

## **ENGINEERING EXHIBIT**

### **Amendment to Application for Digital Television Station Construction Permit LMS File Number 0000118570**

prepared for

#### **Gray Television Licensee, LLC**

KOLN(DT) Lincoln, NE

Facility ID 7890

Ch. 10 66.1 kW 454 m

*Gray Television Licensee, LLC* (“*Gray*”) is the licensee of digital television station KOLN(DT), Channel 10, Facility ID 7890, Lincoln NE. KOLN is licensed (file# BLCDT-20090226AAR) to operate with 28 kW effective radiated power (“ERP”) with a nondirectional antenna at 454 meters height above average terrain (“HAAT”). In connection with constructing a replacement tower structure, *Gray* has submitted a minor modification application (file# 0000118570) to increase KOLN’s nondirectional ERP to 51.6 kW and HAAT to 500 meters. *Gray* herein amends the minor modification application to increase ERP to 66.1 kW while maintaining the licensed antenna HAAT of 454 meters.

The tower structure supporting the KOLN antenna collapsed on January 18, 2020 during an ice storm and KOLN is presently silent. The FCC was notified of the silent status (file# 0000098791). KOLN’s programming is temporarily being carried on multicast streams of KLKN(DT), (Facility ID 11264, Ch. 8, Lincoln NE) and KCWH-LD (Facility ID 21165, Ch. 18, Lincoln NE). *Gray* intends on rebuilding the KOLN tower structure at Beaver Crossing, NE, the location of the tower collapse.

The KOLN tower structure corresponds to FCC Antenna Structure Registration (“ASR”) number 1041796, having an overall height above ground level (“AGL”) of 1500 feet (457.2 meters). As described in the original minor modification application 0000118570, *Gray* had proposed to build a replacement tower that increases the height by 150 feet (45.7 meters) to an overall height AGL of 1650 feet (483.7 meters). The FAA was notified of the proposed height increase (2020-ACE-5172-OE, submitted July 17, 2020) and issued a Notice of Presumed Hazard

on September 29, 2020. Rather than pressing the FAA for further study and public circularization of the height increase, and to expedite the process, *Gray* now seeks to rebuild the KOLN tower to its original height of 1500 feet AGL (457.2 meters) corresponding to the existing ASR number 1041796.

The proposed antenna is an elliptically polarized nondirectional ERI model ATW10V6-ETO-10H (30 percent vertical polarization) to be top-mounted on the replacement tower structure. The antenna's center of radiation height above ground will be 447.1 meters AGL and the resulting antenna HAAT is 454 meters, the same HAAT as specified on the KOLN license.

*Gray* proposes to operate KOLN with an ERP of 66.1 kW nondirectional, which is the maximum permitted by §73.622(f)(7) for the proposed antenna HAAT of 454 meters. The horizontally polarized ERP is 66.1 kW and the vertically polarized ERP is 19.8 kW.

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 KOLN baseline facility's population as described in the *Incentive Auction Closing and Channel Reassignment Public Notice* ("CCRPN", DA 17-317, released April 13, 2017).

### **Gain – Loss Analysis**

The proposed increased ERP provides an expansion in the KOLN noise limited service contour ("NLSC", 36 dB $\mu$ ). No area of NLSC loss will be created. A coverage contour comparison map, Figure 2, shows the NLSC gain areas. The authorized post-repack NLSC of nearby stations which overlap that of KOLN are provided on the map to demonstrate the availability of other services in the gain area. The expanded KOLN would provide a first service to a portion of the gain area having a population of 150 persons (presently a "white" area having no full power television service). The proposal would provide an additional television service to a population of 5,155 persons presently with one other TV service, and to 8,245 persons that presently have two other services.

The proposed KOLN facility’s NLSC encompasses 46,245.4 square kilometers and 1,416,446 persons (2010 Census). This is an increase over the licensed KOLN NLSC, which encompasses 40,048.8 sq km and 1,199,557 persons. From Figure 2, a breakout of the gain population and alternate service availability is provided below.

