



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
POST REPACK CONSTRUCTION PERMIT
KBSI - CAPE GIRARDEAU, MISSOURI
DTV - CH. 36 - 1000 kW - 543 m HAAT**

Prepared for: KBSI LICENSEE L. P.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

GENERAL

This office has been authorized by KBSI LICENSEE L. P., licensee of KBSI, channel 22, facility ID number 19593, licensed to Cape Girardeau, Missouri, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for construction permit, in accordance with the Incentive Auction Closing and Channel Reassignment Public Notice, DA 17-314, and the technical information provided in the confidential reassignment letter from the FCC announcing the substitution of DTV channel 36 for DTV channel 22 to be used by KBSI for its post-reassignment broadcasting.

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DIRECTIONAL ANTENNA

The applicant proposes to install a new Dielectric model TFU-26ETT/VP-R 3S220 SP elliptically polarized directional transmitting antenna with its center of radiation located at a height above ground of 468.6 meters, and a height above average terrain of 543 meters. The antenna manufacturer's directional horizontal plane azimuth radiation pattern for the horizontally polarized component is shown and tabulated in exhibit 2. The manufacturer's horizontal plane azimuth pattern for the vertically polarized component is shown and tabulated in exhibit 3. The manufacturer's vertical plane elevation radiation pattern, illustrating the antenna's radiation characteristics above and below the horizontal plane is shown and tabulated in Exhibit 4.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 1 shows the predicted Noise Limited (40.86 dBu) contour, and the principal community (48 dBu) contour. The 48 dBu contour completely encompasses the principal community of license, Cape Girardeau, Missouri.

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ALLOCATION CONSIDERATIONS

Post-Transition DTV Considerations

A study was performed, using the FCC's software, tv_study, v. 2.2.2, to determine if the instant application for construction permit is predicted to cause new prohibited interference to post reassignment DTV stations, construction permits, DTV allotments or Class A DTV stations. The study results, shown in Appendix B, indicate that the instant application for construction permit is predicted to cause no new interference exceeding 0.5% to the populations served by any post reassignment DTV station, construction permit, allotment or Class A DTV stations. The study also shows that KBSI's proposed service area is within the baseline plus 1%. (See Appendix B)

International DTV Considerations

The KBSI site is located more than 700 kilometers from the nearest point on either the US-Canadian border, or the US-Mexican border. Therefore, there are no international considerations required.

BLANKETING AND INTERMODULATION INTERFERENCE

Other broadcast and non-broadcast facilities are either co-located with, or located within 10 km of the proposed KBSI site. The applicant does recognize its responsibility to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

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RADIO FREQUENCY IMPACT

The FCC's guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986) and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines define a maximum permissible exposure (MPE) level for occupational or "controlled" situations, and for "uncontrolled" environments that apply in all other cases that might affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance to determine whether FCC-regulated transmitting facilities, operations or devices comply with guidelines for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. OET Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The Maximum Permitted Exposure (MPE) level for broadcast facilities that operate on a frequency between 30 MHZ and 300 MHZ is 200 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) for an "uncontrolled" environment, and is 1000 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) for a "controlled" environment. The MPE level for broadcast facilities that operate on a frequency between 300 MHZ and 1500 MHZ, primarily UHF TV stations, is determined for an "uncontrolled" environment by dividing the operating frequency in MHZ by 1.5, and is similarly determined for a "controlled" environment by dividing the operating

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frequency in MHZ by 0.3.

The predicted emissions of KBSI must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For KBSI, which will operate on television Channel 36 (602-608 MHZ), the MPE is 403.3 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an "uncontrolled" environment and 2,016.7 $\mu\text{W}/\text{cm}^2$ in a "controlled" environment. The proposed KBSI facility will operate with a maximum ERP of 1000 kW from an elliptically polarized directional transmitting antenna with a centerline height of 468.6 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the KBSI facility is predicted to produce a power density at two meters above ground level of 27.62 $\mu\text{W}/\text{cm}^2$, which is 6.85% of the FCC guideline value for an "uncontrolled" environment, and 1.37% of the FCC's guideline value for "controlled" environments. There is one FM station also located at the KBSI site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 77.80% of the limit applicable to "uncontrolled" environments, and 15.56% of the limit for "controlled" environments. (See Appendix A)

OCCUPATIONAL SAFETY

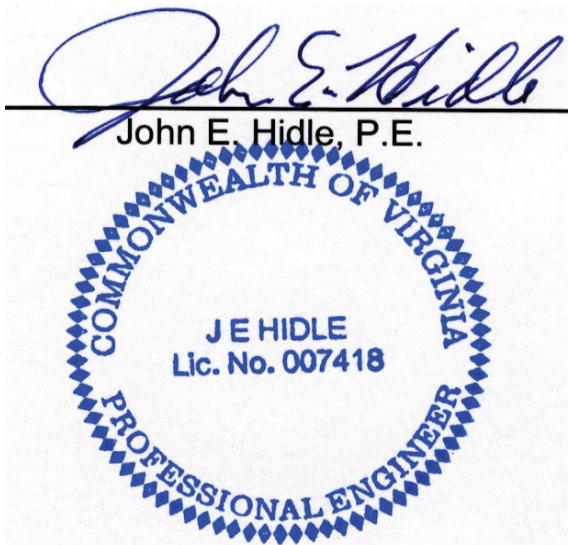
The licensee of KBSI is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KBSI antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

