

ENGINEERING STATEMENT
RE MINOR AMENDMENT OF APPLICATION
(BMPCDT-20080317ACI)
FOR THE DIGITAL TV OPERATION OF
KTVG-DT, GRAND ISLAND, NEBRASKA
CHANNEL 19 10.6 KW 139 METERS
SEPTEMBER 2008

This engineering statement has been prepared on behalf of Hill Broadcasting Company, Inc. (“Hill”), licensee of TV station KTVG, Grand Island, Nebraska, in support of a minor amendment of its application (BMPCDT-20080317ACI) for the station’s digital TV operation.

At present KTVG, Facility ID Number 27220, operates its analog TV facilities on Channel 17 (488-494 MHz) with 3890 kW effective radiated power (ERP) and 186 meters antenna height above average terrain (HAAT) using a directional TV antenna. Station KTVG currently carries Fox Network programming.

KTVG-DT has filed an application (BMPCDT-20080317ACI) to operate on DTV Channel 19 (500-506 MHz) with 21.2 kW ERP and 139 meters HAAT. The station is filing the instant application for a minor change and now proposes to operate on DTV Channel 19 with 10.6 kW ERP and 139 meters HAAT using a directional TV antenna. The proposed KTVG-DT facilities are the same as authorized by the Commission in a special temporary authorization, BMDSTA-20021114ACO.

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

Name of the Licensee:	Hill Broadcasting Company, Inc.
Station Location:	NE-Grand Island
Channel:	19
Hours of Operation:	Unlimited
Transmitter:	Type Accepted
Antenna Type:	ERI, ALP-12L2-HSH-19, Directional

Beam Tilt: 0.5 deg

Antenna Coordinates: North Latitude: 40 deg 43 min 44 sec
West Longitude: 98 deg 34 min 13 sec

Transmitter output power: As required to achieve authorized ERP

Maximum effective radiated power (Average): 10.6 kW
10.25 dBk

Height of radiation center above ground (meters): 127.2 meters

Height of radiation center above mean sea level (meters): 744.1 meters

Height of radiation center above average terrain (meters): 139 meters

Antenna Structure Registration Number: 1023336

Response to questions listed on the FCC Form 301, Section III-D-DTV

Engineering

Question 1. (a)

KTVG will operate its DTV operation on Channel 19 as established in 47 C.F.R. Section 73.622.

Question 1. (d)

KTVG is proposing DTV facilities which are slightly different than established in Appendix B of the Seventh Report and Order (MB Docket No. 87-268). The noise-limited service contour does not extend in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket 87-268.

Question 1. (e)

The population within the proposed DTV service area would be 144,751 people which is 74.2% of the predicted population of 195,000 defined in the new DTV Table Appendix B.

The attached map Figure 1 shows the noise limited contours of KTVG-DT based on the Appendix B facilities as well as for DTV stations KSNB-DT on Channel 4.1 and KHGI-DT on Channel 13.2. KSNB-DT has been allotted Channel 34 for its digital television operation; however, the station has filed a rule-making petition to relocate its digital television operation on its current analog TV Channel 4. Similarly, KHGI-DT was allotted DTV Channel 36 but it has filed a rule-making petition to operate its DTV facility on its current analog TV Channel 13. KSNB-DT and KHGI-DT would be broadcasting Fox Network television programming on DTV Channel 4.1 and DTV Channel 13.2, respectively.

Figure 1 shows the proposed DTV operation of KTVG-DT on Channel 19 would have a very small Fox Network loss area as compared to the Appendix B facilities. The estimated population within the loss area would be 1,288 people (2000 census) and 474 square km area while the Appendix B facility serves a population of 195,000 people and 18,605 square km area. Therefore, the proposed KTVG-DT operation would have loss of Fox Network programming to only 0.66% population and 2.5% area when compared to the Appendix B facilities.

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 KTVG-DT 48 dBu contour will encompass the allotted principal community of Grand Island, Nebraska.

Question 4.

The proposed KTVG-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 KTVG-DT tower is registered (ASR No. 1023336) by the Commission and no changes are proposed to require a change in the registration.

ENVIRONMENTAL PROTECTION ACT

Since KTVG will be using its currently licensed analog TV antenna, located on tower (ASR No. 1023336), 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.

