

ENGINEERING EXHIBIT

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

prepared for

Gray Television Licensee, LLC
KJTB-LD Paragould, AR
Facility ID 188803
Ch. 36 15 kW Directional

Gray Television Licensee, LLC (“*Gray*”) is the licensee of digital Low Power Television station KJTB-LD, Channel 36, Facility ID 188803, Paragould AR. KJTB-LD is licensed to operate at 15 kW effective radiated power (“ERP”) with a directional antenna (file# 0000166715, granted November 10, 2021). A Construction Permit (“CP” file# 0000218623) authorizes relocation of KJTB-LD and use of an alternate directional antenna at 5 kW ERP. *Gray* herein seeks a minor modification of the CP to specify a different site at increased ERP.

The proposed KJTB-LD facility will employ an antenna to be side-mounted on an existing tower structure having an overall height above ground level (“AGL”) of 27.4 meters. The structure does not require an FCC Antenna Structure Registration number since its overall height is less than 61 meters above ground and the structure passes the FCC’s “TOWAIR” slope test program. The proposed location, 5.2 km (3.2 miles) from the licensed site, is at the studio location for KJTB-LD and *Gray*’s full power television station KAIT (Facility ID 13988, Jonesboro AR). No change to the overall structure height is proposed.

As with the current CP, the proposed antenna is a Dielectric model DLP-8B having horizontal polarization. The proposed ERP is 15 kW using a “full service” out of channel emission mask. A plot of the directional antenna’s azimuthal pattern is supplied in Figure 1. Figure 2 depicts the coverage contour of the proposed facility as well as that of the licensed facility, demonstrating compliance with §73.3572 for a minor change.

Interference study per OET Bulletin 69¹ 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 25 percent antenna relative field in downward elevations (pattern data shows 25 percent or less relative field at angles 10 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 AGL is $84.1 \mu\text{W/cm}^2$, which is 20.8 percent of the general population / uncontrolled maximum permissible exposure limit.

The only other emitter that may affect locations near the site is that of the FM radio translator station K218DE (Ch. 218, Jonesboro AR, Fac ID 92689) which is located on an adjacent tower structure. The K218DE license (file# BLFT-20010919AAN) authorizes operation at 0.25 kW ERP with a vertically polarized antenna centered 59 meters AGL. According to the FCC's "FMMModel" software analysis² for the worst-case (a single EPA Type 1 antenna element) the maximum calculated RF electromagnetic field at two meters above ground level attributable to K218DE is $2.6 \mu\text{W/cm}^2$, which is 1.3 percent of the general population / uncontrolled maximum permitted exposure limit. Summing the individual contributions from KJTB-LD and K218DE, the total maximum calculated RF density at two meters above ground level near the proposed site will be 22.1 percent of the FCC's uncontrolled / general population maximum permissible exposure limit.

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, 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.

²"Office of Engineering and Technology Announces Updates to FMMModel Software," Public Notice, DA 16-340, March 31, 2016. FMMModel is available at <https://www.fcc.gov/oet/software/fmmmodel>.

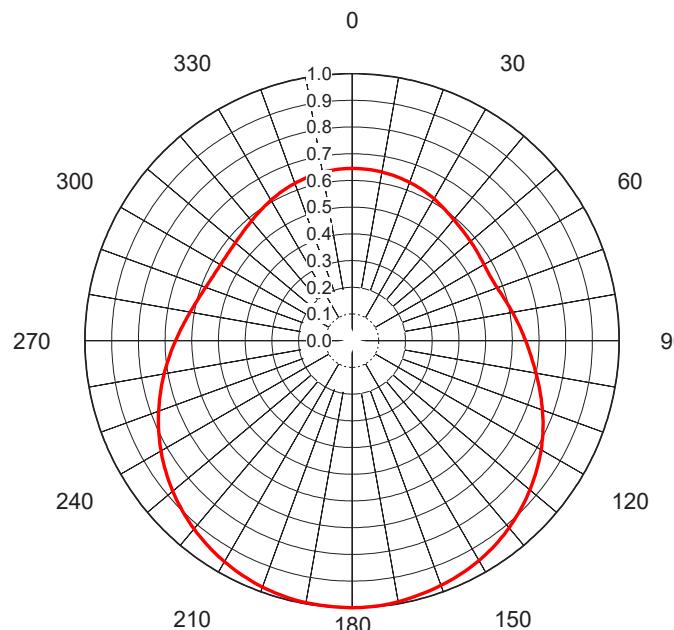
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation 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.

