

ENGINEERING EXHIBIT

Application for Minor Modification of Digital Low Power Television Station Construction Permit

prepared for

Gray Television Licensee, LLC
K19KE-D Jolly, TX
Facility ID 186356
Ch. 19 15 kW Nondirectional

Gray Television Licensee, LLC (“*Gray*”) is the proposed assignee (file# 0000152342) of the authorization for unbuilt digital Low Power Television station K19KE-D, Channel 19, Jolly TX, Facility ID 186356. K19KE-D is authorized to operate pursuant to a Construction Permit (“CP”, file# BNPDTL-20100510AGJ) with 7.5 kW effective radiated power (“ERP”), directional. *Gray* herein seeks a modification of the CP to specify a different transmitting location, increased ERP, and use of a nondirectional antenna.

The proposed facility will employ a new antenna system to be side-mounted on the existing tower structure associated with FCC Antenna Structure Registration number 1049789, located 17.5 km (10.9 miles) from the current CP site. The site is located more than 75 miles (121 km) from the reference coordinates of the markets listed in Appendix A of DA 09-1487¹. No change to the overall structure height is proposed.

The proposed antenna is a Dielectric model TLP-12A/VP-R. The proposed ERP is 15 kW nondirectional using a “full service” out of channel emission mask. Figure 1 depicts the 51 dB μ coverage contour of the proposed facility as well as that of the current authorization, demonstrating compliance with §73.3572 for a minor change.

¹“Commencement of Rural, First-come, First-served digital licensing for Low Power Television and TV Translators Beginning August 25, 2009 and Commencement of Nationwide, First-come, First-served Digital Licensing for Low Power Television and TV Translator Services Beginning January 25, 2010,” Public Notice, DA 09-1487, Released June 29, 2009.

Interference study per OET Bulletin 69² shows that the proposal complies with the FCC's interference protection requirements toward all digital television, television translator, LPTV, and Class A stations. The results, summarized in Table 1, show that any new interference does not exceed the FCC's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations) to any facility.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed facility 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 20 percent antenna relative field in downward elevations (pattern data shows 20 percent or less relative field at angles 20 to 90 degrees below the antenna), the calculated power density attributable to the proposed facility at locations near the transmitter site at a height of two meters above ground level is $0.4 \mu\text{W/cm}^2$, which is 0.1 percent of the general population / uncontrolled maximum permissible 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. No increase in structure height is proposed.

²FCC 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, 1 km cell size, and 1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCCs implementation of TVStudy show excellent correlation.

Engineering Exhibit
Gray Television Licensee, LLC (K19KE-D)
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List of Attachments

Figure 1 Coverage Contour Comparison
Table 1 TVStudy Analysis of Proposal
Form 2100 Saved Version of Engineering Sections of FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E. September 20, 2021
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