**NLSC Gain - Loss Population Detail**

Service Gain/Loss Population Report			
Population Database: 2010 US Census (PL)			
Full Power Television NLSC Areas			
Proposed: KOLN Ch-10 Proposed 66.1 kW 454 m			
36 dBu Total Population: 1,416,446			
Existing: KOLN Ch-10 Licensed 28 kW 454 m			
36 dBu Total Population: 1,199,557			
Gain Area Total Population: 216,889			
Loss Area Total Population: 0			
Common Area Total Population: 1,199,557			
Net Gain in Total Population: 216,889			
Number of Services	Gain	Loss	Net Gain
-----	----	----	-----
0	150	0	150
1	5,155	0	5,155
2	8,245	0	8,245
3	720	0	720
4	679	0	679
5 or more	201,940	0	201,940

**Contour Extension – Waiver Request**

The FCC’s Public Notice<sup>1</sup> of April 5, 2013 (DA 13-618) imposed limitations on the filing and processing of full power station applications that propose an increase in their authorized NLSC. With the increased nondirectional ERP, the KOLN NLSC will be extended beyond the currently authorized contour location. DA 13-618 contemplates waiver of the contour extension limitation for certain cases by stating:

The Bureau will consider, on a case-by-case basis, requests for waiver of the filing limitation imposed by this Public Notice when a modification application is necessary or otherwise in the public interest for technical or other reasons to maintain quality service to the public, such as when zoning restrictions preclude tower construction at a particular site or when unforeseen events, such as extreme weather events or other extraordinary circumstances, require relocation to a new tower site.

---

<sup>1</sup>“Media Bureau Announces Limitations on the Filing and Processing of Full Power and Class A Television Station Modification Applications, Effective Immediately, and Reminds Stations of Spectrum Act Preservation Mandate,” DA 13-618, Public Notice, released April 5, 2013.

Due to the KOLN tower collapse, construction of a replacement tower is necessary in order to restore service to the public. While KOLN's ERP could be limited in order to avoid an NLSC extension, *Gray* seeks to construct the maximum facility permitted by §73.622(f)(7) as a matter of expanding KOLN's service to underserved areas as part of the replacement tower project. With the recent conclusion of the incentive auction 39 month transition period<sup>2</sup> for stations reassigned to new frequencies, the underlying purpose of the NLSC freeze has become moot. As to vendor support to complete final facilities for reassigned stations still operating on interim facilities, *Gray's* use of vendor resources to rebuild the KOLN facility would be to the same extent whether the ERP is at the 66.1 kW proposed herein or set to the presently licensed 28 kW to avoid extending the NLSC. *Gray* seeks a waiver of the DA 13-618 contour extension limitation for the reasons stated above.

### **Interference and Allocation**

The proposed facility expands the KOLN service contour beyond that established by the *CCRPN*. Interference study per FCC OET Bulletin 69<sup>3</sup> 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 and reassignments as required by §73.616. The interference study output report is provided as Table 1.

### **Human Exposure to Radiofrequency Electromagnetic Field**

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 15 percent antenna relative field in downward elevations (pattern data shows less than 15 percent relative field at angles 20 to 90 degrees below the antenna), the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is  $0.3 \mu\text{W}/\text{cm}^2$ ,

---

<sup>2</sup>See "*Post-Incentive Auction Transition Successfully Meets 39-Month Deadline*", FCC News Release, July 13, 2020.

<sup>3</sup>FCC 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 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.

which is 0.2 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.

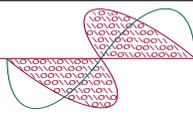
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power 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	Coverage Contour Comparison – NLSC Gain Analysis
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.                      October 6, 2020  
207 Old Dominion Road                      Yorktown, VA 23692                      703-650-9600

