

APPLICATION FOR CONSTRUCTION PERMIT

KJLN-LD – JOPLIN, MISSOURI
FACILITY ID: 190289
CHANNEL 29 15 kW ERP DA

DIGITAL NETWORKS—MIDWEST, LLC

APRIL 2021

APPLICATION FOR CONSTRUCTION PERMIT

The following engineering statement and attached exhibits have been prepared for **Digital Networks-Midwest, LLC** ("Midwest"), licensee of digital low power television station KJLN-LD at Joplin, Missouri, and are in support of their application for construction permit to modify that facility.¹ This application seeks to modify the current license for the facility, which is assigned LMS File No. 0000143105.

KJLN-LD is licensed to operate on television channel 29 with a maximum effective radiated power of 1.5 kW at a center of radiation of 304.3 meters above mean sea level, 30 meters above ground level, utilizing a composite directional antenna. The propose facility would operate on television channel 29 with a maximum effective radiated power of 15.0 kW. The proposed center of radiation is 374 meters above mean sea level, or 72.8 meters above ground level. A Propagation Systems, Inc. ("PSI") model PSILP16BA antenna is proposed for use with the facility. This antenna, a directional antenna, would be oriented at an azimuth of 325 degrees true.

The map in Exhibit E-1 is a comparison between the licensed and proposed technical parameters, and illustrates the 51 dBu F(50,90) service contour for each set of parameters. A small distance change in the transmitter site is proposed under this application, however, the distance of this change is less than 30 miles as demonstrated. Since the licensed 51 dBu service contour is wholly contained within the proposed 51 dBu service contour, it is demonstrated that there is a significant amount over contour overlap between the facilities. The proposed change to the license is therefore a minor change to the facility.

¹ The Facility ID for KJLN-LD at Joplin, Missouri is 190289.

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Exhibit E-2 is the output from *TVStudy* for the proposed technical parameters. This study demonstrates that the proposed technical parameters would not fail interference checks to other relevant proposed and authorized facilities. This study was completed using a default cell size of 1.0 km at a profile spacing of 1.0 kilometer.

The proposed facility is not located within the West Virginia quiet zone and is located at a significant distance from both the Table Mountain receiving zone, and the Commission's Grand Island, Nebraska monitoring station. Additionally, the proposed facility would not constitute a significant environmental impact and is exempt from environmental processing. The proposed antenna would be mounted to an existing tower that is registered with the Commission. The addition of the antenna to this tower would not increase the already existing environmental impact present from the tower.

In addition, the proposed facility would not result in human exposure at ground level to radiofrequency radiation in excess of the Commission's safety standards. Using the equations in Supplement A of *OET Bulletin 65*, the calculated worst-case power density at ground level assuming a downward radiation relative field of 0.3 is $9.0 \mu\text{W}/\text{cm}^2$. This value is below the upper limit of the uncontrolled environment condition. Midwest certifies it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

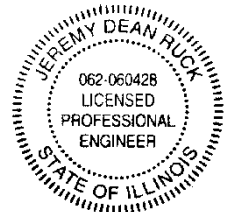
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The proposed facility complies with the provisions of Section 74.709 of the Commission's Rules. No land mobile protection issues have been identified based on the tables in that section of the rules, or on the output of *TVStudy*. The proposed facility also complies with Sections 74.793(e)-(h) and 74.793(h) of the Commission's Rules.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2021

