



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
POST REPACK CONSTRUCTION PERMIT
WTGS - HARDEEVILLE, SOUTH CAROLINA
DTV - CH. 26 - 957 kW - 455 m HAAT**

Prepared for: WTGS LICENSEE, 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 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 WTGS LICENSEE, LLC, licensee of WTGS, channel 28, facility ID number 27245, licensed to Hardeeville, South Carolina, 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 for DTV channel 28 with new DTV channel 26 to be used by WTGS for its post-reassignment broadcasting.

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DIRECTIONAL ANTENNA

The applicant proposes to install a new Dielectric model TFU-24ETT/VP-R 4C290 elliptically polarized directional transmitting antenna with its center of radiation located at a height above ground of 457.7 meters, and a height above average terrain of 455 meters. The antenna manufacturer's 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 (39.95 dBu) contour, and the principal community (48 dBu) contour. which completely encompasses the principal community of license, Hardeeville, South Carolina.

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 WTGS's proposed service area is within the baseline plus 1%. (See Appendix B)

International DTV Considerations

The WTGS site is located more than 1000 kilometers from the nearest points on both the US/Canadian and US/Mexican borders. Therefore there are no international considerations.

BLANKETING AND INTERMODULATION INTERFERENCE

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

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, in $\mu\text{W}/\text{cm}^2$, for an "uncontrolled" environment by dividing the operating frequency in MHz by 1.500, and is similarly determined for a "controlled" environment by

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dividing the operating frequency in MHZ by 0.300.

The predicted emissions of WTGS must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WTGS, which will operate on television Channel 26 (542-548 MHZ), the MPE is 363.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an "uncontrolled" environment and 1,816.7 $\mu\text{W}/\text{cm}^2$ in a "controlled" environment. The proposed WTGS facility will operate with a maximum ERP of 957 kW from an elliptically polarized directional transmitting antenna with a centerline height of 457.7 meters above ground level (AGL). Considering a predicted vertical plane relative field factor of 0.300 the WTGS facility is predicted to produce a power density at two meters above ground level of 27.714 $\mu\text{W}/\text{cm}^2$, which is 7.63% of the FCC guideline value for an "uncontrolled" environment, and 1.526% of the FCC's guideline value for "controlled" environments. There is one other full-power DTV facility and three full-power FM stations that are located at the WTGS site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations within the relevant proximity, is 17.70% of the limit applicable to "uncontrolled" environments, and 3.54% of the limit for "controlled" environments. (See Appendix A)

OCCUPATIONAL SAFETY

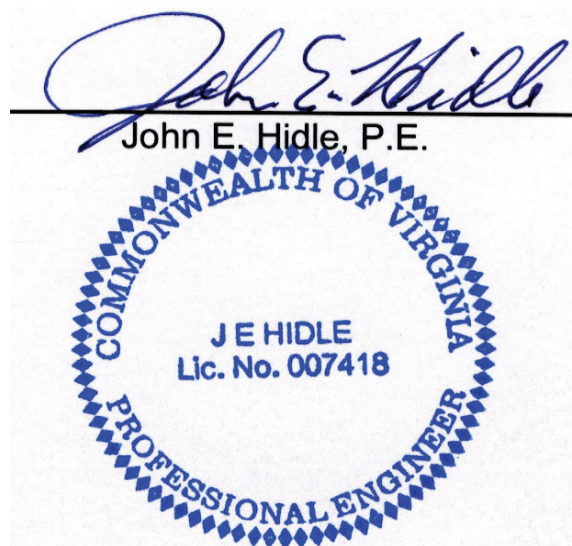
The licensee of WTGS is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WTGS antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

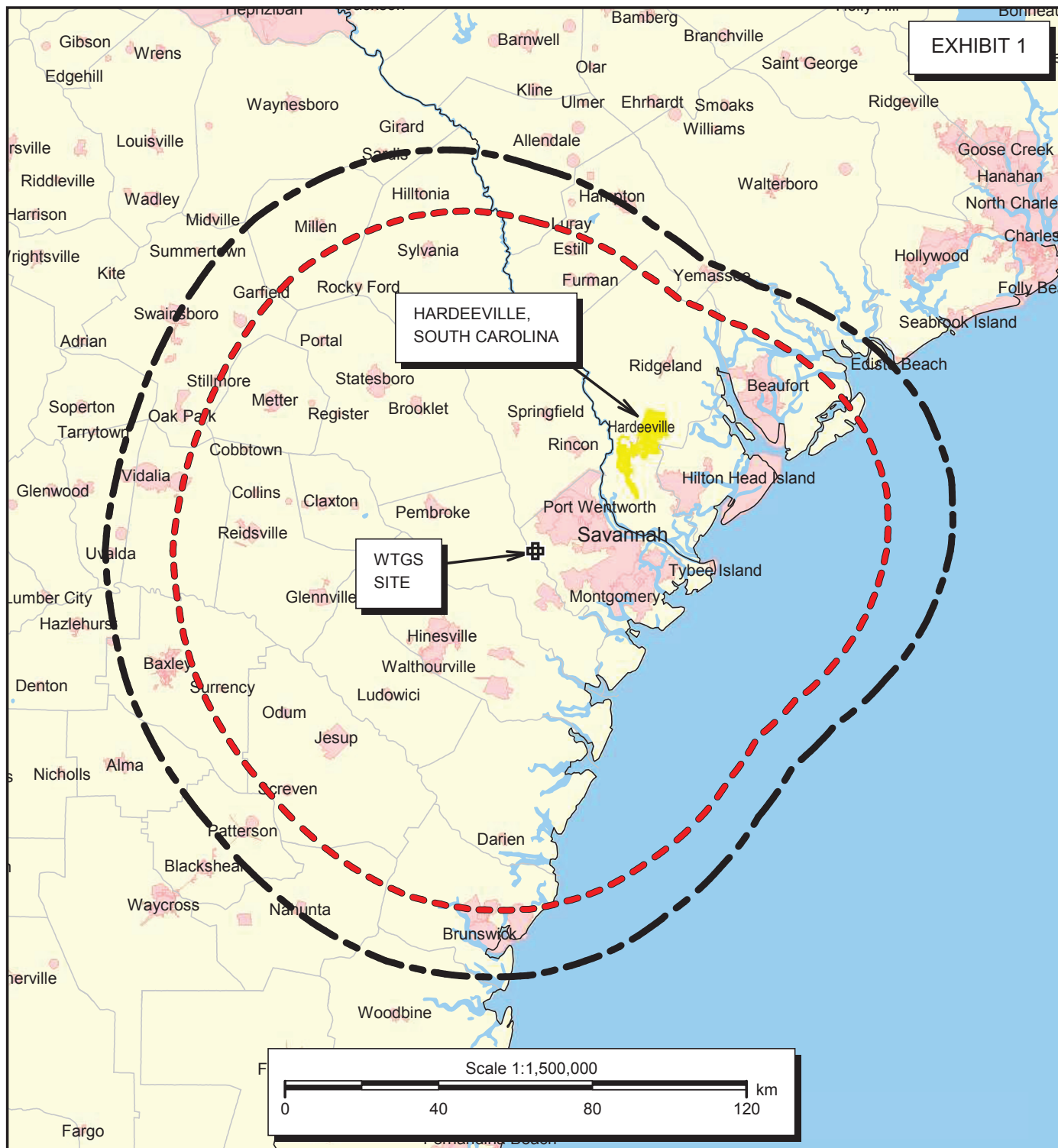
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SUMMARY