List of Attachments

- | | |
|-----------|---|
| Figure 1 | Antenna Azimuthal Pattern |
| Figure 2 | 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. 207 Old Dominion Road	December 7, 2023 Yorktown, VA 23692	703-650-9600
--	--	--------------



AZIMUTH PATTERN Horizontal Polarization

Proposal No. **20231205jmd**
 Date **6-Dec-23**
 Call Letters **KJTB-LD**
 Channel **36**
 Frequency **605 MHz**
 Antenna Type **DLP-8B**
 Gain **1.76 (2.45dB)**
 Calculated

Pattern Number **TLP-B-36 Hpol**

Deg	Value																
0	0.645	36	0.600	72	0.584	108	0.747	144	0.930	180	1.000	216	0.935	252	0.759	288	0.589
1	0.645	37	0.598	73	0.587	109	0.753	145	0.934	181	1.000	217	0.932	253	0.754	289	0.586
2	0.645	38	0.596	74	0.590	110	0.759	146	0.938	182	0.999	218	0.928	254	0.748	290	0.583
3	0.645	39	0.594	75	0.593	111	0.765	147	0.941	183	0.999	219	0.924	255	0.742	291	0.581
4	0.645	40	0.592	76	0.596	112	0.771	148	0.944	184	0.999	220	0.920	256	0.737	292	0.579
5	0.644	41	0.590	77	0.600	113	0.777	149	0.948	185	0.998	221	0.916	257	0.731	293	0.577
6	0.644	42	0.589	78	0.603	114	0.783	150	0.951	186	0.998	222	0.912	258	0.726	294	0.575
7	0.643	43	0.587	79	0.607	115	0.789	151	0.954	187	0.998	223	0.908	259	0.720	295	0.574
8	0.643	44	0.586	80	0.610	116	0.795	152	0.956	188	0.997	224	0.904	260	0.714	296	0.573
9	0.642	45	0.584	81	0.614	117	0.801	153	0.959	189	0.996	225	0.899	261	0.709	297	0.571
10	0.641	46	0.583	82	0.618	118	0.806	154	0.962	190	0.996	226	0.895	262	0.703	298	0.570
11	0.640	47	0.582	83	0.622	119	0.812	155	0.964	191	0.995	227	0.890	263	0.698	299	0.569
12	0.640	48	0.581	84	0.625	120	0.817	156	0.966	192	0.994	228	0.886	264	0.692	300	0.569
13	0.639	49	0.580	85	0.629	121	0.823	157	0.968	193	0.993	229	0.881	265	0.687	301	0.568
14	0.638	50	0.579	86	0.633	122	0.828	158	0.971	194	0.992	230	0.876	266	0.682	302	0.568
15	0.637	51	0.578	87	0.637	123	0.834	159	0.973	195	0.990	231	0.872	267	0.676	303	0.568
16	0.636	52	0.577	88	0.641	124	0.839	160	0.975	196	0.989	232	0.867	268	0.671	304	0.568
17	0.634	53	0.576	89	0.646	125	0.844	161	0.977	197	0.987	233	0.862	269	0.666	305	0.568
18	0.633	54	0.575	90	0.650	126	0.849	162	0.979	198	0.985	234	0.857	270	0.661	306	0.568
19	0.632	55	0.574	91	0.654	127	0.854	163	0.980	199	0.983	235	0.852	271	0.656	307	0.569
20	0.631	56	0.573	92	0.659	128	0.859	164	0.982	200	0.981	236	0.847	272	0.651	308	0.569
21	0.629	57	0.572	93	0.663	129	0.864	165	0.984	201	0.979	237	0.842	273	0.646	309	0.570
22	0.628	58	0.572	94	0.668	130	0.869	166	0.986	202	0.977	238	0.836	274	0.641	310	0.571
23	0.626	59	0.571	95	0.673	131	0.874	167	0.988	203	0.975	239	0.831	275	0.637	311	0.572
24	0.625	60	0.570	96	0.678	132	0.879	168	0.990	204	0.972	240	0.826	276	0.632	312	0.573
25	0.623	61	0.570	97	0.683	133	0.883	169	0.991	205	0.970	241	0.820	277	0.628	313	0.574
26	0.621	62	0.570	98	0.688	134	0.888	170	0.993	206	0.967	242	0.815	278	0.624	314	0.575
27	0.619	63	0.570	99	0.694	135	0.893	171	0.994	207	0.964	243	0.810	279	0.619	315	0.577
28	0.618	64	0.570	100	0.699	136	0.897	172	0.995	208	0.961	244	0.804	280	0.615	316	0.578
29	0.616	65	0.571	101	0.705	137	0.902	173	0.996	209	0.958	245	0.799	281	0.612	317	0.580
30	0.613	66	0.572	102	0.711	138	0.906	174	0.997	210	0.955	246	0.793	282	0.608	318	0.582
31	0.611	67	0.573	103	0.716	139	0.910	175	0.998	211	0.952	247	0.787	283	0.604	319	0.584
32	0.609	68	0.575	104	0.722	140	0.914	176	0.999	212	0.949	248	0.782	284	0.601	320	0.586
33	0.607	69	0.577	105	0.728	141	0.919	177	0.999	213	0.946	249	0.776	285	0.597	321	0.588
34	0.605	70	0.579	106	0.734	142	0.923	178	0.999	214	0.942	250	0.771	286	0.594	322	0.590
35	0.602	71	0.581	107	0.740	143	0.927	179	1.000	215	0.939	251	0.765	287	0.591	323	0.592

