



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
A MINOR MODIFICATION OF A
POST REPACK CONSTRUCTION PERMIT
FILE # 0000027938
WDSI-TV - CHATTANOOGA, TENNESSEE
DTV - CH. 14 - 120 kW - 306 m HAAT**

Prepared for: NEW AGE MEDIA OF TENNESSEE LICENSE, LLC

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 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 NEW AGE MEDIA OF TENNESSEE LICENSE, LLC, licensee of WDSI-TV, channel 40, licensed to Chattanooga, Tennessee, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for a minor modification of its post-reassignment construction permit, File # 0000027938, that authorizes WDSI-TV to use channel 14 for its post-reassignment broadcasting. The instant application proposes to relocate WDSI-TV to the WTVC site in Chattanooga (ASR # 1235360), change its directional antenna azimuth pattern and increase its ERP to 120 kW. The distance between WDSI-TV's licensed channel 40 site (new channel 14) and the WTVC site is 4.1 miles. The licensee proposes to side-mount a new Dielectric directional antenna, to be shared with WFLI-TV, channel

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42 (new channel 23). Both stations are co-located on a tower with FCC tower registration number 1042692, using separate antennas. The proposed antenna to be shared is a Dielectric Model TFU-24WB/VP-R C160 directional elliptically polarized dual channel antenna. The proposed WDSI-TV, channel 14, Effective Radiated Power (ERP) is 120 kW (20.79 dBk). No other changes are proposed.

DIRECTIONAL ANTENNA

The applicant proposes to install the new Dielectric model TFU-25WB/VP-R C160 elliptically polarized directional transmitting antenna with its center of radiation located at a height above ground of 57 meters, and a height above average terrain of 306 meters. The antenna manufacturer's horizontal plane azimuth pattern for the horizontally polarized component is shown and tabulated in exhibit 2. The antenna 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

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Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 8 shows the predicted Noise Limited (41 dBu) contour, and the principal community (48 dBu) contour. The 48 dBu contour completely encompasses the principal community of license, Chattanooga, Tennessee.

ALLOCATION CONSIDERATIONS

Post-Transition DTV Considerations

A study was performed, using the FCC's software, tv_study, v. 2.2.3, 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.

International DTV Considerations

The WDSI-TV site is located more than 700 kilometers from the nearest point on any international/US border. (See Appendix B)

BLANKETING AND INTERMODULATION INTERFERENCE

There will be three television broadcast facilities co-located at the WTVC site. There are two FM radio facilities located on other towers within the relevant distance of 315 meters. There are other broadcast and non-broadcast facilities located within 10 km of WTVC's 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 facilities 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 DTV stations, is determined for an "uncontrolled" environment by dividing the operating frequency in MHZ by 1.5, and is determined for a "controlled" environment by dividing the operating frequency in MHZ by 0.3.

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The predicted emissions of WDSI-TV operating on channel 14 must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WDSI-TV, which will operate on television Channel 14 (470-476 MHz), the MPE is 315.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an "uncontrolled" environment and 1576.67 $\mu\text{W}/\text{cm}^2$ in a "controlled" environment. The proposed WDSI-TV facility will operate with a maximum ERP of 120 kW from an elliptically polarized directional transmitting antenna with a centerline height of 57 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.16, the WDSI-TV facility is predicted to produce a power density at two meters above ground level of 73.076 $\mu\text{W}/\text{cm}^2$, which is 23.17% of the FCC guideline value for an "uncontrolled" environment, and 4.634% of the FCC's guideline value for "controlled" environments. Only three full-power DTV stations are to be located on WTVC's tower, however, there are two FM stations located on other towers that are within the relevant proximity of 315 meters.

Access to the transmitting site is restricted to authorized personnel and is appropriately marked with RFR warning signs. A site protocol is in effect to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure.

OCCUPATIONAL SAFETY

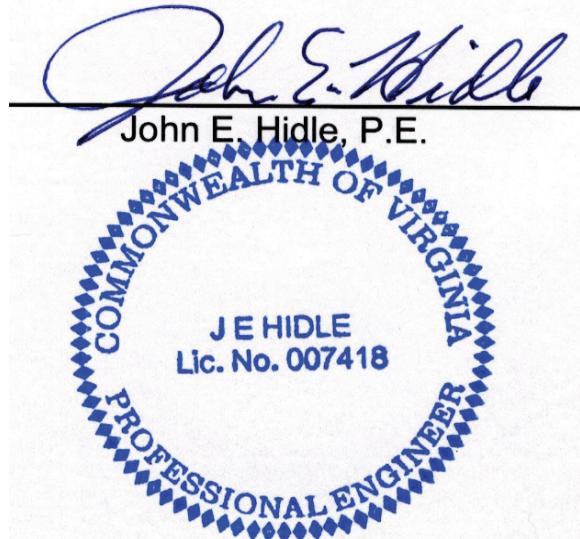
The licensee of WDSI-TV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WDSI-TV antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to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

