2014.0	
lost to additional IX by ATV		381	175.8	
lost to all IX		6957	2189.8	

### 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	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
06	KWNB-TV	HAYES CENTER NE	223.1	APP	USERRECORD-01	

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Proposed station is beyond the site to  
nearest cell evaluation distance

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Analysis of Interference to Affected Station    2

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
06	KRMATV	DENVER CO	DTVPLN	-NPLN0400

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KOAATV	PUEBLO CO	162.2	PLN	DTVPLN	-NPLN0343
05	KGWNTV	CHEYENNE WY	153.7	PLN	DTVPLN	-NPLN0390
06	KREZTV	DURANGO CO	358.3	PLN	DTVPLN	-NPLN0401
06	KWNBTV	HAYES CENTER NE	371.6	PLN	DTVPLN	-NPLN0427
06	NEW	VERNAL UT	338.6	PLN	DTVPLN	-NPLN0447
06	NEW	CASPER WY	347.2	PLN	DTVPLN	-NPLN0453

Results for:	6N CO DENVER	DTVPLN	NPLN0400	PLN
		POPULATION	AREA (sq km)	
within Noise Limited Contour		3184940	32522.3	
not affected by terrain losses		3004687	29627.6	
lost to NTSC IX		151088	2471.0	
lost to additional IX by ATV		0	0.0	
lost to all IX		151088	2471.0	

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	KRMA-TV	DENVER CO	BPET	-19990107KE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KOAA-TV	PUEBLO CO	155.3	LIC	BLCT	-19850314KG
05	KGWN-TV	CHEYENNE WY	159.6	LIC	BLCT	-1639
06	KREZ-TV	DURANGO CO	355.4	LIC	BLCT	-19851107KJ
06	KWNB-TV	HAYES CENTER NE	371.1	LIC	BLCT	-20000828AHT
06	NEW	DES MOINES NM	344.2	APP	BPRM	-20011009AEH
06	KBCJ	VERNAL UT	342.8	CP MOD	BPCT	-20050915ADU
06	KPTW	CASPER WY	354.0	LIC	BLET	-20070228ABK
06	KWNB-TV	HAYES CENTER NE	371.1	APP	USERRECORD-01	

Total scenarios =    1

Result key:            1  
Scenario            1    Affected station            2  
Before Analysis

Results for:	6N CO DENVER	BPET	19990107KE	CP
		POPULATION	AREA (sq km)	
within Noise Limited Contour		2947657	25092.2	
not affected by terrain losses		2919572	23484.7	
lost to NTSC IX		229311	2199.3	
lost to additional IX by ATV		0	0.0	
lost to all IX		229311	2199.3	

Potential Interfering Stations Included in above Scenario    1

5N CO PUEBLO	BLCT	19850314KG	LIC
5N WY CHEYENNE	BLCT	1639	LIC
6N NE HAYES CENTER	BLCT	20000828AHT	LIC

After Analysis

Results for:	6N CO DENVER	BPET	19990107KE	CP
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	POPULATION	AREA (sq km)
within Noise Limited Contour	2947657	25092.2
not affected by terrain losses	2919572	23484.7
lost to NTSC IX	228860	1483.5
lost to additional IX by ATV	134	203.9
lost to all IX	228994	1687.5

Potential Interfering Stations Included in above Scenario 1

5N CO PUEBLO	BLCT	19850314KG	LIC
5N WY CHEYENNE	BLCT	1639	LIC
6A NE HAYES CENTER	USERRECORD01		APP

Percent new IX = 0.0045%

Worst case new IX 0.0045% Scenario 1

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
06	KRMA-TV	DENVER CO	BSTA -20090105AHL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
05	KOAA-TV	PUEBLO CO	162.2	LIC	BLCT -19850314KG
05	KGWN-TV	CHEYENNE WY	153.7	LIC	BLCT -1639
06	KREZ-TV	DURANGO CO	358.2	LIC	BLCT -19851107KJ
06	KWNB-TV	HAYES CENTER NE	372.0	LIC	BLCT -20000828AHT
06	NEW	DES MOINES NM	351.1	APP	BPRM -20011009AEH
06	KBCJ	VERNAL UT	338.6	CP MOD	BPCT -20050915ADU
06	KPTW	CASPER WY	347.2	LIC	BLET -20070228ABK
06	KWNB-TV	HAYES CENTER NE	372.0	APP	USERRECORD-01