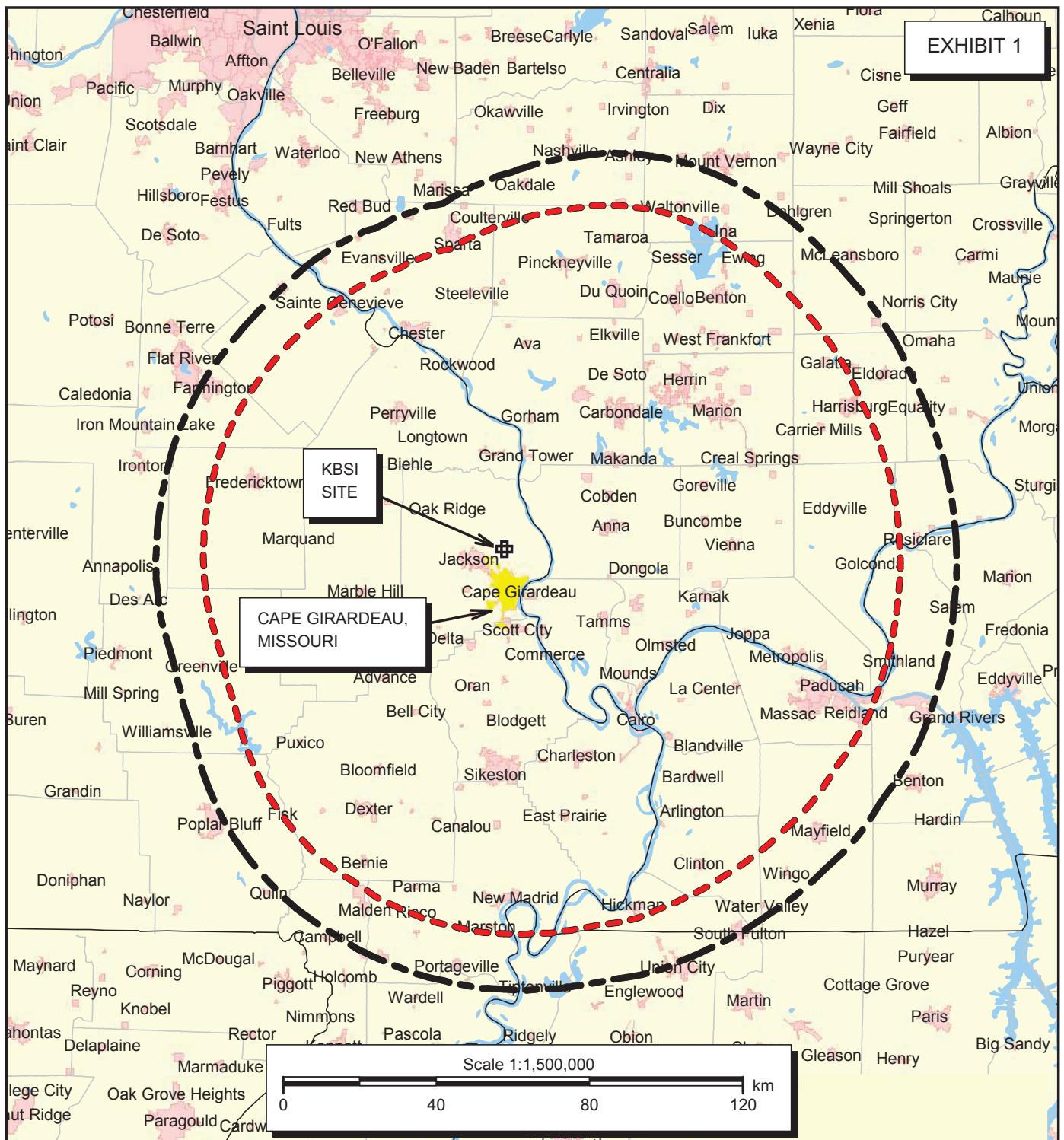
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SUMMARY

It is submitted that the instant application for construction permit to change KBSI from channel 22 to channel 36, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: June 9, 2017