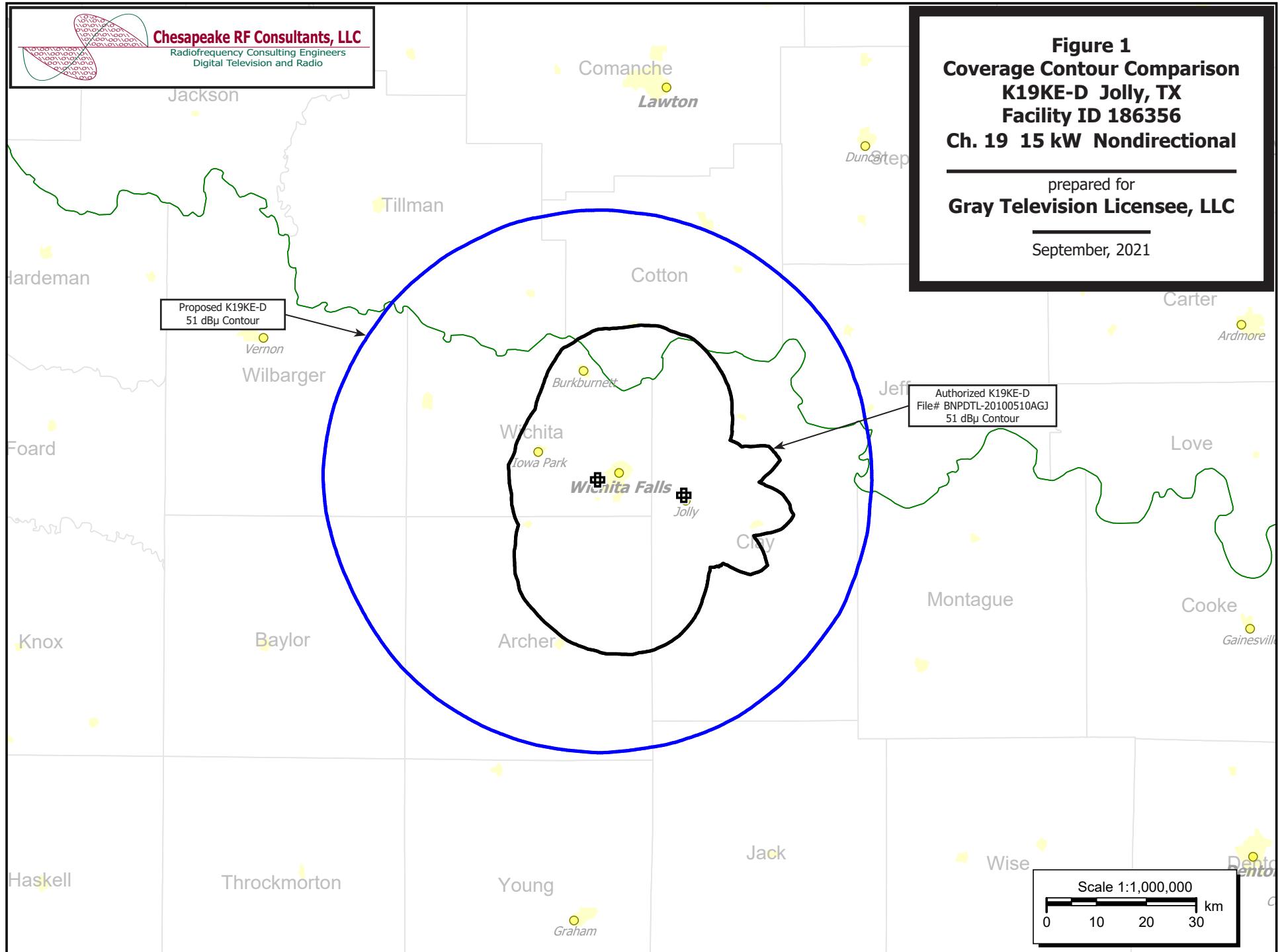


Table 1 K19KE-D TVStudy Analysis of Proposal
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tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: K19KE-D prop, Model: Longley-Rice
Start: 2021.09.20 14:07:07

Study created: 2021.09.20 14:07:07

Study build station data: LMS TV 2021-09-17

Proposal: K19KE-D D19 LD APP JOLLY, TX
File number: K19KE-D prop
Facility ID: 186356
Station data: User record
Record ID: 3876
Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