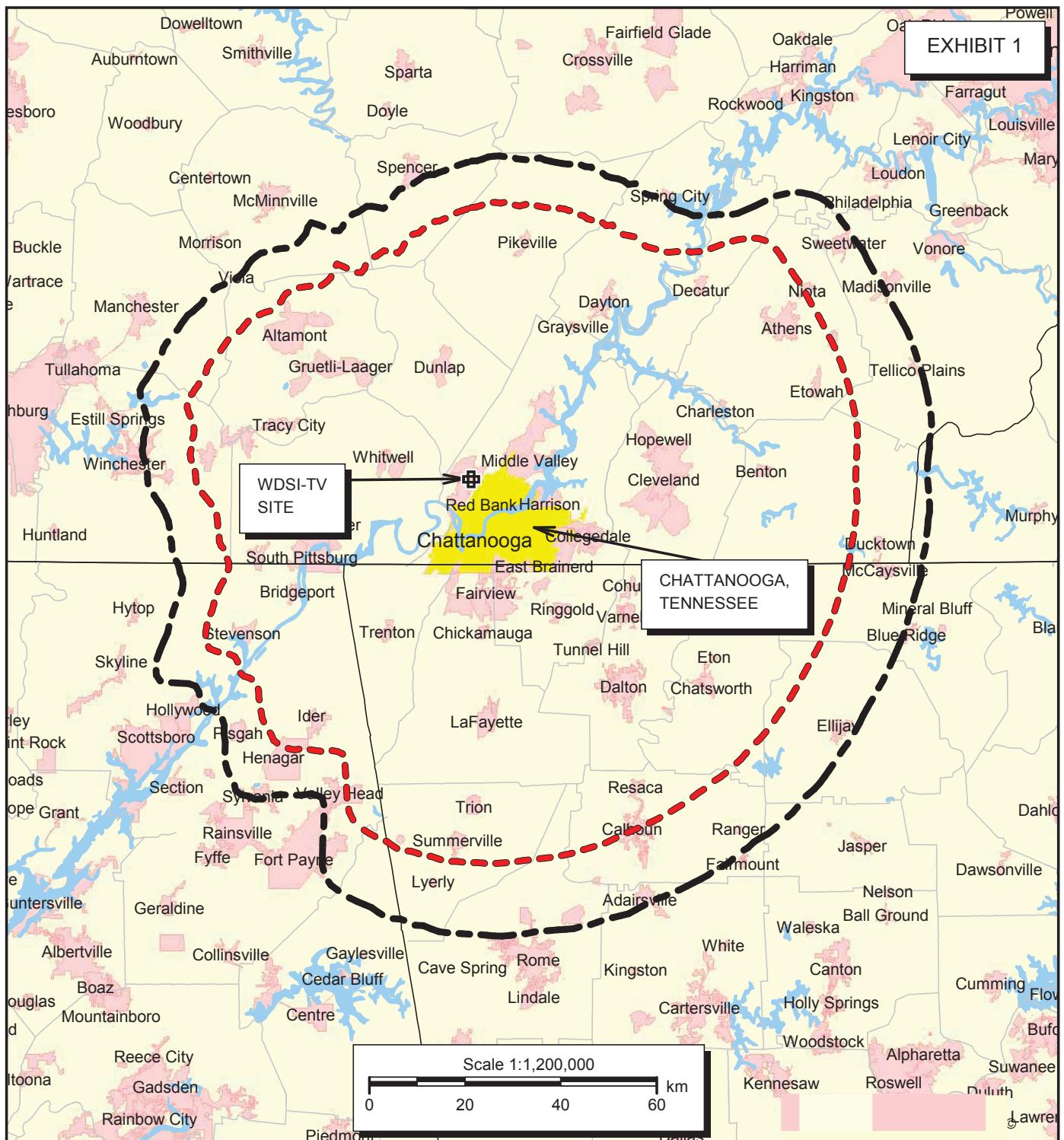
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SUMMARY

It is submitted that the instant application for minor modification of its post-reassignment channel 14 construction permit, file # 0000027938, to relocate to the WTVC site, to change WDSI-TV's proposed directional antenna and horizontal azimuth pattern and to increase WDSI-TV's ERP to 120 kW, as described herein, does comply 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: October 31, 2017