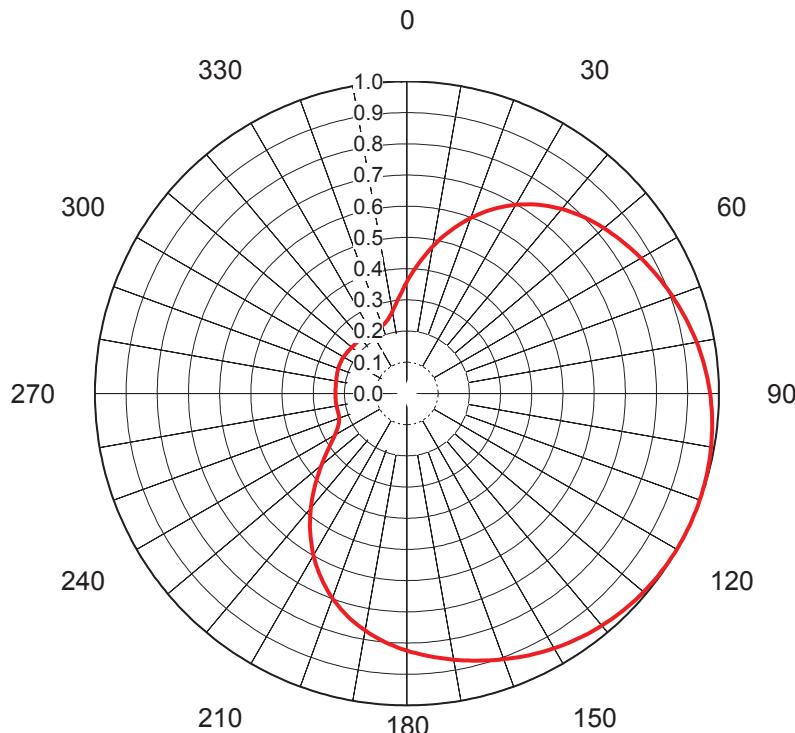
PREDICTED COVERAGE CONTOURS

KBSI - CAPE GIRARDEAU, MISSOURI
 DTV Channel 36 - 1000 kW ERP - 543 M HAAT
 JUNE, 2017

Predicted Noise Limited 40.86 dBu
 F(50,90) Coverage Contour



Predicted Principal Community 48 dBu
 F(50,90) Coverage Contour



AZIMUTH PATTERN Horizontal Polarization

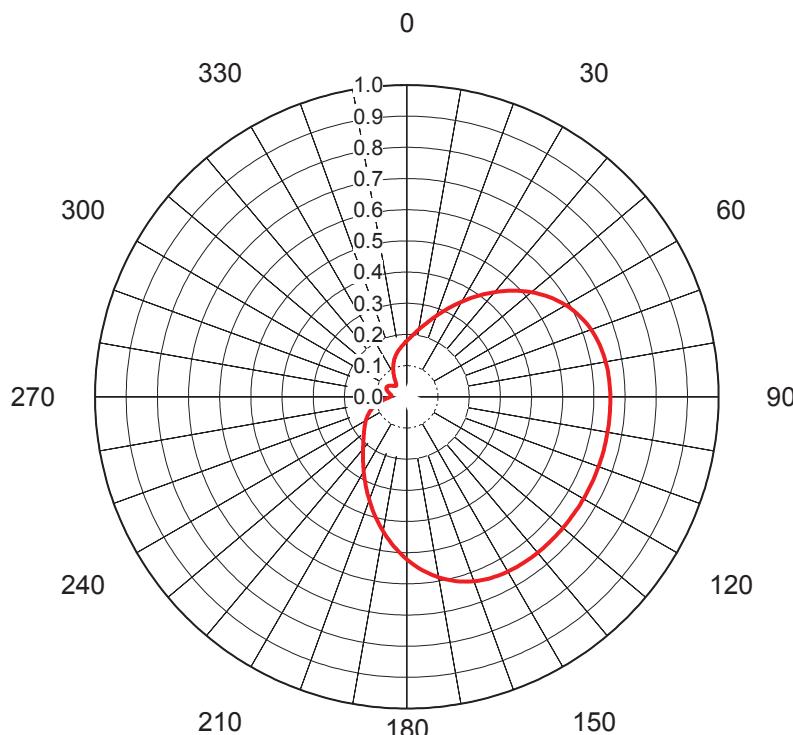
Proposal No. C-70011
 Date 14-Feb-17
 Call Letters KBSI 36
 Frequency 605 MHz
 Antenna Type TFU-26ETT/VP-R 3S220 SP