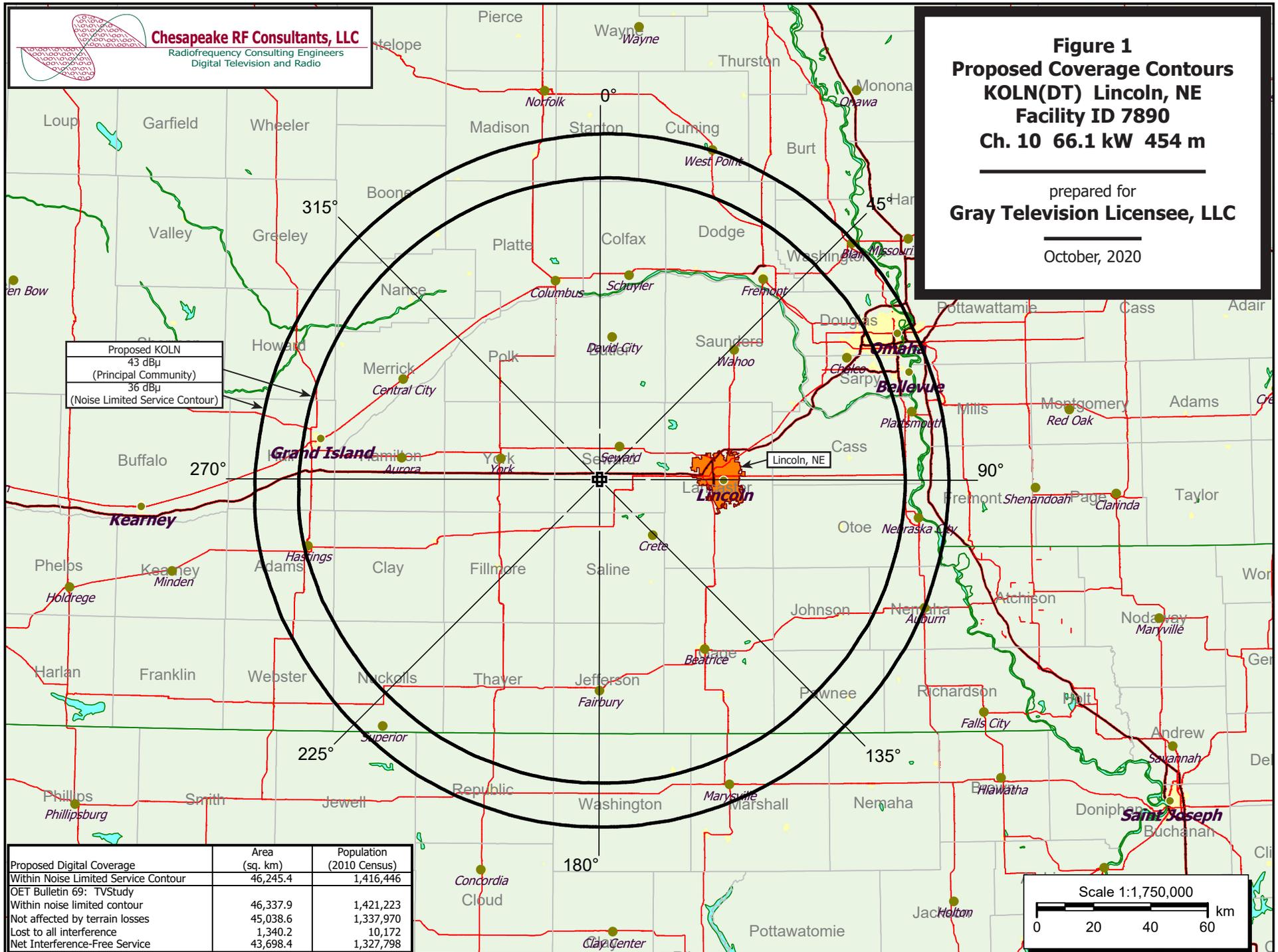


**Chesapeake RF Consultants, LLC**  
 Radiofrequency Consulting Engineers  
 Digital Television and Radio

**Figure 1**  
**Proposed Coverage Contours**  
**KOLN(DT) Lincoln, NE**  
**Facility ID 7890**  
**Ch. 10 66.1 kW 454 m**

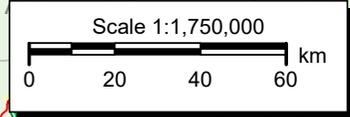
prepared for  
**Gray Television Licensee, LLC**

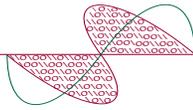
October, 2020



Proposed KOLN  
 43 dBu  
 (Principal Community)  
 36 dBu  
 (Noise Limited Service Contour)

Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	46,245.4	1,416,446
OET Bulletin 69: TVStudy		
Within noise limited contour	46,337.9	1,421,223
Not affected by terrain losses	45,038.6	1,337,970
Lost to all interference	1,340.2	10,172
Net Interference-Free Service	43,698.4	1,327,798





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

**Figure 2**  
**Coverage Contour Comparison**  
**NLSC Gain Analysis**  
**KOLN(DT) Lincoln, NE**  
**Facility ID 7890**  
**Ch. 10 66.1 kW 454 m**

prepared for  
**Gray Television Licensee, LLC**

October, 2020

Licensed KOLN  
 BLCDT-20090226AAR  
 28 kW 454 m  
 36 dBu Contour (NLSC)  
 Area: 40,048.8 sq km  
 Population: 1,199,557

