

ENGINEERING EXHIBIT

Application for Digital Television Station Construction Permit

prepared for

Hearst Properties Inc.

KETV(DT) Omaha, NE

Facility ID 53903

Ch. 20 1000 kW 396 m

Hearst Properties Inc. (“*Hearst*”) is the licensee of digital television station KETV, Channel 20, Facility ID 53903, Omaha NE. KETV is licensed (file# BLCDDT-20041222AED) to operate with 700 kW effective radiated power (“ERP”) at 396 meters antenna height above average terrain (“HAAT”). *Hearst* proposes herein to increase the ERP to 1000 kW.

KETV will continue to employ the existing transmitting antenna utilized by the licensed KETV facility. The antenna is top-mounted on a tower structure which corresponds to FCC Antenna Structure Registration number 1242828. No change to the overall structure height will result.

Figure 1 supplies a map that demonstrates compliance with §73.625(a)(1) regarding coverage of the entire principal community. The proposed facility’s predicted population exceeds 95 percent of the baseline facility’s population as described in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“*CCRPN*”, DA 17-317, released April 13, 2017).

The proposed facility expands the KETV service contour beyond that established by the *CCRPN*. Interference study per FCC OET Bulletin 69¹ shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby full service and Class A television stations as required by §73.616. The interference study output report is provided as Table 1.

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). This analysis employed the FCC’s current “TVStudy” software with the default application processing template settings, 2 km cell size, and 1.0 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC’s implementation of TVStudy show excellent correlation.

The proposed 1000 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 396 meters permitted by §73.622(f)(8)(i). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. The total area within the proposed KETV NLSC is 35,233 square kilometers, which does not exceed the NLSC area of KPTM(DT) (39,827 sq. km, Ch. 26, Omaha NE, file# 0000079038). Thus, the 1000 kW ERP specified herein complies with §73.622(f)(5) of the FCC's Rules.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent antenna relative field in downward elevations at downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $2.3 \mu\text{W}/\text{cm}^2$, which is 0.7 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

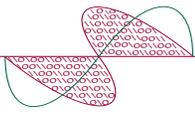
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field.

List of Attachments

Figure 1 Proposed Coverage Contours
Figure 2 Maximum ERP per §73.622(f)
Table 1 TVStudy Analysis of Proposal
Form 2100 Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E. November 25, 2020
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

