



ENGINEERING EXHIBIT

Incentive Auction Channel Reassignment

Application for Digital Television Station Construction Permit

prepared for

Gray Television Licensee, LLC

WSWG(DT) Valdosta, GA
Facility ID 28155
Ch. 31 43 kW 258 m

Gray Television Licensee, LLC (“*Gray*”) is the licensee of digital television station WSWG, Channel 43, Facility ID 28155, Valdosta, GA. *Gray* herein proposes construction of the WSWG post-auction facility on Channel 31. Reassignment of WSWG from Channel 43 to Channel 31 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“*CCRPN*”, DA 17-317, released April 13, 2017).

The proposed Channel 31 operation will employ a new antenna system to be side-mounted on the WSWG tower in lieu of the existing Channel 43 antenna. The tower structure corresponds to FCC Antenna Structure Registration number 1017424. No change to the overall structure height will result.

The proposed antenna is an elliptically polarized directional Dielectric model TLP-12J/VP (25 percent vertical polarization). *Gray* proposes to operate WSWG with an effective radiated power (“ERP”) of 43 kW at 258 meters antenna height above average terrain (“HAAT”). The maximum horizontally polarized ERP is 43 kW and the maximum vertically polarized ERP is 10.75 kW. The vertically polarized component will not exceed the horizontally polarized component at any azimuth. The directional antenna’s azimuthal patterns are depicted in Figures 1 and 1A for horizontal and vertical polarization, respectively. The antenna’s elevation pattern is depicted in Figure 2.

A map is supplied as Figure 3 which depicts the standard predicted coverage contours. This map includes the location of Valdosta, WSWG's principal community. As demonstrated thereon, the proposed facility complies with §73.625(a)(1) as the entire principal community will be encompassed by the 48 dB μ contour.

The proposed noise limited service contour ("NLSC") extends beyond that of the *CCRPN* parameters of 39.5 kW ERP and 253 meters HAAT.¹ The proposal complies with §73.3700(b)(ii) as described in the following.

The *CCRPN* facility specifies the directional antenna pattern corresponding to the WSWG's licensed Channel 43. The antenna manufacturer cannot provide the exact pattern on the new channel due to the change in frequency and corresponding mechanical limitations of antenna construction. The directional pattern proposed herein replicates the reassignment pattern as closely as possible. The proposal results in a slightly larger coverage contour in some directions in an attempt to achieve the *CCRPN* coverage contour. Due to the difference in directional pattern, WSWG qualifies under §73.3700(b)(ii)(A) for a contour extension due to the loss of coverage area resulting from the new channel assignment.

Interference study per FCC OET Bulletin 69² shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and Class A television stations and reassessments as required by §73.616. The interference study output report is provided as Table 1. This satisfies §73.3700(b)(ii)(C) for the proposed NLSC extension.

¹There is no change in antenna height above ground or above mean sea level. The proposed WSWG antenna HAAT is recalculated to be 258.4 meters, based on FCC 30 meter terrain data developed by OET.

²FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). This analysis employed the FCC's current "TVStudy" software with the default application processing template settings, 2 km cell size, and 1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCCs implementation of TVStudy show excellent correlation.

The amount of NLSC extension does not exceed one percent in any direction. Figure 5 supplies a coverage contour comparison of the proposed WSWG facility to the reassignment facility's contour and a one percent extension distance of the reassignment facility's contour. Here, the contour level is adjusted with the dipole factor to match FCC application processing. Table 1's results also demonstrate that the proposed contour is within the baseline contour plus one percent. Therefore the proposed contour extension complies with §73.3700(b)(ii)(B).

The proposed WSWG facility's terrain-limited population provides a 100.6 percent match of the CCRPN baseline facility, as detailed in the following table. The OET Bulletin 69 report summary in Table 1 also concludes that the proposed service area population is more than 95 percent of the baseline population.

Terrain Limited Population - Match of Reassignment

Population Summary (2010 Census) OET Bulletin 69: TVStudy	Reassignment Parameters	Proposed
Within Noise Limited Contour	363,166	365,475
Not affected by terrain losses	363,135	365,444
Match of Reassignment	---	100.64%

The nearest FCC monitoring station is 325 km distant at Powder Springs, GA. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with "quiet" zones specified in §73.1030(a) and (b). The site location is beyond the border areas requiring international coordination. There are no authorized AM stations within 3 kilometers of the site.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 15 percent antenna relative field in downward elevations (pattern data shows less than 15 percent relative field at angles 15 to 90 degrees below the antenna), the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $0.6 \mu\text{W/cm}^2$, which is 0.1 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in

§1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent.

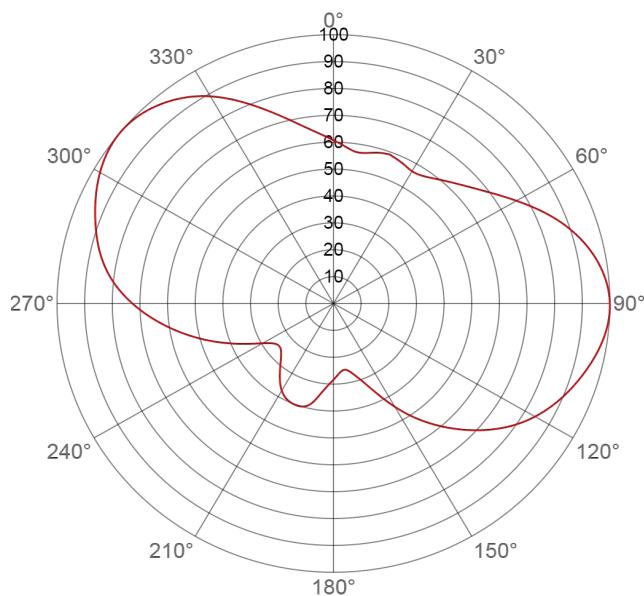
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field. No increase in structure height is proposed.

