

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington DC 20554**

In the Matter of	)	
	)	
Amendment of Section 73.622,	)	MB Docket No. _____
Digital Television Table of Allotments	)	
For WTOC-TV, Savannah, Georgia	)	Rulemaking No. _____
(Facility 590)	)	

To: Office of the Secretary, Federal Communications Commission  
Attn: Chief, Media Bureau

**PETITION FOR RULEMAKING**

Gray Television Licensee, LLC (“Gray”), licensee of Station WTOC-TV (“WTOC”), Savannah, Georgia, hereby requests that the Commission institute a rulemaking proceeding for the purpose of amending the DTV Table of Allotments (the “DTV Table”) contained in Section 73.622(i) of the Commission’s rules.<sup>1</sup> Gray requests that the Commission amend the DTV Table to substitute UHF Channel 23 for VHF Channel 11 with the technical parameters as set forth in the attached Engineering Statement. As set forth herein, grant of this Petition will create a preferential arrangement of allotments by expanding the availability of free over-the-air television service in this market.

The FCC has described the goal of the DTV Table as ensuring the provision of digital television service “to the American people in an expeditious and efficient manner.”<sup>2</sup> In considering channel substitution requests, the Commission considers the

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<sup>1</sup> See 47 C.F.R. §§ 1.401, 1.420, 73.622(i).

<sup>2</sup> See, e.g., *In the Matter of Amendment of Section 73.622(B), Table of Allotments, Digital Television Broadcast Stations (Nampa, Idaho)*, Report and Order, 19 FCC Rcd. 4491, 4493 (2004); *In the Matter of Amendment of Section 73.622(B), Table of Allotments, Digital Television Broadcast Stations (In the Matter of Amendment of Section*

petitioner's public interest justification and whether the proposal would comply with the principal community coverage requirements of Section 73.625(a).<sup>3</sup>

This channel substitution serves the public interest because it will resolve significant over-the-air ("OTA") reception problems in WTOC's existing service area.<sup>4</sup> With viewers increasingly reliant on OTA signals to receive the most valued video content,<sup>5</sup> providing a strong broadcast signal is more important than it has been in decades. Yet, the challenges with digital reception of VHF signals are well-documented. Ten years ago, the Commission recognized the deleterious effects manmade noise has on the reception of VHF signals, finding that "the propagation characteristics of these

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73.622(B), *Table of Allotments, Digital Television Broadcast Stations* (Albany, New York), 19 FCC Rcd. 4279, 4331 (2004); see also *In the Matter of Advanced Television Systems & Their Impact Upon the Existing Television Broadcast Service*, 12 FCC Rcd. 14588 ¶ 76 (1997).

<sup>3</sup> See, e.g., *In Re Amendment of Section 73.622(i), Post-Transition Table of DTV Allotments, Television Broadcast Stations* (Mesa, Arizona), Notice of Proposed Rulemaking, MB Docket No. 20-331, RM-11863, DA-20-1192 (rel. Oct. 13, 2020) ("Mesa NPRM"); *In Re Amendment of Section 73.622(b), Table of Allotments, Digital Television Broadcast Stations, Ontario, CA*, Notice of Proposed Rulemaking, 16 FCC Rcd. 2276 (2001); *In Re Amendment of Section 73.606(b), Table of Allotments, Television Broadcast Stations, Moscow, Idaho*, Notice of Proposed Rulemaking, 17 FCC Rcd. 19447 (2002).

<sup>4</sup> See *Mesa NPRM* ¶ 6 (recognizing effect of "VHF propagation challenges"); *In Re Amendment of Section 73.622(b), Table of Allotments, Digital Television Broadcast Stations, Missoula, Mt.*, Notice of Proposed Rulemaking, 16 FCC Rcd. 2227 (2001) (finding that proposal to substitute channels to improve signal coverage and eliminate interference "warrants consideration").

<sup>5</sup> See, e.g., Parks Associates, *TV Antenna Usage in US Broadband Households Jumped to 25% in 2019 and Is Expected to Grow More as COVID-19 Keeps Consumers at Home* (Mar. 26, 2020), <http://www.parksassociates.com/blog/article/pr-02762020> (finding that OTA viewing increased from 15% in 2018 to 25% in 2019); Phil Kurz, *New Research Reveals Resurgence in OTA Antenna Viewing*, TVTechnology (Apr. 29, 2019), available at <https://www.tvtechnology.com/news/new-research-reveals-resurgence-in-ota-antenna-viewing> (finding that viewers consume 19% of viewing time over the air); *The Evolving Over-the-Air Home*, Nielsen Local Watch Report (Jan. 14, 2019), available at <https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/q2-2018-local-watch-report.pdf> (finding that more than 14% of TV households lack cable or satellite service).

channels allow undesired signals and noise to be receivable at relatively farther distances, nearby electrical devices tends to emit noise in this band that can cause interference, and reception of VHF signals requires physically larger antennas ... relative to UHF channels.”<sup>6</sup> The Commission also observed the “large variability in the performance (especially intrinsic gain) of indoor antennas available to consumers, with most antennas receiving fairly well at UHF and the substantial majority not so well to very poor at high-VHF.”<sup>7</sup>

WTOC’s real world experience confirms these observations. Almost immediately after completing its transition to digital on VHF Channel 11, WTOC experienced a substantial drop off in its OTA reception. By moving from VHF Channel 11 to UHF Channel 23, WTOC will be able to deliver a more reliable over-the-air signal to viewers throughout its coverage area.