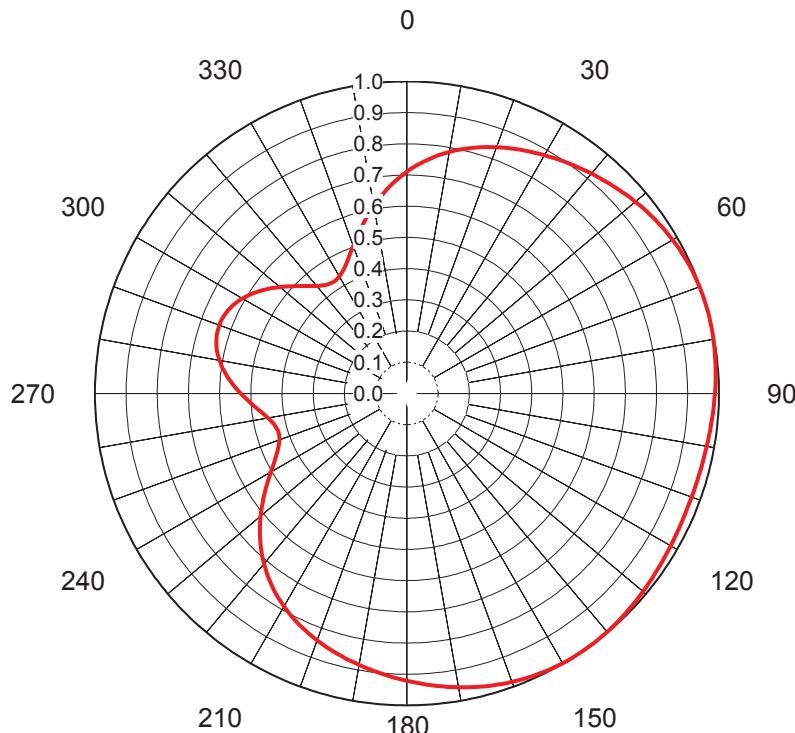
PREDICTED COVERAGE CONTOURS

WDSI-TV - CHATTANOOGA, TENNESSEE
 DTV Channel 14 - 120 kW ERP - 306 M HAAT
 OCTOBER, 2017

Predicted Noise Limited 38.72 dBu
 F(50,90) Coverage Contour



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



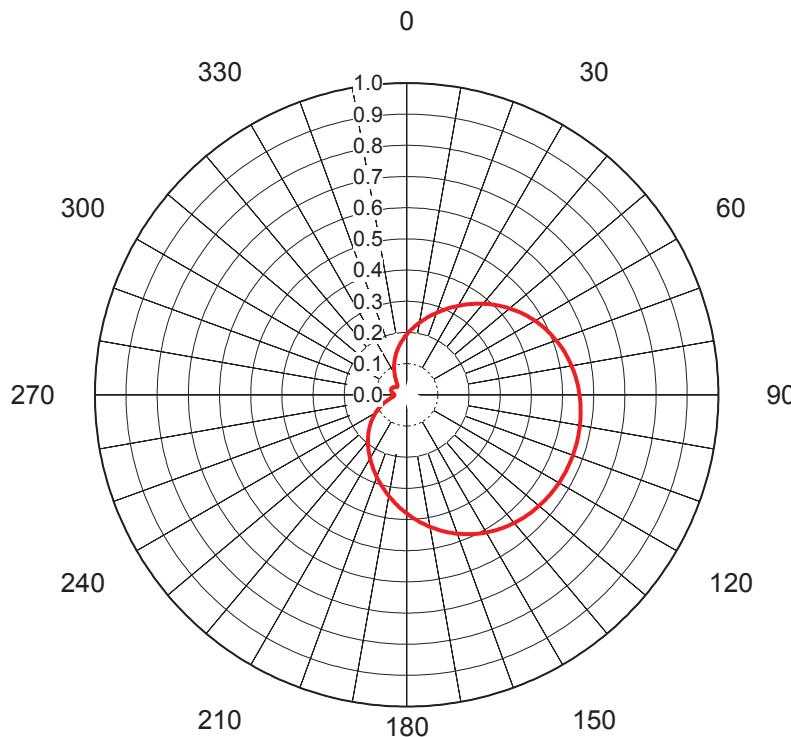
AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No.	C-71027
Date	30-Oct-17
Call Letters	WDSI
Channel	14
Frequency	473 MHz
Antenna Type	TFU-24WB/VP-R C160
Gain	1.55 (1.9dB)
Calculated	