Jeremy D. Ruck, PE
April 20, 2021

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KJLN-LD.X**PROPOSED**

Latitude: 37-04-38 N

Longitude: 094-30-16.50 W

ERP: 15.00 kW

Channel: 29

Frequency: 563.0 MHz

AMSL Height: 374.0 m

Horiz. Pattern: Directional

Prop Model: None

KJLN-LD

0000143105

Latitude: 37-04-33 N

Longitude: 094-38-25.40 W

ERP: 1.50 kW

Channel: 29




Frequency: 563.0 MHz

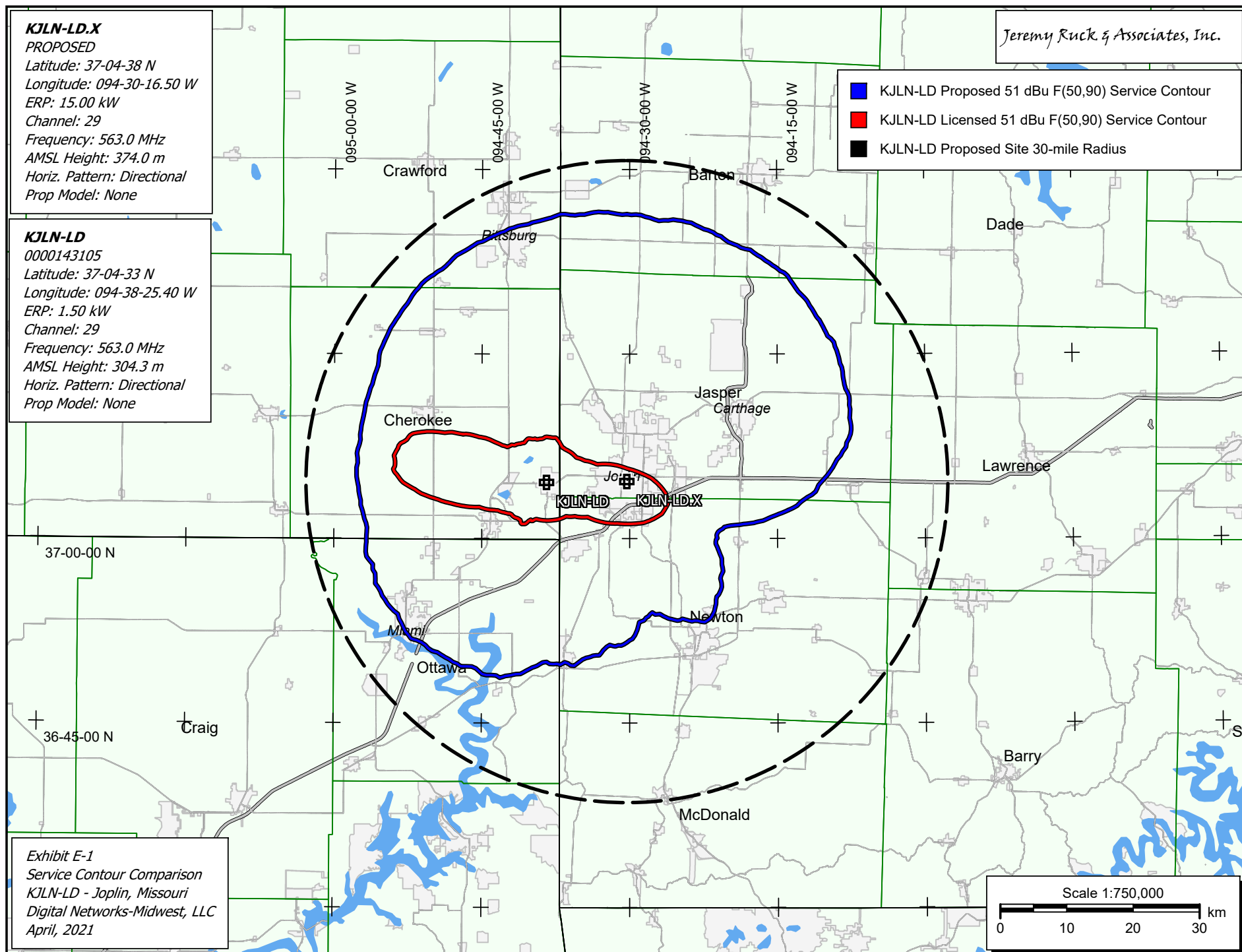
AMSL Height: 304.3 m

Horiz. Pattern: Directional

Prop Model: None

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-  KJLN-LD Proposed 51 dBu F(50,90) Service Contour
-  KJLN-LD Licensed 51 dBu F(50,90) Service Contour
-  KJLN-LD Proposed Site 30-mile Radius

**Exhibit E-1**

Service Contour Comparison

KJLN-LD - Joplin, Missouri

Digital Networks-Midwest, LLC

April, 2021

Exhibit E-2 - TVStudy Interference Study

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: KJLN CH 29 ASRN 1020777 374 m AMSL 15 kW ERP PSILP16BA @ 325, Model: Longley-Rice