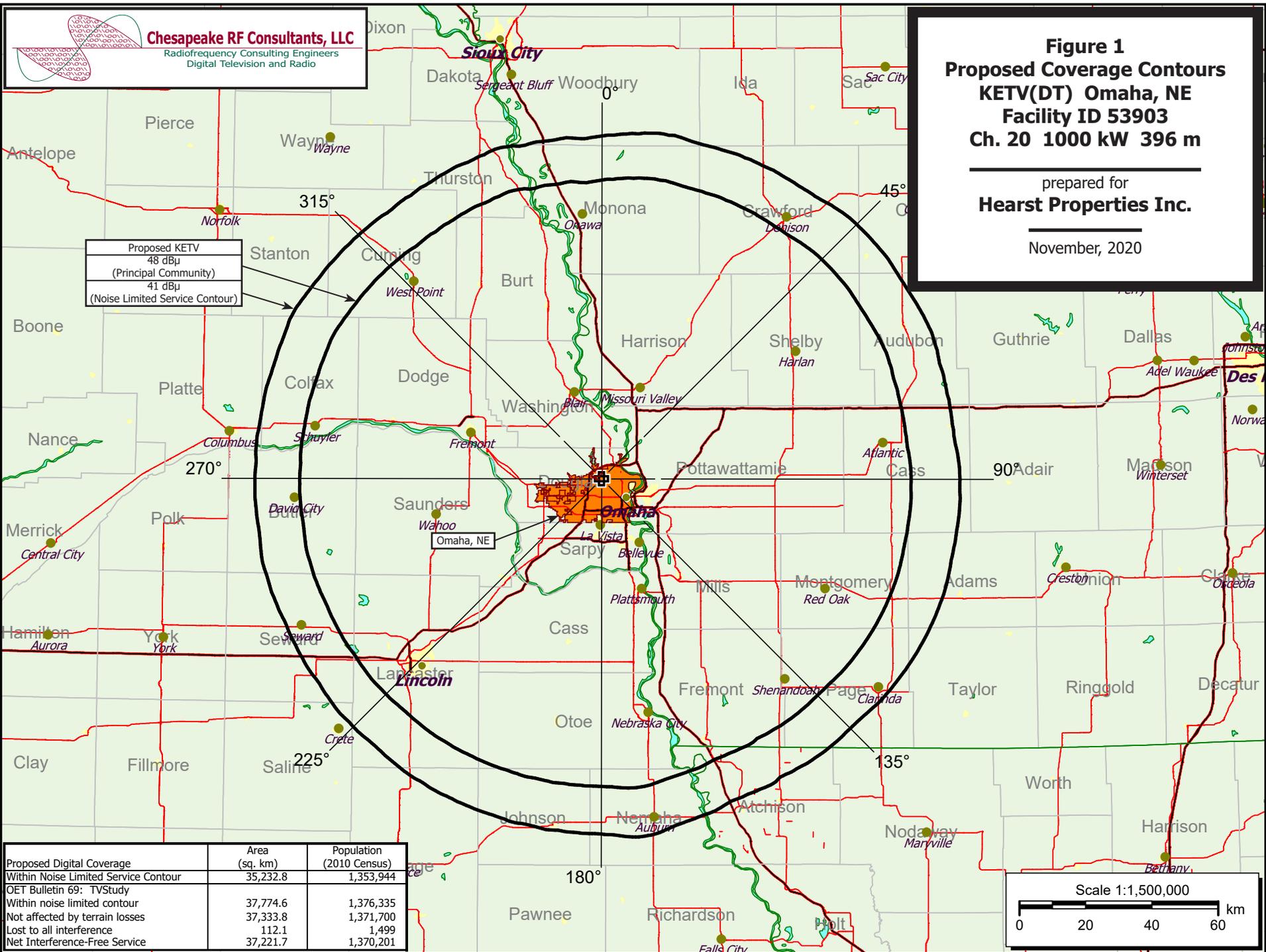


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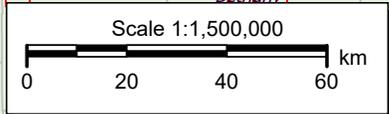
Figure 1
Proposed Coverage Contours
KETV(DT) Omaha, NE
Facility ID 53903
Ch. 20 1000 kW 396 m

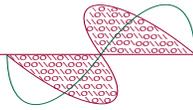
prepared for
Hearst Properties Inc.
 November, 2020

Proposed KETV
 48 dBu
 (Principal Community)
 41 dBu
 (Noise Limited Service Contour)



Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	35,232.8	1,353,944
OET Bulletin 69: TVStudy		
Within noise limited contour	37,774.6	1,376,335
Not affected by terrain losses	37,333.8	1,371,700
Lost to all interference	112.1	1,499
Net Interference-Free Service	37,221.7	1,370,201





Chesapeake RF Consultants, LLC
 Radiofrequency Consulting Engineers
 Digital Television and Radio

Figure 2
Maximum ERP per §73.622(f)
KETV(DT) Omaha, NE
Facility ID 53903
Ch. 20 1000 kW 396 m

prepared for
Hearst Properties Inc.