Attached is an Engineering Statement of Chesapeake RF Consultants, LLC,<sup>8</sup> which sets forth in detail the proposed WTOC’s Channel 23 DTV Table specifications. This proposal is in compliance with all relevant technical requirements for amendment of the post-transition DTV Table, including the interference protection requirements of 47 C.F.R. §73.616 and the 0.5% de minimis interference standard with respect to all allotments and assignments, existing and proposed. As further reflected in the Engineering Statement, the proposed Channel 23 facility will provide full principal community coverage to Savannah, Georgia.

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<sup>6</sup> See *Matter of Innovation in the Broadcast Television Bands: Allocations, Channel Sharing and Improvements to VHF*, Notice of Proposed Rulemaking, 25 FCC Rcd. 16498 ¶ 42 (2010) (recognizing that “VHF channels have certain characteristics that have posed challenges for their use in providing digital television service.”)

<sup>7</sup> *Id.* ¶ 44.

<sup>8</sup> See Exhibit 1 (“Engineering Statement”).

As demonstrated by the attached Engineering Statement, when compared to WTOC's existing Channel 11 DTV allotment, the proposed Channel 23 facilities will not create any new white or gray areas. Although the proposed Channel 23 facilities will result in a slight theoretical reduction in WTOC's predicted coverage and population served using the standard FCC contours, an analysis using the terrain-limited coverage predictions reveals no loss area at all. And the standard contour prediction almost certainly overstates the actual loss area given the specific VHF propagation challenges WTOC faces. In practice, Gray expects no persons who are currently able to receive WTOC's OTA signal on Channel 11 would no longer be able to receive WTOC's OTA signal as a result of the transition to Channel 23.

For the foregoing reasons, Gray respectfully requests that the Commission grant this Petition and immediately comments a rulemaking proceeding to change the digital allotment for WTOC from Channel 11 to Channel 23 as proposed herein.

Respectfully submitted,

GRAY TELEVISION LICENSEE, LLC

By: /s/ Joan Stewart

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Dated: November 27, 2020

Exhibit 1

**Engineering Statement**  
prepared for  
**Gray Television Licensee, LLC**  
WTOC-TV Savannah, GA  
Facility ID 590  
Ch. 23 1000 kW 442 m

This engineering statement has been prepared on behalf of *Gray Television Licensee, LLC* (“Gray”), licensee of WTOC-TV (Facility ID 590, Savannah GA) in support of a *Petition for Rulemaking* to amend §73.622(i)<sup>1</sup> by changing WTOC-TV’s digital television channel assignment. WTOC-TV is licensed to operate on Channel 11 (BLCDT-20090622ABP). As described herein, *Gray* requests substitution of Channel 23 in lieu of Channel 11 for WTOC-TV.

The WTOC-TV Channel 11 facility is in the VHF spectrum and has proven to be ineffective for satisfactory viewer reception as discussed herein and elsewhere in the petition. The use of Channel 23 would place WTOC-TV in the UHF spectrum which is known to provide robust signal levels for home reception.

*Gray* has determined that many viewers experience significant difficulty in receiving WTOC-TV’s signal. Problems with digital VHF reception by stations in many markets were widely publicized since the 2009 digital transition date. It has been established that indoor reception is difficult for digital VHF stations such as WTOC-TV due to the longer wavelength signal’s inability to readily pass through buildings (the windows are smaller than the wavelength size), the ineffectiveness of many indoor antennas many of which were designed to emphasize the shorter wavelengths for UHF reception, and high levels of manmade and environmental noise.

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<sup>1</sup>The post-incentive auction transition period ended on July 13, 2020, pursuant to the *Incentive Auction Closing and Channel Reassignment Public Notice* (DA 17-317, released April 13, 2017). The FCC’s rules have not yet been amended to reflect all new full power channel assignments in a revised Table of Allotments. Because the Table has not yet been amended, it is understood that FCC’s Media Bureau will continue to refer to the Post-Transition Table of DTV Allotments, 47 CFR § 73.622(i) (2018), for the purpose of post-auction channel change rulemaking proceedings.

No change in transmitting location is proposed. The WTOC-TV tower structure corresponds to FCC Antenna Structure Registration (“ASR”) number 1018626. Gray proposes to implement the Channel 23 substitution with a top-mounted transmitting antenna on the existing tower structure which would replace the existing top-mounted Channel 11 antenna.

The licensed Channel 11 facility operates with 24.4 kW effective radiated power (“ERP”) nondirectional at 441 meters antenna height above average terrain (“HAAT”). Gray proposes herein to utilize 1000 kW ERP directional on Channel 23 at 442 meters antenna HAAT.<sup>2</sup>

A summary of the licensed Channel 11 and proposed Channel 23 technical parameters is provided in the following.

**Licensed Channel 11 Parameters (file# BLCDD-20090622ABP)**

FacID	Call	Ch	City	St	Lat	Lon	RCAMSL	HAAT	ERP	DA
590	WTOC-TV	11	SAVANNAH	GA	320315	812100	448	441	24.4	ND

**Proposed Channel 23 Parameters**

FacID	Call	Ch	City	St	Lat	Lon	RCAMSL	HAAT	ERP	DA
590	WTOC-TV	23	SAVANNAH	GA	320315	812100	448	442	1000	DA

The proposed directional antenna azimuthal pattern is plotted in Figure 1. A map is supplied as Figure 2, which depicts the standard predicted coverage contours. As demonstrated thereon, the proposed facility complies with §73.625(a)(1) as the entire community of Savannah will be encompassed by the 48 dBμ contour.

Interference study per FCC OET Bulletin 69<sup>3</sup> shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby full service and Class A television

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<sup>2</sup>The antenna height above ground and above mean sea level are unchanged from licensed values. The antenna HAAT is recalculated to be 441.6 meters, based on FCC 30 meter terrain data developed by OET.