Deg	Value																		
0	0.711	36	0.905	72	0.999	108	0.971	144	1.000	180	0.921	216	0.746	252	0.431	288	0.639	324	0.432
1	0.719	37	0.909	73	0.999	109	0.971	145	1.000	181	0.917	217	0.738	253	0.430	289	0.640	325	0.430
2	0.728	38	0.913	74	1.000	110	0.971	146	1.000	182	0.914	218	0.730	254	0.431	290	0.640	326	0.429
3	0.736	39	0.916	75	1.000	111	0.971	147	1.000	183	0.910	219	0.721	255	0.432	291	0.640	327	0.428
4	0.744	40	0.920	76	0.999	112	0.971	148	1.000	184	0.906	220	0.713	256	0.434	292	0.639	328	0.429
5	0.752	41	0.924	77	0.999	113	0.972	149	0.999	185	0.903	221	0.703	257	0.438	293	0.637	329	0.430
6	0.759	42	0.928	78	0.999	114	0.972	150	0.998	186	0.899	222	0.694	258	0.442	294	0.635	330	0.433
7	0.766	43	0.931	79	0.998	115	0.973	151	0.998	187	0.895	223	0.685	259	0.447	295	0.632	331	0.436
8	0.773	44	0.935	80	0.998	116	0.973	152	0.997	188	0.891	224	0.675	260	0.452	296	0.628	332	0.441
9	0.780	45	0.939	81	0.997	117	0.974	153	0.996	189	0.887	225	0.665	261	0.458	297	0.624	333	0.446
10	0.786	46	0.942	82	0.996	118	0.975	154	0.994	190	0.883	226	0.655	262	0.465	298	0.620	334	0.452
11	0.792	47	0.946	83	0.995	119	0.975	155	0.993	191	0.880	227	0.644	263	0.473	299	0.615	335	0.459
12	0.798	48	0.949	84	0.994	120	0.976	156	0.992	192	0.876	228	0.634	264	0.481	300	0.609	336	0.467
13	0.804	49	0.953	85	0.993	121	0.977	157	0.990	193	0.872	229	0.623	265	0.489	301	0.603	337	0.475
14	0.810	50	0.956	86	0.992	122	0.978	158	0.988	194	0.868	230	0.612	266	0.497	302	0.596	338	0.484
15	0.815	51	0.959	87	0.991	123	0.979	159	0.986	195	0.864	231	0.601	267	0.506	303	0.589	339	0.493
16	0.820	52	0.962	88	0.990	124	0.981	160	0.984	196	0.859	232	0.590	268	0.515	304	0.582	340	0.503
17	0.825	53	0.965	89	0.989	125	0.982	161	0.982	197	0.855	233	0.579	269	0.524	305	0.574	341	0.513
18	0.830	54	0.968	90	0.987	126	0.983	162	0.979	198	0.851	234	0.568	270	0.533	306	0.566	342	0.523
19	0.835	55	0.971	91	0.986	127	0.984	163	0.977	199	0.846	235	0.557	271	0.542	307	0.557	343	0.534
20	0.840	56	0.974	92	0.985	128	0.985	164	0.974	200	0.842	236	0.546	272	0.550	308	0.548	344	0.545
21	0.844	57	0.977	93	0.984	129	0.987	165	0.972	201	0.837	237	0.535	273	0.559	309	0.540	345	0.556
22	0.849	58	0.979	94	0.982	130	0.988	166	0.969	202	0.833	238	0.524	274	0.567	310	0.531	346	0.567
23	0.853	59	0.982	95	0.981	131	0.989	167	0.966	203	0.828	239	0.514	275	0.575	311	0.522	347	0.578
24	0.857	60	0.984	96	0.980	132	0.990	168	0.963	204	0.823	240	0.504	276	0.583	312	0.513	348	0.589
25	0.861	61	0.986	97	0.979	133	0.992	169	0.960	205	0.817	241	0.494	277	0.590	313	0.504	349	0.600
26	0.866	62	0.988	98	0.978	134	0.993	170	0.956	206	0.812	242	0.485	278	0.597	314	0.495	350	0.611
27	0.870	63	0.990	99	0.977	135	0.994	171	0.953	207	0.806	243	0.476	279	0.604	315	0.487	351	0.622
28	0.874	64	0.991	100	0.976	136	0.995	172	0.950	208	0.801	244	0.468	280	0.610	316	0.478	352	0.632
29	0.878	65	0.993	101	0.975	137	0.996	173	0.946	209	0.795	245	0.460	281	0.616	317	0.471	353	0.643
30	0.882	66	0.994	102	0.974	138	0.997	174	0.943	210	0.788	246	0.454	282	0.621	318	0.463	354	0.653
31	0.886	67	0.995	103	0.974	139	0.998	175	0.939	211	0.782	247	0.448	283	0.625	319	0.456	355	0.663
32	0.890	68	0.997	104	0.973	140	0.998	176	0.936	212	0.775	248	0.442	284	0.629	320	0.450	356	0.673
33	0.893	69	0.997	105	0.972	141	0.999	177	0.932	213	0.768	249	0.438	285	0.632	321	0.444	357	0.683
34	0.897	70	0.998	106	0.972	142	0.999	178	0.929	214	0.761	250	0.435	286	0.635	322	0.439	358	0.693
35	0.901	71	0.999	107	0.972	143	1.000	179	0.925	215	0.754	251	0.432	287	0.637	323	0.435	359	0.702

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AZIMUTH PATTERN Vertical Polarization

In Free Space

Proposal No.	C-71027
Date	30-Oct-17
Call Letters	WDSI
Channel	14
Frequency	473 MHz
Antenna Type	TFU-24WB/VP-R C160
Gain	2.61 (4.17dB)
	Calculated