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	KKTM-LP	N17+	TX	LIC	ALTUS, OK	BLTTL20041001AFP	110.1 km
Yes	K18IZ-D	D18	LD	LIC	GRANDFIELD, OK	BLDTT20111003ANW	37.7
No	K18HX-D	D18	LD	LIC	HOLLIS, OK	BLDTT20100802AZL	149.3
No	KOPX-TV	D18	DT	LIC	OKLAHOMA CITY, OK	BLANK0000073170	208.7
No	K18MD-D	D18	LD	LIC	CHILDRESS, TX	BLANK0000076193	167.4
No	KTXA	D18	DT	LIC	FORT WORTH, TX	BLANK0000091060	210.6
No	KUFS-LD	D19+	LD	LIC	FORT SMITH, AR	BLANK0000067178	376.3
No	KWCH-DT	D19	DT	LIC	HUTCHINSON, KS	BLCDT20090929ACC	467.5
Yes	K19AA-D	D19	LD	LIC	ALTUS, OK	BLDTT20091229ACU	107.5
No	K19II-D	D19	LD	LIC	ARDMORE, OK	BLDTL20140224ACB	134.1
No	K19IR-D	D19	LD	LIC	ENID, OK	BLDTL20140224ACF	296.1
Yes	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	208.7
Yes	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	208.7
No	KOTV-DT	D19	LD	LIC	TULSA, OK	BLCDT20120816ABS	286.6
No	KEGG-LD	D19	LD	LIC	TULSA, OK	BLDTL20130222ADJ	308.6
Yes	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	340.3
No	KGBS-CD	D19	DC	CP	AUSTIN, TX	BLANK0000127539	404.1
No	KGBS-CD	D19	DC	LIC	AUSTIN, TX	BLDTL20141118ARA	404.1
Yes	KTVT	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	210.6
No	KLBB-LD	D19	LD	LIC	LUBBOCK, TX	BLANK0000088509	311.4
No	K19ND-D	D19	LD	CP	ODESSA, TX	BLANK0000152402	403.3
No	KIDY	D19	DT	LIC	SAN ANGELO, TX	BLCDT20110520ADN	316.5
No	K24IW-D	D20	LD	CP	ARDMORE, OK	BLANK0000072055	161.0
No	K47KI-D	D20	LD	LIC	DUNCAN, OK	BLANK0000072559	98.4
No	K25LQ-D	D20	LD	LIC	ELK CITY, OK	BLANK0000063621	175.0
No	K20JB-D	D20	LD	LIC	HOLLIS, OK	BLDTT20100802AZJ	149.3
No	KBOP-LD	D20	LD	LIC	DALLAS-FT WORTH, TX	BLDTL20110120ACW	206.4
No	K39GH-D	D20	LD	CP	QUANAH, TX	BLANK0000053926	115.4
No	KTXS-TV	D20	DT	CP	SWEETWATER, TX	BLANK0000035779	220.5
No	KTXS-TV	D20	DT	LIC	SWEETWATER, TX	BLCDT20080815ABJ	220.5
Yes	K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	2.2
Yes	K20LC-D	D20	LD	CP	WICHITA FALLS, TX	BNPDTL20090825BQN	2.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D19
Mask: Full Service
Latitude: 33 54 4.00 N (NAD83)
Longitude: 98 32 22.00 W
Height AMSL: 583.7 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.00

Table 1 K19KE-D TVStudy Analysis of Proposal
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49.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	272.4 m	56.0 km
45.0	15.0	290.7	57.0
90.0	15.0	286.9	56.8
135.0	15.0	286.0	56.8
180.0	15.0	281.6	56.5
225.0	15.0	276.1	56.2
270.0	15.0	289.1	56.9
315.0	15.0	276.8	56.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 282 m

Distance to Canadian border: 1616.4 km

Distance to Mexican border: 532.6 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 174.8 degrees Distance: 720.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 321.3 degrees Distance: 910.3 km

No land mobile station failures found

Study cell size: 1.00 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 BLDTT20111003ANW LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K18IZ-D	D18	LD	LIC	GRANDFIELD, OK	BLDTT20111003ANW	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	37.7 km
	KJTN-LP	N18z	TX	LIC	ABILENE, TX	BLTTL20051215ABA	216.5
	K18NO-D	D18	LD	LIC	LUBBOCK, TX	BLANK0000151858	303.4
	KXVZ-LP	D18z	LD	CP	PLAINVIEW, TX	BLANK0000152109	281.4
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
9045.0	247,760	9045.0	247,760	9045.0	247,760	9024.2	247,630
Undesired	K19KE-D D19 LD APP		Total IX	Unique IX, before	Unique IX, after		
		20.8	130		20.8	130	

Interference to BLDTT20091229ACU LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K19AA-D	D19	LD	LIC	ALTUS, OK	BLDTT20091229ACU	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	107.5 km
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	198.9
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
1711.6	26,491	1710.6	26,491	1708.6	26,491	1703.6	26,483
Undesired	K19KE-D D19 LD APP		Total IX	Unique IX, before	Unique IX, after		
	KAUT-TV D19 DT LIC	5.0	8	5.0	8	2.0	0