It is submitted that the instant application for construction permit to change WTGS from channel 28 to channel 26, 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 29, 2017





PREDICTED COVERAGE CONTOURS

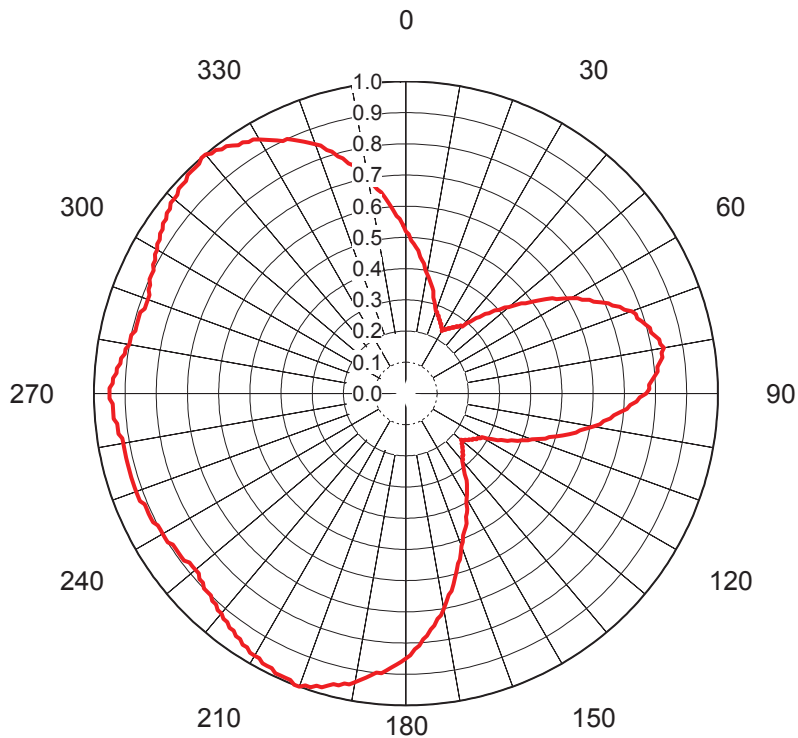
WTGS - HARDEEVILLE, SOUTH CAROLINA
DTV Channel 26 - 957 kW ERP - 455 M HAAT
JUNE, 2017

