ENGINEERING STATEMENT
IN SUPPORT OF AN AMENDMENT OF
APPLICATION TO MODIFY CONSTRUCTION PERMIT
FOR THE PROPOSED DIGITAL TV OPERATION OF
KHGI-DT, KEARNEY, NEBRASKA
CHANNEL 36 865 KW 333 METERS
MARCH 2008

This engineering statement has been prepared on behalf of Pappas Telecasting of Central Nebraska, L.P., licensee of TV station KHGI-TV, Kearney, Nebraska, in support of an amendment of its application to modify the construction permit (BMPCDT-20020301AEB) for post-transition digital TV (DTV) operation on Channel 36.

At present KHGI-TV, Facility ID Number 21160, operates its analog TV facilities on Channel 13 (210-216 MHz) with 316 kW effective radiated power (ERP) and 338 meters antenna height above average terrain (HAAT) using a non-directional TV antenna. KHGI-TV also holds a construction permit (BMPCDT-20020301AEB) to operate on Channel 36 (602-608 MHz) with 865 kW ERP, 314 meters HAAT and a non-directional TV antenna. In the Seventh Report and Order (MB Docket No. 87-268) the Commission has allotted Channel 36 for the KHGI-TV's post-transition DTV operation. KHGI-TV is filing an amendment to its application to modify the construction permit to operate on DTV Channel 36 with 865 kW ERP and 333 meters HAAT using a non-directional TV antenna.

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

Name of the Licensee:	Pappas Telecasting of Central Nebraska, L.P.
Station Location:	NE-Kearney
Channel:	36
Hours of Operation:	Unlimited
Transmitter:	Type Accepted
Antenna Type:	ERI, ATW24H3-HTO-36H, Non-Directional

Beam Tilt:	0.75 deg			
Antenna Coordinates:	North Latitude:	40 deg	39 min	28 sec
	West Longitude:	98 deg	52 min	04 sec

Transmitter output power: As required to achieve authorized ERP

Maximum effective radiated power (Average):	865 kW 29.4 dBk
Elevation of site above mean sea level:	629.7 meters
Overall height of the tower above ground:	357.7 meters
Height of radiation center above ground (meters):	340.3 meters
Height of radiation center above mean sea level (meters):	970 meters
Height of radiation center above average terrain (meters):	333 meters
Antenna Structure Registration Number:	1026197

Response to questions for Post Transition Expedited Processing listed on the FCC Form 301, Section III-D-DTV Engineering

Question 1. (a)

KHGI-DT will operate its DTV facility on Channel 36 as established in 47 C.F.R. Section 73.622.

Question 1. (d)

KHGI-DT 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 proposed noise-limited service (41 dBu) contour would be essentially the same as established by Appendix B of the Seventh Report and Order in MB Docket 87-268 by extending no more than 0.9 km (0.56 mile) in any direction.

The attached electromagnetic interference study conducted according to OET Bulletin 69 indicates the proposed KGHI-DT operation would not cause any interference to other DTV stations.

Question 1. (e)

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

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 KHGI-DT contour will encompass the allotted principal community of Kearney, Nebraska.

Question 4.

A FCC monitoring station is located 47.3 km at a bearing of 51.3 degrees from the KHGI-DT antenna site. The current analog KHGI-TV operation on Channel 13 places a 15.0 mV/m signal level at the FCC monitoring station. The proposed KHGI-DT operation on DTV Channel 36 is predicted to result in 12.5 mV/m; thereby, resulting in 1.6 dB reduction of signal level at the FCC monitoring station. Therefore, it is believed the proposed KHGI-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 KHGI-DT tower is registered (ASR No. 1026197) by the Commission and no changes are proposed to require a change in the registration.