November, 2020

KPTM(DT) Ch. 26 Omaha, NE
 File# 0000079038
 41 dBu Contour (NLSC)
 Area: 39,826.9 sq. km

Proposed KETV
 41 dBu Contour (NLSC)
 Area: 35,232.8 sq. km

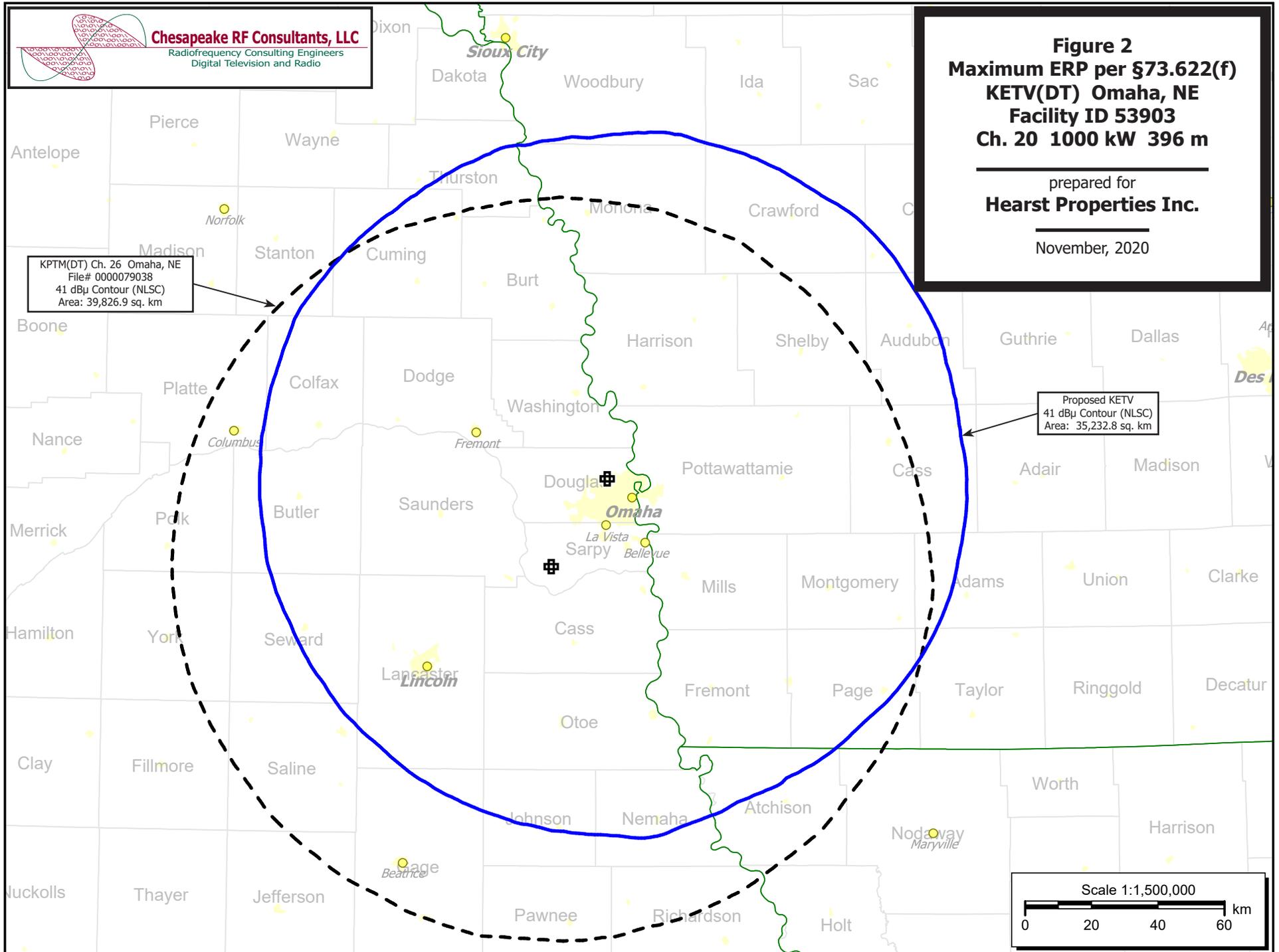


Table 1 KETV TVStudy Analysis of Proposal
 (page 1 of 5)



tvstudy v2.2.5 (4uoc83)
 Database: localhost, Study: KETV_1000kW, Model: Longley-Rice
 Start: 2020.11.24 20:12:33