Deg	Value																		
0	0.193	36	0.360	72	0.517	108	0.567	144	0.527	180	0.381	216	0.209	252	0.070	288	0.053	324	0.058
1	0.197	37	0.365	73	0.519	109	0.568	145	0.525	181	0.375	217	0.205	253	0.067	289	0.053	325	0.061
2	0.201	38	0.371	74	0.522	110	0.568	146	0.522	182	0.370	218	0.201	254	0.064	290	0.053	326	0.064
3	0.205	39	0.376	75	0.525	111	0.568	147	0.519	183	0.365	219	0.197	255	0.061	291	0.053	327	0.067
4	0.209	40	0.381	76	0.527	112	0.567	148	0.516	184	0.360	220	0.193	256	0.058	292	0.053	328	0.070
5	0.213	41	0.386	77	0.530	113	0.567	149	0.513	185	0.355	221	0.189	257	0.055	293	0.052	329	0.074
6	0.217	42	0.391	78	0.532	114	0.567	150	0.510	186	0.350	222	0.185	258	0.052	294	0.052	330	0.077
7	0.222	43	0.396	79	0.535	115	0.567	151	0.507	187	0.345	223	0.181	259	0.050	295	0.052	331	0.081
8	0.226	44	0.401	80	0.537	116	0.566	152	0.504	188	0.340	224	0.177	260	0.048	296	0.051	332	0.084
9	0.230	45	0.406	81	0.539	117	0.566	153	0.500	189	0.335	225	0.173	261	0.046	297	0.050	333	0.088
10	0.234	46	0.411	82	0.541	118	0.566	154	0.497	190	0.330	226	0.169	262	0.044	298	0.050	334	0.092
11	0.239	47	0.416	83	0.543	119	0.565	155	0.493	191	0.324	227	0.165	263	0.043	299	0.049	335	0.095
12	0.243	48	0.421	84	0.545	120	0.564	156	0.490	192	0.319	228	0.161	264	0.041	300	0.048	336	0.099
13	0.247	49	0.426	85	0.547	121	0.564	157	0.486	193	0.314	229	0.157	265	0.040	301	0.047	337	0.103
14	0.252	50	0.431	86	0.548	122	0.563	158	0.482	194	0.309	230	0.153	266	0.040	302	0.046	338	0.107
15	0.256	51	0.436	87	0.550	123	0.562	159	0.478	195	0.305	231	0.149	267	0.039	303	0.045	339	0.111
16	0.261	52	0.440	88	0.552	124	0.561	160	0.474	196	0.300	232	0.145	268	0.039	304	0.044	340	0.114
17	0.265	53	0.445	89	0.553	125	0.560	161	0.470	197	0.295	233	0.142	269	0.039	305	0.044	341	0.118
18	0.270	54	0.449	90	0.554	126	0.559	162	0.466	198	0.290	234	0.138	270	0.040	306	0.043	342	0.122
19	0.275	55	0.454	91	0.556	127	0.558	163	0.462	199	0.285	235	0.134	271	0.040	307	0.042	343	0.126
20	0.280	56	0.458	92	0.557	128	0.557	164	0.457	200	0.280	236	0.130	272	0.041	308	0.041	344	0.130
21	0.284	57	0.463	93	0.558	129	0.556	165	0.453	201	0.276	237	0.126	273	0.041	309	0.041	345	0.134
22	0.289	58	0.467	94	0.559	130	0.555	166	0.448	202	0.271	238	0.122	274	0.042	310	0.040	346	0.138
23	0.294	59	0.471	95	0.560	131	0.553	167	0.444	203	0.266	239	0.118	275	0.043	311	0.040	347	0.142
24	0.299	60	0.475	96	0.561	132	0.552	168	0.439	204	0.262	240	0.114	276	0.044	312	0.040	348	0.146
25	0.304	61	0.479	97	0.562	133	0.550	169	0.435	205	0.257	241	0.110	277	0.045	313	0.040	349	0.150
26	0.309	62	0.483	98	0.563	134	0.548	170	0.430	206	0.253	242	0.107	278	0.046	314	0.040	350	0.153
27	0.314	63	0.487	99	0.564	135	0.547	171	0.425	207	0.248	243	0.103	279	0.047	315	0.041	351	0.157
28	0.319	64	0.490	100	0.564	136	0.545	172	0.420	208	0.244	244	0.099	280	0.048	316	0.042	352	0.161
29	0.324	65	0.494	101	0.565	137	0.543	173	0.416	209	0.239	245	0.095	281	0.049	317	0.043	353	0.165
30	0.329	66	0.497	102	0.565	138	0.541	174	0.411	210	0.235	246	0.091	282	0.050	318	0.045	354	0.169
31	0.334	67	0.501	103	0.566	139	0.539	175	0.406	211	0.231	247	0.088	283	0.050	319	0.046	355	0.173
32	0.339	68	0.504	104	0.566	140	0.537	176	0.401	212	0.226	248	0.084	284	0.051	320	0.048	356	0.177
33	0.345	69	0.507	105	0.567	141	0.534	177	0.396	213	0.222	249	0.080	285	0.051	321	0.050	357	0.181
34	0.350	70	0.511	106	0.567	142	0.532	178	0.391	214	0.218	250	0.077	286	0.052	322	0.053	358	0.185
35	0.355	71	0.514	107	0.567	143	0.530	179	0.386	215	0.214	251	0.073	287	0.052	323	0.055	359	0.189

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ELEVATION PATTERN

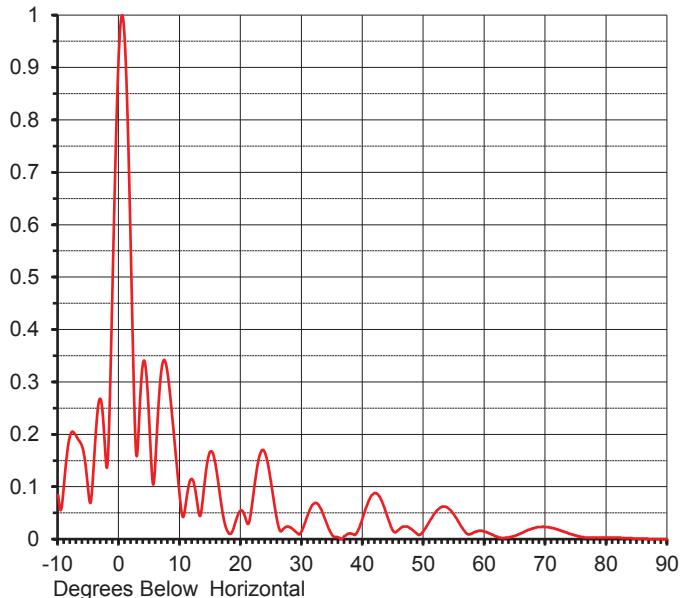
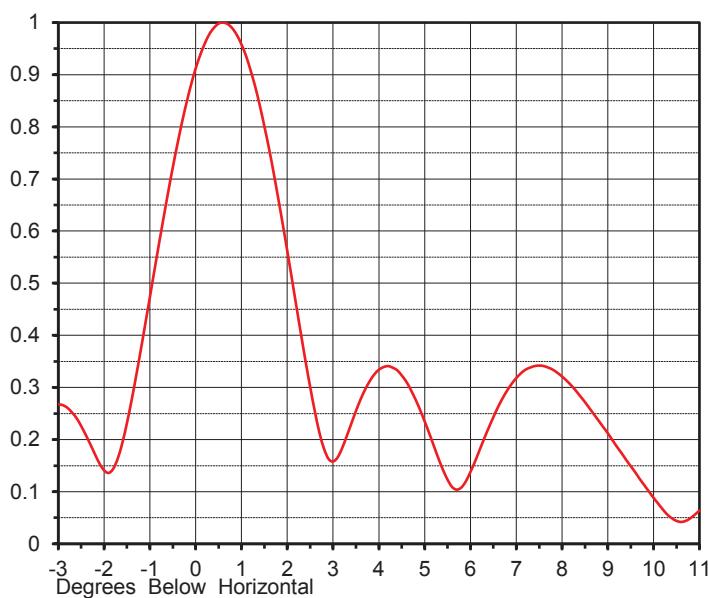
Proposal No. C-71027
 Date 30-Oct-17
 Call Letters WDSI
 Channel 14
 Frequency 473 MHz
 Antenna Type TFU-24WB/VP-R C160