Interference to BLDTT20091229ACU LIC scenario 2

Table 1 K19KE-D TVStudy Analysis of Proposal
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Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K19AA-D	D19	LD	LIC	ALTUS, OK	BLDTT20091229ACU	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	107.5 km
	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	198.9
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
1711.6	26,491	1710.6	26,491	1707.6	26,491	1702.6	26,483
Undesired			Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP		5.0		8		5.0	8
KAUT-TV D19 DT CP		3.0		0	3.0	0	

Interference to BLANK0000121785 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	208.7 km
	KWCH-DT	D19	DT	LIC	HUTCHINSON, KS	BLCDT20090929ACC	278.0
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	393.1
	KTVT	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	339.8
	KQCW-DT	D20	DT	CP	MUSKOGEE, OK	BLANK0000035925	171.0
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
39066.2	1,637,201	38789.3	1,636,219	37354.1	1,627,138	37078.7	1,624,617
Undesired			Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP		416.8		6,210		275.4	2,521
KWCH-DT D19 DT LIC		964.4		3,309	927.4	927.4	2,958
KAMR-TV D19 DT LIC		33.8		86	16.9	52	6.0
KTVT D19 DT LIC		298.8		4,724	298.8	4,724	1,075
KQCW-DT D20 DT CP		175.1		1,313	154.9	996	154.9

Interference to BLANK0000121785 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	208.7 km
	KWCH-DT	D19	DT	LIC	HUTCHINSON, KS	BLCDT20090929ACC	278.0
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	393.1
	KTVT	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	339.8
	KQCW-DT	D20	DT	LIC	MUSKOGEE, OK	BMLCDT20130823ACR	153.5
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
39066.2	1,637,201	38789.3	1,636,219	37403.6	1,627,781	37128.2	1,625,260
Undesired			Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP		416.8		6,210		275.4	2,521
KWCH-DT D19 DT LIC		964.4		3,309	940.5	940.5	3,186
KAMR-TV D19 DT LIC		33.8		86	16.9	52	6.0
KTVT D19 DT LIC		298.8		4,724	298.8	4,724	1,075
KQCW-DT D20 DT LIC		112.5		442	105.5	353	105.5

Interference to BLANK0000127590 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	208.7 km
	KWCH-DT	D19	DT	LIC	HUTCHINSON, KS	BLCDT20090929ACC	278.0
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	393.1
	KTVT	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	339.8
	KQCW-DT	D20	DT	CP	MUSKOGEE, OK	BLANK0000035925	171.0
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
40269.7	1,654,257	39968.8	1,652,995	38399.0	1,641,647	38080.4	1,636,672
Undesired			Total IX		Unique IX, before	Unique IX, after	

Table 1 K19KE-D TVStudy Analysis of Proposal
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K19KE-D D19 LD APP	508.1	9,725		318.6	4,975
KWCH-DT D19 DT LIC	1012.7	4,136	976.6	976.6	3,681
KAMR-TV D19 DT LIC	37.8	213	22.9	131	8.0
KVTM D19 DT LIC	370.1	5,823	370.1	5,823	195.6
KQCW-DT D20 DT CP	185.2	1,631	164.0	1,258	164.0

Interference to BLANK0000127590 CP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	208.7 km
	KWCH-DT	D19	DT	LIC	HUTCHINSON, KS	BLCDT20090929ACC	278.0
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	393.1
	KVTM	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	339.8
	KQCW-DT	D20	DT	LIC	MUSKOGEE, OK	BMLCDT20130823ACR	153.5
Service area					Terrain-limited	IX-free, before	
40269.7	1,654,257	39968.8	1,652,995	38436.8	1,642,435	38118.2	IX-free, after
						1,637,460	Percent New IX
						0.83	0.30
Undesired					Total IX	Unique IX, before	
K19KE-D D19 LD APP		508.1		9,725		318.6	4,975
KWCH-DT D19 DT LIC		1012.7		4,136	985.7	985.7	3,954
KAMR-TV D19 DT LIC		37.8		213	22.9	131	8.0
KVTM D19 DT LIC		370.1		5,823	370.1	5,823	195.6
KQCW-DT D20 DT LIC		138.4		570	126.3	470	126.3