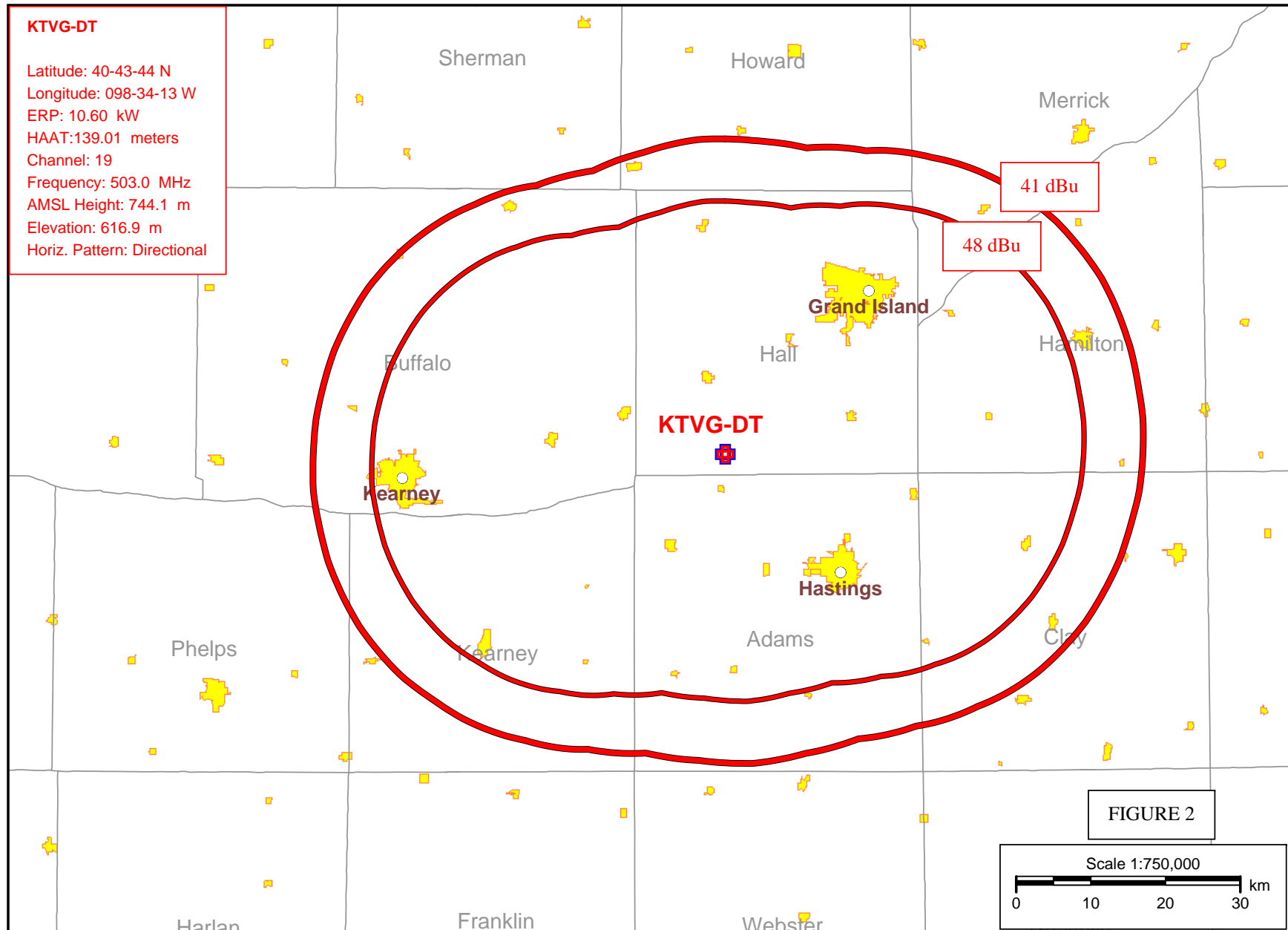
An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 10.6 kW and a radiation center of 127.2 meters above ground level, the proposed Channel 19 DTV operation would have less than 5.7 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 19 TV are $1666 \mu\text{W}/\text{cm}^2$ for the occupational/controlled, and $333 \mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

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