Figure 1
Antenna Azimuthal Pattern
KJTB-LD Paragould, AR
Facility ID 188803
Ch. 36 15 kW Directional

prepared for
Gray Television Licensee, LLC

December, 2023



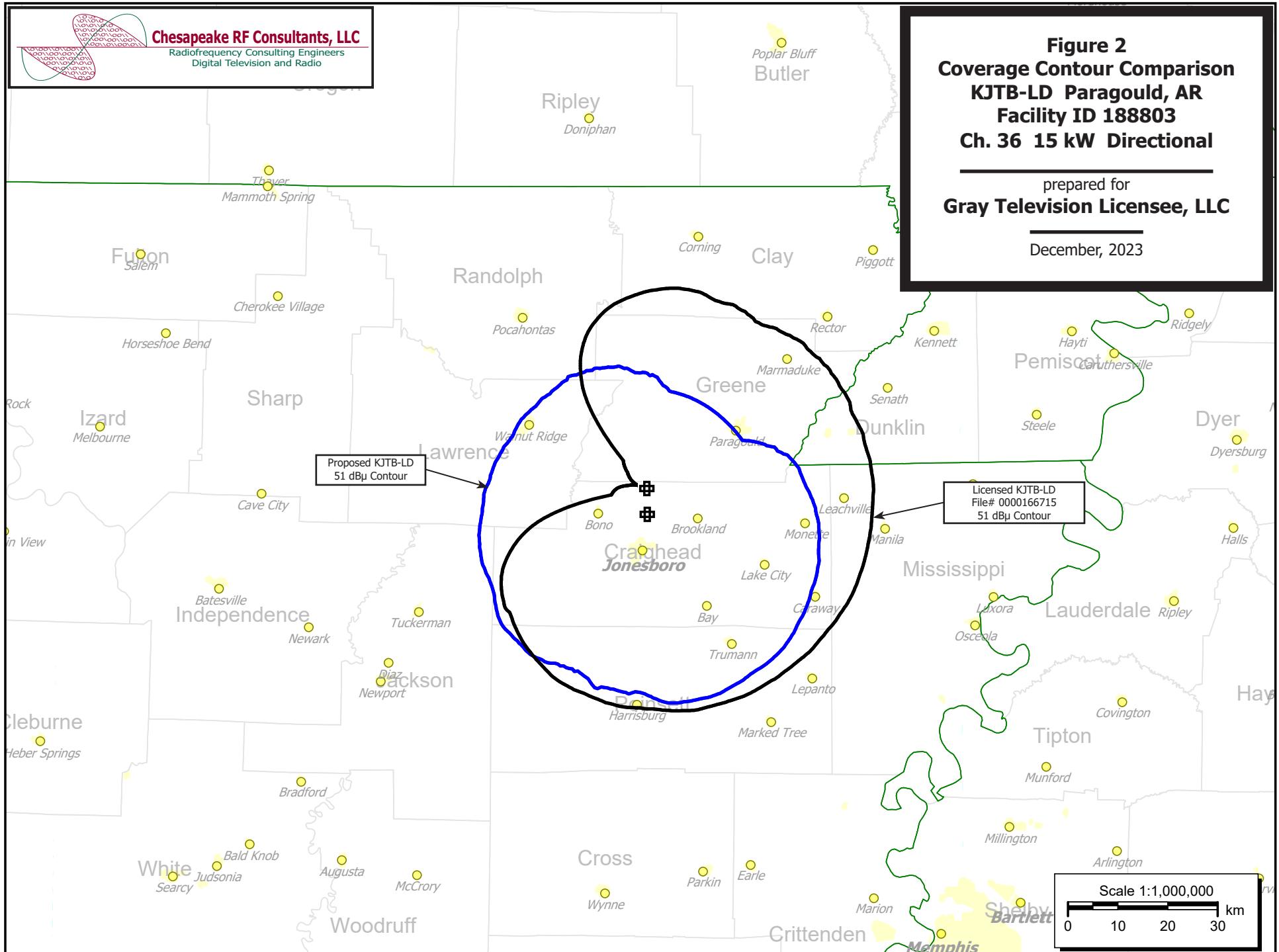


Table 1 KJTB-LD TVStudy Analysis of Proposal
 (page 1 of 4)



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

tvstudy v2.2.5 (4uoc83)
 Database: localhost, Study: KJTB-LD Studio, Model: Longley-Rice
 Start: 2023.12.06 14:43:17

Study created: 2023.12.06 14:43:16

Study build station data: LMS TV 2023-12-04

Proposal: KJTB-LD D36 LD APP PARAGOULD, AR
 File number: KJTB-LD Studio
 Facility ID: 188803
 Station data: User record
 Record ID: 225
 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
Yes	KJBW-LD	D35	LD	LIC	PARAGOULD, AR	BLANK0000170679	5.2 km
No	KJBW-LD	D35	LD	CP	PARAGOULD, AR	BLANK0000218608	49.1
No	WBBJ-TV	D35	DT	LIC	JACKSON, TN	BLANK0000116047	182.9
No	WSES	D36	DT	LIC	TUSCALOOSA, AL	BLANK0000191494	402.1
No	KLMB-CD	D36z	DC	LIC	EL DORADO, AR	BLANK0000146580	349.8
No	KFFS-CD	D36	DC	LIC	FAYETTEVILLE, AR	BLANK0000055356	315.2
Yes	KKAP	D36	DT	LIC	LITTLE ROCK, AR	BLEDT20090522AFW	204.6