Proposed station is beyond the site to  
nearest cell evaluation distance

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
06	KRMA-TV	DENVER CO	BLET -19950504KE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
05	KOAA-TV	PUEBLO CO	162.2	LIC	BLCT -19850314KG
05	KGWN-TV	CHEYENNE WY	153.7	LIC	BLCT -1639
06	KREZ-TV	DURANGO CO	358.2	LIC	BLCT -19851107KJ
06	KWNB-TV	HAYES CENTER NE	372.0	LIC	BLCT -20000828AHT
06	NEW	DES MOINES NM	351.1	APP	BPRM -20011009AEH
06	KBCJ	VERNAL UT	338.6	CP MOD	BPCT -20050915ADU
06	KPTW	CASPER WY	347.2	LIC	BLET -20070228ABK
06	KWNB-TV	HAYES CENTER NE	372.0	APP	USERRECORD-01

Total scenarios = 1

Result key: 2  
Scenario 1 Affected station 4  
Before Analysis



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Results for: 6N CO DENVER                      BLET                      19950504KE      LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	3184940	32522.3
not affected by terrain losses	3004687	29627.6
lost to NTSC IX	151043	2443.0
lost to additional IX by ATV	0	0.0
lost to all IX	151043	2443.0

Potential Interfering Stations Included in above Scenario      1

5N CO PUEBLO	BLCT	19850314KG	LIC
5N WY CHEYENNE	BLCT	1639	LIC
6N UT VERNAL	BPCT	20050915ADU	CP
6N NE HAYES CENTER	BLCT	20000828AHT	LIC

After Analysis

Results for: 6N CO DENVER                      BLET                      19950504KE      LIC

	POPULATION	AREA (sq km)
within Noise Limited Contour	3184940	32522.3
not affected by terrain losses	3004687	29627.6
lost to NTSC IX	150022	1567.3
lost to additional IX by ATV	259	271.9
lost to all IX	150281	1839.2

Potential Interfering Stations Included in above Scenario      1

5N CO PUEBLO	BLCT	19850314KG	LIC
5N WY CHEYENNE	BLCT	1639	LIC
6N UT VERNAL	BPCT	20050915ADU	CP
6A NE HAYES CENTER	USERRECORD01		APP

Percent new IX =      0.0081%

Worst case new IX      0.0081% Scenario      1

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Analysis of Interference to Affected Station      5

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
06	KBSDTV	ENSIGN KS	DTVPLN	-NPLN0411

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KBSD-DT	ENSIGN KS	0.0	PLN	DTVPLN	-DTPV0020
06	KWNBTV	HAYES CENTER NE	336.9	PLN	DTVPLN	-NPLN0427

Results for: 6N KS ENSIGN                      DTVPLN                      NPLN0411      PLN

	POPULATION	AREA (sq km)
within Noise Limited Contour	139326	28813.0
not affected by terrain losses	137536	28326.2
lost to NTSC IX	2134	1219.0
lost to additional IX by ATV	0	0.0
lost to all IX	2134	1219.0

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	KBSD-TV	ENSIGN KS	BMLCT	-20040826AAG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KBSD-DT	ENSIGN KS	0.0	PLN	DTVPLN	-DTPV0020
06	NEW	HUTCHINSON KS	181.5	APP	BPRM	-20011009AEG
06	KWNB-TV	HAYES CENTER NE	336.9	LIC	BLCT	-20000828AHT
06	NEW	DES MOINES NM	327.0	APP	BPRM	-20011009AEH

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06 KWNB-TV HAYES CENTER NE 336.9 APP USERRECORD-01

Total scenarios = 1

Result key: 3  
Scenario 1 Affected station 5  
Before Analysis

Results for: 6N KS ENSIGN	BMLCT	20040826AAG	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	139314	28804.9	
not affected by terrain losses	138632	28318.1	
lost to NTSC IX	2132	1198.9	
lost to additional IX by ATV	0	0.0	
lost to all IX	2132	1198.9	

Potential Interfering Stations Included in above Scenario 1

6N NE HAYES CENTER BLCT 20000828AHT LIC

After Analysis

Results for: 6N KS ENSIGN	BMLCT	20040826AAG	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	139314	28804.9	
not affected by terrain losses	138632	28318.1	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	5	36.2	
lost to all IX	5	36.2	

Potential Interfering Stations Included in above Scenario 1

6A NE HAYES CENTER USERRECORD01 APP

Percent new IX = 0.0036%

Worst case new IX 0.0036% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	NEW	HUTCHINSON KS	BPRM	-20011009AEG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KBSD-DT	ENSIGN KS	181.5	PLN	DTVPLN	-DTVP0020
06	KBSD-TV	ENSIGN KS	181.5	LIC	BMLCT	-20040826AAG
06	KWNBT	HAYES CENTER NE	380.3	PLN	DTVPLN	-NPLN0427
06	WOWT-TV	OMAHA NE	423.7	LIC	BLCT	-19831024KI
06	KOTV	TULSA OK	315.7	LIC	BLCT	-19841031KI
06	KWNB-TV	HAYES CENTER NE	380.2	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 7