RMS Directivity at Main Lobe
 RMS Directivity at Horizontal

20.6 (13.13 dB)
18.1 (12.58 dB)

Calculated

Beam Tilt 0.50 deg
 Pattern Number 24W201050



Angle	Field								
-10.0	0.084	10.0	0.077	30.0	0.016	50.0	0.016	70.0	0.023
-9.0	0.110	11.0	0.072	31.0	0.047	51.0	0.035	71.0	0.021
-8.0	0.199	12.0	0.114	32.0	0.068	52.0	0.052	72.0	0.018
-7.0	0.196	13.0	0.055	33.0	0.060	53.0	0.062	73.0	0.014
-6.0	0.174	14.0	0.104	34.0	0.032	54.0	0.059	74.0	0.010
-5.0	0.086	15.0	0.167	35.0	0.007	55.0	0.046	75.0	0.007
-4.0	0.172	16.0	0.130	36.0	0.003	56.0	0.027	76.0	0.004
-3.0	0.266	17.0	0.049	37.0	0.006	57.0	0.011	77.0	0.003
-2.0	0.136	18.0	0.011	38.0	0.011	58.0	0.011	78.0	0.003
-1.0	0.525	19.0	0.029	39.0	0.012	59.0	0.016	79.0	0.003
0.0	0.938	20.0	0.055	40.0	0.041	60.0	0.014	80.0	0.003
1.0	0.936	21.0	0.031	41.0	0.074	61.0	0.010	81.0	0.003
2.0	0.509	22.0	0.082	42.0	0.088	62.0	0.005	82.0	0.003
3.0	0.166	23.0	0.157	43.0	0.075	63.0	0.002	83.0	0.002
4.0	0.339	24.0	0.163	44.0	0.044	64.0	0.003	84.0	0.002
5.0	0.212	25.0	0.103	45.0	0.015	65.0	0.006	85.0	0.001
6.0	0.158	26.0	0.032	46.0	0.019	66.0	0.011	86.0	0.001
7.0	0.327	27.0	0.020	47.0	0.024	67.0	0.017	87.0	0.000
8.0	0.313	28.0	0.023	48.0	0.019	68.0	0.021	88.0	0.000
9.0	0.199	29.0	0.014	49.0	0.009	69.0	0.023	89.0	0.000
								90.0	0.000

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ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The licensee of WDSI-TV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WDSI-TV 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.

The predicted emissions of WDSI-TV operating on channel 14 must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WDSI-TV, which will operate on television Channel 14 (470-476 MHz), the MPE is 315.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an "uncontrolled" environment and 1576.67 $\mu\text{W}/\text{cm}^2$ in a "controlled" environment. The proposed WDSI-TV facility will operate with a maximum ERP of 120 kW from an elliptically polarized directional transmitting antenna with a centerline height of 57 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.16, the WDSI-TV facility is predicted to produce a power density at two meters above ground level of 73.076 $\mu\text{W}/\text{cm}^2$, which is 23.17% of the FCC guideline value for an "uncontrolled" environment, and 4.634% of the FCC's guideline value for "controlled" environments. Only three full-power DTV stations are to be located on WTVC's tower, however, there are two FM stations located on other towers that are within the relevant proximity of 315 meters. Access to the transmitting site is restricted to authorized personnel and is appropriately marked with RFR warning signs. A site protocol is in effect to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure.