<sup>3</sup>FCC 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 FCC’s implementation of TVStudy show excellent correlation.

stations and reassignments as required by §73.616. The interference study output report is provided as Table 1.

The proposed 1000 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 442 meters permitted by §73.622(f)(8)(i). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. As demonstrated in Figure 3, the total area within the proposed WTOC-TV noise limited service contour (“NLSC”) is 37,310 square kilometers, which does not exceed the NLSC area of the licensed WTOC-TV Channel 11 facility (38,421 sq. km). Thus, the 1000 kW ERP specified herein complies with §73.622(f)(5) of the FCC’s Rules.

Figure 3 also shows that the proposed Channel 23 NLSC will fall short of matching that of the licensed Channel 11 facility at locations to the west and northwest. These areas are in the pattern minima region of the proposed directional antenna. On Channel 23, the best available UHF channel at Savannah, the directional pattern is necessary to avoid causing impermissible interference to WPGA-TV (Ch. 23, Fac ID 54728, Perry GA).

Figure 3 depicts the proposed WTOC-TV Channel 23 resulting NLSC loss areas along with the NLSC of overlapping alternative authorized television services. The stations<sup>4</sup> providing the alternative services are listed in Table 2. The areas on Figure 3 that are tinted yellow represent locations where there are less than 5 other TV services remaining in the loss area. A summary of the number of alternative services for the loss area is provided on the map and in the following table.

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<sup>4</sup>Class A television stations are included in the alternative service facility count to determine if an area is well-served, as they have the same primary status and public service obligations as full-power television stations.



**Loss Area Analysis – Standard FCC Contours**

WTOC-TV Population Within NLSC	(2010 census)	
Licensed Ch. 11 Total:	992,417	
Proposed Ch. 23 Total:	968,120	
Gain Area Population:	5,535	
Loss Area Population:	29,832	
Common Area Population:	962,585	
Number of Other Services	Loss Pop	Gain Pop
0	0	0
1	0	0
2	250	0
3	992	102
4	12,943	300
5 or more	15,647	5,133
Total Change	29,832	5,535
Total less than 5 services	14,185	402
Total less than 5 (percentage)	1.43%	0.04%

The licensed Channel 11 facility's NLSC encompasses 992,417 persons and the proposed Channel 23 facility's NLSC would encompass 968,120 persons. The resulting NLSC loss population is 29,832 persons, of which 12,943 persons would have less than five other services representing 1.43 percent of the total population within the licensed WTOC-TV Channel 11 NLSC. Most of the NLSC loss area population (15,647 persons) is well-served, having 5 or more other TV services. The proposal will result in the WTOC-TV NLSC expanding slightly to the northeast and southwest, representing a gain of 5,535 persons.

The results of additional loss area analysis are provided in Figure 4, now to consider terrain-limited coverage predictions of the licensed Channel 11 facility and the proposed Channel 23 operation. Here, the FCC's TVStudy computer program was used to determine terrain-limited coverage predictions at locations beyond the proposed Channel 23 NLSC. The study area was set using the "fixed geography" option to match the WTOC-TV licensed Channel 11 NLSC. Default cell size and profile step settings were employed. The analysis included examination of each cell that is located beyond the Channel 23 NLSC and beyond the NLSC of at least five other stations (the same, yellow-tinted area as Figure 3) as bounded by the existing Channel 11 facility's NLSC. The results regarding the number of alternative services for the loss areas are provided on Figure 4 and in the following table.

**Loss Area Analysis – Terrain-Limited**

WTOC-TV Terrain-Limited Population	
TVStudy at Fixed Geography Area	(2010 census)
Licensed Ch. 11 Total	992,658
Number of Other Services	<u>Loss Pop</u>
0	0
1	0
2	0
3	0
4	0
5 or more	0
Total Loss	0
Total less than 5 services	0
Total less than 5 (percentage)	0.00%

This analysis shows that all of the terrain-limited service area achieved by the licensed WTOC-TV within its NLSC will receive terrain-limited service from the proposed Channel 23. The terrain-limited analysis shows that the proposed Channel 23 facility will not create any loss of service.

**Conclusion**

The proposed channel substitution complies with the FCC's principal community coverage requirements of §73.625 and the interference protection requirements of §73.616. No area of service loss would be created.

List of Attachments

Figure 1	Antenna Azimuthal Pattern
Figure 2	Proposed Coverage Contours
Figure 3	Coverage Contour Comparison; Loss Area Analysis – Standard FCC Contours
Figure 4	Loss Area Analysis – Terrain-Limited Method
Table 1	TVStudy Analysis of Proposal
Table 2	Overlapping Authorized Alternate Television Services

**Chesapeake RF Consultants, LLC**

Joseph M. Davis, P.E.	November 19, 2020	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600