Study created: 2020.11.24 20:12:32

Study build station data: LMS TV 2020-11-23

Proposal: KETV D20 DT APP OMAHA, NE
 File number: KETV 1000kW
 Facility ID: 53903
 Station data: User record
 Record ID: 3319
 Country: U.S.
 Zone: II

Search options:
 Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	208.7 km
Yes	KDMI	D19	DT	APP	DES MOINES, IA	BPCDT20130205AAM	208.7
Yes	KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898	146.4
Yes	KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	146.4
Yes	KTMJ-CD	D20	DC	CP	TOPEKA, KS	BLANK0000072852	253.9
Yes	KTMJ-CD	D20	DC	LIC	TOPEKA, KS	BLANK0000122285	253.9
No	KSMQ-TV	D20	DT	LIC	AUSTIN, MN	BLEDT20081223AAK	386.7
No	KNLJ	D20	DT	LIC	JEFFERSON CITY, MO	BLCDT20110121ACA	442.8
No	KDLT-TV	D21	DT	LIC	SIOUX FALLS, SD	BLANK0000075809	247.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D20
 Latitude: 41 18 32.00 N (NAD83)
 Longitude: 96 1 34.20 W
 Height AMSL: 739.8 m
 HAAT: 395.5 m
 Peak ERP: 1000 kW
 Antenna: Omnidirectional
 Elev Pattn: Generic
 Elec Tilt: 0.75

39.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	1000 kW	366.1 m	106.8 km
45.0	1000	425.4	112.5
90.0	1000	419.7	112.0
135.0	1000	398.7	110.0
180.0	1000	407.7	110.8
225.0	1000	394.2	109.5
270.0	1000	380.7	108.2
315.0	1000	371.4	107.3

Database HAAT does not agree with computed HAAT
 Database HAAT: 396 m Computed HAAT: 395 m

ERP exceeds maximum
 ERP: 1000 kW ERP maximum: 898 kW

Distance to Canadian border: 820.1 km

Distance to Mexican border: 1370.6 km

Conditions at FCC monitoring station: Grand Island NE
 Bearing: 258.7 degrees Distance: 205.7 km

Proposal is not within the West Virginia quiet zone area

Table 1 KETV TVStudy Analysis of Proposal
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Conditions at Table Mountain receiving zone:
Bearing: 263.6 degrees Distance: 785.0 km

No land mobile station failures found

Study cell size: 2.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLCDT20120627AAE LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE				
Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	208.7 km			
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	208.7			
	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	197.4			
	KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898	305.8			
	WMTV	D19	DT	LIC	MADISON, WI	BLCDT20100413AAW	364.7			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	47883.0	1,141,990	47642.0	1,140,939	47368.4	1,136,269	47364.4	1,136,269	0.01	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
KETV D20 DT BL		8.1	20	0.0	0					
KETV D20 DT APP		12.1	20		4.0	0				
KYIN D18 DT LIC		32.0	70	32.0	70	32.0	70			
KXNE-TV D19 DT CP		217.5	2,003	209.4	1,983	209.4	1,983			
WMTV D19 DT LIC		24.1	2,597	24.1	2,597	24.1	2,597			

Interference to BLCDT20120627AAE LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE				
Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	208.7 km			
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	208.7			
	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	197.4			
	KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	305.8			
	WMTV	D19	DT	LIC	MADISON, WI	BLCDT20100413AAW	364.7			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	47883.0	1,141,990	47642.0	1,140,939	47400.7	1,137,022	47396.7	1,137,022	0.01	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
KETV D20 DT BL		8.1	20	0.0	0					
KETV D20 DT APP		12.1	20		4.0	0				
KYIN D18 DT LIC		32.0	70	32.0	70	32.0	70			
KXNE-TV D19 DT LIC		185.2	1,250	177.1	1,230	177.1	1,230			
WMTV D19 DT LIC		24.1	2,597	24.1	2,597	24.1	2,597			