No	K36MU-D	D36	LD	LIC	TEXARKANA, AR	BLANK0000179477	376.3
No	W36EX-D	D36	DC	LIC	ALTON, IL	BLANK0000132189	338.9
No	WEIN-LD	D36	LD	LIC	EVANSVILLE, IN	BLANK0000164457	361.7
No	KBNS-CD	D36	DC	LIC	BRANSON, MO	BLDTL20100315ADB	239.7
Yes	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	BLANK0000115700	194.8
No	KGKM-LD	D36	LD	LIC	COLUMIA, MO	BLANK0000179478	350.4
No	K36II-D	D36	LD	LIC	JOPLIN, MO	BLDTL20101022ACG	358.7
No	DK36NJ-D	D36	LD	APP	MONETT, MO	BLANK0000058924	310.9
No	KPTN-LD	D36	DC	LIC	ST. LOUIS, MO	BLDTA20111003APE	298.2
Yes	K36NN-D	D36	LD	LIC	WEST PLAINS, MO	BLANK0000059299	140.6
Yes	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	200.8
No	WLOO	D36	DT	LIC	VICKSBURG, MS	BLANK0000063959	411.5
No	KDOR-TV	D36	DT	LIC	BARTLESVILLE, OK	BLANK0000067842	460.3
No	WTVF	D36	DT	LIC	NASHVILLE, TN	BLANK0000115766	353.1
No	K27OY-D	N39+	TX	LIC	MEMPHIS, TN	BLTT19930329IE	101.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D36
 Mask: Full Service
 Latitude: 35 54 26.50 N (NAD83)
 Longitude: 90 41 36.10 W
 Height AMSL: 152.4 m
 HAAT: 0.0 m
 Peak ERP: 15.0 kW
 Antenna: Dielectric-DLP-8B (ID 1010939) 180.0 deg
 Elev Pattn: Generic
 Elec Tilt: 1.00