**AZIMUTH PATTERN**

Type: ATW-WC

Numeric	dBd
1.40	1.46

Directivity: 1.40

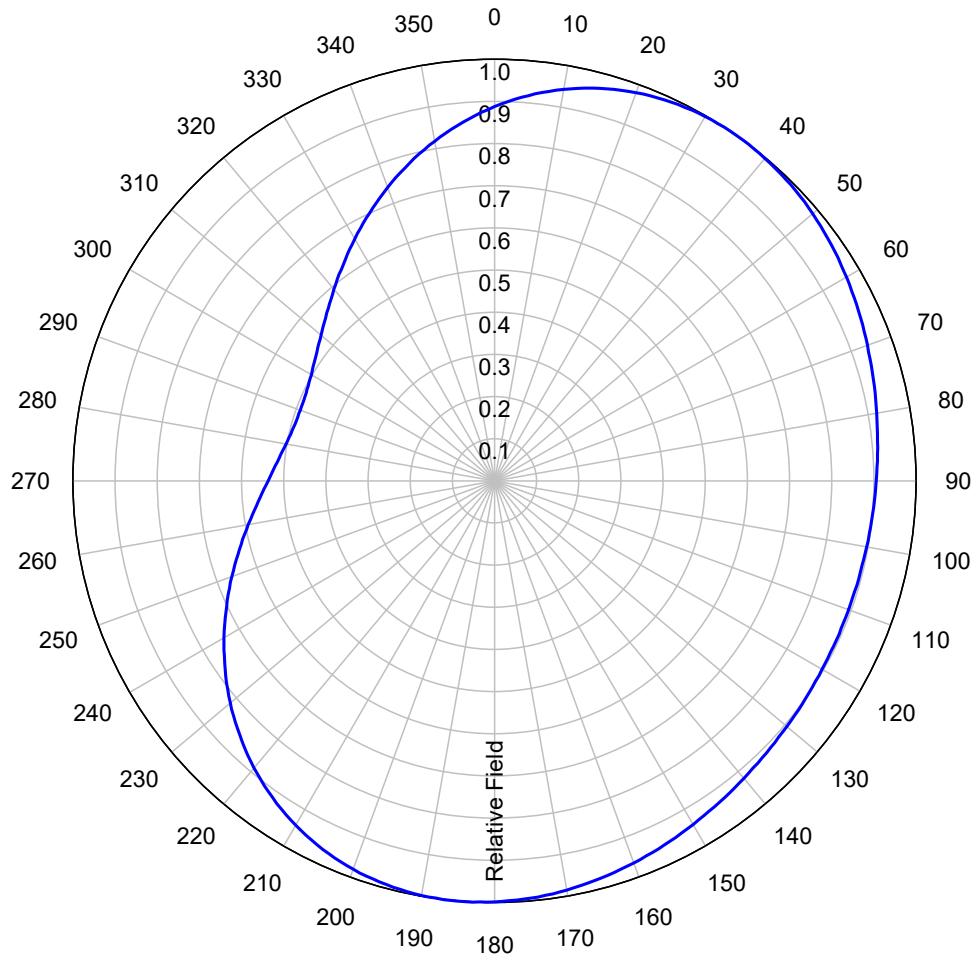
Peak(s) at:

Channel: 23

Location: Savannah, GA

Polarization: Horizontal

Note: Pattern shape and directivity may vary with channel and mounting configuration.



Preliminary, subject to final design and review.

ELECTRONICS RESEARCH, INC. **ERI**



**Figure 1**  
**Antenna Azimuthal Pattern**  
**WTOG-TV Savannah, GA**  
**Facility ID 590**  
**Ch. 23 1000 kW 442 m**

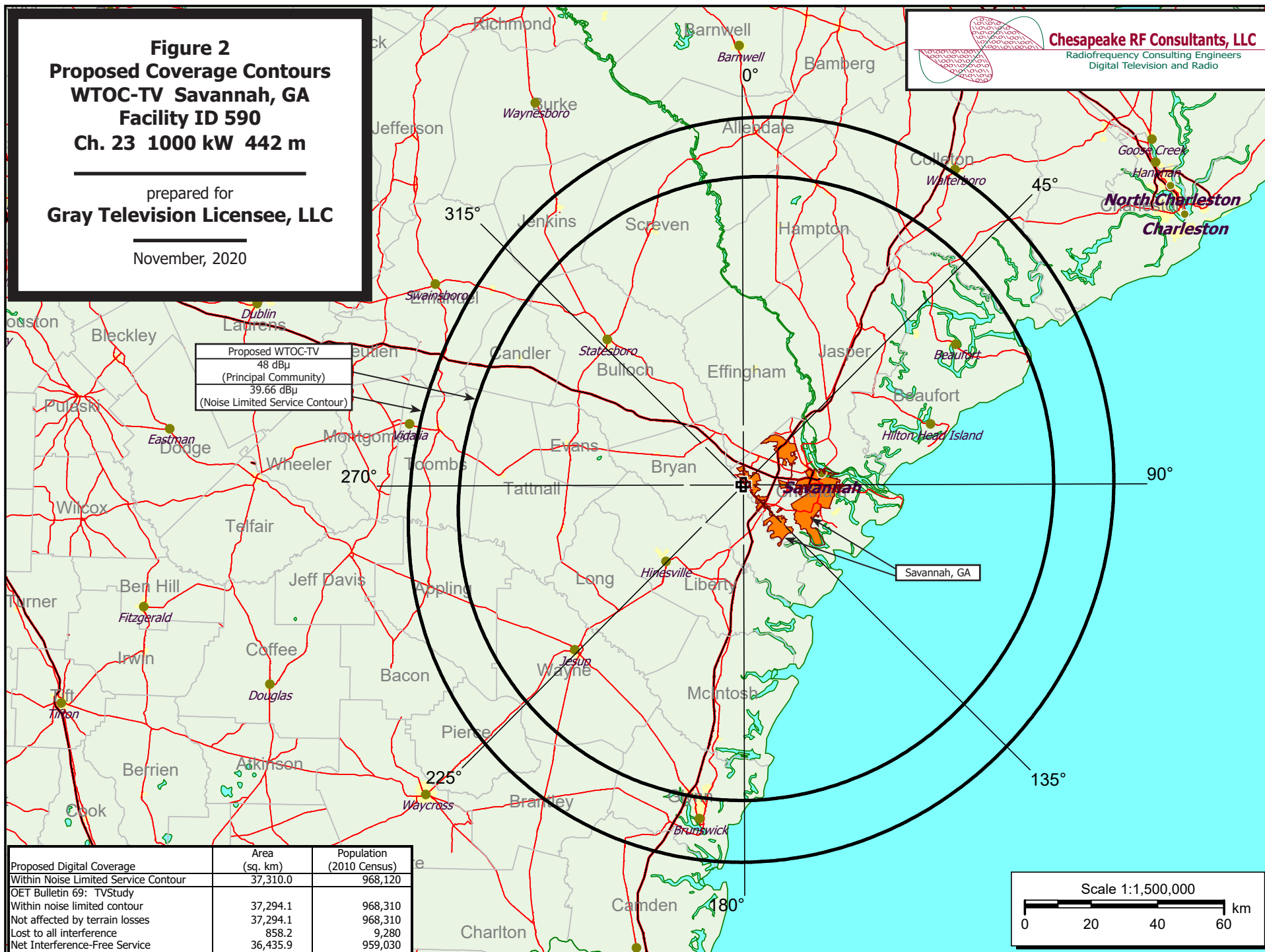
prepared for  
**Gray Television Licensee, LLC**