TABLE

OET BULLETIN 69 INTERFERENCE STUDY

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Census data selected 2000

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

 Date: 03-18-2008    Time: 10:20:04

 Record Selected for Analysis

 KHGI-TV  USERRECORD-01               KEARNEY              NE US
 Channel 36 ERP 865.   kW   HAAT  333. m  RCAMSL 00970 m
 Latitude 040-39-28  Longitude 0098-52-04
 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     ERP        HAAT   41.0 dBu F(50,90)
     (Deg)      (kW)       (m)        (km)
      0.0      865.000     332.3       98.9
     45.0      865.000     348.1      100.3
     90.0      865.000     346.9      100.2
    135.0      865.000     337.4       99.4
    180.0      865.000     327.1       98.4
    225.0      865.000     321.3       97.9
    270.0      865.000     325.8       98.3
    315.0      865.000     327.3       98.4


                   Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

                   Class A Evaluation Complete

                   SPACING VIOLATION FOUND BETWEEN STATION

 KHGI-TV  36 KEARNEY              NE USERRECORD01

 and station


 SHORT TO: KHGI-TV  36 KEARNEY              NE BDTV      00000243
  40-39-28    98-52-04
 Req. separation 223.7 Actual separation   0.0 Short 223.7 km

                   LANDMOBILE SPACING VIOLATIONS FOUND

                   NONE


 Proposed facility is  47.3km from FCC Monitoring station at
     Grand Island     NE
 Bearing:  51.3 degrees   ERP:  865.00 kW   HAAT:   349.3 m
 Field =  12.5 mV/m
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 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


              Proposed Station
Channel     Call         City/State               ARN
   36      KHGI-TV    KEARNEY NE                  USERRECORD01

     Stations Potentially Affected by  Proposed Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 36   KWSD     SIOUX FALLS SD            368.8  CP     BPCDT     -20010618AAI

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     Analysis of Interference to Affected Station   1


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   36      KWSD       SIOUX FALLS SD            BPCDT     -20010618AAI

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 36   KAAL     AUSTIN MN                 275.6  CP     BFRCCT    -20050304ABP
 36   KHGI-TV  KEARNEY NE                368.8  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.
   36      KHGI-TV    KEARNEY NE                USERRECORD-01

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 36   KWSD     SIOUX FALLS SD            368.8  CP     BPCDT     -20010618AAI

 Total scenarios =   1


Result key:        1
Scenario        1  Affected station        2
Before Analysis

Results for: 36A NE KEARNEY              USERRECORD01           APP
   HAAT  333.0 m, ATV ERP  865.0 kW
                                  POPULATION   AREA (sq km)
   within Noise Limited Contour      228641      30991.8
   not affected by terrain losses    228550      30919.9
   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
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 Potential Interfering Stations Included in above Scenario     1

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED
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ENVIRONMENTAL PROTECTION ACT

Since KHGI-TV will be using its currently licensed analog TV tower (ASR No. 1026197) 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 865 kW and a radiation center of 340.3 meters above ground level, the proposed Channel 36 DTV operation would have less than 11.0 microwatts per square centimeter ($\mu W/cm^2$) RF field at 2 meters above the base of tower assuming an antenna field factor of 0.2 in the downward direction.

The Commission's guidelines for the Channel 36 TV are 2,006 $\mu W/cm^2$ for the occupational/controlled, and 401 $\mu W/cm^2$ for the general population/uncontrolled environment.

The above analysis indicates that members of the public and personnel working around the KHGI-DT tower would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, KHGI-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.