List of Attachments

- Figure 1, 1A Antenna Azimuthal Pattern
- Figure 2 Antenna Elevation Pattern
- Figure 3 Proposed Coverage Contours
- Figure 4 Proposed Contour Expansion
- Table 1 OET Bulletin 69 Interference Study
- Form 2100 Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E. June 23, 2017
207 Old Dominion Road Yorktown, VA 23692 703-650-9600



Horizontal Polarization AZIMUTH PATTERN

Exhibit No.

8 Jun 2017

Date Call Letters

WSWG

Channel

31

Antenna Type

TLP-16J/VP-R

Location

Albany, GA

Customer

Gray

Gain 2.0 (3.01 dB)

Calculated

Drawing #

TLP-J

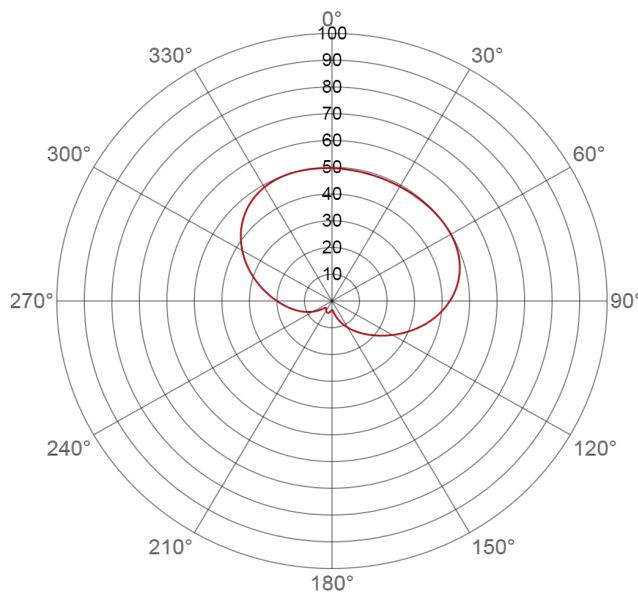
Deg	Value																		
0	0.608	36	0.581	72	0.898	108	0.930	144	0.536	180	0.284	216	0.330	252	0.457	288	0.904	324	0.943
1	0.602	37	0.585	73	0.908	109	0.924	145	0.521	181	0.290	217	0.322	253	0.472	289	0.911	325	0.935
2	0.597	38	0.590	74	0.917	110	0.918	146	0.506	182	0.295	218	0.314	254	0.487	290	0.917	326	0.927
3	0.592	39	0.595	75	0.926	111	0.911	147	0.491	183	0.301	219	0.306	255	0.502	291	0.923	327	0.919
4	0.586	40	0.601	76	0.934	112	0.905	148	0.475	184	0.308	220	0.299	256	0.518	292	0.930	328	0.910
5	0.581	41	0.606	77	0.942	113	0.898	149	0.460	185	0.315	221	0.291	257	0.533	293	0.936	329	0.900
6	0.576	42	0.612	78	0.950	114	0.890	150	0.444	186	0.323	222	0.285	258	0.548	294	0.942	330	0.890
7	0.573	43	0.618	79	0.957	115	0.883	151	0.428	187	0.331	223	0.278	259	0.564	295	0.948	331	0.879
8	0.570	44	0.624	80	0.964	116	0.875	152	0.413	188	0.340	224	0.273	260	0.579	296	0.954	332	0.868
9	0.569	45	0.630	81	0.970	117	0.868	153	0.397	189	0.351	225	0.268	261	0.594	297	0.960	333	0.857
10	0.569	46	0.637	82	0.975	118	0.859	154	0.382	190	0.361	226	0.263	262	0.609	298	0.965	334	0.845
11	0.570	47	0.644	83	0.981	119	0.851	155	0.368	191	0.371	227	0.259	263	0.625	299	0.970	335	0.834
12	0.572	48	0.651	84	0.985	120	0.842	156	0.355	192	0.380	228	0.256	264	0.640	300	0.975	336	0.822
13	0.575	49	0.658	85	0.989	121	0.833	157	0.342	193	0.387	229	0.254	265	0.655	301	0.980	337	0.810
14	0.578	50	0.666	86	0.993	122	0.823	158	0.330	194	0.392	230	0.253	266	0.670	302	0.984	338	0.798
15	0.581	51	0.674	87	0.995	123	0.813	159	0.319	195	0.396	231	0.252	267	0.685	303	0.987	339	0.786
16	0.583	52	0.683	88	0.997	124	0.803	160	0.309	196	0.399	232	0.253	268	0.699	304	0.991	340	0.775
17	0.586	53	0.692	89	0.999	125	0.792	161	0.300	197	0.401	233	0.254	269	0.713	305	0.994	341	0.763
18	0.588	54	0.701	90	1.000	126	0.780	162	0.292	198	0.402	234	0.257	270	0.728	306	0.996	342	0.752
19	0.589	55	0.711	91	1.000	127	0.768	163	0.284	199	0.402	235	0.260	271	0.741	307	0.998	343	0.741
20	0.591	56	0.721	92	0.999	128	0.756	164	0.277	200	0.402	236	0.265	272	0.755	308	0.999	344	0.731
21	0.588	57	0.732	93	0.998	129	0.744	165	0.271	201	0.401	237	0.271	273	0.767	309	1.000	345	0.720
22	0.586	58	0.742	94	0.996	130	0.731	166	0.265	202	0.401	238	0.279	274	0.780	310	1.000	346	0.710
23	0.584	59	0.753	95	0.994	131	0.718	167	0.260	203	0.399	239	0.287	275	0.792	311	0.999	347	0.700
24	0.582	60	0.764	96	0.991	132	0.705	168	0.256	204	0.397	240	0.296	276	0.803	312	0.998	348	0.691
25	0.580	61	0.776	97	0.988	133	0.692	169	0.252	205	0.395	241	0.307	277	0.814	313	0.997	349	0.682
26	0.577	62	0.787	98	0.984	134	0.678	170	0.250	206	0.392	242	0.318	278	0.825	314	0.994	350	0.673
27	0.574	63	0.799	99	0.980	135	0.664	171	0.250	207	0.389	243	0.330	279	0.834	315	0.991	351	0.665
28	0.572	64	0.810	100	0.975	136	0.650	172	0.251	208	0.385	244	0.342	280	0.844	316	0.988	352	0.657
29	0.570	65	0.822	101	0.970	137	0.637	173	0.252	209	0.380	245	0.355	281	0.852	317	0.984	353	0.650
30	0.568	66	0.834	102	0.965	138	0.623	174	0.255	210	0.374	246	0.369	282	0.861	318	0.979	354	0.643
31	0.568	67	0.845	103	0.960	139	0.608	175	0.259	211	0.368	247	0.383	283	0.869	319	0.974	355	0.637
32	0.569	68	0.856	104	0.954	140	0.594	176	0.263	212	0.361	248	0.397	284	0.876	320	0.969	356	0.630
33	0.571	69	0.867	105	0.948	141	0.580	177	0.268	213	0.354	249	0.412	285	0.883	321	0.963	357	0.624
34	0.573	70	0.878	106	0.942	142	0.566	178	0.273	214	0.346	250	0.427	286	0.890	322	0.957	358	0.619
35	0.577	71	0.888	107	0.936	143	0.551	179	0.279	215	0.338	251	0.442	287	0.897	323	0.950	359	0.613