 Gain 2.2 (3.41dB)
 Calculated

 Drawing # TFU-3S220-36

Deg	Value																		
0	0.358	36	0.745	72	0.914	108	0.998	144	0.962	180	0.824	216	0.528	252	0.229	288	0.233	324	0.229
1	0.369	37	0.752	73	0.918	109	0.998	145	0.959	181	0.820	217	0.516	253	0.229	289	0.234	325	0.229
2	0.380	38	0.759	74	0.922	110	0.999	146	0.956	182	0.815	218	0.504	254	0.228	290	0.234	326	0.229
3	0.392	39	0.765	75	0.926	111	0.999	147	0.953	183	0.810	219	0.491	255	0.228	291	0.234	327	0.229
4	0.404	40	0.772	76	0.929	112	1.000	148	0.950	184	0.805	220	0.479	256	0.228	292	0.234	328	0.229
5	0.416	41	0.778	77	0.933	113	1.000	149	0.947	185	0.800	221	0.466	257	0.228	293	0.235	329	0.229
6	0.429	42	0.784	78	0.936	114	1.000	150	0.943	186	0.795	222	0.454	258	0.228	294	0.235	330	0.229
7	0.441	43	0.789	79	0.940	115	1.000	151	0.940	187	0.789	223	0.441	259	0.229	295	0.235	331	0.229
8	0.454	44	0.795	80	0.943	116	1.000	152	0.936	188	0.784	224	0.429	260	0.229	296	0.235	332	0.228
9	0.466	45	0.800	81	0.947	117	1.000	153	0.933	189	0.778	225	0.416	261	0.229	297	0.235	333	0.228
10	0.479	46	0.805	82	0.950	118	1.000	154	0.929	190	0.772	226	0.404	262	0.229	298	0.234	334	0.228
11	0.491	47	0.810	83	0.953	119	0.999	155	0.926	191	0.765	227	0.392	263	0.229	299	0.234	335	0.228
12	0.504	48	0.815	84	0.956	120	0.999	156	0.922	192	0.759	228	0.380	264	0.229	300	0.234	336	0.228
13	0.516	49	0.820	85	0.959	121	0.998	157	0.918	193	0.752	229	0.369	265	0.229	301	0.234	337	0.229
14	0.528	50	0.824	86	0.962	122	0.998	158	0.914	194	0.745	230	0.358	266	0.229	302	0.233	338	0.229
15	0.540	51	0.829	87	0.964	123	0.997	159	0.910	195	0.738	231	0.346	267	0.229	303	0.233	339	0.230
16	0.552	52	0.833	88	0.967	124	0.996	160	0.907	196	0.731	232	0.336	268	0.229	304	0.232	340	0.231
17	0.564	53	0.838	89	0.970	125	0.996	161	0.903	197	0.723	233	0.325	269	0.229	305	0.232	341	0.232
18	0.576	54	0.842	90	0.972	126	0.995	162	0.899	198	0.715	234	0.316	270	0.229	306	0.232	342	0.234
19	0.587	55	0.846	91	0.974	127	0.994	163	0.895	199	0.707	235	0.306	271	0.229	307	0.231	343	0.236
20	0.599	56	0.850	92	0.976	128	0.993	164	0.891	200	0.698	236	0.297	272	0.229	308	0.231	344	0.239
21	0.610	57	0.854	93	0.978	129	0.992	165	0.887	201	0.689	237	0.289	273	0.229	309	0.231	345	0.242
22	0.620	58	0.858	94	0.980	130	0.990	166	0.883	202	0.680	238	0.281	274	0.229	310	0.230	346	0.246
23	0.631	59	0.863	95	0.982	131	0.989	167	0.879	203	0.671	239	0.274	275	0.229	311	0.230	347	0.250
24	0.641	60	0.867	96	0.984	132	0.987	168	0.875	204	0.661	240	0.267	276	0.229	312	0.230	348	0.256
25	0.652	61	0.871	97	0.986	133	0.986	169	0.871	205	0.652	241	0.261	277	0.229	313	0.229	349	0.261
26	0.661	62	0.875	98	0.987	134	0.984	170	0.867	206	0.641	242	0.256	278	0.230	314	0.229	350	0.267
27	0.671	63	0.879	99	0.989	135	0.982	171	0.863	207	0.631	243	0.250	279	0.230	315	0.229	351	0.274
28	0.680	64	0.883	100	0.990	136	0.980	172	0.858	208	0.620	244	0.246	280	0.230	316	0.229	352	0.281
29	0.689	65	0.887	101	0.992	137	0.978	173	0.854	209	0.610	245	0.242	281	0.231	317	0.229	353	0.289
30	0.698	66	0.891	102	0.993	138	0.976	174	0.850	210	0.599	246	0.239	282	0.231	318	0.229	354	0.297
31	0.707	67	0.895	103	0.994	139	0.974	175	0.846	211	0.587	247	0.236	283	0.231	319	0.229	355	0.306
32	0.715	68	0.899	104	0.995	140	0.972	176	0.842	212	0.576	248	0.234	284	0.232	320	0.229	356	0.316
33	0.723	69	0.903	105	0.996	141	0.970	177	0.838	213	0.564	249	0.232	285	0.232	321	0.229	357	0.325
34	0.731	70	0.907	106	0.996	142	0.967	178	0.833	214	0.552	250	0.231	286	0.232	322	0.229	358	0.336
35	0.738	71	0.910	107	0.997	143	0.964	179	0.829	215	0.540	251	0.230	287	0.233	323	0.229	359	0.346

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AZIMUTH PATTERN Vertical Polarization

Proposal No. C-70011
 Date 14-Feb-17
 Call Letters KBSI 36
 Frequency 605 MHz
 Antenna Type TFU-26ETT/VP-R 3S220 SP