Predicted Noise Limited 39.95 dBu
F(50,90) Coverage Contour



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

AZIMUTH PATTERN Horizontal Polarization



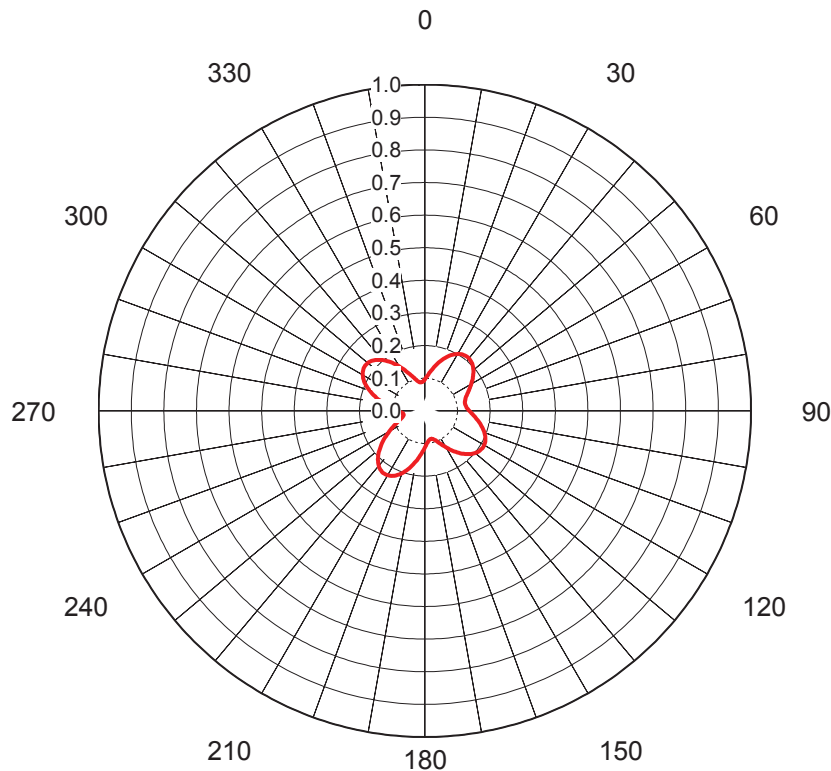
Proposal No. **C-70019**
 Date **29-Mar-17**
 Call Letters **WTGS**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-24ETT/VP-R 4C290**
 Gain **1.82 (2.6dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.520	36	0.260	72	0.780	108	0.470	144	0.320	180	0.850	216	0.940	252	0.920	288	0.880
1	0.510	37	0.270	73	0.790	109	0.450	145	0.340	181	0.860	217	0.940	253	0.920	289	0.880
2	0.490	38	0.270	74	0.800	110	0.430	146	0.350	182	0.870	218	0.930	254	0.920	290	0.880
3	0.480	39	0.280	75	0.810	111	0.420	147	0.360	183	0.880	219	0.930	255	0.920	291	0.880
4	0.470	40	0.280	76	0.810	112	0.400	148	0.370	184	0.890	220	0.920	256	0.920	292	0.890
5	0.460	41	0.300	77	0.820	113	0.390	149	0.380	185	0.900	221	0.920	257	0.920	293	0.890
6	0.440	42	0.310	78	0.830	114	0.370	150	0.390	186	0.900	222	0.910	258	0.920	294	0.900
7	0.430	43	0.330	79	0.830	115	0.360	151	0.400	187	0.910	223	0.910	259	0.920	295	0.900
8	0.420	44	0.340	80	0.840	116	0.340	152	0.420	188	0.920	224	0.900	260	0.920	296	0.900
9	0.400	45	0.360	81	0.830	117	0.330	153	0.430	189	0.930	225	0.900	261	0.920	297	0.910
10	0.390	46	0.370	82	0.830	118	0.310	154	0.440	190	0.940	226	0.900	262	0.930	298	0.910
11	0.380	47	0.390	83	0.820	119	0.300	155	0.460	191	0.950	227	0.890	263	0.930	299	0.920
12	0.370	48	0.400	84	0.810	120	0.280	156	0.470	192	0.950	228	0.890	264	0.930	300	0.920
13	0.360	49	0.420	85	0.810	121	0.280	157	0.480	193	0.960	229	0.880	265	0.940	301	0.930
14	0.350	50	0.430	86	0.800	122	0.270	158	0.490	194	0.960	230	0.880	266	0.940	302	0.930
15	0.340	51	0.450	87	0.790	123	0.270	159	0.510	195	0.970	231	0.880	267	0.940	303	0.940
16	0.320	52	0.470	88	0.780	124	0.260	160	0.520	196	0.980	232	0.880	268	0.940	304	0.940
17	0.310	53	0.480	89	0.780	125	0.260	161	0.540	197	0.980	233	0.890	269	0.950	305	0.950
18	0.300	54	0.500	90	0.770	126	0.250	162	0.560	198	0.990	234	0.890	270	0.950	306	0.950
19	0.290	55	0.520	91	0.750	127	0.250	163	0.570	199	0.990	235	0.890	271	0.950	307	0.960
20	0.280	56	0.540	92	0.740	128	0.240	164	0.590	200	1.000	236	0.890	272	0.940	308	0.960
21	0.280	57	0.560	93	0.720	129	0.240	165	0.610	201	1.000	237	0.890	273	0.940	309	0.970
22	0.270	58	0.570	94	0.710	130	0.230	166	0.630	202	0.990	238	0.900	274	0.930	310	0.970
23	0.270	59	0.590	95	0.690	131	0.240	167	0.650	203	0.990	239	0.900	275	0.930	311	0.970
24	0.260	60	0.610	96	0.670	132	0.240	168	0.660	204	0.990	240	0.900	276	0.920	312	0.980
25	0.260	61	0.630	97	0.660	133	0.250	169	0.680	205	0.990	241	0.900	277	0.920	313	0.980
26	0.250	62	0.640	98	0.640	134	0.250	170	0.700	206	0.980	242	0.900	278	0.910	314	0.980
27	0.250	63	0.660	99	0.630	135	0.260	171	0.720	207	0.980	243	0.910	279	0.910	315	0.990
28	0.240	64	0.670	100	0.610	136	0.260	172	0.730	208	0.980	244	0.910	280	0.900	316	0.990
29	0.240	65	0.690	101	0.590	137	0.270	173	0.750	209	0.970	245	0.910	281	0.900	317	0.990
30	0.230	66	0.710	102	0.570	138	0.270	174	0.760	210	0.970	246	0.910	282	0.900	318	0.990
31	0.240	67	0.720	103	0.560	139	0.280	175	0.780	211	0.970	247	0.910	283	0.890	319	1.000
32	0.240	68	0.740	104	0.540	140	0.280	176	0.790	212	0.960	248	0.920	284	0.890	320	1.000
33	0.250	69	0.750	105	0.520	141	0.290	177	0.810	213	0.960	249	0.920	285	0.890	321	0.990
34	0.250	70	0.770	106	0.500	142	0.300	178	0.820	214	0.950	250	0.920	286	0.890	322	0.990
35	0.260	71	0.780	107	0.480	143	0.310	179	0.840	215	0.950	251	0.920	287	0.890	323	0.980