Figure 1
Antenna Azimuthal Pattern
Horizontal Polarization
WSWG(DT) Valdosta, GA
Facility ID 28155
Ch. 31 43 kW 258 m

prepared for
Gray Television Licensee, LLC

June, 2017





Vertical Polarization AZIMUTH PATTERN

Exhibit No.

8 Jun 2017

Call Letters

WSWG

Channel

31

Antenna Type

TLP-16J/VP-R

Location

Albany, GA

Customer

Gray

Gain

2.0 (3.01 dB)

Calculated

Drawing #

TLP-J

Deg	Value																		
0	0.496	36	0.495	72	0.487	108	0.327	144	0.138	180	0.034	216	0.036	252	0.123	288	0.303	324	0.479
1	0.496	37	0.495	73	0.485	109	0.321	145	0.134	181	0.034	217	0.035	253	0.127	289	0.309	325	0.482
2	0.496	38	0.495	74	0.483	110	0.315	146	0.130	182	0.034	218	0.034	254	0.131	290	0.316	326	0.484
3	0.495	39	0.496	75	0.481	111	0.309	147	0.127	183	0.035	219	0.034	255	0.134	291	0.322	327	0.486
4	0.495	40	0.496	76	0.479	112	0.303	148	0.123	184	0.036	220	0.034	256	0.138	292	0.328	328	0.488
5	0.495	41	0.496	77	0.476	113	0.296	149	0.119	185	0.037	221	0.034	257	0.142	293	0.334	329	0.489
6	0.494	42	0.497	78	0.473	114	0.290	150	0.115	186	0.038	222	0.035	258	0.146	294	0.340	330	0.491
7	0.494	43	0.497	79	0.471	115	0.284	151	0.112	187	0.039	223	0.035	259	0.150	295	0.346	331	0.492
8	0.494	44	0.497	80	0.468	116	0.278	152	0.108	188	0.040	224	0.036	260	0.155	296	0.353	332	0.494
9	0.494	45	0.497	81	0.464	117	0.272	153	0.104	189	0.041	225	0.038	261	0.159	297	0.359	333	0.495
10	0.494	46	0.498	82	0.461	118	0.266	154	0.101	190	0.042	226	0.039	262	0.163	298	0.365	334	0.496
11	0.493	47	0.498	83	0.458	119	0.260	155	0.097	191	0.043	227	0.041	263	0.167	299	0.371	335	0.497
12	0.493	48	0.498	84	0.454	120	0.254	156	0.093	192	0.044	228	0.043	264	0.172	300	0.376	336	0.497
13	0.493	49	0.499	85	0.450	121	0.248	157	0.090	193	0.044	229	0.046	265	0.176	301	0.382	337	0.498
14	0.493	50	0.499	86	0.446	122	0.243	158	0.086	194	0.045	230	0.048	266	0.181	302	0.388	338	0.499
15	0.493	51	0.499	87	0.442	123	0.237	159	0.083	195	0.046	231	0.051	267	0.186	303	0.393	339	0.499
16	0.493	52	0.499	88	0.438	124	0.231	160	0.079	196	0.046	232	0.054	268	0.190	304	0.399	340	0.499
17	0.493	53	0.499	89	0.433	125	0.226	161	0.076	197	0.047	233	0.057	269	0.195	305	0.404	341	0.500
18	0.493	54	0.499	90	0.429	126	0.221	162	0.073	198	0.047	234	0.060	270	0.200	306	0.410	342	0.500
19	0.493	55	0.500	91	0.424	127	0.215	163	0.069	199	0.047	235	0.063	271	0.205	307	0.415	343	0.500
20	0.493	56	0.500	92	0.419	128	0.210	164	0.066	200	0.047	236	0.066	272	0.210	308	0.420	344	0.500
21	0.493	57	0.499	93	0.414	129	0.205	165	0.063	201	0.047	237	0.069	273	0.216	309	0.425	345	0.500
22	0.493	58	0.499	94	0.409	130	0.200	166	0.060	202	0.047	238	0.073	274	0.221	310	0.429	346	0.500
23	0.493	59	0.499	95	0.404	131	0.195	167	0.056	203	0.047	239	0.076	275	0.226	311	0.434	347	0.500
24	0.493	60	0.499	96	0.398	132	0.190	168	0.054	204	0.046	240	0.080	276	0.232	312	0.438	348	0.500
25	0.493	61	0.498	97	0.393	133	0.185	169	0.051	205	0.046	241	0.083	277	0.238	313	0.443	349	0.499
26	0.493	62	0.498	98	0.387	134	0.181	170	0.048	206	0.045	242	0.087	278	0.243	314	0.447	350	0.499
27	0.493	63	0.497	99	0.381	135	0.176	171	0.045	207	0.044	243	0.090	279	0.249	315	0.451	351	0.499
28	0.493	64	0.497	100	0.376	136	0.171	172	0.043	208	0.044	244	0.094	280	0.255	316	0.455	352	0.499
29	0.493	65	0.496	101	0.370	137	0.167	173	0.041	209	0.043	245	0.097	281	0.261	317	0.458	353	0.498
30	0.494	66	0.495	102	0.364	138	0.163	174	0.039	210	0.042	246	0.101	282	0.267	318	0.462	354	0.498
31	0.494	67	0.494	103	0.358	139	0.158	175	0.038	211	0.041	247	0.105	283	0.273	319	0.465	355	0.498
32	0.494	68	0.493	104	0.352	140	0.154	176	0.036	212	0.040	248	0.108	284	0.279	320	0.468	356	0.497
33	0.494	69	0.492	105	0.346	141	0.150	177	0.035	213	0.039	249	0.112	285	0.285	321	0.471	357	0.497
34	0.494	70	0.490	106	0.340	142	0.146	178	0.034	214	0.038	250	0.116	286	0.291	322	0.474	358	0.497
35	0.495	71	0.489	107	0.333	143	0.142	179	0.034	215	0.037	251	0.119	287	0.297	323	0.477	359	0.496