Interference to BLCDT20080519ACZ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	340.3 km
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	393.1
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000150916	6.5
Service area					Terrain-limited	IX-free, before	
35065.5	366,500	34601.1	366,447	34055.0	365,788	34052.0	IX-free, after
						365,783	Percent New IX
						0.01	0.00
Undesired					Total IX	Unique IX, before	
K19KE-D D19 LD APP		3.0		5		3.0	5
KAUT-TV D19 DT LIC		16.9		0	16.9	0	16.9
KVII-TV D20 DT CP		529.1		659	529.1	659	529.1

Interference to BLCDT20080519ACZ LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	340.3 km
	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	393.1
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000150916	6.5
Service area					Terrain-limited	IX-free, before	
35065.5	366,500	34601.1	366,447	34049.1	365,788	34046.1	IX-free, after
						365,783	Percent New IX
						0.01	0.00
Undesired					Total IX	Unique IX, before	
K19KE-D D19 LD APP		3.0		5		3.0	5
KAUT-TV D19 DT CP		22.9		0	22.9	0	22.9
KVII-TV D20 DT CP		529.1		659	529.1	659	529.1

Interference to BLCDT20121115ABM LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KVII-TV	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	210.6 km
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	339.8
	KGBS-CD	D19	DC	CP	AUSTIN, TX	BLANK0000127539	259.8

Table 1 K19KE-D TVStudy Analysis of Proposal
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KTXH	D19	DT	CP	HOUSTON, TX	BLANK0000149928	358.2	
KFXK-TV	D20	DT	LIC	LONGVIEW, TX	BLANK0000071623	191.1	
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX	
45657.6	6,909,682	45290.7	6,906,435	45105.7	6,904,589	0.30 0.02	
Undesired		Total IX		Unique IX, before	Unique IX, after		
K19KE-D D19 LD APP	198.2	1,593			134.5	1,342	
KAUT-TV D19 DT LIC	112.4	908		908	48.7	657	
KGBS-CD D19 DC CP	13.1	49		13.1	13.1	49	
KTXH D19 DT CP	28.3	210		210	28.3	210	
KFXK-TV D20 DT LIC	31.1	679		679	31.1	679	
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Interference to BLCDT20121115ABM LIC scenario 2							
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM	Distance
Undesireds:	K19KE-D KAUT-TV KGBS-CD KTXH KFXK-TV	D19 D19 D19 D19 D20	LD DT DC DT DT	APP LIC CP LIC LIC	JOLLY, TX OKLAHOMA CITY, OK AUSTIN, TX HOUSTON, TX LONGVIEW, TX	K19KE-D prop BLANK0000121785 BLANK0000127539 BLCDT20090804ABC BLANK0000071623	210.6 km 339.8 259.8 358.9 191.1
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX	
45657.6	6,909,682	45290.7	6,906,435	45104.7	6,904,761	0.30 0.02	
Undesired		Total IX		Unique IX, before	Unique IX, after		
K19KE-D D19 LD APP	198.2	1,593			134.5	1,342	
KAUT-TV D19 DT LIC	112.4	908		908	48.7	657	
KGBS-CD D19 DC CP	13.1	49		13.1	13.1	49	
KTXH D19 DT LIC	29.3	38		38	29.3	38	
KFXK-TV D20 DT LIC	31.1	679		679	31.1	679	
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Interference to BLCDT20121115ABM LIC scenario 3							
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM	Distance
Undesireds:	K19KE-D KAUT-TV KTXH KFXK-TV	D19 D19 D19 D20	LD DT CP DT	APP LIC LIC LIC	JOLLY, TX OKLAHOMA CITY, OK HOUSTON, TX LONGVIEW, TX	K19KE-D prop BLANK0000121785 BLANK0000149928 BLANK0000071623	210.6 km 339.8 358.2 191.1
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX	
45657.6	6,909,682	45290.7	6,906,435	45118.8	6,904,638	0.30 0.02	
Undesired		Total IX		Unique IX, before	Unique IX, after		
K19KE-D D19 LD APP	198.2	1,593			134.5	1,342	
KAUT-TV D19 DT LIC	112.4	908		908	48.7	657	
KTXH D19 DT CP	28.3	210		210	28.3	210	
KFXK-TV D20 DT LIC	31.1	679		679	31.1	679	
<hr/>							
Interference to BLCDT20121115ABM LIC scenario 4							
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM	Distance
Undesireds:	K19KE-D KAUT-TV KTXH KFXK-TV	D19 D19 D19 D20	LD DT LIC DT	APP LIC LIC LIC	JOLLY, TX OKLAHOMA CITY, OK HOUSTON, TX LONGVIEW, TX	K19KE-D prop BLANK0000121785 BLCDT20090804ABC BLANK0000071623	210.6 km 339.8 358.9 191.1
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX	
45657.6	6,909,682	45290.7	6,906,435	45117.8	6,904,810	0.30 0.02	
Undesired		Total IX		Unique IX, before	Unique IX, after		
K19KE-D D19 LD APP	198.2	1,593			134.5	1,342	
KAUT-TV D19 DT LIC	112.4	908		908	48.7	657	
KTXH D19 DT LIC	29.3	38		38	29.3	38	