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-70019**
 Date **29-Mar-17**
 Call Letters **WTGS**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-24ETT/VP-R 4C290**
 Gain **2 (3dB)**
 Calculated



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.096	36	0.210	72	0.133	108	0.189	144	0.154	180	0.113	216	0.227	252	0.076	288	0.169
1	0.099	37	0.210	73	0.131	109	0.192	145	0.149	181	0.116	217	0.226	253	0.074	289	0.175
2	0.101	38	0.210	74	0.129	110	0.194	146	0.145	182	0.120	218	0.224	254	0.072	290	0.180
3	0.104	39	0.210	75	0.128	111	0.197	147	0.141	183	0.125	219	0.222	255	0.070	291	0.185
4	0.107	40	0.210	76	0.127	112	0.199	148	0.137	184	0.129	220	0.220	256	0.068	292	0.190
5	0.110	41	0.210	77	0.126	113	0.201	149	0.133	185	0.134	221	0.217	257	0.067	293	0.194
6	0.114	42	0.209	78	0.126	114	0.203	150	0.129	186	0.138	222	0.214	258	0.067	294	0.199
7	0.117	43	0.208	79	0.125	115	0.205	151	0.125	187	0.143	223	0.210	259	0.066	295	0.203
8	0.121	44	0.206	80	0.125	116	0.206	152	0.121	188	0.148	224	0.207	260	0.066	296	0.207
9	0.125	45	0.205	81	0.125	117	0.208	153	0.117	189	0.153	225	0.203	261	0.066	297	0.210
10	0.129	46	0.203	82	0.126	118	0.209	154	0.114	190	0.157	226	0.199	262	0.067	298	0.214
11	0.133	47	0.201	83	0.126	119	0.210	155	0.110	191	0.162	227	0.194	263	0.067	299	0.217
12	0.137	48	0.199	84	0.127	120	0.210	156	0.107	192	0.167	228	0.190	264	0.068	300	0.220
13	0.141	49	0.197	85	0.128	121	0.210	157	0.104	193	0.172	229	0.185	265	0.070	301	0.222
14	0.145	50	0.194	86	0.129	122	0.210	158	0.101	194	0.177	230	0.180	266	0.072	302	0.224
15	0.149	51	0.192	87	0.131	123	0.210	159	0.099	195	0.182	231	0.175	267	0.074	303	0.226
16	0.154	52	0.189	88	0.133	124	0.210	160	0.096	196	0.186	232	0.169	268	0.076	304	0.227
17	0.158	53	0.186	89	0.134	125	0.209	161	0.094	197	0.191	233	0.164	269	0.079	305	0.228
18	0.162	54	0.183	90	0.136	126	0.208	162	0.093	198	0.195	234	0.158	270	0.082	306	0.229
19	0.166	55	0.180	91	0.139	127	0.207	163	0.091	199	0.199	235	0.153	271	0.085	307	0.229
20	0.170	56	0.177	92	0.141	128	0.205	164	0.090	200	0.203	236	0.147	272	0.088	308	0.229
21	0.174	57	0.174	93	0.144	129	0.203	165	0.089	201	0.207	237	0.142	273	0.092	309	0.229
22	0.177	58	0.171	94	0.146	130	0.201	166	0.088	202	0.210	238	0.136	274	0.096	310	0.228
23	0.181	59	0.168	95	0.149	131	0.199	167	0.088	203	0.214	239	0.131	275	0.101	311	0.227
24	0.185	60	0.164	96	0.152	132	0.197	168	0.088	204	0.217	240	0.125	276	0.105	312	0.226
25	0.188	61	0.161	97	0.155	133	0.194	169	0.088	205	0.219	241	0.120	277	0.110	313	0.224
26	0.191	62	0.158	98	0.158	134	0.191	170	0.089	206	0.222	242	0.115	278	0.115	314	0.222
27	0.194	63	0.155	99	0.161	135	0.188	171	0.090	207	0.224	243	0.110	279	0.120	315	0.219
28	0.197	64	0.152	100	0.164	136	0.185	172	0.091	208	0.226	244	0.105	280	0.125	316	0.217
29	0.199	65	0.149	101	0.168	137	0.181	173	0.093	209	0.227	245	0.101	281	0.131	317	0.214
30	0.201	66	0.146	102	0.171	138	0.177	174	0.095	210	0.228	246	0.096	282	0.136	318	0.210
31	0.203	67	0.144	103	0.174	139	0.174	175	0.097	211	0.229	247	0.092	283	0.142	319	0.207
32	0.205	68	0.141	104	0.177	140	0.170	176	0.100	212	0.229	248	0.088	284	0.147	320	0.203
33	0.207	69	0.139	105	0.180	141	0.166	177	0.103	213	0.229	249	0.085	285	0.153	321	0.199
34	0.208	70	0.136	106	0.183	142	0.162	178	0.106	214	0.229	250	0.082	286	0.158	322	0.195
35	0.209	71	0.134	107	0.186	143	0.158	179	0.109	215	0.228	251	0.079	287	0.164	323	0.191