Start: 2021.04.20 10:38:05

Study created: 2021.04.20 10:38:05

Study build station data: LMS TV 2021-04-20

Proposal: KJLN-LD D29 LD LIC Joplin, MO
File number: BLANK0000143105
Facility ID: 190289
Station data: User record
Record ID: 3
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K28NT-D	D28z	LD	LIC	BENTONVILLE & ROGERS, AR	BLANK0000059138	81.0 km
Yes	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	10.6
No	KCMN-LD	D28	LD	LIC	Kansas city, MO	BLANK0000124482	215.5
Yes	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDT20070213ABB	138.7
No	KTPX-TV	D28	DT	LIC	OKMULGEE, OK	BLCDT20020510AAQ	200.2
No	K28NV-D	D28	LD	LIC	PONCA CITY, OK	BLANK0000055256	228.6
No	K29NT-D	D29	LD	CP	FORT SMITH, AR	BLANK0000071941	176.4
No	KZTE-LD	D29	LD	CP	FULTON, AR	BLANK0000054183	408.3
No	KWMO-LD	D29	LD	LIC	HOT SPRINGS, AR	BLANK0000080611	311.4
Yes	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	100.9
No	KHDS-LD	D29	LD	LIC	SALINA, KS	BLANK0000059140	339.6
No	K15DD-D	D29	LD	CP	WICHITA, KS	BLANK0000130643	276.7
Yes	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	277.2
Yes	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	223.0
No	KSFZ-LD	D29+	LD	CP	Springfield, MO	BLANK0000130705	138.7
No	KSFZ-LD	D29+	LD	LIC	Springfield, MO	BLANK0000116832	161.4
No	KXVO	D29	DT	LIC	OMAHA, NE	BLANK0000078842	468.1
No	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDT20081105ACO	315.7
No	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	167.6
Yes	KTZT-CD	D29	DC	LIC	TULSA, OK	BLDTA20120430AEA	167.6
No	K29JY-D	D29	LD	CP	VIAN, OK	BNPDTL20100504ALZ	184.0
No	WKNO	D29	DT	LIC	MEMPHIS, TN	BLCDT20060627ABE	471.5
No	KKAF-LD	D30	LD	LIC	FAYETTEVILLE, AR	BLANK0000062918	107.2
No	K30AL-D	D30	LD	LIC	IOLA, KS	BLDTT20090226ABD	107.4
Yes	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	10.6
Yes	KCLJ-LP	N30z	TX	LIC	JOPLIN/CARTHAGE, MO	BLTTA20050506ACG	10.6
No	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	216.2
No	K30OK-D	D30	LD	LIC	TULSA, OK	BLANK0000080580	167.9
No	KOTV-DT	D30	LD	LIC	TULSA, OK	BLCDT20120817ACF	124.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D29
Mask: Full Service
Latitude: 37 4 38.00 N (NAD83)
Longitude: 94 30 16.50 W
Height AMSL: 374.0 m
HAAT: 70.7 m
Peak ERP: 15.0 kW
Antenna: PSILP16BA 325.0 deg
Elev Pattern: Generic
Elec Tilt: 1.00

50.2 dBu contour:

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Exhibit E-2 - TVStudy Interference Study

Azimuth	ERP	HAAT	Distance
0.0 deg	13.0 kW	83.8 m	40.8 km
45.0	14.4	68.3	39.0
90.0	4.54	50.9	30.2
135.0	0.726	49.4	21.0
180.0	1.26	56.8	25.2
225.0	11.4	72.1	38.4
270.0	13.7	84.3	41.1
315.0	14.4	100.4	43.5

Distance to Canadian border: 1114.8 km

Distance to Mexican border: 1033.1 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 322.8 degrees Distance: 545.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 293.2 degrees Distance: 989.9 km

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 BLANK0000054317 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	10.6 km
	K28NT-D	D28z	LD	LIC	BENTONVILLE & ROGERS, AR	BLANK0000059138	77.1
	KARZ-TV	D28	DT	LIC	LITTLE ROCK, AR	BLANK0000074890	303.1
	KWKD-LP	N28+	TX	LIC	WICHITA, KS	BLTT20050801AHP	268.6
	KLMC-LP	N28+	TX	LIC	JEFFERSON CITY, MO	BLTTL20050613AFP	252.0
	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDT20070213ABB	128.9
	KTPX-TV	D28	DT	LIC	OKMULGEE, OK	BLCDT20020510AAQ	206.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
3580.8		180,591		3529.7		179,904	0.03 0.00
				Total IX		Unique IX, before	Unique IX, after
Undesired							
KJLN-LD D29 LD LIC		4.0		1,371		1.0	0
K28NT-D D28z LD LIC		53.1		652		28.1	456
KOZL-TV D28 DT LIC		392.6		10,069		339.5	9,501
KTPX-TV D28 DT LIC		47.1		439		10.0	36