 Gain 2.38 (3.76dB)
 Calculated

 Drawing # TFU-3S220-36-V

Deg	Value																		
0	0.179	36	0.403	72	0.635	108	0.654	144	0.652	180	0.522	216	0.239	252	0.114	288	0.067	324	0.063
1	0.183	37	0.412	73	0.637	109	0.654	145	0.651	181	0.514	217	0.233	253	0.111	289	0.068	325	0.066
2	0.186	38	0.421	74	0.639	110	0.655	146	0.651	182	0.506	218	0.228	254	0.107	290	0.069	326	0.069
3	0.189	39	0.429	75	0.641	115	0.655	147	0.650	183	0.498	219	0.223	255	0.103	291	0.070	327	0.073
4	0.193	40	0.438	76	0.643	112	0.655	148	0.650	184	0.489	220	0.218	256	0.099	292	0.071	328	0.077
5	0.197	41	0.447	77	0.644	113	0.655	149	0.649	185	0.481	221	0.213	257	0.096	293	0.071	329	0.080
6	0.201	42	0.456	78	0.646	114	0.655	150	0.648	186	0.473	222	0.209	258	0.092	294	0.071	330	0.084
7	0.205	43	0.464	79	0.647	115	0.655	151	0.647	187	0.464	223	0.205	259	0.088	295	0.071	331	0.088
8	0.209	44	0.473	80	0.648	116	0.655	152	0.646	188	0.456	224	0.201	260	0.084	296	0.071	332	0.092
9	0.213	45	0.481	81	0.649	117	0.655	153	0.644	189	0.447	225	0.197	261	0.080	297	0.071	333	0.096
10	0.218	46	0.489	82	0.650	118	0.655	154	0.643	190	0.438	226	0.193	262	0.077	298	0.071	334	0.099
11	0.223	47	0.498	83	0.650	119	0.655	155	0.641	191	0.429	227	0.189	263	0.073	299	0.070	335	0.103
12	0.228	48	0.506	84	0.651	120	0.655	156	0.639	192	0.421	228	0.186	264	0.069	300	0.069	336	0.107
13	0.233	49	0.514	85	0.651	121	0.654	157	0.637	193	0.412	229	0.183	265	0.066	301	0.068	337	0.111
14	0.239	50	0.522	86	0.652	122	0.654	158	0.635	194	0.403	230	0.179	266	0.063	302	0.067	338	0.114
15	0.245	51	0.529	87	0.652	123	0.654	159	0.632	195	0.394	231	0.176	267	0.060	303	0.065	339	0.118
16	0.250	52	0.537	88	0.652	124	0.654	160	0.629	196	0.386	232	0.173	268	0.057	304	0.064	340	0.121
17	0.257	53	0.544	89	0.653	125	0.654	161	0.627	197	0.377	233	0.170	269	0.055	305	0.063	341	0.124
18	0.263	54	0.551	90	0.653	126	0.654	162	0.623	198	0.369	234	0.168	270	0.053	306	0.061	342	0.128
19	0.269	55	0.558	91	0.653	127	0.654	163	0.620	199	0.360	235	0.165	271	0.051	307	0.059	343	0.131
20	0.276	56	0.564	92	0.653	128	0.654	164	0.616	200	0.352	236	0.162	272	0.050	308	0.058	344	0.134
21	0.283	57	0.571	93	0.653	129	0.654	165	0.612	201	0.344	237	0.159	273	0.049	309	0.056	345	0.137
22	0.290	58	0.577	94	0.653	130	0.654	166	0.608	202	0.336	238	0.157	274	0.049	310	0.054	346	0.140
23	0.297	59	0.583	95	0.653	131	0.654	167	0.603	203	0.328	239	0.154	275	0.049	311	0.053	347	0.143
24	0.305	60	0.588	96	0.654	132	0.654	168	0.598	204	0.320	240	0.151	276	0.050	312	0.052	348	0.146
25	0.312	61	0.593	97	0.654	133	0.654	169	0.593	205	0.312	241	0.149	277	0.050	313	0.050	349	0.149
26	0.320	62	0.598	98	0.654	134	0.654	170	0.588	206	0.305	242	0.146	278	0.052	314	0.050	350	0.151
27	0.328	63	0.603	99	0.654	135	0.653	171	0.583	207	0.297	243	0.143	279	0.053	315	0.049	351	0.154
28	0.336	64	0.608	100	0.654	136	0.653	172	0.577	208	0.290	244	0.140	280	0.054	316	0.049	352	0.157
29	0.344	65	0.612	101	0.654	137	0.653	173	0.571	209	0.283	245	0.137	281	0.056	317	0.049	353	0.159
30	0.352	66	0.616	102	0.654	138	0.653	174	0.564	210	0.276	246	0.134	282	0.058	318	0.050	354	0.162
31	0.360	67	0.620	103	0.654	139	0.653	175	0.558	211	0.269	247	0.131	283	0.059	319	0.051	355	0.165
32	0.369	68	0.623	104	0.654	140	0.653	176	0.551	212	0.263	248	0.128	284	0.061	320	0.053	356	0.168
33	0.377	69	0.627	105	0.654	141	0.653	177	0.544	213	0.257	249	0.124	285	0.063	321	0.055	357	0.170
34	0.386	70	0.629	106	0.654	142	0.652	178	0.537	214	0.250	250	0.121	286	0.064	322	0.057	358	0.173
35	0.394	71	0.632	107	0.654	143	0.652	179	0.529	215	0.245	251	0.118	287	0.065	323	0.060	359	0.176