Interference to BPCDT20130205AAM APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KDMI	D19	DT	APP	DES MOINES, IA	BPCDT20130205AAM				
Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	208.7 km			
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	208.7			
	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	197.4			
	KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898	305.8			
	WMTV	D19	DT	LIC	MADISON, WI	BLCDT20100413AAW	364.7			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	49377.5	1,175,179	49112.4	1,174,026	48794.7	1,171,723	48790.7	1,171,723	0.01	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
KETV D20 DT BL		8.1	20	0.0	0					

Table 1 KETV TVStudy Analysis of Proposal
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KETV D20 DT APP	24.2	40			4.0	0
KYIN D18 DT LIC	44.0	127	44.0	127	44.0	127
KXNE-TV D19 DT CP	249.6	1,230	241.5	1,210	229.4	1,190
WMTV D19 DT LIC	24.1	946	24.1	946	24.1	946

Interference to BPCDT20130205AAM APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KDMI	D19	DT	APP	DES MOINES, IA	BPCDT20130205AAM				
Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	208.7 km			
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	208.7			
	KYIN	D18	DT	LIC	MASON CITY, IA	BLEDT20090612AHJ	197.4			
	KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	305.8			
	WMTV	D19	DT	LIC	MADISON, WI	BLCDT20100413AAW	364.7			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	49377.5	1,175,179	49112.4	1,174,026	48794.7	1,171,723	48790.7	1,171,723	0.01	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
KETV D20 DT BL		8.1	20	0.0	0					
KETV D20 DT APP		24.2	40		4.0	0				
KYIN D18 DT LIC		44.0	127	44.0	127	44.0	127			
KXNE-TV D19 DT LIC		249.6	1,230	241.5	1,210	229.4	1,190			
WMTV D19 DT LIC		24.1	946	24.1	946	24.1	946			

Interference to BLANK0000035898 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898				
Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	146.4 km			
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	146.4			
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	305.8			
	KPRY-TV	D19	DT	LIC	PIERRE, SD	BLCDT20080806AAT	304.0			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	24344.2	305,839	24115.7	304,682	23851.1	302,269	23835.0	302,229	0.07	0.01
Undesired			Total IX	Unique IX, before	Unique IX, after					
KETV D20 DT BL		124.3	278	36.2	48					
KETV D20 DT APP		144.4	320		52.2	88				
KDMI D19 DT LIC		180.4	1,262	92.3	1,032	88.2	1,030			
KPRY-TV D19 DT LIC		48.0	1,103	48.0	1,103	48.0	1,103			

Interference to BLANK0000035898 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898				
Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	146.4 km			
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	146.4			
	KDMI	D19	DT	APP	DES MOINES, IA	BPCDT20130205AAM	305.8			
	KPRY-TV	D19	DT	LIC	PIERRE, SD	BLCDT20080806AAT	304.0			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	24344.2	305,839	24115.7	304,682	23831.0	302,238	23819.0	302,206	0.05	0.01
Undesired			Total IX	Unique IX, before	Unique IX, after					
KETV D20 DT BL		124.3	278	24.1	39					
KETV D20 DT APP		144.4	320		36.2	71				
KDMI D19 DT APP		212.6	1,302	112.4	1,063	104.3	1,053			
KPRY-TV D19 DT LIC		48.0	1,103	48.0	1,103	48.0	1,103			

Interference to BLEDT20090615ADS LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	

Table 1 KETV TVStudy Analysis of Proposal
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Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	146.4	km
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	146.4	
	KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	305.8	
	KPRY-TV	D19	DT	LIC	PIERRE, SD	BLCDT20080806AAT	304.0	