Proposed KOLN  
 Replacement Tower  
 66.1 kW 454 m  
 36 dBu Contour (NLSC)  
 Area: 46,245.4 sq km  
 Population: 1,416,446

Gain Area

Alternative Services Depicted  
 Authorized Post-Repack Facilities  
 Noise Limited Service Contours

Call Sign	Ch.	Community
KSNB-TV	4	Superior, NE
KNHL	5	Hastings, NE
KLKN	8	Lincoln, NE
KCAU-TV	9	Sioux City, IA
KGIN	11	Grand Island, NE
KUON-TV	12	Lincoln, NE
KHGI-TV CP	13	Kearney, NE
WIBW-TV	13	Topeka, KS
KTIV	14	Sioux City, IA
KFXL-TV	15	Lincoln, NE
KYNE-TV CP	17	Omaha, NE
KXNE-TV CP	19	Norfolk, NE
KETV	20	Omaha, NE
WOWT	22	Omaha, NE
KLNE-TV CP	26	Lexington, NE
KPTM	26	Omaha, NE
KHNE-TV	28	Hastings, NE
KSIN-TV	28	Sioux City, IA
KXVO	29	Omaha, NE
KPTH	30	Sioux City, IA
KMTV-TV	31	Omaha, NE
KMEG	32	Sioux City, IA
KBIN-TV	33	Council Bluffs, IA
KHIN	35	Red Oak, IA

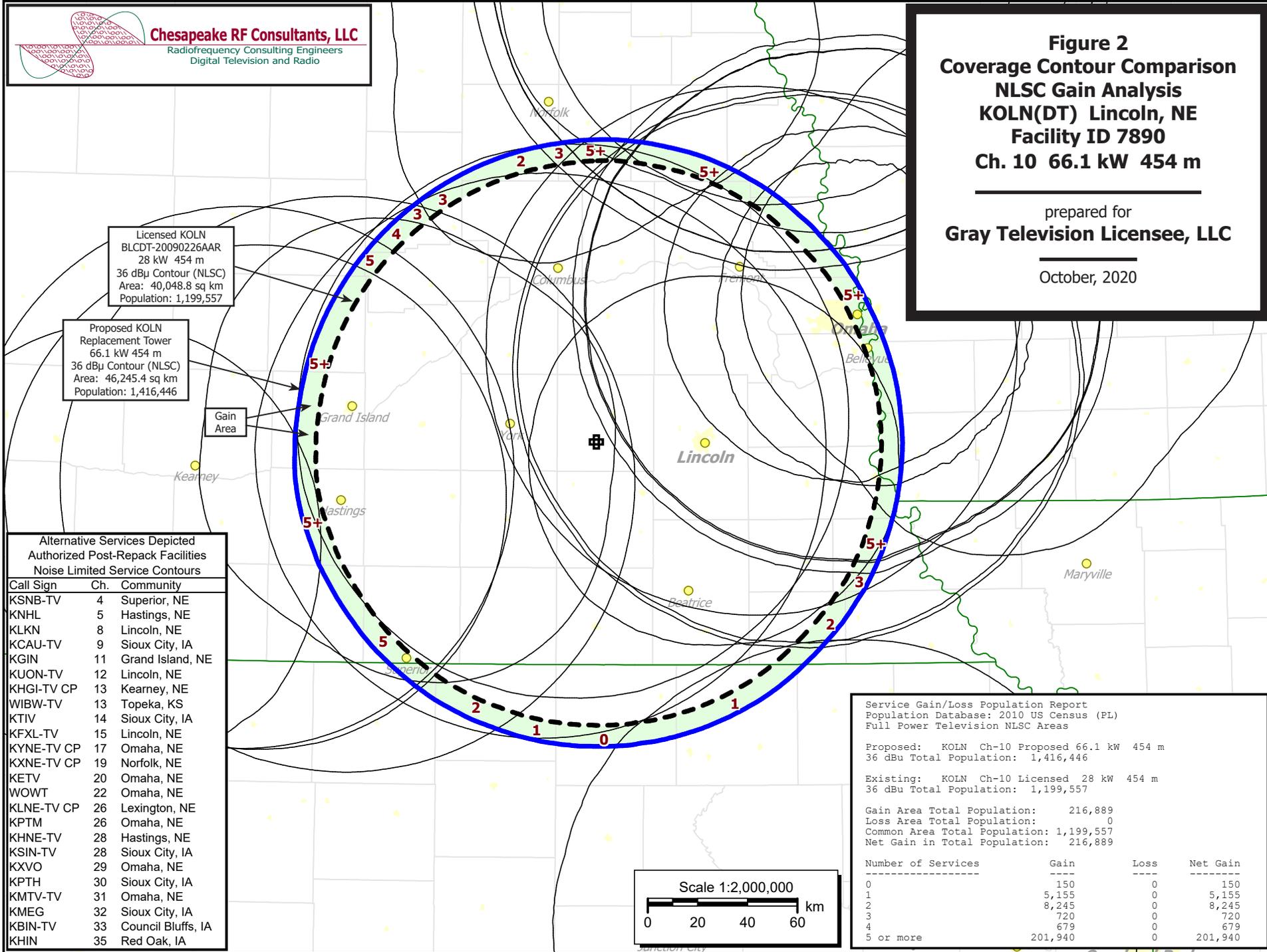
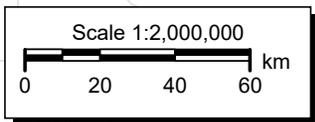
Service Gain/Loss Population Report  
 Population Database: 2010 US Census (PL)  
 Full Power Television NLSC Areas