50.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	6.24 kW	40.8 m	28.4 km
45.0	5.14	23.2	24.6
90.0	6.34	65.4	33.8
135.0	11.9	72.3	38.0
180.0	15.0	54.8	36.1
225.0	12.1	61.3	36.3
270.0	6.55	60.5	33.2

Table 1 KJTB-LD TVStudy Analysis of Proposal
(page 2 of 4)



315.0 5.02 57.3 31.4

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 54 m

Distance to Canadian border: 933.8 km

Distance to Mexican border: 1200.3 km

Conditions at FCC monitoring station: Powder Springs GA
Bearing: 110.9 degrees Distance: 589.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 294.6 degrees Distance: 1353.9 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 BLANK0000170679 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KJBW-LD	D35	LD	LIC	PARAGOULD, AR	BLANK0000170679	
Undesireds:	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	5.2 km
	WBBJ-TV	D35	DT	LIC	JACKSON, TN	BLANK0000116047	183.9
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
3635.2	150,941	3629.1	150,890	3617.0	150,748	3615.0	150,689
Undesired	KJTB-LD D36 LD APP	3.0	Total IX	129	Unique IX, before	Unique IX, after	
	WBBJ-TV D35 DT LIC	12.1		142	12.1	2.0	59
					142	11.1	72

Interference to BLEDT20090522AFW LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KKAP	D36	DT	LIC	LITTLE ROCK, AR	BLEDT20090522AFW	
Undesireds:	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	204.6 km
	KRAH-CD	D35	DC	LIC	PARIS, AR	BLANK0000127224	84.0
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	261.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
18330.5	955,951	17333.6	921,995	17166.0	916,852	17164.0	916,786
Undesired	KJTB-LD D36 LD APP	5.0	Total IX	388	Unique IX, before	Unique IX, after	
	KRAH-CD D35 DC LIC	147.7		4,605	147.7	2.0	66
	WMAV-TV D36 DT LIC	19.9		538	19.9	4,605	216
					538	17.0	

Interference to BLANK0000115700 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	BLANK0000115700	
Undesireds:	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	194.8 km
	KSDK	D35	DT	LIC	ST. LOUIS, MO	BLANK0000158259	145.7
	W36EX-D	D36	DC	LIC	ALTON, IL	BLANK0000132189	174.8
	WCCU	D36	DT	LIC	URBANA, IL	BLANK0000203559	328.7
	WAVE	D36	DT	LIC	LOUISVILLE, KY	BLANK0000197265	344.4
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	346.5
	WTVF	D36	DT	LIC	NASHVILLE, TN	BLANK0000115766	277.3

Table 1 KJTB-LD TVStudy Analysis of Proposal
 (page 3 of 4)

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
35380.9	756,105	34925.6	753,626	34393.6	746,808	34391.6	746,749	0.01 0.01
Undesired		Total IX		Unique IX, before		Unique IX, after		
KJTB-LD D36 LD APP		3.0	108			2.0	59	
KSDK D35 DT LIC		16.1	33	10.1	33	10.1	33	
W36EX-D D36 DC LIC		49.4	940	43.4	940	43.4	940	
WCCU D36 DT LIC		5.1	12	0.0	0	0.0	0	
WAVE D36 DT LIC		72.7	349	19.2	77	19.2	77	
WMAV-TV D36 DT LIC		2.0	71	1.0	22	1.0	22	
WTVF D36 DT LIC		451.3	5,746	397.8	5,425	397.8	5,425	

 Interference to BLANK0000059299 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance	
	K36NN-D	D36	LD	LIC	WEST PLAINS, MO	BLANK0000059299		
Undesireds:	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	140.6 km	
	KJBW-LD	D35	LD	LIC	PARAGOULD, AR	BLANK0000170679	137.1	
	KBNS-CD	D36	DC	LIC	BRANSON, MO	BLDTL20100315ADB	116.1	
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	BLANK0000115700	216.8	
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
5623.4	61,615	5432.8	59,761	5429.8	59,738	5420.7	59,683	0.17 0.09
Undesired		Total IX		Unique IX, before		Unique IX, after		
KJTB-LD D36 LD APP		9.0	55			9.0	55	
KBNS-CD D36 DC LIC		2.0	23	2.0	23	2.0	23	
KBSI D36 DT LIC		1.0	0	1.0	0	1.0	0	