November, 2020

**Figure 2**  
**Proposed Coverage Contours**  
**WTOC-TV Savannah, GA**  
**Facility ID 590**  
**Ch. 23 1000 kW 442 m**

prepared for  
**Gray Television Licensee, LLC**

November, 2020



**Figure 3**  
**Coverage Contour Comparison**  
**Gain-Loss Area Analysis**  
**Standard FCC Contours**  
**Alternate TV Services**  
**WTOC-TV Savannah, GA**  
**Facility ID 590**  
**Ch. 23 1000 kW 442 m**

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November, 2020

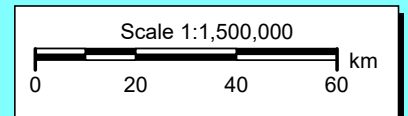


WTOC-TV Licensed Ch. 11  
 BLCDT-20090622ABP  
 36 dBμ Contour (NLSC)  
 38,420.8 sq. km

Proposed WTOC-TV Ch. 23  
 39.66 dBμ Contour (NLSC)  
 37,310.0 sq. km

WTOC-TV Population Within NLSC		(2010 census)	
Licensed Ch. 11 Total:		992,417	
Proposed Ch. 23 Total:		968,120	
Gain Area Population:		5,535	
Loss Area Population:		29,832	
Common Area Population:		962,585	
Number of Other Services	Loss Pop	Gain Pop	
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2	250	0	
3	992	102	
4	12,943	300	
5 or more	15,647	5,133	
Total Change	29,832	5,535	
Total less than 5 services	14,185	402	
Total less than 5 (percentage)	1.43%	0.04%	

Contours plotted per FCC TVStudy default method using 8-radial HAAT and for UHF stations are adjusted with dipole factor.