Proposed: KOLN Ch-10 Proposed 66.1 kW 454 m  
 36 dBu Total Population: 1,416,446

Existing: KOLN Ch-10 Licensed 28 kW 454 m  
 36 dBu Total Population: 1,199,557

Gain Area Total Population: 216,889  
 Loss Area Total Population: 0  
 Common Area Total Population: 1,199,557  
 Net Gain in Total Population: 216,889

Number of Services	Gain	Loss	Net Gain
0	150	0	150
1	5,155	0	5,155
2	8,245	0	8,245
3	720	0	720
4	679	0	679
5 or more	201,940	0	201,940



**Table 1 KOLN TVStudy Analysis of Proposal**  
(page 1 of 3)



tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: KOLN 66.1kW\_454.0m, Model: Longley-Rice  
Start: 2020.10.06 08:20:05

Study created: 2020.10.06 08:20:05

Study build station data: LMS TV 2020-10-05

Proposal: KOLN D10 DT APP LINCOLN, NE  
File number: KOLN 66.1kW 454.0m  
Facility ID: 7890  
Station data: User record  
Record ID: 3227  
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
No	KCAU-TV	D9	DT	LIC	SIOUX CITY, IA	BLCDT20100702BMT	213.3 km
Yes	KBSL-DT	D10	DT	LIC	GOODLAND, KS	BLCDT20130318ADJ	400.1
Yes	KAKE	D10	DT	LIC	WICHITA, KS	BLCDT20090410ABG	337.1
Yes	KTSD-TV	D10	DT	LIC	PIERRE, SD	BLEDT20090527AGT	403.7
No	KTWU	D11	DT	LIC	TOPEKA, KS	BLEDT20090917AAW	227.9
Yes	KGIN	D11	DT	LIC	GRAND ISLAND, NE	BLCDT20090226AAZ	138.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D10  
Latitude: 40 48 11.00 N (NAD83)  
Longitude: 97 10 53.00 W  
Height AMSL: 913.0 m  
HAAT: 454.0 m  
Peak ERP: 66.1 kW  
Antenna: Omnidirectional  
Elev Pattn: Generic  
Elec Tilt: 1.50

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	66.1 kW	450.2 m	121.2 km
45.0	66.1	461.6	122.0
90.0	66.1	467.6	122.4
135.0	66.1	457.5	121.7
180.0	66.1	457.8	121.8
225.0	66.1	453.1	121.4
270.0	66.1	447.5	120.9
315.0	66.1	436.5	119.9

ERP exceeds maximum  
ERP: 66.1 kW ERP maximum: 66.1 kW

Distance to Canadian border: 898.0 km

Distance to Mexican border: 1283.7 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 277.6 degrees Distance: 105.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 266.6 degrees Distance: 683.7 km