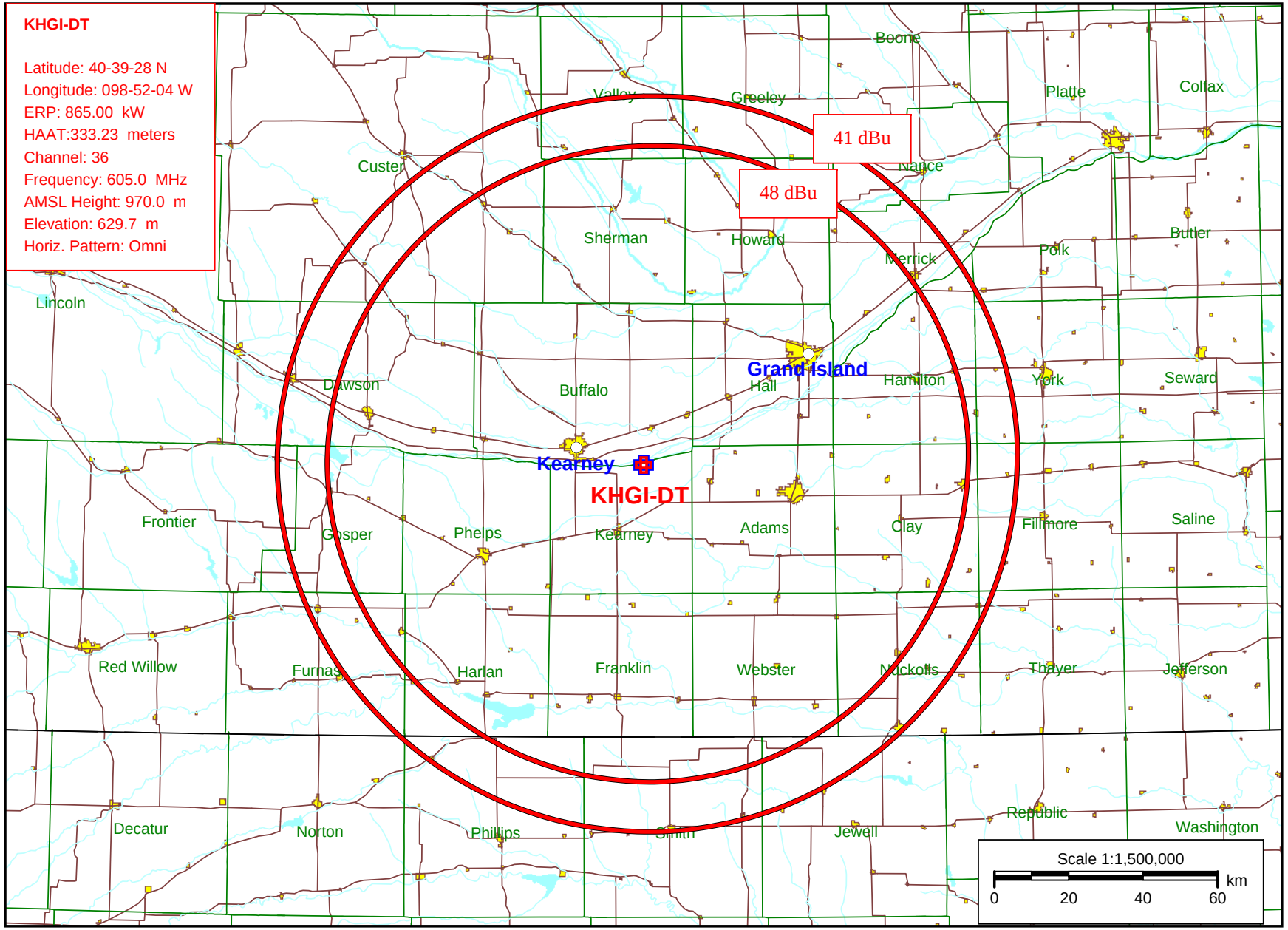
For the reasons stated above, it is believed this proposal complies with Section 1.1307(a) and (b) of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from environmental processing.

KHANNA & GUILL, Inc. - Consulting Engineers

MARCH 2008

KHGI-DT

Latitude: 40-39-28 N
Longitude: 098-52-04 W
ERP: 865.00 kW
HAAT:333.23 meters
Channel: 36
Frequency: 605.0 MHz
AMSL Height: 970.0 m
Elevation: 629.7 m
Horiz. Pattern: Omni



COMPUTED COVERAGE CONTOURS FOR THE PROPOSED DTV OPERATION OF KHGI-DT, KEARNEY, NEBRASKA