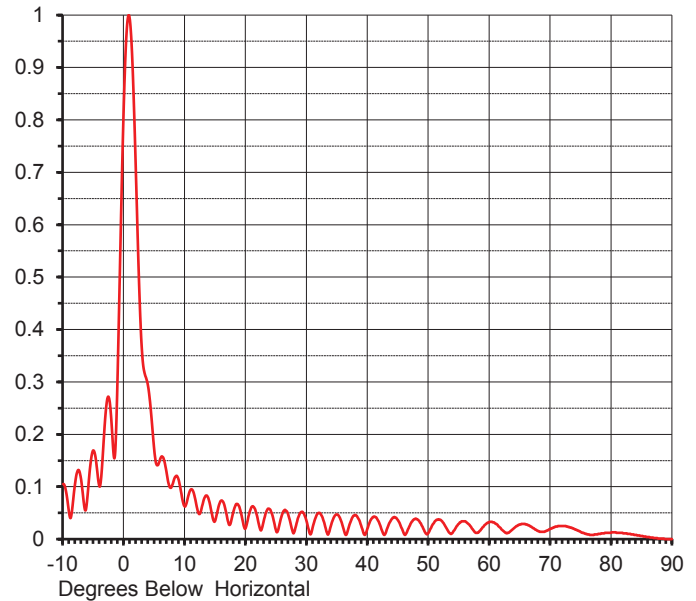
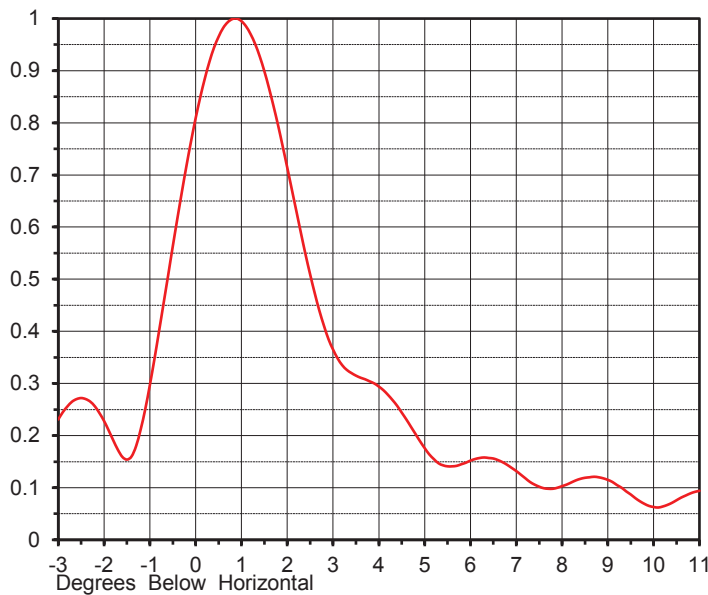
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ELEVATION PATTERN

Proposal No. **C-70019**
 Date **29-Mar-17**
 Call Letters **WTGS**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-24ETT/VP-R 4C290**

RMS Directivity at Main Lobe **22.9 (13.60 dB)**
 RMS Directivity at Horizontal **16.5 (12.17 dB)**
Calculated

Beam Tilt **0.75 deg**
 Pattern Number **24E229075**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.105	10.0	0.062	30.0	0.032	50.0	0.013	70.0	0.020
-9.0	0.048	11.0	0.095	31.0	0.025	51.0	0.034	71.0	0.024
-8.0	0.110	12.0	0.058	32.0	0.050	52.0	0.036	72.0	0.025
-7.0	0.109	13.0	0.072	33.0	0.024	53.0	0.019	73.0	0.023
-6.0	0.083	14.0	0.071	34.0	0.028	54.0	0.014	74.0	0.019
-5.0	0.169	15.0	0.037	35.0	0.047	55.0	0.030	75.0	0.013
-4.0	0.100	16.0	0.074	36.0	0.020	56.0	0.034	76.0	0.009
-3.0	0.245	17.0	0.036	37.0	0.028	57.0	0.022	77.0	0.008
-2.0	0.210	18.0	0.055	38.0	0.046	58.0	0.012	78.0	0.010
-1.0	0.347	19.0	0.058	39.0	0.022	59.0	0.024	79.0	0.012
0.0	0.849	20.0	0.023	40.0	0.022	60.0	0.033	80.0	0.013
1.0	0.985	21.0	0.062	41.0	0.043	61.0	0.029	81.0	0.012
2.0	0.672	22.0	0.034	42.0	0.027	62.0	0.018	82.0	0.011
3.0	0.348	23.0	0.039	43.0	0.014	63.0	0.012	83.0	0.010
4.0	0.287	24.0	0.056	44.0	0.039	64.0	0.021	84.0	0.008
5.0	0.164	25.0	0.014	45.0	0.035	65.0	0.028	85.0	0.006
6.0	0.155	26.0	0.049	46.0	0.009	66.0	0.028	86.0	0.004
7.0	0.125	27.0	0.044	47.0	0.029	67.0	0.022	87.0	0.002
8.0	0.106	28.0	0.016	48.0	0.038	68.0	0.015	88.0	0.001
9.0	0.111	29.0	0.051	49.0	0.023	69.0	0.014	89.0	0.000
								90.0	0.000

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SUMMARY OF RADIOFREQUENCY

RADIATION STUDY

WTGS, Hardeeville, SC

Channel 26, 957 kW, 455 m HAAT

May, 2017

CALL	SERVICE	CHANNEL	FREQUENCY	POLAR- IZATION	ANTENNA HEIGHT	ERP (kW)	VERT. RELATIVE FIELD FACTOR	WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)	FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)	PERCENT OF UNCONTROLLED LIMIT
WTGS	DT	26	545	H & V	457.7	957.000	0.300	27.714	363.33	7.63%
WGSA	DT	35	599	H	351	1000.000	0.300	24.687	399.33	6.18%
WEAS-FM	FM	226	93.1	H & V	299.4	96.600	<note 1>	3.398	200.00	1.70%
WQBT	FM	231	94.1	H & V	398	100.000	<note 2>	2.193	200.00	1.10%
WAEV	FM	247	97.3	H & V	398	100.000	<note 2>	2.193	200.00	1.10%
TOTAL PERCENTAGE OF FCC GUIDELINE VALUE =										17.70%