Interference to BLCDT20070213ABB LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDT20070213ABB	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	138.7 km
	KFTA-TV	D27	DT	CP	FORT SMITH, AR	BLANK0000127614	198.6
	KOMU-TV	D27	DT	CP	COLUMBIA, MO	BLANK0000125105	195.1
	KARZ-TV	D28	DT	LIC	LITTLE ROCK, AR	BLANK0000074890	272.1
	WRBU	D28	DT	LIC	EAST ST. LOUIS, IL	BLANK0000108757	252.2
	KTPX-TV	D28	DT	LIC	OKMULGEE, OK	BLCDT20020510AAQ	322.7
	WREG-TV	D28	DT	LIC	MEMPHIS, TN	BLCDT20050513AAE	359.8
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	179.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
42082.3		993,835		41099.7		973,361	0.00 0.00
				40566.6		962,792	
						40565.6	962,792

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2

Exhibit E-2 - TVStudy Interference Study

Undesired		Total IX	Unique IX, before	Unique IX, after
KJLN-LD D29 LD LIC	5.0	107	1.0	0
KARZ-TV D28 DT LIC	22.1	2,138	9.1	1,197
WRBU D28 DT LIC	294.3	3,405	245.2	2,770
KTPX-TV D28 DT LIC	141.2	2,427	136.2	2,417
WREG-TV D28 DT LIC	84.2	3,607	50.2	2,554
KRCG D29 DT APP	54.5	568	32.3	216

Interference to BLCDDT20070213ABB LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDDT20070213ABB	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	138.7 km
	KFTA-TV	D27	DT	CP	FORT SMITH, AR	BLANK0000127614	198.6
	KOMU-TV	D27	DT	CP	COLUMBIA, MO	BLANK0000125105	195.1
	KARZ-TV	D28	DT	CP	LITTLE ROCK, AR	BLANK0000127609	272.1
	WRBU	D28	DT	LIC	EAST ST. LOUIS, IL	BLANK0000108757	252.2
	KTPX-TV	D28	DT	LIC	OKMULGEE, OK	BLCDDT20020510AAQ	322.7
	WREG-TV	D28	DT	LIC	MEMPHIS, TN	BLCDDT20050513AAE	359.8
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	179.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
42082.3	993,835	41099.7	973,361	40558.5
			962,139	40557.5
				962,139
				0.00
				0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
KJLN-LD D29 LD LIC	5.0	107	1.0	0
KARZ-TV D28 DT CP	46.2	2,984	17.1	1,850
WRBU D28 DT LIC	294.3	3,405	244.2	2,770
KTPX-TV D28 DT LIC	141.2	2,427	128.1	2,288
WREG-TV D28 DT LIC	84.2	3,607	46.2	2,505
KRCG D29 DT APP	54.5	568	32.3	216

Interference to BLANK0000049027 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	100.9 km
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	339.7
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	322.8
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDDT20081105ACO	295.4
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	152.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
11306.4	512,648	10566.4	505,544	10193.8
			501,105	10152.6
				500,252
				0.40
				0.17

Undesired		Total IX	Unique IX, before	Unique IX, after
KJLN-LD D29 LD LIC	124.6	2,184	41.2	853
KRCG D29 DT APP	15.1	61	7.0	0
KMBC-TV D29 DT LIC	50.2	722	13.1	209
KTUZ-TV D29 DT LIC	225.4	3,086	129.7	1,212
KTZT-CD D29 DC CP	206.7	2,755	114.0	991

Interference to BLANK0000049027 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	100.9 km
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	339.7
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	322.8
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDDT20081105ACO	295.4
	KTZT-CD	D29	DC	LIC	TULSA, OK	BLDTA20120430AEA	152.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
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3

Exhibit E-2 - TVStudy Interference Study

11306.4	512,648	10566.4	505,544	10305.8	502,096	10261.6	501,243	0.43	0.17
Undesired		Total IX		Unique IX, before		Unique IX, after			
KJLN-LD D29 LD LIC	124.6	2,184				44.2	853		
KRCG D29 DT APP	15.1	61	8.0	28	7.0	28			
KMBC-TV D29 DT LIC	50.2	722	18.1	301	8.0	190			
KTUZ-TV D29 DT LIC	225.4	3,086	192.2	2,596	150.0	1,792			
KTZT-CD D29 DC LIC	10.1	102	2.0	0	2.0	0			