Figure 1A
Antenna Azimuthal Pattern
Vertical Polarization
WSWG(DT) Valdosta, GA
Facility ID 28155
Ch. 31 43 kW 258 m

prepared for
Gray Television Licensee, LLC

June, 2017

ELEVATION PATTERN

Exhibit No.

Date **8 Jun 2017**
 Call Letters **WSWG**
 Channel **31**
 Antenna Type **TLP-16J/VP-R**
 Location **Albany, GA**
 Customer **Gray**

RMS Gain at Main Lobe

16.0 (12.04 dB)

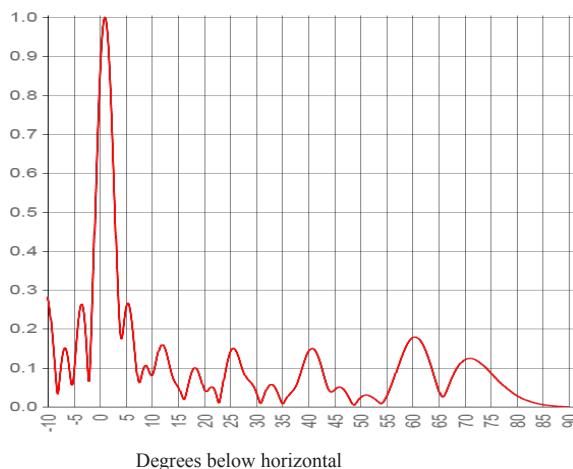
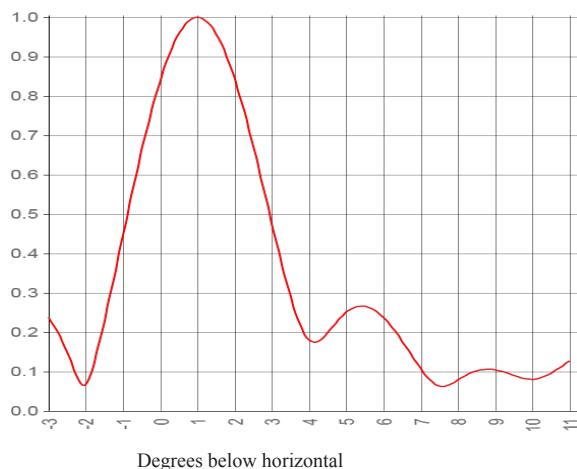
RMS Gain at Horizontal