WDSI-TV - CHATTANOOGA, TENNESSEE

Appendix B - Longley-Rice Interference Analysis

October 2017

tvstudy v2.2.3 (Dxtpx3)
Database: localhost, Study: WDSI-14 TVC C160 120K, Model: Longley-Rice
Start: 2017.10.26 11:31:59

Study created: 2017.10.26 11:31:22

Study build station data: LMS TV 2017-10-01 (38)

Proposal: WDSI-TV D14 DT APP CHATTANOOGA, TN
File number: WDSI-14 TVC C160 120K
Facility ID: 71353
Station data: User record
Record ID: 2255
Country: U.S.
Zone: II

Search options:

Non-U.S. records included

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	267.2 km
WSKC-CD	D14	DC	CP	ATLANTA, GA	BLANK0000025394	169.1
WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	345.3
WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	121.6
WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	155.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D14
Latitude: 35 9 38.00 N (NAD83)
Longitude: 85 19 6.00 W
Height AMSL: 691.0 m
HAAT: 306.0 m
Peak ERP: 120 kW
Antenna: WDSI C160 Pattern 0.0 deg
Elev Pattrn: Generic
Elec Tilt: 1.0

38.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	60.7 kW	143.7 m	66.4 km
45.0	106	263.9	78.4
90.0	117	451.7	95.3
135.0	118	468.5	96.7
180.0	102	462.2	94.9
225.0	52.7	246.4	73.4
270.0	34.1	200.3	67.9
315.0	28.9	167.6	64.7

Database HAAT does not agree with computed HAAT

Database HAAT: 306 m Computed HAAT: 301 m

**Proposal service area extends beyond baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Appendix B - Interference Analysis
WDSI-TV - Chattanooga, Tennessee
Channel 14 - 120 kW - Page 2

Distance to Canadian border: 759.7 km

Distance to Mexican border: 1506.5 km

Conditions at FCC monitoring station: Powder Springs GA
 Bearing: 159.2 degrees Distance: 154.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 293.4 degrees Distance: 1832.1 km

No land mobile station failures found

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 BLANK0000025692 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	
Undesireds:	WDSI-TV	D14	DT	BL	CHATTANOOGA, TN	DTVBL71353	273.6 km
	WDSI-TV	D14	DT	APP	CHATTANOOGA, TN	WDSI-14 TVC C160 120K	267.2
	WFGX	D14	DT	CP	FORT WALTON BEACH, FL	BLANK0000027383	319.6
	WDBD	D14	DT	CP	JACKSON, MS	BLANK0000025182	312.0
	WLJT-DT	D14	DT	CP	LEXINGTON, TN	BLANK0000027017	270.4
	WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	158.2
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
39276.4	1,688,439	38504.0	1,666,606	37425.0	1,633,358	37316.8	1,629,816
Undesired		Total IX			Unique IX, before	Unique IX, after	
WDSI-TV D14 DT BL		88.0	2,814	36.1	1,718		
WDSI-TV D14 DT APP		224.1	6,826			144.3	5,260
WFGX D14 DT CP		192.9	2,828	180.8	2,817	180.8	2,817
WDBD D14 DT CP		124.4	1,458	72.3	1,134	72.3	1,134
WLJT-DT D14 DT CP		562.5	15,004	327.0	7,457	307.1	7,213
WAFF D15 DT CP		374.8	19,077	207.3	12,428	211.3	12,447

Interference to BLANK0000025394 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSKC-CD	D14	DC	CP	ATLANTA, GA	BLANK0000025394	
Undesireds:	WDSI-TV	D14	DT	BL	CHATTANOOGA, TN	DTVBL71353	171.1 km
	WDSI-TV	D14	DT	APP	CHATTANOOGA, TN	WDSI-14 TVC C160 120K	169.1
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
3670.1	2,911,344	3585.8	2,860,400	3565.8	2,850,764	3537.7	2,837,663
Undesired		Total IX			Unique IX, before	Unique IX, after	
WDSI-TV D14 DT BL		20.0	9,636	20.0	9,636		
WDSI-TV D14 DT APP		48.1	22,737			48.1	22,737

Interference to BLANK0000026306 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFGF	D14	DT	CP	GRUNDY, VA	BLANK0000026306	
Undesireds:	WDSI-TV	D14	DT	BL	CHATTANOOGA, TN	DTVBL71353	339.3 km

Appendix B - Interference Analysis
WDSI-TV - Chattanooga, Tennessee
Channel 14 - 120 kW - Page 3

WDSI-TV	D14	DT	APP	CHATTANOOGA, TN	WDSI-14 TVC C160 120K	345.3
WLKY	D14	DT	CP	LOUISVILLE, KY	BLANK0000025154	371.9
WRDC	D14	DT	CP	DURHAM, NC	BLANK0000027404	342.5
WHKY-TV	D14	DD	CP	HICKORY, NC	BLANK0000024614	139.1
WCMH-TV	D14	DT	LIC	COLUMBUS, OH	BLCDT20050823AAD	358.8
WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	187.2
WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	190.3

Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
46547.5	1,614,321	38165.5	1,289,609	36677.1	1,249,468	36641.2	1,247,709

Undesired		Total IX	Unique IX, before		Unique IX, after	
WDSI-TV D14 DT BL		16.0	145	12.0	143	
WDSI-TV D14 DT APP		64.0	1,936		48.0	1,902
WLKY D14 DT CP		92.0	2,149	56.1	52.1	1,152
WRDC D14 DT CP		355.1	10,499	131.7	5,212	131.7
WHKY-TV D14 DD CP		1137.6	30,281	846.5	23,141	23,141
WCMH-TV D14 DT LIC		111.3	2,889	43.7	1,114	43.7
WQCW D15 DT CP		67.4	1,654	55.5	763	763
WTNZ D15 DT CP		28.0	769	24.0	371	339