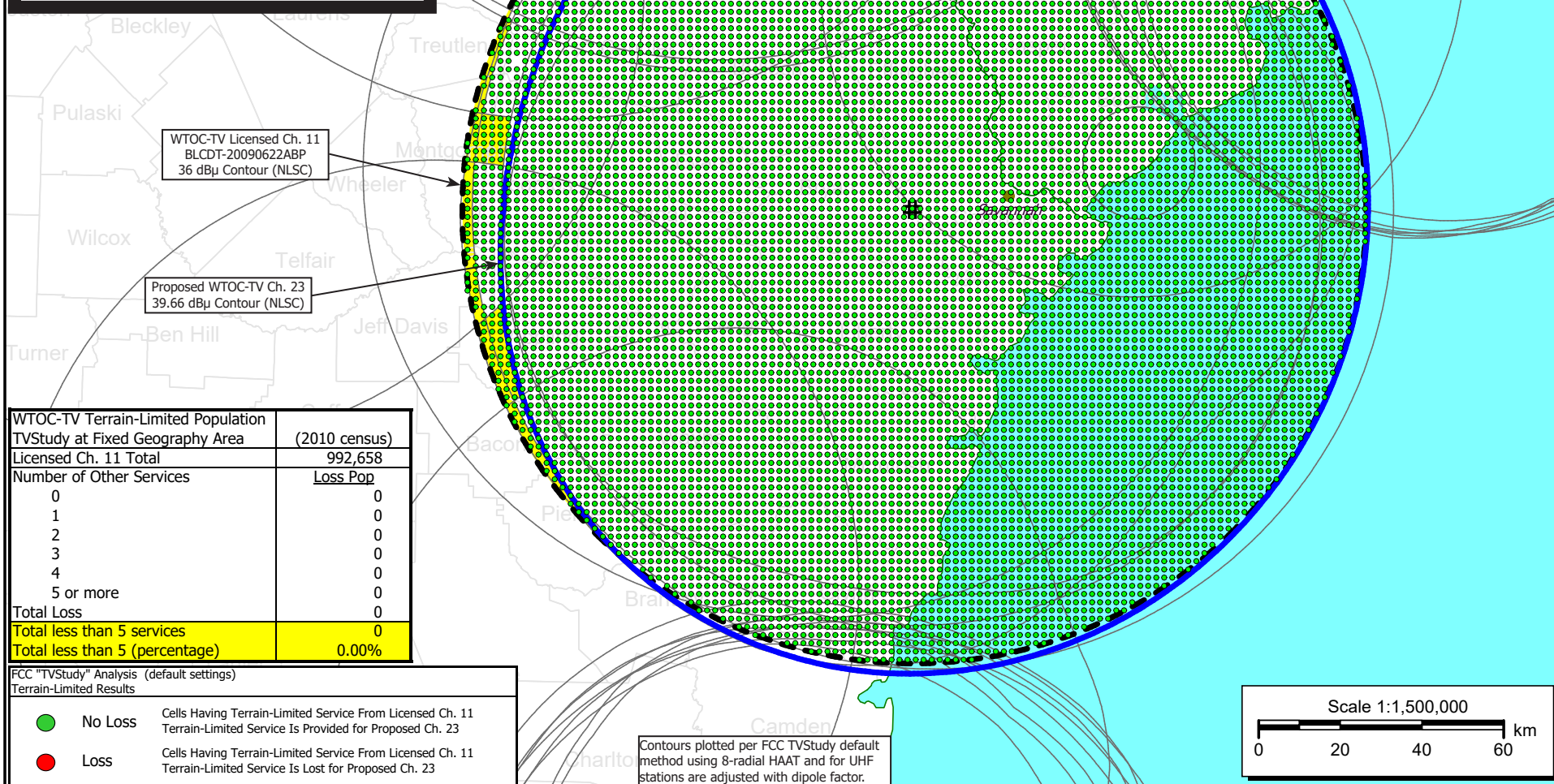




**Figure 4**  
**Loss Area Analysis**  
**Terrain-Limited Method**  
**WTOC-TV Savannah, GA**  
**Facility ID 590**  
**Ch. 23 1000 kW 442 m**

prepared for  
**Gray Television Licensee, LLC**

November, 2020



**Table 1 WTOC-TV TVStudy Analysis of Proposal**  
(page 1 of 4)



tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: WTOC-TV to Ch23\_DA-WC, Model: Longley-Rice  
Start: 2020.11.19 09:21:12

Study created: 2020.11.19 09:21:12

Study build station data: LMS TV 2020-11-19

Proposal: WTOC-TV D23 DT APP SAVANNAH, GA  
File number: WTOC-TV to Ch23 DA-WC  
Facility ID: 590  
Station data: User record  
Record ID: 3062  
Country: U.S.  
Zone: II

Search options:  
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WJCL	D22	DT	LIC	SAVANNAH, GA	BLANK0000029019	1.2 km
No	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	235.6
No	WKCF	D23	DT	LIC	CLERMONT, FL	BLANK0000113322	386.2
No	WKTG-CD	D23	DC	LIC	NORCROSS, GA	BLANK0000081811	337.0
Yes	WPGA-TV	D23	DT	LIC	PERRY, GA	BLANK0000116580	221.2
Yes	WBTV	D23	DT	LIC	CHARLOTTE, NC	BLCDT19991025AEB	368.2
No	WECT	D23	DT	LIC	WILMINGTON, NC	BLANK0000111584	374.2
Yes	WPXC-TV	D24	DT	LIC	BRUNSWICK, GA	BLCDT20110426AAQ	141.3
Yes	WITV	D24	DT	LIC	CHARLESTON, SC	BLANK0000118279	182.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D23  
Latitude: 32 3 15.00 N (NAD83)  
Longitude: 81 21 0.00 W  
Height AMSL: 448.0 m  
HAAT: 442.0 m  
Peak ERP: 1000 kW  
Antenna: ERI ATW-WC 110.0 deg  
Elev Pattn: Generic  
Elec Tilt: 0.75

39.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	789 kW	437.4 m	110.3 km
45.0	983	442.4	113.0
90.0	819	444.9	111.3
135.0	833	445.3	111.5
180.0	996	445.2	113.4
225.0	728	443.3	110.0
270.0	288	435.3	100.1
315.0	319	438.5	101.3

ERP exceeds maximum  
ERP: 1000 kW ERP maximum: 693 kW

Distance to Canadian border: 1073.6 km

Distance to Mexican border: 1655.5 km

Conditions at FCC monitoring station: Powder Springs GA  
Bearing: 303.5 degrees Distance: 373.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 299.5 degrees Distance: 2315.1 km

**Table 1 WTOC-TV TVStudy Analysis of Proposal**  
(page 2 of 4)



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%

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Interference to BLANK0000029019 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJCL	D22	DT	LIC	SAVANNAH, GA	BLANK0000029019	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	1.2 km
	WEBA-TV	D21	DT	LIC	ALLENDALE, SC	BLANK0000081199	125.7
	WTWC-TV	D22	DT	LIC	TALLAHASSEE, FL	BLANK0000118579	293.1
	WHSG-TV	D22	DT	LIC	MONROE, GA	BLANK0000081582	338.6
	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	234.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
32206.9 938,086		32206.9 938,086		32046.3 935,822		31998.2 934,791	0.15 0.11
Undesired		Total IX		Unique IX, before		Unique IX, after	
WTOC-TV D23 DT APP		48.1 1,031		48.1 1,031		48.1 1,031	
WTWC-TV D22 DT LIC		60.4 575		56.4 462		56.4 462	
WHSG-TV D22 DT LIC		8.0 124		0.0 0		0.0 0	
WACH D22 DT LIC		104.3 1,802		96.2 1,678		96.2 1,678	

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Interference to BLANK0000116580 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPGA-TV	D23	DT	LIC	PERRY, GA	BLANK0000116580	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	221.2 km
	WKTb-CD	D23	DC	LIC	NORCROSS, GA	BLANK0000081811	142.7
	WFLI-TV	D23	DT	LIC	CLEVELAND, TN	BLANK0000093785	313.2
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
13486.2 559,495		13454.2 559,025		13406.3 558,676		13293.9 556,348	0.84 0.42
Undesired		Total IX		Unique IX, before		Unique IX, after	
WTOC-TV D23 DT APP		124.4 2,408		112.4 2,328		112.4 2,328	
WKTb-CD D23 DC LIC		48.0 349		32.0 264		28.0 255	
WFLI-TV D23 DT LIC		16.0 85		0.0 0		0.0 0	