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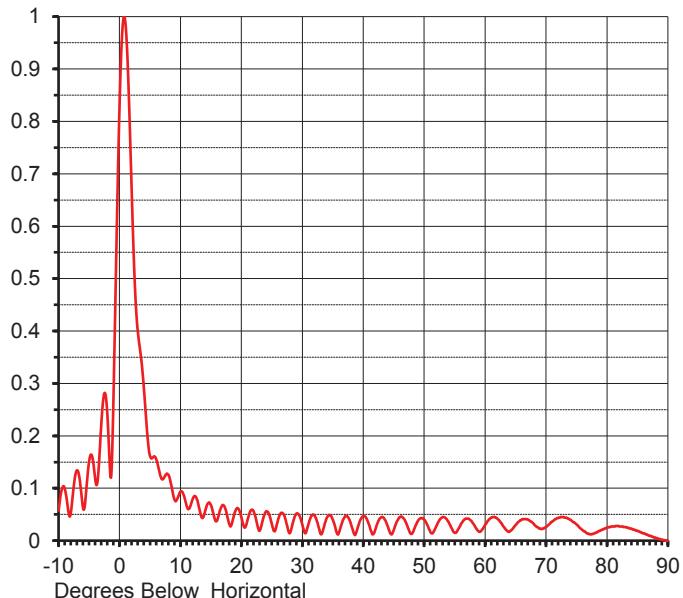
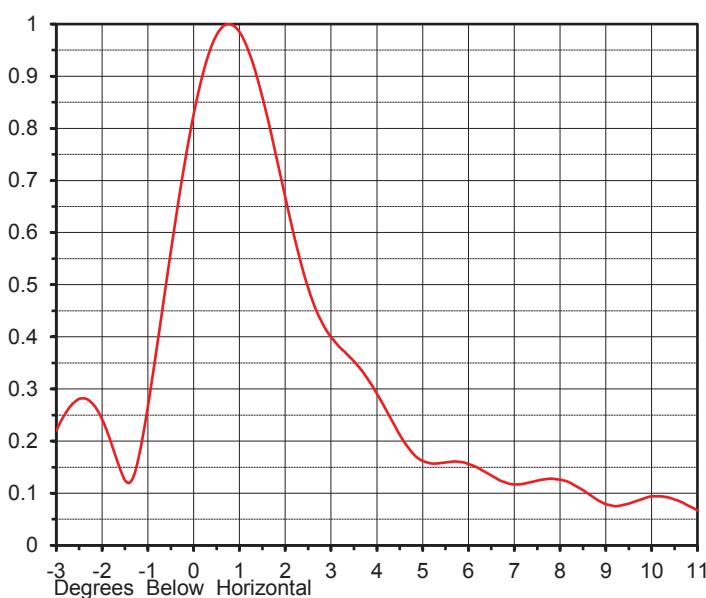
ELEVATION PATTERN

Proposal No. C-70011
 Date 14-Feb-17
 Call Letters KBSI 36
 Frequency 605 MHz
 Antenna Type TFU-26ETT/VP-R 3S220 SP

RMS Directivity at Main Lobe
 RMS Directivity at Horizontal

22.80 (13.58 dB)
15.60 (11.93 dB)
 Calculated

Beam Tilt 0.75 deg
 Drawing Number 26E228075



Angle	Field								
-10.0	0.057	10.0	0.094	30.0	0.031	50.0	0.040	70.0	0.026
-9.0	0.100	11.0	0.067	31.0	0.031	51.0	0.017	71.0	0.036
-8.0	0.052	12.0	0.079	32.0	0.048	52.0	0.028	72.0	0.043
-7.0	0.134	13.0	0.066	33.0	0.013	53.0	0.045	73.0	0.044
-6.0	0.063	14.0	0.054	34.0	0.043	54.0	0.036	74.0	0.040
-5.0	0.150	15.0	0.068	35.0	0.040	55.0	0.015	75.0	0.031
-4.0	0.119	16.0	0.038	36.0	0.015	56.0	0.031	76.0	0.020
-3.0	0.220	17.0	0.068	37.0	0.046	57.0	0.042	77.0	0.013
-2.0	0.242	18.0	0.032	38.0	0.031	58.0	0.033	78.0	0.014
-1.0	0.266	19.0	0.056	39.0	0.021	59.0	0.017	79.0	0.020
0.0	0.827	20.0	0.045	40.0	0.047	60.0	0.030	80.0	0.025
1.0	0.985	21.0	0.039	41.0	0.029	61.0	0.044	81.0	0.027
2.0	0.668	22.0	0.056	42.0	0.022	62.0	0.042	82.0	0.027
3.0	0.400	23.0	0.019	43.0	0.045	63.0	0.027	83.0	0.026
4.0	0.291	24.0	0.055	44.0	0.028	64.0	0.017	84.0	0.023
5.0	0.162	25.0	0.032	45.0	0.020	65.0	0.030	85.0	0.019
6.0	0.156	26.0	0.039	46.0	0.045	66.0	0.040	86.0	0.014
7.0	0.117	27.0	0.049	47.0	0.035	67.0	0.040	87.0	0.009
8.0	0.126	28.0	0.015	48.0	0.013	68.0	0.032	88.0	0.005
9.0	0.079	29.0	0.051	49.0	0.038	69.0	0.023	89.0	0.002
									90.0 0.000

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**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
KBSI, Cape Girardeau, MO
Channel 36, 1000 kW, 543 m HAAT
June, 2017

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLAR- IZATION</u>	<u>ANTENNA HEIGHT</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)</u>	<u>FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
KBSI	DT	36	605	H & V	468.6	1000.000	0.300	27.622	403.33	6.85%
KEZS-FM	FM	275	102.9	H & V	219	100.000	1.000	141.901	200.00	70.95%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 77.80%

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.