Study cell size: 2.00 km

**Table 1 KOLN TVStudy Analysis of Proposal**  
(page 2 of 3)



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 BLCDT20130318ADJ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	KBSL-DT	D10	DT	LIC	GOODLAND, KS	BLCDT20130318ADJ				
Undesireds:	KOLN	D10	DT	BL	LINCOLN, NE	DTVBL7890	400.1 km			
	KOLN	D10	DT	APP	LINCOLN, NE	KOLN 66.1kW 454.0m	400.1			
	KAKE	D10	DT	LIC	WICHITA, KS	BLCDT20090410ABG	397.5			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	36858.5	49,814	36192.3	48,483	36144.3	48,463	36132.2	48,461	0.03	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
KOLN D10 DT BL		8.1	2	8.1	2					
KOLN D10 DT APP		20.1	4			20.1	4			
KAKE D10 DT LIC		40.0	18	40.0	18	40.0	18			

-----  
Interference to BLCDT20090410ABG LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	KAKE	D10	DT	LIC	WICHITA, KS	BLCDT20090410ABG				
Undesireds:	KOLN	D10	DT	BL	LINCOLN, NE	DTVBL7890	337.1 km			
	KOLN	D10	DT	APP	LINCOLN, NE	KOLN 66.1kW 454.0m	337.1			
	KOLR	D10	DT	LIC	SPRINGFIELD, MO	BLCDT20090810ACN	407.7			
	KTUL	D10	DT	CP	TULSA, OK	BLANK0000035654	263.1			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	36135.6	803,937	34510.6	799,254	32949.6	795,653	32612.2	794,800	1.02	0.11
Undesired			Total IX	Unique IX, before	Unique IX, after					
KOLN D10 DT BL		417.8	1,170	413.7	1,165					
KOLN D10 DT APP		763.0	2,025			751.1	2,018			
KOLR D10 DT LIC		4.0	2	0.0	0	0.0	0			
KTUL D10 DT CP		1147.3	2,436	1139.3	2,429	1131.4	2,427			

-----  
Interference to BLCDT20090410ABG LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance			
Desired:	KAKE	D10	DT	LIC	WICHITA, KS	BLCDT20090410ABG				
Undesireds:	KOLN	D10	DT	BL	LINCOLN, NE	DTVBL7890	337.1 km			
	KOLN	D10	DT	APP	LINCOLN, NE	KOLN 66.1kW 454.0m	337.1			
	KOLR	D10	DT	LIC	SPRINGFIELD, MO	BLCDT20090810ACN	407.7			
	KTUL	D10	DT	LIC	TULSA, OK	BLCDT20100505AGI	263.1			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	36135.6	803,937	34510.6	799,254	33449.6	796,547	33108.3	795,694	1.02	0.11
Undesired			Total IX	Unique IX, before	Unique IX, after					
KOLN D10 DT BL		417.8	1,170	413.7	1,165					
KOLN D10 DT APP		763.0	2,025			755.0	2,018			
KOLR D10 DT LIC		4.0	2	0.0	0	0.0	0			
KTUL D10 DT LIC		647.3	1,542	639.3	1,535	635.4	1,533			

-----  
Interference to BLEDT20090527AGT LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTSD-TV	D10	DT	LIC	PIERRE, SD	BLEDT20090527AGT	
Undesireds:	KOLN	D10	DT	BL	LINCOLN, NE	DTVBL7890	403.7 km
	KOLN	D10	DT	APP	LINCOLN, NE	KOLN 66.1kW 454.0m	403.7
	DKABY-TV	D9	DT	BL	ABERDEEN, SD	DTVBL48659	184.5

**Table 1 KOLN TVStudy Analysis of Proposal**  
(page 3 of 3)



KWCM-TV	D10	DT	LIC	APPLETON, MN		BLEDT20091217ADE		314.2	
KQME	D10	DT	LIC	LEAD, SD		BLCDT20050825ABN		340.7	
KQSD-TV	D11	DT	LIC	LOWRY, SD		BLEDT20090527AGY		148.8	
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
46544.5	83,645	44982.5	82,828	43734.5	78,950	43682.6	78,901	0.12	0.06
Undesired			Total IX	Unique IX, before		Unique IX, after			
KOLN D10 DT BL		27.9	57	27.9	57				
KOLN D10 DT APP		79.7	106			79.7	106		
DKABY-TV D9 DT BL		115.4	96	115.4	96	115.4	96		
KWCM-TV D10 DT LIC		8.1	17	8.1	17	8.1	17		
KQME D10 DT LIC		810.8	2,455	806.8	2,455	806.8	2,455		
KQSD-TV D11 DT LIC		290.0	1,253	286.0	1,253	286.0	1,253		