Table 1 K19KE-D TVStudy Analysis of Proposal
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KFXK-TV D20 DT LIC	31.1	679	31.1	679	31.1	679
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Interference to BLCDT20121115ABM LIC scenario 5						
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM
Undesireds:	K19KE-D KAUT-TV KGBS-CD KTXH KFXK-TV	D19 D19 D19 D19 D20	LD DT DC DT DT	APP CP CP CP LIC	JOLLY, TX OKLAHOMA CITY, OK AUSTIN, TX HOUSTON, TX LONGVIEW, TX	K19KE-D prop BLANK0000127590 BLANK0000127539 BLANK0000149928 BLANK0000071623
Service area	45657.6	6,909,682	45290.7	6,906,435	IX-free, before 45089.8 6,904,343	IX-free, after 44961.3 6,903,034
Undesired	K19KE-D D19 LD APP KAUT-TV D19 DT CP KGBS-CD D19 DC CP KTXH D19 DT CP KFXK-TV D20 DT LIC	198.2 128.3 13.1 28.3 31.1	Total IX 1,593 1,154 49 210 679	128.3 1,154 13.1 28.3 31.1	Unique IX, before 1,154 128.3 49 210 31.1	Unique IX, after 128.5 58.6 13.1 28.3 31.1
Service area	45657.6	6,909,682	45290.7	6,906,435	IX-free, before 45088.8 6,904,515	IX-free, after 44960.3 6,903,206
Undesired	K19KE-D D19 LD APP KAUT-TV D19 DT CP KGBS-CD D19 DC CP KTXH D19 DT LIC KFXK-TV D20 DT LIC	198.2 128.3 13.1 29.3 31.1	Total IX 1,593 1,154 49 38 679	128.3 1,154 13.1 38 31.1	Unique IX, before 1,154 128.3 49 38 679	Unique IX, after 128.5 58.6 13.1 29.3 31.1
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Interference to BLCDT20121115ABM LIC scenario 6						
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM
Undesireds:	K19KE-D KAUT-TV KGBS-CD KTXH KFXK-TV	D19 D19 D19 D19 D20	LD DT DC DT DT	APP CP CP CP LIC	JOLLY, TX OKLAHOMA CITY, OK AUSTIN, TX HOUSTON, TX LONGVIEW, TX	K19KE-D prop BLANK0000127590 BLANK0000127539 BLCDT20090804ABC BLANK0000071623
Service area	45657.6	6,909,682	45290.7	6,906,435	IX-free, before 45088.8 6,904,515	IX-free, after 44960.3 6,903,206
Undesired	K19KE-D D19 LD APP KAUT-TV D19 DT CP KGBS-CD D19 DC CP KTXH D19 DT LIC KFXK-TV D20 DT LIC	198.2 128.3 13.1 29.3 31.1	Total IX 1,593 1,154 49 38 679	128.3 1,154 13.1 38 31.1	Unique IX, before 1,154 128.3 49 38 679	Unique IX, after 128.5 58.6 13.1 29.3 31.1
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Interference to BLCDT20121115ABM LIC scenario 7						
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM
Undesireds:	K19KE-D KAUT-TV KTXH KFXK-TV	D19 D19 D19 D20	LD DT DT DT	APP CP CP LIC	JOLLY, TX OKLAHOMA CITY, OK HOUSTON, TX LONGVIEW, TX	K19KE-D prop BLANK0000127590 BLANK0000149928 BLANK0000071623
Service area	45657.6	6,909,682	45290.7	6,906,435	IX-free, before 45102.9 6,904,392	IX-free, after 44974.4 6,903,083
Undesired	K19KE-D D19 LD APP KAUT-TV D19 DT CP KTXH D19 DT CP KFXK-TV D20 DT LIC	198.2 128.3 28.3 31.1	Total IX 1,593 1,154 210 679	128.3 1,154 28.3 31.1	Unique IX, before 1,154 128.3 210 679	Unique IX, after 128.5 58.6 28.3 31.1
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Interference to BLCDT20121115ABM LIC scenario 8						
Desired:	Call KTVT	Chan D19	Svc DT	Status LIC	City, State FORT WORTH, TX	File Number BLCDT20121115ABM
Undesireds:	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop
						210.6 km