11.3 (10.53 dB)**Calculated**

Beam Tilt

1 Degrees

Drawing #

16L160100

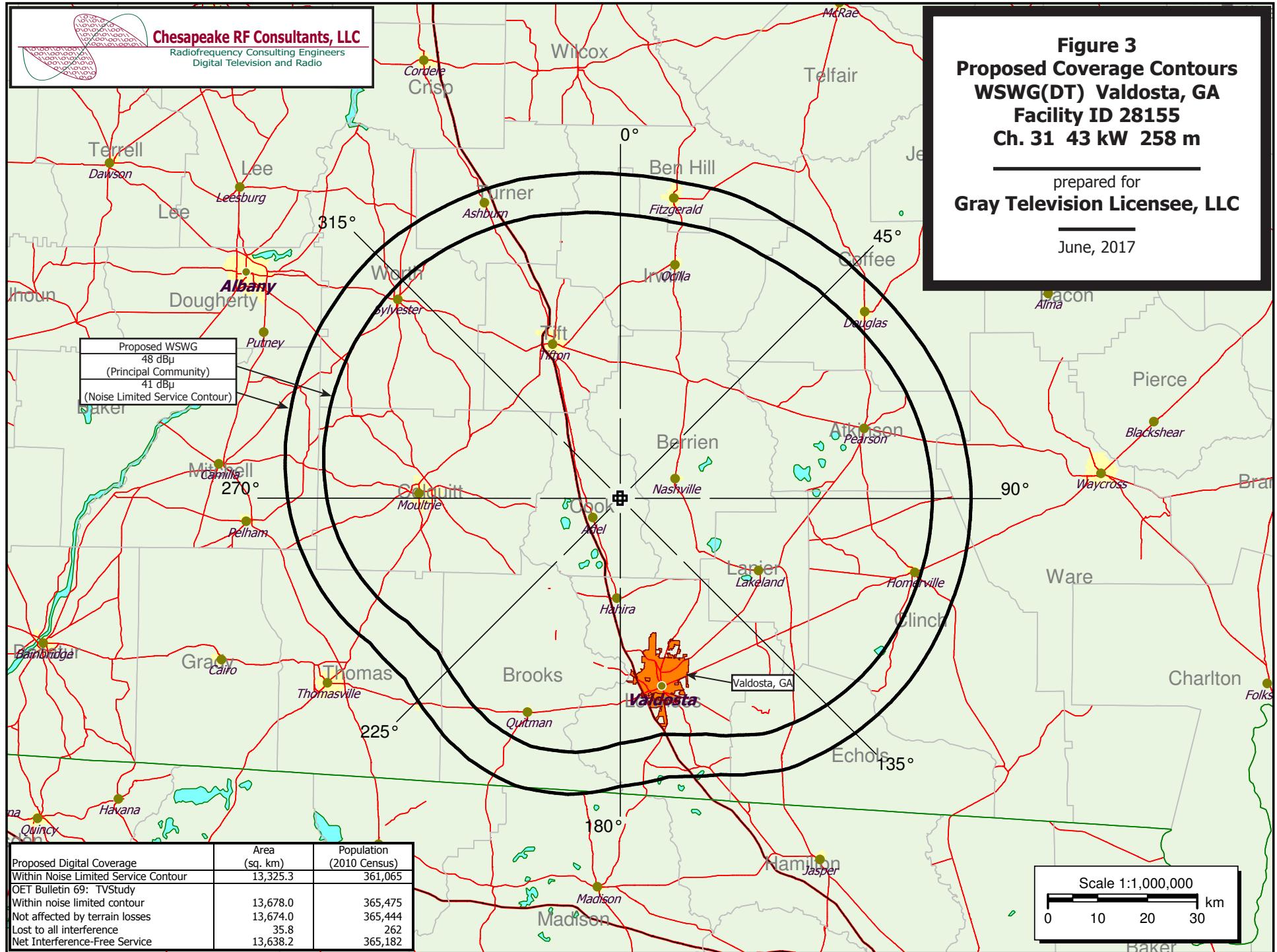
Angle	Field								
-10	0.283	10	0.080	30	0.039	50	0.023	70	0.120
-9	0.167	11	0.127	31	0.010	51	0.030	71	0.124
-8	0.036	12	0.159	32	0.044	52	0.027	72	0.121
-7	0.141	13	0.128	33	0.057	53	0.017	73	0.113
-6	0.119	14	0.077	34	0.040	54	0.008	74	0.101
-5	0.081	15	0.052	35	0.009	55	0.026	75	0.087
-4	0.233	16	0.021	36	0.025	56	0.057	76	0.074
-3	0.237	17	0.057	37	0.041	57	0.094	77	0.060
-2	0.066	18	0.098	38	0.064	58	0.131	78	0.048
-1	0.446	19	0.088	39	0.105	59	0.161	79	0.038
0	0.840	20	0.046	40	0.140	60	0.177	80	0.029
1	1.000	21	0.047	41	0.149	61	0.177	81	0.022
2	0.844	22	0.045	42	0.125	62	0.159	82	0.016
3	0.476	23	0.012	43	0.081	63	0.128	83	0.012
4	0.180	24	0.084	44	0.043	64	0.087	84	0.008
5	0.251	25	0.140	45	0.043	65	0.044	85	0.006
6	0.237	26	0.147	46	0.051	66	0.027	86	0.004
7	0.107	27	0.113	47	0.042	67	0.056	87	0.002
8	0.079	28	0.078	48	0.020	68	0.086	88	0.001
9	0.104	29	0.062	49	0.007	69	0.108	89	0.000



Figure 2
Antenna Elevation Pattern
WSWG(DT) Valdosta, GA
Facility ID 28155
Ch. 31 43 kW 258 m

prepared for
Gray Television Licensee, LLC

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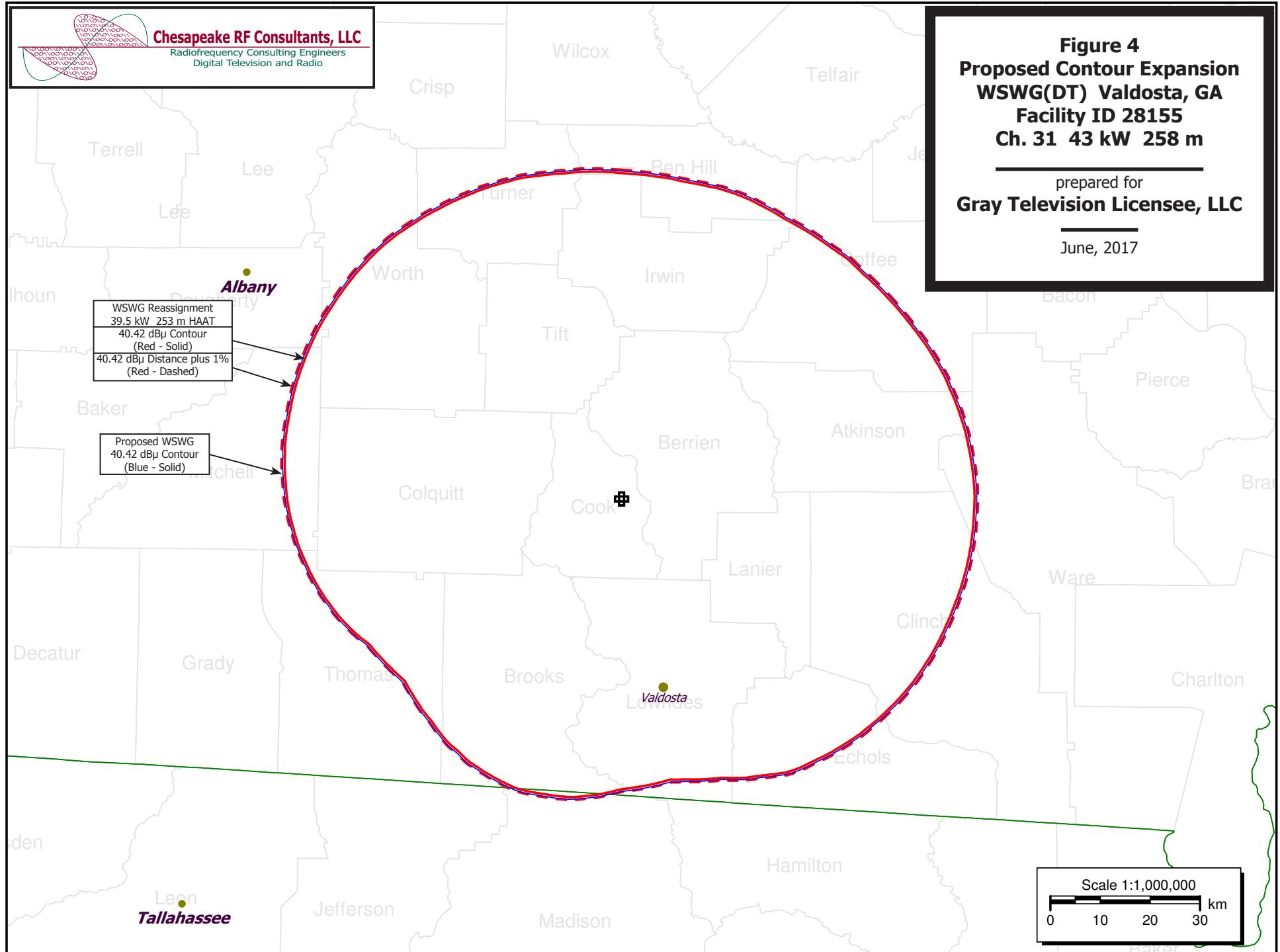