 Interference to BLEDT20090612AAK LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance	
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK		
Undesireds:	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	200.8 km	
	WSES	D36	DT	LIC	TUSCALOOSA, AL	BLANK0000191494	228.5	
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	BLANK0000115700	346.5	
	WLOO	D36	DT	LIC	VICKSBURG, MS	BLANK0000063959	239.3	
	WTVF	D36	DT	LIC	NASHVILLE, TN	BLANK0000115766	344.0	
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
24250.4	1,004,490	24217.3	1,004,307	23737.1	994,230	23737.1	994,230	0.00 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after		
KJTB-LD D36 LD APP		3.0	346			0.0	0	
WSES D36 DT LIC		381.9	8,063	296.2	6,961	296.2	6,961	
KBSI D36 DT LIC		12.0	1,709	3.0	1,361	2.0	1,361	
WLOO D36 DT LIC		158.9	1,081	94.2	653	94.2	653	
WTVF D36 DT LIC		24.1	513	1.0	0	1.0	0	

 Interference to proposal scenario 1

7.75% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	
Undesireds:	KJBW-LD	D35	LD	LIC	PARAGOULD, AR	BLANK0000170679	5.2 km
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	BLANK0000115700	194.8
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	200.8
Service area		Terrain-limited		IX-free		Percent IX	
3433.2	137,718	3433.2	137,718	3391.9	127,041	1.21	7.75
Undesired		Total IX		Unique IX		Prcnt Unique IX	
KJBW-LD D35 LD LIC		37.4	10,668	34.4	9,586	1.00	6.96
KBSI D36 DT LIC		7.0	1,091	3.0	0	0.09	0.00
WMAV-TV D36 DT LIC		1.0	9	0.0	0	0.00	0.00

Table 1 KJTB-LD TVStudy Analysis of Proposal
 (page 4 of 4)



Interference to proposal scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KJTB-LD	D36	LD	APP	PARAGOULD, AR	KJTB-LD Studio	
Undesireds:	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	BLANK0000115700	194.8 km
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	200.8
	Service area		Terrain-limited			IX-free	Percent IX
3433.2	137,718	3433.2	137,718	3426.2	136,627	0.20	0.79
Undesired			Total IX		Unique IX	Prcnt Unique IX	
KBSI D36 DT LIC		7.0	1,091	6.0	1,082	0.18	0.79
WMAV-TV D36 DT LIC		1.0	9	0.0	0	0.00	0.00

Channel and Facility Information

Section	Question	Response
Facility ID	188803	
State	Arkansas	
City	PARAGOULD	
LPD Channel	36	

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	No
	ASR Number	
Coordinates (NAD83)	Latitude	35° 54' 26.5" N+
	Longitude	090° 41' 36.1" W-
	Structure Type	LTOWER-Lattice Tower
	Overall Structure Height	27.4 meters
	Support Structure Height	24.4 meters
	Ground Elevation (AMSL)	131.1 meters
Antenna Data	Height of Radiation Center Above Ground Level	21.3 meters
	Height of Radiation Center Above Mean Sea Level	152.4 meters
	Effective Radiated Power	15 kW

Antenna Technical Data	Section	Question	Response
	Antenna Type	Antenna Type	Directional Custom
		Do you have an Antenna ID?	Yes
		Antenna ID	1010939
	Antenna Manufacturer and Model	Manufacturer:	Dielectric
		Model	DLP-8B
		Rotation	180 degrees
		Electrical Beam Tilt	1.0
		Mechanical Beam Tilt	Not Applicable
		toward azimuth	
		Polarization	Horizontal
	Elevation Radiation 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	
		Out-of-Channel Emission Mask:	Full Service

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	1.000	90	0.661	180	0.645	270	0.650
10	0.996	100	0.615	190	0.641	280	0.699
20	0.981	110	0.583	200	0.631	290	0.759
30	0.955	120	0.569	210	0.613	300	0.817
40	0.920	130	0.571	220	0.592	310	0.869
50	0.876	140	0.586	230	0.579	320	0.914
60	0.826	150	0.607	240	0.570	330	0.951
70	0.771	160	0.627	250	0.579	340	0.975
80	0.714	170	0.640	260	0.610	350	0.993

Additional Azimuths

Degree	V _A