Interference to BLANK0000025101 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	

Undesireds:	WDSI-TV	D14	DT	BL	CHATTANOOGA, TN	DTVBL71353	127.3 km
	WDSI-TV	D14	DT	APP	CHATTANOOGA, TN	WDSI-14 TVC C160 120K	121.6
	WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	158.2
	WRBL	D15	DT	LIC	COLUMBUS, GA	BLCDT20061013ABV	310.9
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	275.4
	WPXA-TV	D16	DT	CP	ROME, GA	BLANK0000027423	178.4
	WHTN	D16	DT	CP	MURFREESBORO, TN	BLANK0000025312	152.8

Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
26054.2	1,196,496	24508.4	1,137,788	23892.1	1,109,686	23888.1	1,109,552

Undesired		Total IX	Unique IX, before		Unique IX, after	
WDSI-TV D14 DT BL		4.0	112	0.0	0	
WDSI-TV D14 DT APP		23.8	685		4.0	134
WDBB D14 DT CP		176.2	4,208	172.2	4,105	172.2
WRBL D15 DT LIC		191.8	11,844	124.0	10,409	124.0
WTNZ D15 DT CP		272.0	12,591	200.0	11,162	184.2
WPXA-TV D16 DT CP		39.9	885	8.0	124	8.0
WHTN D16 DT CP		36.4	589	16.2	431	124

Interference to BLANK0000025183 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	

Undesireds:	WDSI-TV	D14	DT	BL	CHATTANOOGA, TN	DTVBL71353	149.5 km
	WDSI-TV	D14	DT	APP	CHATTANOOGA, TN	WDSI-14 TVC C160 120K	155.7
	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	190.3
	WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	275.4
	WLCU-CD	D15	DC	CP	CAMPBELLSVILLE, KY	BLANK0000028622	195.3
	WXIX-TV	D15	DT	CP	NEWPORT, KY	BLANK0000025169	350.7
	WPBM-CD	D15	DC	CP	SCOTTSVILLE, KY	BLANK0000026401	212.5
	WQCW	D15	DT	CP	PORTSMOUTH, OH	BLANK0000025192	317.6
	WLTX	D15	DT	CP	COLUMBIA, SC	BLANK0000028035	358.5
	WPXA-TV	D16	DT	CP	ROME, GA	BLANK0000027423	198.5
	WAPK-CD	D16	DC	CP	BRISTOL VA/KINGSPORT, TN	BLANK0000026121	168.7

Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
37847.9	1,722,693	30999.3	1,528,558	30111.8	1,504,883	30103.8	1,505,568

Appendix B - Interference Analysis
WDSI-TV - Chattanooga, Tennessee
Channel 14 - 120 kW - Page 4

Undesired	Total IX	Unique IX, before	Unique IX, after
WDSI-TV D14 DT BL	84.8	2,247	84.8
WDSI-TV D14 DT APP	96.7	1,587	92.7
WLFG D14 DT CP	83.8	2,538	67.8
WAFF D15 DT CP	104.1	3,188	56.0
WLCU-CD D15 DC CP	143.6	2,016	59.7
WXIX-TV D15 DT CP	52.0	1,117	12.0
WPBM-CD D15 DC CP	112.0	4,345	56.0
WQCW D15 DT CP	355.2	7,117	267.4
WLTX D15 DT CP	24.2	0	20.2
WPXA-TV D16 DT CP	7.9	0	7.9
WAPK-CD D16 DC CP	107.9	6,239	87.9
			5,212
			87.9
			5,212

Interference to proposal, scenario 1
1.32% interference

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDSI-TV	D14	DT	APP	CHATTANOOGA, TN	WDSI-14 TVC C160 120K	
Undesireds:	WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	267.2 km
	WSKC-CD	D14	DC	CP	ATLANTA, GA	BLANK0000025394	169.1
	WLKY	D14	DT	CP	LOUISVILLE, KY	BLANK0000025154	359.5
	WHKY-TV	D14	DD	CP	HICKORY, NC	BLANK0000024614	366.6
	WLJT-DT	D14	DT	CP	LEXINGTON, TN	BLANK0000027017	303.5
	WLFG	D14	DT	CP	GRUNDY, VA	BLANK0000026306	345.3
	WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	121.6
	WTNZ	D15	DT	CP	KNOXVILLE, TN	BLANK0000025183	155.7
Service area					Terrain-limited	IX-free	Percent IX
20525.4	1,101,392	17912.1	1,043,144	17348.8	1,029,407	3.15	1.32
Undesired					Total IX	Unique IX	Prcnt Unique IX
WDBB D14 DT CP		438.8	12,596	402.9	11,999	2.25	1.15
WSKC-CD D14 DC CP		51.7	786	27.8	391	0.16	0.04
WLKY D14 DT CP		4.0	0	4.0	0	0.02	0.00
WHKY-TV D14 DD CP		4.0	52	4.0	52	0.02	0.00
WLJT-DT D14 DT CP		24.2	229	16.2	27	0.09	0.00
WLFG D14 DT CP		44.2	404	24.0	66	0.13	0.01
WAFF D15 DT CP		4.0	0	0.0	0	0.00	0.00
WTNZ D15 DT CP		48.5	605	28.3	267	0.16	0.03