Table 1 WSWG OET Bulletin 69 Interference Study
(page 1 of 8)



tvstudy v2.2.2
Database: localhost, Study: WSWG PROP 43KW, Model: Longley-Rice
Start: 2017.06.23 09:55:50

Study created: 2017.06.23 09:55:44

Study build station data: LMS TV 2017-06-22 LMSTV

Proposal: WSWG D31 DT APP VALDOSTA, GA
File number: WSWG 43KW PROP
Facility ID: 28155
Station data: User record
Record ID: 584
Country: U.S.

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WGIQ	D30	DT	BL	LOUISVILLE, AL	DTVBL710	205.3 km
WVUP-CD	D30	DC	BL	TALLAHASSEE, FL	DTVBL3032	103.8
WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	176.8
WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	340.6
WPAN	D31	DT	BL	FORT WALTON BEACH, FL	DTVBL31570	356.7
WOGX	D31	DT	LIC	OCALA, FL	BLCDT20020730ABS	224.7
WTMO-CD	D31	DC	LIC	ORLANDO, FL	BLDTA20110815ACQ	339.3
WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	306.8
WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	407.9
WFSU-TV	D32	DT	LIC	TALLAHASSEE, FL	BLEDT20030730ACW	149.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D31
Latitude: 31 10 18.70 N (NAD83)
Longitude: 83 21 56.60 W
Height AMSL: 328.2 m
HAAT: 258.4 m
Peak ERP: 43.0 kW
Antenna: TLP-J 20170311 0.0 deg

40.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.9 kW	253.7 m	65.7 km
45.0	17.3	259.0	66.5
90.0	43.0	262.8	71.5
135.0	18.9	266.2	67.5
180.0	3.47	259.7	58.2
225.0	3.28	258.7	57.9
270.0	22.8	254.2	67.6
315.0	41.7	252.5	70.6

Proposal service area is within baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1169.2 km

Distance to Mexican border: 1442.6 km

Conditions at FCC monitoring station: Powder Springs GA
Bearing: 337.3 degrees Distance: 325.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 302.9 degrees Distance: 2202.5 km

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

Table 1 WSWG OET Bulletin 69 Interference Study
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Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to DTVBL710 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 3
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 4
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 5
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 6
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 7
Proposal causes no interference.

Interference to DTVBL710 BL, scenario 8
Proposal causes no interference.

Interference to DTVBL3032 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL43847 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL43847 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL43847 BL, scenario 3
Proposal causes no interference.

Interference to DTVBL43847 BL, scenario 4
Proposal causes no interference.

Interference to BLANK0000001319 LIC, scenario 1
Proposal causes no interference.

Interference to DTVBL31570 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL31570 BL, scenario 2
Proposal causes no interference.

Interference to BLCDT20020730ABS LIC, scenario 1
Proposal causes no interference.

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Interference to BLDTA20110815ACQ LIC, scenario 1
Proposal causes no interference.

Interference to DTVBL64033 BL, scenario 1

Desired:	Call WPCH-TV	Chan D31	Svc DT	Status BL	City, State ATLANTA, GA	File Number DTVBL64033	Distance
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	CP	CROSSVILLE, TN	BLANK0000025087	255.8
	WSB-TV	D32	DT	APP	ATLANTA, GA	BLANK0000025134	5.2
Service area	30875.1	5,948,481	29453.4	5,872,781	28418.7	IX-free, before 5,800,745	IX-free, after 28418.7 5,800,745
Undesired				Total IX	Unique IX, before	Unique IX, after	
WSWG D31 DT BL		4.0		37	0.0	0	
WSWG D31 DT APP		4.0		37		0.0	0
WDGA-CD D30 DC BL		330.7		21,628	123.5	5,273	123.5 5,273
WMGT-TV D30 DT BL		4.0		107	0.0	0	0.0 0
WNCF D31 DT LIC		240.1		10,377	151.9	6,838	151.9 6,838
WKTC D31 DT BL		52.1		4,380	36.1	3,602	36.1 3,602
WBXX-TV D31 DT CP		543.4		46,415	260.0	25,936	260.0 25,936
WSB-TV D32 DT APP		175.7		9,871	147.8	9,608	147.8 9,608

Interference to DTVBL64033 BL, scenario 2

Desired:	Call WPCH-TV	Chan D31	Svc DT	Status BL	City, State ATLANTA, GA	File Number DTVBL64033	Distance
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	BL	CROSSVILLE, TN	DTVBL72971	255.9
	WSB-TV	D32	DT	APP	ATLANTA, GA	BLANK0000025134	5.2
Service area	30875.1	5,948,481	29453.4	5,872,781	28422.7	IX-free, before 5,800,862	IX-free, after 28422.7 5,800,862
Undesired				Total IX	Unique IX, before	Unique IX, after	
WSSWG D31 DT BL		4.0		37	0.0	0	
WSSWG D31 DT APP		4.0		37		0.0	0
WDGA-CD D30 DC BL		330.7		21,628	119.5	5,046	119.5 5,046
WMGT-TV D30 DT BL		4.0		107	0.0	0	0.0 0
WNCF D31 DT LIC		240.1		10,377	151.9	6,838	151.9 6,838
WKTC D31 DT BL		52.1		4,380	36.1	3,602	36.1 3,602
WBXX-TV D31 DT BL		543.4		46,525	256.0	25,819	256.0 25,819
WSB-TV D32 DT APP		175.7		9,871	147.8	9,608	147.8 9,608