KBSI - CAPE GIRARDEAU, MISSOURI

Longley-Rice Interference Analysis

tvstudy v2.2.2
Database: localhost, Study: KBSI_36_DIE_543H_1000K, Model: Longley-Rice
Start: 2017.06.02 13:54:23

Study created: 2017.06.02 13:54:17

Study build station data: LMS TV 2017-06-01 (11)

Proposal: KBSI D36 DT LIC CAPE GIRARDEAU, MO
File number: KBSI_36_DIE_543H_1000K
Facility ID: 19593
Station data: User record
Record ID: 513
Country: U.S.
Zone: II

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KSDK	D35	DT	LIC	ST. LOUIS, MO	BLLCDT19991202ABM	145.7 km
WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	211.4
KKAP	D36	DT	LIC	LITTLE ROCK, AR	BLEDT20090522AFW	391.6
W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	174.8
WMEC	D36	DT	BL	MACOMB, IL	DTVBL70537	347.6
WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	353.0
WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	344.4
KBNS-CD	D36	DC	LIC	BRANSON, MO	BLDTL20100315ADB	328.4
WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	346.5
WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	277.3

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
Latitude: 37 24 23.00 N (NAD83)
Longitude: 89 33 44.00 W
Height AMSL: 685.0 m
HAAT: 543.0 m
Peak ERP: 1000 kW
Antenna: DIE-TFU-26ETT/VP--R 3S220 SP 0.0 deg

40.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	128 kW	524.9 m	97.7 km
45.0	637	547.5	113.7
90.0	945	557.6	117.9
135.0	962	558.3	118.2
180.0	679	556.4	114.8
225.0	175	548.0	102.2

Appendix B - Interference Analysis
KBSI - Cape Girardeau, Missouri
Channel 36 - 1000 kW - Page 2

270.0	52.4	531.8	90.8
315.0	52.7	507.7	89.2

Database HAAT does not agree with computed HAAT
 Database HAAT: 543 m Computed HAAT: 542 m

ERP exceeds maximum
 ERP: 1000 kW ERP maximum: 417 kW

Proposal service area is within baseline plus 1.0%
 Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 744.1 km

Distance to Mexican border: 1380.4 km

Conditions at FCC monitoring station: Powder Springs GA
 Bearing: 130.6 degrees Distance: 588.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 287.4 degrees Distance: 1388.6 km

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

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

Interference to BLCDT19991202ABM LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KSDK	D35	DT	LIC	ST. LOUIS, MO	BLCDT19991202ABM	
Undesireds:	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	145.7 km
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	KBSI_36_DIE_543H_1000K	145.7
	WSIL-TV	D34	DT	LIC	HARRISBURG, IL	BLCDT20080718AAR	166.0
	WQEC	D34	DT	LIC	QUINCY, IL	BLEDT20040715ADL	177.8
	WTVP	D35	DT	BL	PEORIA, IL	DTVBL28311	238.2
	WTWO	D35	DT	BL	TERRE HAUTE, IN	DTVBL20426	265.1
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	356.6
	W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	43.8

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
31247.4	2,986,764	30782.6	2,979,035	30464.6	2,974,154	30460.7	2,974,154	0.01	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KBSI D36 DT BL	91.2	252	79.3
KBSI D36 DT LIC	95.2	252	83.3
WSIL-TV D34 DT LIC	59.3	3,452	47.4
WTVP D35 DT BL	55.7	206	47.7
WTWO D35 DT BL	123.6	928	95.9
WBBJ-TV D35 DT BL	23.8	222	15.9

Interference to DTVBL65204 BL, scenario 1
 Proposal causes no interference.

Appendix B - Interference Analysis
KBSI - Cape Girardeau, Missouri
Channel 36 - 1000 kW - Page 3

Interference to DTVBL65204 BL, scenario 2
 Proposal causes no interference.

Interference to DTVBL65204 BL, scenario 3
 Proposal causes no interference.

Interference to DTVBL65204 BL, scenario 4
 Proposal causes no interference.

Interference to BLEDT20090522AFW LIC, scenario 1
 Proposal causes no interference.

Interference to BLEDT20090522AFW LIC, scenario 2
 Proposal causes no interference.

Interference to DTVBL37238 BL, scenario 1
 Proposal causes no interference.

Interference to DTVBL70537 BL, scenario 1
 Proposal causes no interference.

Interference to DTVBL69544 BL, scenario 1
 Proposal causes no interference.

Interference to DTVBL13989 BL, scenario 1

Desired:	Call WAVE	Chan D36	Svc DT	Status BL	City, State LOUISVILLE, KY	File Number DTVBL13989	Distance
Undesireds:	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	344.4 km
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	KBSI_36_DIE_543H_1000K	344.4
	WTWO	D35	DT	BL	TERRE HAUTE, IN	DTVBL20426	166.5
	WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	142.3
	W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	376.1
	WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	280.8
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	158.2
	WHME-TV	D36	DT	BL	SOUTH BEND, IN	DTVBL36117	359.7
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	279.7
	WRGT-TV	D36	DT	BL	DAYTON, OH	DTVBL411	202.9
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	248.4
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	304.8

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
29932.0 1,845,674	29317.8 1,836,343	28457.0 1,822,586	28457.0 1,822,586	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KBSI D36 DT BL	83.7	1,452	16.0 337
KBSI D36 DT LIC	83.6	1,425	16.0 337
WCCU D36 DT BL	80.0	764	40.0 328
WKAS D36 DT BL	4.0	28	0.0 0
WRGT-TV D36 DT BL	288.0	5,491	248.3 5,255
WTVF D36 DT BL	536.5	7,709	437.0 6,316 437.1 6,343

Appendix B - Interference Analysis
KBSI - Cape Girardeau, Missouri
Channel 36 - 1000 kW - Page 4

Interference to BLDTL20100315ADB LIC, scenario 1
 Proposal causes no interference.