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Interference to BLCDT19991025AEB LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WBTv	D23	DT	LIC	CHARLOTTE, NC	BLCDT19991025AEB	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	368.2 km
	WUVC-DT	D22	DT	LIC	FAYETTEVILLE, NC	BLANK0000125505	200.7
	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	144.0
	WKPT-CD	D22	DC	LIC	KINGSFORD, TN	BLDTA20120420ACJ	180.5
	WKPT-TV	D23	DT	LIC	PIKEVILLE, KY	BLANK0000087418	244.8
	WARZ-CD	D23	DC	LIC	SMITHFIELD-SELMA, NC	BLANK0000124859	261.8
	WECT	D23	DT	LIC	WILMINGTON, NC	BLANK0000111584	306.2
	WAPW-CD	D23	DC	LIC	ABINGDON, ETC., VA	BLANK0000116775	173.8
	WTVR-TV	D23	DT	LIC	RICHMOND, VA	BLANK0000109887	399.7
	WCNC-TV	D24	DT	LIC	CHARLOTTE, NC	BLANK0000087279	2.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
46318.9 4,433,020		44105.4 4,295,962		43018.8 4,267,365		42998.8 4,266,654	0.05 0.02
Undesired		Total IX		Unique IX, before		Unique IX, after	
WTOC-TV D23 DT APP		95.7 2,183		19.9 711		19.9 711	
WUVC-DT D22 DT LIC		40.4 1,274		8.1 255		8.1 255	
WACH D22 DT LIC		359.0 4,511		287.2 3,039		287.2 3,039	
WKPT-CD D22 DC LIC		4.0 183		0.0 0		0.0 0	



**Table 1 WTOC-TV TVStudy Analysis of Proposal**  
(page 3 of 4)



WKPI-TV D23 DT LIC	24.0	557	12.0	170	12.0	170
WARZ-CD D23 DC LIC	8.1	393	0.0	0	0.0	0
WECT D23 DT LIC	388.1	10,898	343.9	9,839	343.9	9,839
WAPW-CD D23 DC LIC	28.0	351	20.0	147	20.0	147
WTVR-TV D23 DT LIC	4.0	1,644	4.0	1,644	4.0	1,644
WCNC-TV D24 DT LIC	295.4	10,625	295.4	10,625	291.4	10,625

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Interference to BLCDT19991025AEB LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WBTW	D23	DT	LIC	CHARLOTTE, NC	BLCDT19991025AEB	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	368.2 km
	WUVC-DT	D22	DT	LIC	FAYETTEVILLE, NC	BLANK0000125505	200.7
	WACH	D22	DT	LIC	COLUMBIA, SC	BLANK0000093772	144.0
	WKPT-CD	D22	DC	LIC	KINGSPORT, TN	BLDTA20120420ACJ	180.5
	WKPI-TV	D23	DT	LIC	PIKEVILLE, KY	BLANK0000087418	244.8
	WARZ-CD	D23	DC	APP	SMITHFIELD-SELMA, NC	BLANK0000123118	242.3
	WECT	D23	DT	LIC	WILMINGTON, NC	BLANK0000111584	306.2
	WAPW-CD	D23	DC	LIC	ABINGDON, ETC., VA	BLANK0000116775	173.8
	WTVR-TV	D23	DT	LIC	RICHMOND, VA	BLANK0000109887	399.7
	WCNC-TV	D24	DT	LIC	CHARLOTTE, NC	BLANK0000087279	2.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
46318.9 4,433,020	44105.4 4,295,962	43018.8 4,267,365	42998.8 4,266,654	0.05 0.02
Undesired	Total IX	Unique IX, before	Unique IX, after	
WTOC-TV D23 DT APP	95.7 2,183		19.9 711	
WUVC-DT D22 DT LIC	40.4 1,274	8.1 255	8.1 255	
WACH D22 DT LIC	359.0 4,511	347.0 4,471	287.2 3,039	
WKPT-CD D22 DC LIC	4.0 183	0.0 0	0.0 0	
WKPI-TV D23 DT LIC	24.0 557	12.0 170	12.0 170	
WARZ-CD D23 DC APP	4.0 177	0.0 0	0.0 0	
WECT D23 DT LIC	388.1 10,898	343.9 9,839	343.9 9,839	
WAPW-CD D23 DC LIC	28.0 351	20.0 147	20.0 147	
WTVR-TV D23 DT LIC	4.0 1,644	4.0 1,644	4.0 1,644	
WCNC-TV D24 DT LIC	295.4 10,625	295.4 10,625	291.4 10,625	

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Interference to BLCDT20110426AAQ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPXC-TV	D24	DT	LIC	BRUNSWICK, GA	BLCDT20110426AAQ	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	141.3 km
	WDSC-TV	D24	DT	LIC	NEW SMYRNA BEACH, FL	BLANK0000090505	255.1
	WWSB	D24	DT	CP	SARASOTA, FL	BLANK0000035646	368.4
	WTLF	D24	DT	CP	TALLAHASSEE, FL	BLANK0000035775	213.8
	WITV	D24	DT	LIC	CHARLESTON, SC	BLANK0000118279	302.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31644.1 1,561,014	31644.1 1,561,014	30168.3 1,554,250	29871.0 1,548,161	0.99 0.39
Undesired	Total IX	Unique IX, before	Unique IX, after	
WTOC-TV D23 DT APP	309.5 6,102		297.3 6,089	
WDSC-TV D24 DT LIC	4.0 0	4.0 0	4.0 0	
WTLF D24 DT CP	1459.7 6,751	1459.7 6,751	1459.7 6,751	
WITV D24 DT LIC	12.2 13	12.2 13	0.0 0	