Interference to DTVBL64033 BL, scenario 3

Desired:	Call WPCH-TV	Chan D31	Svc DT	Status BL	City, State ATLANTA, GA	File Number DTVBL64033	Distance
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	CP	CROSSVILLE, TN	BLANK0000025087	255.8
	WSB-TV	D32	DT	BL	ATLANTA, GA	DTVBL23960	5.2

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Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
30875.1 5,948,481	29453.4 5,872,781	28418.7 5,800,752	28418.7 5,800,752	0.00 0.00
Undesired	Total IX	Unique IX, before	Unique IX, after	
WSWG D31 DT BL	4.0 37	0.0 0	0.0 0	
WSWG D31 DT APP	4.0 37			
WDGA-CD D30 DC BL	330.7 21,628	123.5 5,273	123.5 5,273	
WMGT-TV D30 DT BL	4.0 107	4.0 107	4.0 107	
WNCF D31 DT LIC	240.1 10,377	151.9 6,838	151.9 6,838	
WKTC D31 DT BL	52.1 4,380	36.1 3,602	36.1 3,602	
WBXX-TV D31 DT CP	543.4 46,415	260.0 25,936	260.0 25,936	
WSB-TV D32 DT BL	171.7 9,757	147.8 9,601	147.8 9,601	

Interference to DTVBL64033 BL, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	BL	CROSSVILLE, TN	DTVBL72971	255.9
	WSB-TV	D32	DT	BL	ATLANTA, GA	DTVBL23960	5.2
Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
30875.1 5,948,481	29453.4 5,872,781		28422.7 5,800,869		28422.7 5,800,869	0.00	0.00
Undesired	Total IX		Unique IX, before		Unique IX, after		
WSWG D31 DT BL	4.0 37		0.0 0		0.0 0		
WSWG D31 DT APP	4.0 37						
WDGA-CD D30 DC BL	330.7 21,628		119.5 5,046		119.5 5,046		
WMGT-TV D30 DT BL	4.0 107		4.0 107		4.0 107		
WNCF D31 DT LIC	240.1 10,377		151.9 6,838		151.9 6,838		
WKTC D31 DT BL	52.1 4,380		36.1 3,602		36.1 3,602		
WBXX-TV D31 DT BL	543.4 46,525		256.0 25,819		256.0 25,819		
WSB-TV D32 DT BL	171.7 9,757		147.8 9,601		147.8 9,601		

Interference to DTVBL64033 BL, scenario 5

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	CP	CROSSVILLE, TN	BLANK0000025087	255.8
	WSB-TV	D32	DT	APP	ATLANTA, GA	BLANK0000025134	5.2
Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
30875.1 5,948,481	29453.4 5,872,781		28418.7 5,800,745		28418.7 5,800,745	0.00	0.00
Undesired	Total IX		Unique IX, before		Unique IX, after		
WSWG D31 DT BL	4.0 37		0.0 0		0.0 0		
WSWG D31 DT APP	4.0 37						
WDGA-CD D30 DC BL	330.7 21,628		123.5 5,273		123.5 5,273		
WMGT-TV D30 DT BL	4.0 107		0.0 0		0.0 0		
WNCF D31 DT LIC	240.1 10,377		151.9 6,838		151.9 6,838		
WKTC D31 DT BL	52.1 4,380		36.1 3,602		36.1 3,602		
WBXX-TV D31 DT CP	543.4 46,415		260.0 25,936		260.0 25,936		
WSB-TV D32 DT APP	175.7 9,871		147.8 9,608		147.8 9,608		

Interference to DTVBL64033 BL, scenario 6

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Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	BL	CROSSVILLE, TN	DTVBL72971	255.9
	WSB-TV	D32	DT	APP	ATLANTA, GA	BLANK0000025134	5.2
Service area							
30875.1	5,948,481	29453.4	Terrain-limited		IX-free, before	IX-free, after	Percent New IX
					28422.7	5,800,862	0.00 0.00
Undesired			Total	IX	Unique IX, before	Unique IX, after	
WSWG D31 DT BL		4.0		37	0.0	0	
WSWG D31 DT APP		4.0		37		0.0	0
WDGA-CD D30 DC BL		330.7		21,628	119.5	5,046	119.5 5,046
WMGT-TV D30 DT BL		4.0		107	0.0	0	0.0 0
WNCF D31 DT LIC		240.1		10,377	151.9	6,838	151.9 6,838
WKTC D31 DT BL		52.1		4,380	36.1	3,602	36.1 3,602
WBXX-TV D31 DT BL		543.4		46,525	256.0	25,819	256.0 25,819
WSB-TV D32 DT APP		175.7		9,871	147.8	9,608	147.8 9,608

Interference to DTVBL64033 BL, scenario 7							
Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	CP	CROSSVILLE, TN	BLANK0000025087	255.8
	WSB-TV	D32	DT	BL	ATLANTA, GA	DTVBL23960	5.2
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
30875.1	5,948,481	29453.4		5,872,781	28418.7	5,800,752	0.00 0.00
Undesired			Total	IX	Unique IX, before	Unique IX, after	
WSSWG D31 DT BL		4.0		37	0.0	0	
WSWG D31 DT APP		4.0		37		0.0	0
WDGA-CD D30 DC BL		330.7		21,628	123.5	5,273	123.5 5,273
WMGT-TV D30 DT BL		4.0		107	4.0	107	4.0 107
WNCF D31 DT LIC		240.1		10,377	151.9	6,838	151.9 6,838
WKTC D31 DT BL		52.1		4,380	36.1	3,602	36.1 3,602
WBXX-TV D31 DT CP		543.4		46,415	260.0	25,936	260.0 25,936
WSB-TV D32 DT BL		171.7		9,757	147.8	9,601	147.8 9,601