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

note 1: FM Model Antenna: EPA Type 3; ERI, 12-bay, full-wave spaced antenna

note 2: FM Model Antenna: EPA Type 3; ERI, 10-bay, full-wave spaced antenna



WTGS - HARDEEVILLE, SOUTH CAROLINA Longley-Rice Interference Analysis

tvstudy v2.2.2

Database: localhost, Study: WTGS_26_455H_957K_AP, Model: Longley-Rice
Start: 2017.06.23 09:25:45

Study created: 2017.06.23 09:25:39

Study build station data: LMS TV 2017-06-21 (19)

Proposal: WTGS D26 DT APP HARDEEVILLE, SC
File number: WTGS_26_455H_957K_AP
Facility ID: 27245
Station data: User record
Record ID: 692
Country: U.S.
Zone: II

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WCIV	D25	DT	BL	CHARLESTON, SC	DTVBL9015	183.5 km
WZRB	D25	DT	BL	COLUMBIA, SC	DTVBL136750	224.4
WBIF	D26	DT	CP	MARIANNA, FL	BLANK0000024929	429.3
WBIF	D26	DT	BL	MARIANNA, FL	DTVBL81594	429.3
WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLCDT20090618ABB	382.9
WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	352.3
WGXA	D26	DT	BL	MACON, GA	DTVBL58262	222.4
WWMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	318.6
WNEH	D26	DT	CP	GREENWOOD, SC	BLANK0000025027	269.7
WNEH	D26	DT	BL	GREENWOOD, SC	DTVBL60931	269.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D26
Latitude: 32 2 46.00 N (NAD83)
Longitude: 81 20 26.00 W
Height AMSL: 462.0 m
HAAT: 455.0 m
Peak ERP: 957 kW
Antenna: ERI-ATW28H3-HTTXU-28H (ID 88321) 0.0 deg

40.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	259 kW	452.8 m	99.9 km
45.0	121	456.9	93.6
90.0	567	457.5	107.9
135.0	62.2	459.6	88.9
180.0	691	459.0	110.1
225.0	775	457.7	111.1

**Appendix B - Interference Analysis
WTGS - Hardeeville, South Carolina
Channel 26 - 957 kW - Page 2**

270.0	864	451.6	111.7
315.0	929	453.0	112.6

Database HAAT does not agree with computed HAAT

Database HAAT: 455 m Computed HAAT: 456 m

ERP exceeds maximum

ERP: 957 kW ERP maximum: 644 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: 1074.5 km

Distance to Mexican border: 1656.0 km

Conditions at FCC monitoring station: Powder Springs GA

Bearing: 303.5 degrees Distance: 374.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 299.5 degrees Distance: 2316.3 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 DTVBL9015 BL, scenario 1

Proposal causes no interference.

Interference to DTVBL136750 BL, scenario 1

Proposal causes no interference.

Interference to DTVBL136750 BL, scenario 2

Proposal causes no interference.

Interference to DTVBL136750 BL, scenario 3

Proposal causes no interference.

Interference to DTVBL136750 BL, scenario 4

Proposal causes no interference.

Interference to BLANK0000024929 CP, scenario 1

Proposal causes no interference.

Interference to DTVBL81594 BL, scenario 1

Proposal causes no interference.

Interference to BLCDT20090618ABB LIC, scenario 1

Proposal causes no interference.

Appendix B - Interference Analysis
WTGS - Hardeeville, South Carolina
Channel 26 - 957 kW - Page 3

Interference to BLCDT20090618ABB LIC, scenario 2
Proposal causes no interference.

Interference to DTVBL17544 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL17544 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL17544 BL, scenario 3
Proposal causes no interference.

Interference to DTVBL17544 BL, scenario 4
Proposal causes no interference.

Interference to DTVBL58262 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	
Undesireds:	WTGS	D26	DT	BL	HARDEEVILLE, SC	DTVBL27245	222.4 km
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	222.4
	WATL	D25	DT	LIC	ATLANTA, GA	BLCDT20020716AAH	138.1
	WTJP-TV	D26	DT	LIC	GADSDEN, AL	BLCDT20110304ACB	293.4
	WBIF	D26	DT	CP	MARIANNA, FL	BLANK0000024929	308.5
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	143.6
	WNEH	D26	DT	CP	GREENWOOD, SC	BLANK0000025027	221.7
	WATE-TV	D26	DT	LIC	KNOXVILLE, TN	BMLCDT20041203AEG	363.4
	WAGA-TV	D27	DT	LIC	ATLANTA, GA	BLCDT20060728AEL	136.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
20857.0 741,675	20796.9 740,994	20428.1 734,003	20424.1 734,002	0.02 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTGS D26 DT BL 288.8	4,577	220.8 3,180	
WTGS D26 DT APP 292.8	4,578	224.8 3,181	
WATL D25 DT LIC 8.0	334	0.0 0	0.0 0
WTJP-TV D26 DT LIC 32.0	1,145	12.0 651	12.0 651
WYBU-CD D26 DC BL 40.2	201	24.1 137	24.1 137
WNEH D26 DT CP 59.9	744	20.0 103	20.0 103
WAGA-TV D27 DT LIC 23.9	1,523	19.9 1,493	19.9 1,493