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Interference to BLCDT20110426AAQ LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPXC-TV	D24	DT	LIC	BRUNSWICK, GA	BLCDT20110426AAQ	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	141.3 km
	WDSC-TV	D24	DT	LIC	NEW SMYRNA BEACH, FL	BLANK0000090505	255.1
	WWSB	D24	DT	CP	SARASOTA, FL	BLANK0000035646	368.4
	WITV	D24	DT	LIC	CHARLESTON, SC	BLANK0000118279	302.4

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31644.1 1,561,014	31644.1 1,561,014	31627.9 1,561,001	31330.6 1,554,912	0.94 0.39

**Table 1 WTOC-TV TVStudy Analysis of Proposal**  
(page 4 of 4)



Undesired		Total IX	Unique IX, before	Unique IX, after
WTOC-TV D23 DT APP	309.5	6,102		297.3 6,089
WDSC-TV D24 DT LIC	4.0	0	4.0 0	4.0 0
WITV D24 DT LIC	12.2	13	12.2 13	0.0 0

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Interference to BLANK0000118279 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WITV	D24	DT	LIC	CHARLESTON, SC	BLANK0000118279	
Undesireds:	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	182.5 km
	WCIV	D25	DT	LIC	CHARLESTON, SC	BLANK0000081822	1.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
28696.5	871,783	28696.5	871,783	26919.2	858,541	26842.7 858,396	0.28 0.02

Undesired		Total IX	Unique IX, before	Unique IX, after
WTOC-TV D23 DT APP	76.5	145		76.5 145
WCIV D25 DT LIC	1777.3	13,242	1777.3 13,242	1777.3 13,242

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Interference to proposal scenario 1  
0.96% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOC-TV	D23	DT	APP	SAVANNAH, GA	WTOC-TV to Ch23 DA-WC	
Undesireds:	WJCL	D22	DT	LIC	SAVANNAH, GA	BLANK0000029019	1.2 km
	WPGA-TV	D23	DT	LIC	PERRY, GA	BLANK0000116580	221.2
	WPXC-TV	D24	DT	LIC	BRUNSWICK, GA	BLCDT20110426AAQ	141.3
	WITV	D24	DT	LIC	CHARLESTON, SC	BLANK0000118279	182.5
Service area		Terrain-limited		IX-free		Percent IX	
37294.1	968,310	37294.1	968,310	36435.9	959,030	2.30 0.96	
Undesired		Total IX		Unique IX		Prcnt Unique IX	
WJCL D22 DT LIC	4.0	25		25		0.01 0.00	
WPGA-TV D23 DT LIC	28.2	213		213		0.08 0.02	
WPXC-TV D24 DT LIC	548.7	6,801		6,801		1.47 0.70	
WITV D24 DT LIC	277.2	2,241		2,241		0.74 0.23	

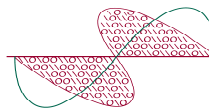


Table 2

**Overlapping Authorized Alternate Television Services**

prepared for

**Gray Television Licensee, LLC**

WTOC-TV Savannah, GA

Call Sign	Ch.	Facility ID	Status	File Number	Community
WCES-TV	6	23937	Lic	0000016506	Wrens, GA
WXGA-TV	7	23929	Lic	0000113481	Waycross, GA
WVAN-TV	8	23947	Lic	0000113482	Savannah, GA
WJCT	9	73130	Lic	0000124636	Jacksonville, FL
WMUM-TV	9	23935	Lic	0000124672	Cochran, GA
WJXX	10	11893	Lic	BLCDT-20090702AAK	Orange Park, FL
WRDW-TV	12	73937	Lic	BLCDT-20090227ABQ	Augusta, GA
WTLV	13	65046	Lic	BLCDT-20090702AAJ	Jacksonville, FL
WFOX-TV	14	11909	Lic	0000120746	Jacksonville, FL
WSAV-TV	16	48662	Lic	0000055021	Savannah, GA
WTAT-TV	17	416	Lic	0000118551	Charleston, SC
WJXT	18	53116	Lic	0000097950	Jacksonville, FL
WCSC-TV	19	71297	Lic	0000054856	Charleston, SC
WJAX-TV	19	35576	Lic	BLCDT-20030328ANV	Jacksonville, FL
WCBD-TV	20	10587	Lic	0000081288	Charleston, SC
WCWJ	20	29712	Lic	0000097952	Jacksonville, FL
WEBA-TV	21	61003	Lic	0000081199	Allendale, SC
WJEB-TV	21	29719	Lic	0000105949	Jacksonville, FL
WJCL	22	37174	Lic	0000029019	Savannah, GA
WITV	24	61005	Lic	0000118279	Charleston, SC
WPXC-TV	24	71236	Lic	BLCDT-20110426AAQ	Brunswick, GA
WCIV	25	9015	Lic	0000081822	Charleston, SC
WTGS	26	27245	Lic	0000112289	Hardeeville, SC
WJBF	28	27140	Lic	0000116201	Augusta, GA
W30CV-D	30	67140	Lic	BLDTL-20110110AAR	Hilton Head Island, SC
WAGT-CD	30	3369	Lic	0000063630	Augusta, GA
WJWJ-TV	32	61007	Lic	0000100564	Beaufort, SC
WGWG	34	21536	Lic	BLCDT-20060630ADJ	Charleston, SC
WSCG	35	69446	Lic	BLCDT-20071120AJC	Baxley, GA
WFXG	36	3228	Lic	0000081277	Augusta, GA