Table 1 K19KE-D TVStudy Analysis of Proposal
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KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	339.8
KTXH	D19	DT	LIC	HOUSTON, TX	BLCDT20090804ABC	358.9
KFXK-TV	D20	DT	LIC	LONGVIEW, TX	BLANK0000071623	191.1
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
45657.6	6,909,682	45290.7	6,906,435	45101.9	6,904,564	44973.4
Undesired		Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP	198.2		1,593		128.5	1,309
KAUT-TV D19 DT CP	128.3		1,154	128.3	58.6	870
KTXH D19 DT LIC	29.3		38	29.3	29.3	38
KFXK-TV D20 DT LIC	31.1		679	31.1	679	679

Interference to BLANK0000001589 LIC scenario 1						
Desired:	Call K20DN-D	Chan D20	Svc DC	Status LIC	City, State WICHITA FALLS, TX	File Number BLANK0000001589
Undesireds:	K19KE-D KTXS-TV	D19 D20	LD DT	APP CP	JOLLY, TX SWEETWATER, TX	K19KE-D prop BLANK0000035779
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
5918.0	151,761	5918.0	151,761	5916.0	151,761	5913.0
Undesired		Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP	3.0		0		3.0	0
KTXS-TV D20 DT CP	2.0		0	2.0	2.0	0

Interference to BLANK0000001589 LIC scenario 2						
Desired:	Call K20DN-D	Chan D20	Svc DC	Status LIC	City, State WICHITA FALLS, TX	File Number BLANK0000001589
Undesireds:	K19KE-D KTXS-TV	D19 D20	LD DT	APP CP	JOLLY, TX SWEETWATER, TX	K19KE-D prop BLCDT20080815ABJ
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
5918.0	151,761	5918.0	151,761	5917.0	151,761	5914.0
Undesired		Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP	3.0		0		3.0	0
KTXS-TV D20 DT LIC	1.0		0	1.0	1.0	0

Interference to BNPDTL20090825BQN CP scenario 1						
Desired:	Call K20LC-D	Chan D20	Svc LD	Status CP	City, State WICHITA FALLS, TX	File Number BNPDTL20090825BQN
Undesireds:	K19KE-D K47KI-D KTXS-TV K20DN-D	D19 D20 D20 D20	LD LD DT DC	APP LIC CP LIC	JOLLY, TX DUNCAN, OK SWEETWATER, TX WICHITA FALLS, TX	K19KE-D prop BLANK0000072559 BLANK0000035779 BLANK0000001589
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
5218.8	151,242	5218.8	151,242	106.3	344	106.3
Undesired		Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP	44.6		54		0.0	0
K47KI-D D20 LD LIC	122.5		572	0.0	0.0	0
KTXS-TV D20 DT CP	3.0		0	0.0	0.0	0
K20DN-D D20 DC LIC	5112.5		150,898	4990.0	150,326	4965.2