Interference to DTVBL64033 BL, scenario 8							
Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	
Undesireds:	WSWG	D31	DT	BL	VALDOSTA, GA	DTVBL28155	306.8 km
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	306.8
	WDGA-CD	D30	DC	BL	DALTON, GA	DTVBL49235	120.3
	WMGT-TV	D30	DT	BL	MACON, GA	DTVBL43847	137.6
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	292.7
	WKTC	D31	DT	BL	SUMTER, SC	DTVBL40902	331.4
	WBXX-TV	D31	DT	BL	CROSSVILLE, TN	DTVBL72971	255.9
	WSB-TV	D32	DT	BL	ATLANTA, GA	DTVBL23960	5.2
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
30875.1	5,948,481	29453.4		5,872,781	28422.7	5,800,869	0.00 0.00
Undesired			Total	IX	Unique IX, before	Unique IX, after	
WSSWG D31 DT BL		4.0		37	0.0	0	

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WSWG D31 DT APP	4.0	37		0.0	0
WDGA-CD D30 DC BL	330.7	21,628	119.5	5,046	119.5
WMGT-TV D30 DT BL	4.0	107	4.0	107	4.0
WNCF D31 DT LIC	240.1	10,377	151.9	6,838	151.9
WKTC D31 DT BL	52.1	4,380	36.1	3,602	36.1
WBXX-TV D31 DT BL	543.4	46,525	256.0	25,819	256.0
WSB-TV D32 DT BL	171.7	9,757	147.8	9,601	147.8

 Interference to DTVBL40902 BL, scenario 1
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 2
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 3
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 4
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 5
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 6
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 7
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 8
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 9
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 10
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 11
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 12
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 13
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 14
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 15
 Proposal causes no interference.

 Interference to DTVBL40902 BL, scenario 16
 Proposal causes no interference.

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Interference to DTVBL40902 BL, scenario 17
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 18
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 19
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 20
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 21
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 22
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 23
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 24
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 25
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 26
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 27
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 28
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 29
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 30
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 31
Proposal causes no interference.

Interference to DTVBL40902 BL, scenario 32
Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 1
Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 2
Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 3

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Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 4
 Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 5
 Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 6
 Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 7
 Proposal causes no interference.

Interference to BLEDT20030730ACW LIC, scenario 8
 Proposal causes no interference.

Interference to proposal, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSWG	D31	DT	APP	VALDOSTA, GA	WSWG 43KW PROP	
Undesireds:	WVUP-CD	D30	DC	BL	TALLAHASSEE, FL	DTVBL3032	103.8 km
	WNCF	D31	DT	LIC	MONTGOMERY, AL	BLANK0000001319	340.6
	WPAN	D31	DT	BL	FORT WALTON BEACH, FL	DTVBL31570	356.7
	WOGX	D31	DT	LIC	OCALA, FL	BLCDT20020730ABS	224.7
	WTMO-CD	D31	DC	LIC	ORLANDO, FL	BLDTA20110815ACQ	339.3
	WPCH-TV	D31	DT	BL	ATLANTA, GA	DTVBL64033	306.8
	WFSU-TV	D32	DT	LIC	TALLAHASSEE, FL	BLEDT20030730ACW	149.3
Service area							
13678.0	365,475	13674.0	365,444	13638.2	IX-free 365,182	Percent IX 0.26	0.07
Undesired					Total IX	Unique IX	Prcnt Unique IX
WVUP-CD D30 DC BL		24.0		194	24.0	194	0.18 0.05
WNCF D31 DT LIC		11.9		68	4.0	26	0.03 0.01
WPCH-TV D31 DT BL		7.9		42	0.0	0	0.00 0.00

Channel and Facility Information	Section	Question	Response
	Proposed Community of License	Facility ID	28155
		State	Georgia
		City	VALDOSTA
		DTV Channel	31
	Facility Type	Facility Type	Commercial
		Station Type	Main
	Zone	Zone	3

Antenna Location Data	Section	Question	Response
	Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
		ASR Number	1017424
	Coordinates (NAD83)	Latitude	31° 10' 18.7" N+
		Longitude	083° 21' 56.6" W-
		Structure Type	TOWER-A free standing or guyed struct
		Overall Structure Height	291.1 meters
		Support Structure Height	274.0 meters
		Ground Elevation (AMSL)	69.2 meters
	Antenna Data	Height of Radiation Center Above Ground Level	259 meters
		Height of Radiation Center Above Average Terrain	258.4 meters
		Height of Radiation Center Above Mean Sea Level	328.2 meters
		Effective Radiated Power	43 kW

Antenna Technical Data	Section	Question	Response
	Antenna Type	Antenna Type	Directional Custom
		Do you have an Antenna ID?	No
		Antenna ID	
	Antenna Manufacturer and Model	Manufacturer:	DIE
		Model	TLP-12J/VP
		Rotation	0 degrees
		Electrical Beam Tilt	1
		Mechanical Beam Tilt	Not Applicable
		toward azimuth	
		Polarization	Elliptical
	DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
		Uploaded file for elevation antenna (or radiation) pattern data	

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	V _A (Authorized Value)						
0	0.608	90	1.000	180	0.284	270	0.728
10	0.569	100	0.975	190	0.361	280	0.844
20	0.591	110	0.918	200	0.402	290	0.917
30	0.568	120	0.842	210	0.374	300	0.975
40	0.601	130	0.731	220	0.299	310	1.000
50	0.666	140	0.594	230	0.253	320	0.969
60	0.764	150	0.444	240	0.296	330	0.890
70	0.878	160	0.309	250	0.427	340	0.775
80	0.964	170	0.250	260	0.579	350	0.673

Additional Azimuths

Degree	V _A

Construction Permit Certifications	Section	Question	Response
	Post-Incentive Auction Expedited Processing	<p>It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.</p> <p>It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.</p> <p>It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.</p> <p>The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.</p>	Yes No Yes Yes
	Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See Section 1.1306 of 47 C.F.R.)	No
	Broadcast Facility	The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C.F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.	Yes