Interference to BLANK0000127631 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	
Undesireds:							
	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	277.2 km
	WRBU	D28	DT	LIC	EAST ST. LOUIS, IL	BLANK0000108757	143.8
	KOZL-TV	D28	DT	LIC	SPRINGFIELD, MO	BLCDDT20070213ABB	179.9
	W29CI-D	D29	DC	LIC	SALEM, IL	BLDTA20120913AAP	269.2
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	213.9
Service area							
31047.1	746,566	30361.4	731,284	28824.9	686,599	28824.9	686,599
		Terrain-limited		IX-free, before		IX-free, after	
						Percent New IX	
						0.00	

Undesired		Total IX		Unique IX, before		Unique IX, after	
KJLN-LD D29 LD LIC	1.0	0			0.0	0	
WRBU D28 DT LIC	180.5	12,992	167.4	12,199	167.4	12,199	
KOZL-TV D28 DT LIC	13.1	669	6.1	106	6.1	106	
W29CI-D D29 DC LIC	10.0	689	4.0	71	4.0	71	
KMBC-TV D29 DT LIC	1353.0	31,691	1338.9	30,953	1337.9	30,953	

Interference to BLCDDT20090618ACY LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	
Undesireds:							
	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	223.0 km
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	213.9
	KXVO	D29	DT	LIC	OMAHA, NE	BLANK0000078842	264.4
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	350.4
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	6.8
Service area							
34003.1	2,511,626	33505.8	2,509,773	31279.1	2,476,661	31277.1	2,476,661
		Terrain-limited		IX-free, before		IX-free, after	
						Percent New IX	
						0.01	

Undesired		Total IX		Unique IX, before		Unique IX, after	
KJLN-LD D29 LD LIC	10.1	22			2.0	0	
KRCG D29 DT APP	1559.1	12,979	1339.1	11,815	1332.1	11,795	
KXVO D29 DT LIC	737.4	18,051	551.5	16,545	551.5	16,545	
KPXE-TV D30 DT LIC	160.1	3,910	107.1	2,926	107.1	2,926	

Interference to BLDTA20120430AEA LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTZT-CD	D29	DC	LIC	TULSA, OK	BLDTA20120430AEA	
Undesireds:							
	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	167.6 km
	KTPX-TV	D28	DT	LIC	OKMULGEE, OK	BLCDDT20020510AAQ	37.7
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	152.0
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDDT20081105ACO	150.0
Service area							
3994.0	750,003	3893.3	748,904	3389.9	734,626	3389.9	734,626
		Terrain-limited		IX-free, before		IX-free, after	
						Percent New IX	
						0.00	

Undesired		Total IX		Unique IX, before		Unique IX, after	
KJLN-LD D29 LD LIC	1.0	32			0.0	0	
KTPX-TV D28 DT LIC	305.5	9,212	176.1	5,004	176.1	5,004	
KWOG D29 DT LIC	16.2	208	5.1	32	4.0	0	

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Exhibit E-2 - TVStudy Interference Study

KTUZ-TV D29 DT LIC 322.2 9,242 183.8 4,858 183.8 4,858

Interference to BDFCDTA20100813CAI CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	10.6 km
	KSFZ-LD	D29+	LD	CP	Springfield, MO	BLANK0000130705	128.9
	KKAF-LD	D30	LD	LIC	FAYETTEVILLE, AR	BLANK0000062918	102.2
	K30AL-D	D30	LD	LIC	IOLA, KS	BLDTT20090226ABD	115.2
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	219.2
	KWBM	D31	DT	CP	HARRISON, AR	BLANK0000036086	124.1
	KPJO-LD	D31	LD	LIC	PITTSBURG, KS	BLANK0000080011	30.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
5509.6 208,874	5461.5 208,537	5386.5 208,061	5379.5 206,417	0.13 0.79

Undesired	Total IX	Unique IX, before	Unique IX, after
KJLN-LD D29 LD LIC	7.0 1,644	7.0 1,644	
KKAF-LD D30 LD LIC	20.1 110	12.0 60	12.0 60
K30AL-D D30 LD LIC	2.0 14	0.0 0	0.0 0
KPXE-TV D30 DT LIC	40.1 290	31.1 226	31.1 226
KPJO-LD D31 LD LIC	22.9 126	22.9 126	22.9 126

Interference to BLTTA20050506ACG LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KCLJ-LP	N30z	TX	LIC	JOPLIN/CARTHAGE, MO	BLTTA20050506ACG	
Undesireds:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	10.6 km
	K30AL-D	D30	LD	LIC	IOLA, KS	BLDTT20090226ABD	115.2
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	219.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
653.7 102,247	651.7 102,203	646.7 101,874	644.7 101,673	0.31 0.20