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
23930.8	300,021	23698.3	298,839	23429.7	296,481	23417.7	296,453	0.05	0.01

Undesired				Total IX	Unique IX, before	Unique IX, after	
KETV D20 DT BL		108.3		249	28.1	45	
KETV D20 DT APP		124.4		285		40.2	73
KDMI D19 DT LIC		168.4		1,207	88.3	1,003	995
KPRY-TV D19 DT LIC		72.0		1,106	72.0	1,106	72.0

Interference to BLEDT20090615ADS LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	

Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	146.4	km
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	146.4	
	KDMI	D19	DT	APP	DES MOINES, IA	BPCDT20130205AAM	305.8	
	KPRY-TV	D19	DT	LIC	PIERRE, SD	BLCDT20080806AAT	304.0	

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
23930.8	300,021	23698.3	298,839	23405.7	296,424	23397.7	296,417	0.03	0.00

Undesired				Total IX	Unique IX, before	Unique IX, after	
KETV D20 DT BL		108.3		249	28.1	45	
KETV D20 DT APP		124.4		285		36.2	52
KDMI D19 DT APP		192.5		1,264	112.3	1,060	1,031
KPRY-TV D19 DT LIC		72.0		1,106	72.0	1,106	72.0

Interference to BLANK0000072852 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTMJ-CD	D20	DC	CP	TOPEKA, KS	BLANK0000072852	

Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	253.9	km
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	253.9	
	KQCW-DT	D20	DT	CP	MUSKOGEE, OK	BLANK0000035925	334.7	
	KTAJ-TV	D21	DT	LIC	ST. JOSEPH, MO	BLCDT20060703AAK	121.2	

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
10767.7	343,148	10719.9	333,654	10711.9	326,502	10707.9	326,502	0.04	0.00

Undesired				Total IX	Unique IX, before	Unique IX, after	
KETV D20 DT BL		4.0		5	4.0	5	
KETV D20 DT APP		8.0		5		8.0	5
KTAJ-TV D21 DT LIC		4.0		7,147	4.0	7,147	4.0

Interference to BLANK0000122285 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTMJ-CD	D20	DC	LIC	TOPEKA, KS	BLANK0000122285	

Undesireds:	KETV	D20	DT	BL	OMAHA, NE	DTVBL53903	253.9	km
	KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	253.9	
	KQCW-DT	D20	DT	CP	MUSKOGEE, OK	BLANK0000035925	334.7	
	KTAJ-TV	D21	DT	LIC	ST. JOSEPH, MO	BLCDT20060703AAK	121.2	

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
10779.6	343,166	10731.8	333,672	10723.8	326,520	10719.8	326,520	0.04	0.00

Undesired				Total IX	Unique IX, before	Unique IX, after	
KETV D20 DT BL		4.0		5	4.0	5	
KETV D20 DT APP		8.0		5		8.0	5
KTAJ-TV D21 DT LIC		4.0		7,147	4.0	7,147	4.0

Table 1 KETV TVStudy Analysis of Proposal
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Interference to proposal scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	
Undesireds: KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	208.7 km
KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898	146.4
KTMJ-CD	D20	DC	CP	TOPEKA, KS	BLANK0000072852	253.9
KSMQ-TV	D20	DT	LIC	AUSTIN, MN	BLEDT20081223AAK	386.7
Service area	Terrain-limited	IX-free	Percent IX			
37774.6 1,376,335	37333.8 1,371,700	37221.7 1,370,201	0.30 0.11			
Undesired	Total IX	Unique IX	Prcnt Unique IX			
KXNE-TV D19 DT CP	68.0 970	68.0 970	0.18 0.07			
KTMJ-CD D20 DC CP	32.0 505	32.0 505	0.09 0.04			
KSMQ-TV D20 DT LIC	12.0 24	12.0 24	0.03 0.00			