Interference to BLDTL20100315ADB LIC, scenario 2
 Proposal causes no interference.

Interference to BLEDT20090612AAK LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
Undesireds:		D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	
KBSI		D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	346.5 km
KBSI		D36	DT	LIC	CAPE GIRARDEAU, MO	KBSI_36_DIE_543H_1000K	346.5
WBBJ-TV		D35	DT	BL	JACKSON, TN	DTVBL65204	175.9
WSES		D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	228.5
KLMB-CD		D36	DC	BL	EL DORADO, AR	DTVBL38585	297.9
KKAP		D36	DT	LIC	LITTLE ROCK, AR	BLEDT20090522AFW	261.6
WLOO		D36	DT	BL	VICKSBURG, MS	DTVBL84253	239.3
WTVF		D36	DT	BL	NASHVILLE, TN	DTVBL36504	344.0
Service area							
24241.2	1,008,339	24217.3	1,008,208	23888.9	999,647	23888.9	999,647
Undesired				Total IX	IX-free, before	IX-free, after	Percent New IX
KBSI D36 DT BL		15.8		3,389	7.9	3,374	
KBSI D36 DT LIC		15.8		3,389		7.9	3,374
WSES D36 DT BL		163.6		4,321	127.8	3,496	127.8
WLOO D36 DT BL		168.8		1,497	152.8	778	152.8
WTVF D36 DT BL		19.9		181	4.0	88	4.0

Interference to DTVBL36504 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
Undesireds:		D36	DT	BL	NASHVILLE, TN	DTVBL36504	
KBSI		D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	277.3 km
KBSI		D36	DT	LIC	CAPE GIRARDEAU, MO	KBSI_36_DIE_543H_1000K	277.3
WTCI		D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	179.9
WBBJ-TV		D35	DT	BL	JACKSON, TN	DTVBL65204	185.1
WSES		D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	315.4
WUPA		D36	DT	BL	ATLANTA, GA	DTVBL6900	352.8
WBXI-CD		D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	393.1
WAVE		D36	DT	BL	LOUISVILLE, KY	DTVBL13989	248.4
WMAV-TV		D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	344.0
WVLR		D36	DT	BL	TAZEWELL, TN	DTVBL81750	283.1
Service area				Total IX	IX-free, before	IX-free, after	Percent New IX
36441.7	2,365,383	35337.1	2,348,589	34524.3	2,331,492	34524.3	2,332,330
Undesired					Unique IX, before	Unique IX, after	
KBSI D36 DT BL		492.4		11,507	404.3	10,785	
KBSI D36 DT LIC		496.4		10,779		404.3	9,947
WUPA D36 DT BL		28.2		713	16.2	207	16.2
WAVE D36 DT BL		352.1		4,214	220.0	2,871	216.0
WMAV-TV D36 DT LIC		8.0		14	8.0	14	8.0
WVLR D36 DT BL		72.2		2,498	28.1	1,452	1,452

Appendix B - Interference Analysis
KBSI - Cape Girardeau, Missouri
Channel 36 - 1000 kW - Page 5

Interference to proposal, scenario 1

0.57% interference

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KBSI	D36	DT	LIC	CAPE GIRARDEAU, MO	KBSI_36_DIE_543H_1000K	
Undesireds:	KSDK	D35	DT	LIC	ST. LOUIS, MO	BLCDT19991202ABM	145.7 km
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	211.4
	KKAP	D36	DT	LIC	LITTLE ROCK, AR	BLEDT20090522AFW	391.6
	W50CH-D	D36	DC	BL	ALTON, IL	DTVBL37238	174.8
	WMEC	D36	DT	BL	MACOMB, IL	DTVBL70537	347.6
	WCCU	D36	DT	BL	URBANA, IL	DTVBL69544	353.0
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	395.6
	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	344.4
	KBNS-CD	D36	DC	LIC	BRANSON, MO	BLDTL20100315ADB	328.4
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	346.5
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	277.3
Service area		Terrain-limited			IX-free	Percent IX	
35414.2	756,501	35007.9	754,722	34541.4	750,442	1.33	0.57
Undesired		Total IX			Unique IX	Prcnt Unique	Unique IX
KSDK D35 DT LIC		23.7	200	23.7	200	0.07	0.03
WCCU D36 DT BL		4.0	16	0.0	0	0.00	0.00
WAVE D36 DT BL		67.7	300	19.8	60	0.06	0.01
WTVF D36 DT BL		422.9	4,020	375.1	3,780	1.07	0.50