NTSC Baseline Analysis

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

Stations Potentially Affecting This Station

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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

	POPULATION	AREA (sq km)
within Noise Limited Contour	1267293	40115.1
not affected by terrain losses	1254682	38745.9
lost to NTSC IX	14988	2274.0
lost to additional IX by ATV	0	0.0
lost to all IX	14988	2274.0

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	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	BLCT	-20010926ACE
06	KWNB-TV	HAYES CENTER NE	426.6	LIC	BLCT	-20000828AHT
06	KPLO-TV	RELIANCE SD	415.3	LIC	BLCT	-1436
06	KWNB-TV	HAYES CENTER NE	426.6	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 8

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
06	KPLOTV	RELIANCE SD	DTVPLN	-NPLN0439

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KDLT	MITCHELL SD	182.7	PLN	DTVPLN	-NPLN0378
06	WDAYTV	FARGO ND	386.9	PLN	DTVPLN	-NPLN0425
06	KWNBTV	HAYES CENTER NE	389.4	PLN	DTVPLN	-NPLN0427
06	WOWT	OMAHA NE	415.3	PLN	DTVPLN	-NPLN0428

Results for: 6N SD RELIANCE

	POPULATION	AREA (sq km)
within Noise Limited Contour	59775	35578.4
not affected by terrain losses	59349	34342.3
lost to NTSC IX	2877	2203.3
lost to additional IX by ATV	0	0.0
lost to all IX	2877	2203.3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
06	KPLO-TV	RELIANCE SD	BLCT	-1436

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
05	KDLV-TV	MITCHELL SD	98.1	LIC	BLCT	-20020501AAL
06	WDAY-TV	FARGO ND	386.9	LIC	BMLCT	-624

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06	KWNB-TV	HAYES CENTER NE	389.3	LIC	BLCT	-20000828AHT
06	WOWT-TV	OMAHA NE	415.3	LIC	BLCT	-19831024KI
06	KWNB-TV	HAYES CENTER NE	389.3	APP	USERRECORD-01	

Total scenarios = 1

Result key: 4  
 Scenario 1 Affected station 8  
 Before Analysis

Results for: 6N SD RELIANCE	BLCT	1436	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	59775	35578.4	
not affected by terrain losses	59349	34342.3	
lost to NTSC IX	9598	5831.4	
lost to additional IX by ATV	0	0.0	
lost to all IX	9598	5831.4	

Potential Interfering Stations Included in above Scenario 1

5N SD MITCHELL	BLCT	20020501AAL	LIC
6N ND FARGO	BMLCT	624	LIC
6N NE HAYES CENTER	BLCT	20000828AHT	LIC

After Analysis

Results for: 6N SD RELIANCE	BLCT	1436	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	59775	35578.4	
not affected by terrain losses	59349	34342.3	
lost to NTSC IX	9358	5474.2	
lost to additional IX by ATV	2	12.0	
lost to all IX	9360	5486.3	

Potential Interfering Stations Included in above Scenario 1

5N SD MITCHELL	BLCT	20020501AAL	LIC
6N ND FARGO	BMLCT	624	LIC
6A NE HAYES CENTER	USERRECORD01		APP

Percent new IX = 0.0033%

Worst case new IX 0.0033% Scenario 1

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### Analysis of Interference to Affected Station 9

#### Analysis of current record

Channel	Call	City/State	Application Ref. No.
06	KWNB-TV	HAYES CENTER NE	USERRECORD-01

#### Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
05	KHAS-TV	HASTINGS NE	223.1	LIC	BLCT -2417
06	KRMA-TV	DENVER CO	371.1	CP	BPET -19990107KE
06	KBSD-TV	ENSIGN KS	336.9	LIC	BMLCT -20040826AAG
06	NEW	HUTCHINSON KS	380.2	APP	BPRM -20011009AEG
06	WOWT-TV	OMAHA NE	426.6	LIC	BLCT -19831024KI
06	KPLO-TV	RELIANCE SD	389.3	LIC	BLCT -1436

Total scenarios = 1

Result key: 5  
 Scenario 1 Affected station 9  
 Before Analysis

# KHANNA & GUILL, Inc. – Consulting Engineers

Results for: 6A NE HAYES CENTER                      USERRECORD01                      APP  
 HAAT 221.0 m, ATV ERP 3.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	77072	24985.9
not affected by terrain losses	76774	24758.1
lost to NTSC IX	419	91.9
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	419	91.9