Interference to proposal scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	
Undesireds: KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	208.7 km
KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	146.4
KTMJ-CD	D20	DC	CP	TOPEKA, KS	BLANK0000072852	253.9
KSMQ-TV	D20	DT	LIC	AUSTIN, MN	BLEDT20081223AAK	386.7
Service area	Terrain-limited	IX-free	Percent IX			
37774.6 1,376,335	37333.8 1,371,700	37229.7 1,370,206	0.28 0.11			
Undesired	Total IX	Unique IX	Prcnt Unique IX			
KXNE-TV D19 DT LIC	60.0 965	60.0 965	0.16 0.07			
KTMJ-CD D20 DC CP	32.0 505	32.0 505	0.09 0.04			
KSMQ-TV D20 DT LIC	12.0 24	12.0 24	0.03 0.00			

Interference to proposal scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	
Undesireds: KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	208.7 km
KXNE-TV	D19	DT	CP	NORFOLK, NE	BLANK0000035898	146.4
KTMJ-CD	D20	DC	LIC	TOPEKA, KS	BLANK0000122285	253.9
KSMQ-TV	D20	DT	LIC	AUSTIN, MN	BLEDT20081223AAK	386.7
Service area	Terrain-limited	IX-free	Percent IX			
37774.6 1,376,335	37333.8 1,371,700	37221.7 1,370,201	0.30 0.11			
Undesired	Total IX	Unique IX	Prcnt Unique IX			
KXNE-TV D19 DT CP	68.0 970	68.0 970	0.18 0.07			
KTMJ-CD D20 DC LIC	32.0 505	32.0 505	0.09 0.04			
KSMQ-TV D20 DT LIC	12.0 24	12.0 24	0.03 0.00			

Interference to proposal scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KETV	D20	DT	APP	OMAHA, NE	KETV 1000kW	
Undesireds: KDMI	D19	DT	LIC	DES MOINES, IA	BLCDT20120627AAE	208.7 km
KXNE-TV	D19	DT	LIC	NORFOLK, NE	BLEDT20090615ADS	146.4
KTMJ-CD	D20	DC	LIC	TOPEKA, KS	BLANK0000122285	253.9
KSMQ-TV	D20	DT	LIC	AUSTIN, MN	BLEDT20081223AAK	386.7
Service area	Terrain-limited	IX-free	Percent IX			
37774.6 1,376,335	37333.8 1,371,700	37229.7 1,370,206	0.28 0.11			
Undesired	Total IX	Unique IX	Prcnt Unique IX			
KXNE-TV D19 DT LIC	60.0 965	60.0 965	0.16 0.07			
KTMJ-CD D20 DC LIC	32.0 505	32.0 505	0.09 0.04			
KSMQ-TV D20 DT LIC	12.0 24	12.0 24	0.03 0.00			

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	53903
	State	Nebraska
	City	OMAHA
	DTV Channel	20
	Designated Market Area	OMAHA
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	2

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1242828
Coordinates (NAD83)	Latitude	41° 18' 32.0" N+
	Longitude	096° 01' 34.2" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	416.0 meters
	Support Structure Height	377.2 meters
	Ground Elevation (AMSL)	353.8 meters
Antenna Data	Height of Radiation Center Above Ground Level	386 meters
	Height of Radiation Center Above Average Terrain	395.5 meters
	Height of Radiation Center Above Mean Sea Level	739.8 meters
	Effective Radiated Power	1000 kW

**Antenna
Technical Data**

Section	Question	Response
Antenna Type	Antenna Type	Non-Directional
	Do you have an Antenna ID?	
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	DIE
	Model	TFU-28GBH-R O8
	Rotation	
	Electrical Beam Tilt	0.75
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Horizontal
DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	

**Construction
Permit
Certifications**

Section	Question	Response
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.	No
	It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.	Yes
	The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	Yes
Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See 47 C.F.R. Section 1.1306)	No
Broadcast Facility	The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C.F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.	Yes