Interference to DTVBL58262 BL, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	
Undesireds:	WTGS	D26	DT	BL	HARDEEVILLE, SC	DTVBL27245	222.4 km
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	222.4
	WATL	D25	DT	LIC	ATLANTA, GA	BLCDT20020716AAH	138.1
	WTJP-TV	D26	DT	LIC	GADSDEN, AL	BLCDT20110304ACB	293.4
	WBIF	D26	DT	BL	MARIANNA, FL	DTVBL81594	308.5
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	143.6

Appendix B - Interference Analysis
WTGS - Hardeeville, South Carolina
Channel 26 - 957 kW - Page 4

WNEH	D26	DT	CP	GREENWOOD, SC	BLANK0000025027	221.7
WATE-TV	D26	DT	LIC	KNOXVILLE, TN	BMLCDT20041203AEG	363.4
WAGA-TV	D27	DT	LIC	ATLANTA, GA	BLCDT20060728AEL	136.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
20857.0 741,675	20796.9 740,994	20428.1 734,003	20424.1 734,002	0.02 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTGS D26 DT BL	288.8 4,577	220.8 3,180	
WTGS D26 DT APP	292.8 4,578		224.8 3,181
WATL D25 DT LIC	8.0 334	0.0 0	0.0 0
WTJP-TV D26 DT LIC	32.0 1,145	12.0 651	12.0 651
WYBU-CD D26 DC BL	40.2 201	24.1 137	24.1 137
WNEH D26 DT CP	59.9 744	20.0 103	20.0 103
WAGA-TV D27 DT LIC	23.9 1,523	19.9 1,493	19.9 1,493

Interference to DTVBL58262 BL, scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WGXA	D26	DT	BL	MACON, GA	DTVBL58262	
Undesireds: WTGS	D26	DT	BL	HARDEEVILLE, SC	DTVBL27245	222.4 km
WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	222.4
WATL	D25	DT	LIC	ATLANTA, GA	BLCDT20020716AAH	138.1
WTJP-TV	D26	DT	LIC	GADSDEN, AL	BLCDT20110304ACB	293.4
WBIF	D26	DT	CP	MARIANNA, FL	BLANK0000024929	308.5
WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	143.6
WNEH	D26	DT	BL	GREENWOOD, SC	DTVBL60931	221.7
WATE-TV	D26	DT	LIC	KNOXVILLE, TN	BMLCDT20041203AEG	363.4
WAGA-TV	D27	DT	LIC	ATLANTA, GA	BLCDT20060728AEL	136.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
20857.0 741,675	20796.9 740,994	20432.1 734,063	20428.1 734,062	0.02 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTGS D26 DT BL	288.8 4,577	228.8 3,535	
WTGS D26 DT APP	292.8 4,578		232.8 3,536
WATL D25 DT LIC	8.0 334	0.0 0	0.0 0
WTJP-TV D26 DT LIC	32.0 1,145	12.0 651	12.0 651
WYBU-CD D26 DC BL	40.2 201	24.1 137	24.1 137
WNEH D26 DT BL	48.0 329	16.0 43	16.0 43
WAGA-TV D27 DT LIC	23.9 1,523	19.9 1,493	19.9 1,493

Interference to DTVBL58262 BL, scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WGXA	D26	DT	BL	MACON, GA	DTVBL58262	
Undesireds: WTGS	D26	DT	BL	HARDEEVILLE, SC	DTVBL27245	222.4 km
WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	222.4
WATL	D25	DT	LIC	ATLANTA, GA	BLCDT20020716AAH	138.1
WTJP-TV	D26	DT	LIC	GADSDEN, AL	BLCDT20110304ACB	293.4
WBIF	D26	DT	BL	MARIANNA, FL	DTVBL81594	308.5
WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	143.6
WNEH	D26	DT	BL	GREENWOOD, SC	DTVBL60931	221.7
WATE-TV	D26	DT	LIC	KNOXVILLE, TN	BMLCDT20041203AEG	363.4
WAGA-TV	D27	DT	LIC	ATLANTA, GA	BLCDT20060728AEL	136.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
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Appendix B - Interference Analysis
WTGS - Hardeeville, South Carolina
Channel 26 - 957 kW - Page 5

20857.0 741,675 20796.9 740,994 20432.1 734,063 20428.1 734,062 0.02 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WTGS D26 DT BL	288.8	4,577	228.8	3,535
WTGS D26 DT APP	292.8	4,578		232.8 3,536
WATL D25 DT LIC	8.0	334	0.0	0.0 0
WTJP-TV D26 DT LIC	32.0	1,145	12.0	651 12.0 651
WYBU-CD D26 DC BL	40.2	201	24.1	137 24.1 137
WNEH D26 DT BL	48.0	329	16.0	43 16.0 43
WAGA-TV D27 DT LIC	23.9	1,523	19.9	1,493 19.9 1,493

Interference to DTVBL3133 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL3133 BL, scenario 2
Proposal causes no interference.