-----  
Interference to BLCDT20090226AAZ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	KGIN	D11	DT	LIC	GRAND ISLAND, NE	BLCDT20090226AAZ			
Undesireds:	KOLN	D10	DT	BL	LINCOLN, NE	DTVBL7890	138.7 km		
	KOLN	D10	DT	APP	LINCOLN, NE	KOLN 66.1kW 454.0m	138.7		
	KSNG	D11	DT	LIC	GARDEN CITY, KS	BLCDT20090630AAP	359.3		
	KTWU	D11	DT	LIC	TOPEKA, KS	BLEDT20090917AAW	309.8		
	KELO-TV	D11	DT	LIC	SIOUX FALLS, SD	BLCDT20090619AAZ	375.7		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
31760.9	230,535	30927.2	228,338	30201.3	225,839	29965.9	225,126	0.78	0.32
Undesired			Total IX	Unique IX, before		Unique IX, after			
KOLN D10 DT BL		275.3	403	275.3	403				
KOLN D10 DT APP		510.6	1,116			510.6	1,116		
KSNG D11 DT LIC		200.9	194	164.9	183	164.9	183		
KTWU D11 DT LIC		273.6	1,913	237.6	1,902	237.6	1,902		
KELO-TV D11 DT LIC		12.1	0	12.1	0	12.1	0		

-----  
Interference to proposal scenario 1  
0.76% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KOLN	D10	DT	APP	LINCOLN, NE	KOLN 66.1kW 454.0m	
Undesireds:	KBSL-DT	D10	DT	LIC	GOODLAND, KS	BLCDT20130318ADJ	400.1 km
	KAKE	D10	DT	LIC	WICHITA, KS	BLCDT20090410ABG	337.1
	KGIN	D11	DT	LIC	GRAND ISLAND, NE	BLCDT20090226AAZ	138.7
Service area		Terrain-limited		IX-free		Percent IX	
46337.9	1,421,223	45038.6	1,337,970	43698.4	1,327,798	2.98	0.76
Undesired			Total IX	Unique IX		Prct Unique IX	
KBSL-DT D10 DT LIC		24.2	28	0.0	0	0.00	0.00
KAKE D10 DT LIC		544.6	4,182	516.4	4,153	1.15	0.31
KGIN D11 DT LIC		803.6	5,997	795.5	5,990	1.77	0.45

**Channel and Facility Information**

Section	Question	Response
<b>Proposed Community of License</b>	Facility ID	7890
	State	Nebraska
	City	LINCOLN
	DTV Channel	10
	Designated Market Area	Lincoln & Hastings-Krny
<b>Facility Type</b>	Facility Type	Commercial
	Station Type	Main
<b>Zone</b>	Zone	2

**Antenna Location Data**

Section	Question	Response
<b>Antenna Structure Registration</b>	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1041796
<b>Coordinates (NAD83)</b>	Latitude	40° 48' 11.0" N+
	Longitude	097° 10' 53.0" W-
	Structure Type	TOWER-A free standing or guyed struct
	Overall Structure Height	457.2 meters
	Support Structure Height	435.5 meters
	Ground Elevation (AMSL)	465.9 meters
<b>Antenna Data</b>	Height of Radiation Center Above Ground Level	447.1 meters
	Height of Radiation Center Above Average Terrain	454.0 meters
	Height of Radiation Center Above Mean Sea Level	913.0 meters
	Effective Radiated Power	66.1 kW

**Antenna  
Technical Data**

Section	Question	Response
<b>Antenna Type</b>	Antenna Type	Non-Directional
	Do you have an Antenna ID?	
	Antenna ID	
<b>Antenna Manufacturer and Model</b>	Manufacturer:	ERI
	Model	ATW10V6-ETO-10H
	Rotation	
	Electrical Beam Tilt	1.5
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Elliptical
<b>DTV and DTS: Elevation Pattern</b>	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
<p><b>Post-Incentive Auction Expedited Processing</b></p>	<p>It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.</p>	<p>Yes</p>
	<p>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.</p>	<p>No</p>
	<p>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.</p>	<p>Yes</p>
	<p>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.</p>	<p>Yes</p>
<p><b>Environmental Effect</b></p>	<p>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)</p>	<p>No</p>
<p><b>Broadcast Facility</b></p>	<p>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.</p>	<p>Yes</p>