Undesired	Total IX	Unique IX, before	Unique IX, after
KJLN-LD D29 LD LIC	5.0 282	2.0 201	
K30AL-D D30 LD LIC	5.0 329	4.0 292	2.0 248
KPXE-TV D30 DT LIC	1.0 37	0.0 0	0.0 0

Interference to proposal scenario 1
7.09% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	
Undesireds:	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	10.6 km
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	100.9
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	277.2
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	223.0
	KSFZ-LD	D29+	LD	CP	Springfield, MO	BLANK0000130705	138.7
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDT20081105ACO	315.7
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	167.6
	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	10.6

Service area	Terrain-limited	IX-free	Percent IX
3975.0 205,804	3962.0 204,057	3248.7 189,581	18.00 7.09

Undesired	Total IX	Unique IX	Prct Unique IX
KJPX-LP D28+ LD CP	9.0 443	0.0 0	0.00 0.00
KWOG D29 DT LIC	4.0 22	1.0 14	0.03 0.01
KRCG D29 DT APP	1.0 0	0.0 0	0.00 0.00
KMBC-TV D29 DT LIC	18.0 932	6.0 80	0.15 0.04
KSFZ-LD D29+ LD CP	1.0 0	1.0 0	0.03 0.00
KTUZ-TV D29 DT LIC	1.0 0	0.0 0	0.00 0.00

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5

Exhibit E-2 - TVStudy Interference Study

KCLJ-LP D30 LD CP 703.3 14,374 687.3 13,522 17.35 6.63

Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	
Undesireds:	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	10.6 km
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	100.9
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	277.2
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	223.0
	KSFZ-LD	D29+	LD	CP	Springfield, MO	BLANK0000130705	138.7
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDDT20081105ACO	315.7
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	167.6

Service area	Terrain-limited	IX-free	Percent IX
3975.0 205,804	3962.0 204,057	3936.0 203,103	0.66 0.47

Undesired	Total IX	Unique IX	Prcnt Unique IX
KJPX-LP D28+ LD CP	9.0 443	5.0 8	0.13 0.00
KWOG D29 DT LIC	4.0 22	1.0 14	0.03 0.01
KRCG D29 DT APP	1.0 0	1.0 0	0.03 0.00
KMBC-TV D29 DT LIC	18.0 932	11.0 489	0.28 0.24
KSFZ-LD D29+ LD CP	1.0 0	1.0 0	0.03 0.00
KTUZ-TV D29 DT LIC	1.0 0	0.0 0	0.00 0.00

Interference to proposal scenario 3

7.09% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	
Undesireds:	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	10.6 km
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	100.9
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	277.2
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	223.0
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDDT20081105ACO	315.7
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	167.6
	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	10.6

Service area	Terrain-limited	IX-free	Percent IX
3975.0 205,804	3962.0 204,057	3249.7 189,581	17.98 7.09

Undesired	Total IX	Unique IX	Prcnt Unique IX
KJPX-LP D28+ LD CP	9.0 443	0.0 0	0.00 0.00
KWOG D29 DT LIC	4.0 22	1.0 14	0.03 0.01
KRCG D29 DT APP	1.0 0	0.0 0	0.00 0.00
KMBC-TV D29 DT LIC	18.0 932	6.0 80	0.15 0.04
KTUZ-TV D29 DT LIC	1.0 0	0.0 0	0.00 0.00
KCLJ-LP D30 LD CP	703.3 14,374	687.3 13,522	17.35 6.63

Interference to proposal scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	
Undesireds:	KJPX-LP	D28+	LD	CP	JOPLIN, MO	BLANK0000054317	10.6 km
	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	100.9
	KRCG	D29	DT	APP	JEFFERSON CITY, MO	BLANK0000127631	277.2
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDDT20090618ACY	223.0
	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDDT20081105ACO	315.7
	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000036113	167.6

Service area	Terrain-limited	IX-free	Percent IX
3975.0 205,804	3962.0 204,057	3937.0 203,103	0.63 0.47

Undesired	Total IX	Unique IX	Prcnt Unique IX

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Exhibit E-2 - TVStudy Interference Study

KJPX-LP D28+ LD CP	9.0	443	5.0	8	0.13	0.00
KWOG D29 DT LIC	4.0	22	1.0	14	0.03	0.01
KRCG D29 DT APP	1.0	0	1.0	0	0.03	0.00
KMBC-TV D29 DT LIC	18.0	932	11.0	489	0.28	0.24
KTUZ-TV D29 DT LIC	1.0	0	0.0	0	0.00	0.00

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