Potential Interfering Stations Included in above Scenario 1

6N KS ENSIGN                      BMLCT                      20040826AAG                      LIC

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## **ENVIRONMENTAL PROTECTION ACT**

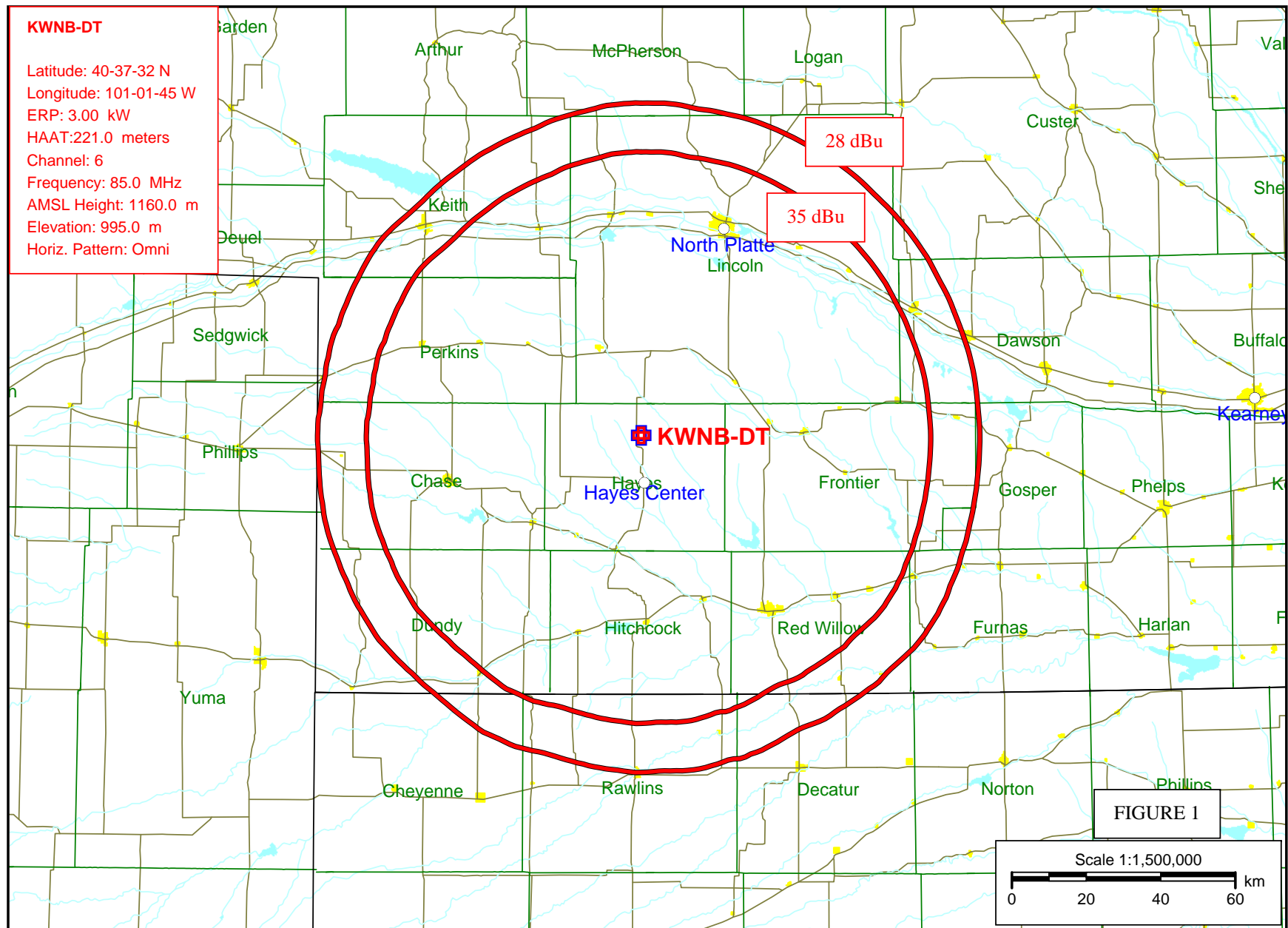
Since KWNB-DT will be using its currently licensed tower (ASR No. 1026527), for the DTV operation the environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent; therefore, those issues have not been addressed.

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 3 kW and a radiation center of 165 meters above ground level, the proposed Channel 6 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 Channel 6 are 1,000  $\mu\text{W}/\text{cm}^2$  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 KWNB-DT tower would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, KWNB-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 CONTOURS FOR THE PROPOSED CH. 6 DTV OPERATION OF KWNB-DT, HAYES CENTER, NEBRASKA