Interference to BLANK0000025027 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WNEH	D26	DT	CP	GREENWOOD, SC	BLANK0000025027	
Undesireds:	WTGS	D26	DT	BL	HARDEEVILLE, SC	DTVBL27245	269.7 km
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	269.7
	WJZY	D25	DT	BL	BELMONT, NC	DTVBL73152	143.7
	WZRB	D25	DT	BL	COLUMBIA, SC	DTVBL136750	113.6
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	341.5
	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	221.7
	WGPX-TV	D26	DT	BL	BURLINGTON, NC	DTVBL65074	308.9
	WMMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	260.3
	WATE-TV	D26	DT	LIC	KNOXVILLE, TN	BMLCDT20041203AEG	242.6
	WUNW	D27	DT	LIC	CANTON, NC	BLEDT20110921AAA	149.1
	WGTX-CD	D27	DC	BL	CHARLOTTE, NC	DTVBL70097	143.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
18297.7 1,261,482	18190.3 1,255,218	17850.7 1,241,831	17850.7 1,241,831	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WTGS D26 DT BL	84.4	849	24.1	197
WTGS D26 DT APP	84.4	849		24.1 197
WJZY D25 DT BL	55.6	1,914	43.7	732 43.7 732
WGXA D26 DT BL	244.0	8,932	144.0	4,428 144.0 4,428
WGPX-TV D26 DT BL	4.0	0	0.0	0 0.0 0
WMMB D26 DT BL	63.6	7,108	23.9	3,485 23.9 3,485

Interference to DTVBL60931 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WNEH	D26	DT	BL	GREENWOOD, SC	DTVBL60931	
Undesireds:	WTGS	D26	DT	BL	HARDEEVILLE, SC	DTVBL27245	269.7 km
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	269.7
	WJZY	D25	DT	BL	BELMONT, NC	DTVBL73152	143.7
	WZRB	D25	DT	BL	COLUMBIA, SC	DTVBL136750	113.6
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	341.5
	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	221.7
	WGPX-TV	D26	DT	BL	BURLINGTON, NC	DTVBL65074	308.9

Appendix B - Interference Analysis
WTGS - Hardeeville, South Carolina
Channel 26 - 957 kW - Page 6

WWMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	260.3
WATE-TV	D26	DT	LIC	KNOXVILLE, TN	BMLCDT20041203AEG	242.6
WUNW	D27	DT	LIC	CANTON, NC	BLEDT20110921AAA	149.1
WGTB-CD	D27	DC	BL	CHARLOTTE, NC	DTVBL70097	143.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
17990.3 1,248,421	17875.0 1,241,843	17563.4 1,229,804	17563.4 1,229,804	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WTGS D26 DT BL	68.3 585	16.1 129	
WTGS D26 DT APP	72.3 730		16.1 129
WJZY D25 DT BL	63.5 2,230	35.7 667	35.7 667
WGXA D26 DT BL	231.9 8,009	132.1 1,915	132.1 1,915
WGPX-TV D26 DT BL	4.0 0	0.0 0	0.0 0
WWMB D26 DT BL	63.6 8,253	15.9 3,161	15.9 3,161

Interference to proposal, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	
Undesireds:	WCIV	D25	DT	BL	CHARLESTON, SC	DTVBL9015	183.5 km
	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLCDDT20090618ABB	382.9
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	352.3
	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	222.4
	WWMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	318.6
	WNEH	D26	DT	CP	GREENWOOD, SC	BLANK0000025027	269.7

Service area	Terrain-limited	IX-free	Percent IX
34511.4 967,792	34507.3 967,630	33976.6 963,751	1.54 0.40
Undesired	Total IX	Unique IX	Prcnt Unique IX
WGXA D26 DT BL	514.7 3,073	470.6 2,838	1.36 0.29
WNEH D26 DT CP	60.2 1,041	16.1 806	0.05 0.08

Interference to proposal, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	
Undesireds:	WCIV	D25	DT	BL	CHARLESTON, SC	DTVBL9015	183.5 km
	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLCDDT20090618ABB	382.9
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	352.3
	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	222.4
	WWMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	318.6
	WNEH	D26	DT	CP	GREENWOOD, SC	BLANK0000025027	269.7

Service area	Terrain-limited	IX-free	Percent IX
34511.4 967,792	34507.3 967,630	33976.6 963,751	1.54 0.40
Undesired	Total IX	Unique IX	Prcnt Unique IX
WGXA D26 DT BL	514.7 3,073	470.6 2,838	1.36 0.29
WNEH D26 DT CP	60.2 1,041	16.1 806	0.05 0.08

Interference to proposal, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	

Appendix B - Interference Analysis
WTGS - Hardeeville, South Carolina
Channel 26 - 957 kW - Page 7

Undesireds:	WCIV	D25	DT	BL	CHARLESTON, SC	DTVBL9015	183.5 km
	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLCDT20090618ABB	382.9
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	352.3
	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	222.4
	WWMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	318.6
	WNEH	D26	DT	BL	GREENWOOD, SC	DTVBL60931	269.7

Service area	Terrain-limited	IX-free	Percent IX
34511.4 967,792	34507.3 967,630	33980.6 964,470	1.53 0.33

Undesired	Total IX	Unique IX	Prcnt Unique IX
WGXA D26 DT BL 514.7	3,073	482.6	2,908 1.40 0.30
WNEH D26 DT BL 44.2	252	12.0	87 0.03 0.01

Interference to proposal, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTGS	D26	DT	APP	HARDEEVILLE, SC	WTGS_26_455H_957K_AP	
Undesireds:	WCIV	D25	DT	BL	CHARLESTON, SC	DTVBL9015	183.5 km
	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLCDT20090618ABB	382.9
	WYBU-CD	D26	DC	BL	COLUMBUS, GA	DTVBL17544	352.3
	WGXA	D26	DT	BL	MACON, GA	DTVBL58262	222.4
	WWMB	D26	DT	BL	FLORENCE, SC	DTVBL3133	318.6
	WNEH	D26	DT	BL	GREENWOOD, SC	DTVBL60931	269.7

Service area	Terrain-limited	IX-free	Percent IX
34511.4 967,792	34507.3 967,630	33980.6 964,470	1.53 0.33

Undesired	Total IX	Unique IX	Prcnt Unique IX
WGXA D26 DT BL 514.7	3,073	482.6	2,908 1.40 0.30
WNEH D26 DT BL 44.2	252	12.0	87 0.03 0.01