Interference to BNPDTL20090825BQN CP scenario 2						
Desired:	Call K20LC-D	Chan D20	Svc LD	Status CP	City, State WICHITA FALLS, TX	File Number BNPDTL20090825BQN
Undesireds:	K19KE-D K47KI-D	D19 D20	LD LD	APP LIC	JOLLY, TX DUNCAN, OK	K19KE-D prop BLANK0000072559

Table 1 K19KE-D TVStudy Analysis of Proposal
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K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	0.0
Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
5218.8	151,242	5218.8	151,242	106.3	344	0.00 0.00
Undesired		Total IX		Unique IX, before	Unique IX, after	
K19KE-D D19 LD APP	44.6	54		0.0	0	
K47KI-D D20 LD LIC	122.5	572	0.0	0	0.0	0
K20DN-D D20 DC LIC	5112.5	150,898	4990.0	150,326	4965.2	150,289

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	
Undesireds:	K18IZ-D	D18	LD	LIC	GRANDFIELD, OK	BLDTT20111003ANW	37.7 km
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	208.7
	KVT	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	210.6
	K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	2.2
	K20LC-D	D20	LD	CP	WICHITA FALLS, TX	BNPDTL20090825BQN	2.2
Service area		Terrain-limited		IX-free		Percent IX	
10028.2	159,999	10028.2	159,999	9531.0	159,817	4.96 0.11	
Undesired		Total IX		Unique IX		Prcnt Unique IX	
K18IZ-D D18 LD LIC	472.5	177	471.5	177	4.70	0.11	
KAUT-TV D19 DT LIC	3.0	5	0.0	0	0.00	0.00	
KVT D19 DT LIC	10.9	5	7.9	0	0.08	0.00	
K20DN-D D20 DC LIC	14.9	0	9.9	0	0.10	0.00	
K20LC-D D20 LD CP	4.0	0	0.0	0	0.00	0.00	

Interference to proposal scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K19KE-D	D19	LD	APP	JOLLY, TX	K19KE-D prop	
Undesireds:	K18IZ-D	D18	LD	LIC	GRANDFIELD, OK	BLDTT20111003ANW	37.7 km
	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	208.7
	KVT	D19	DT	LIC	FORT WORTH, TX	BLCDT20121115ABM	210.6
	K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	2.2
	K20LC-D	D20	LD	CP	WICHITA FALLS, TX	BNPDTL20090825BQN	2.2
Service area		Terrain-limited		IX-free		Percent IX	
10028.2	159,999	10028.2	159,999	9531.0	159,817	4.96 0.11	
Undesired		Total IX		Unique IX		Prcnt Unique IX	
K18IZ-D D18 LD LIC	472.5	177	471.5	177	4.70	0.11	
KAUT-TV D19 DT CP	3.0	5	0.0	0	0.00	0.00	
KVT D19 DT LIC	10.9	5	7.9	0	0.08	0.00	
K20DN-D D20 DC LIC	14.9	0	9.9	0	0.10	0.00	
K20LC-D D20 LD CP	4.0	0	0.0	0	0.00	0.00	

Channel and Facility Information

Section	Question	Response
Facility ID	186356	
State	Texas	
City	JOLLY	
LPD Channel	19	

Primary station proposed to be rebroadcast:

Facility Id	Call Sign	City	State

Antenna Location Data	Section	Question	Response
Antenna Structure Registration	Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
		ASR Number	1049789
Coordinates (NAD83)	Latitude	33° 54' 04.0" N+	
	Longitude	098° 32' 22.0" W-	
	Structure Type	TOWER-A free standing or guyed struct	
	Overall Structure Height	314.5 meters	
	Support Structure Height	291.8 meters	
	Ground Elevation (AMSL)	309.4 meters	
Antenna Data	Height of Radiation Center Above Ground Level	274.3 meters	
	Height of Radiation Center Above Mean Sea Level	583.7 meters	
	Effective Radiated Power	15 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:	Dielectric
		Model	TLP-12A/VP-R
		Rotation	
		Electrical Beam Tilt	1.0
		Mechanical Beam Tilt	Not Applicable
		toward azimuth	
	Elevation Radiation Pattern	Polarization	Elliptical
		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	
		Out-of-Channel Emission Mask:	Full Service