

ENGINEERING EXHIBIT

Incentive Auction Channel Reassignment

Application for Digital Television Station Construction Permit prepared for

Atlanta Television Station WUPA Inc
WUPA(DT) Atlanta, GA
Facility ID 6900
Ch. 36 975 kW 329 m

Atlanta Television Station WUPA Inc (“ATS”) is the licensee of digital television station WUPA(DT), Channel 43, Facility ID 6900, Atlanta, GA. *ATS* herein proposes construction of the WUPA post-auction facility on Channel 36. Reassignment of WUPA from Channel 43 to Channel 36 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“CCRPN”, DA 17-317, released April 13, 2017).

The proposed Channel 36 operation will employ a new broadband shared antenna system to be top-mounted on the WUPA candelabra tower in lieu of the existing Channel 43 antenna. *ATS* proposes to operate WUPA with an effective radiated power (“ERP”) of 975 kW at 329 meters antenna height above average terrain (“HAAT”). The existing tower structure corresponds to FCC Antenna Structure Registration number 1223132. No change to the overall structure height will result.

The proposed antenna is an elliptically polarized nondirectional Dielectric model TUM-AP-O4-14/56H-R-2-T (25 percent vertical polarization). The horizontally polarized ERP is 975 kW and the vertically polarized ERP is 244 kW.

A map is supplied as Figure 1 which depicts the standard predicted coverage contours. This map includes the location of Atlanta, WUPA’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 dBμ contour.

The proposed noise limited service contour (“NLSC”) extends beyond that of the *CCRPN* parameters of 874 kW ERP and 329 meters HAAT.¹ The proposal complies with §73.3700(b)(ii) as described in the following.

WUPA’s reassignment facility suffers from a 0.27 percent loss of interference-free population² when compared to that of its baseline³ pre-auction facility. Therefore WUPA qualifies under §73.3700(b)(ii)(A) for a contour extension due to the loss of coverage area resulting from the new channel assignment. A population summary is provided below.

WUPA Interference-Free Service Population	
November 2015 Pre-Auction Baseline (Ch. 43):	5,862,739
April 2017 Reassignment Baseline (Ch. 36):	5,846,699
Change:	-0.27%

Interference study per FCC OET Bulletin 69⁴ 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 reassignments 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.

The amount of NLSC extension does not exceed one percent in any direction. Figure 2 supplies a coverage contour comparison of the proposed WUPA 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.

¹There is a 0.1 meter decrease in antenna height above ground and above mean sea level. The proposed WUPA antenna HAAT is recalculated to be 328.6 meters, based on FCC 30 meter terrain data developed by OET.

²*CCRPN “Coverage Baseline for Post-Auction Table of Allotments”.*

³*“Final Digital Television Baseline Coverage Area And Population Served Information Related To Incentive Auction Repacking,”* DA 15-1296, Public Notice, Released November 12, 2015.

⁴FCC 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.

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 WUPA facility's terrain-limited population provides a 100.2 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	5,946,452	5,960,242
Not affected by terrain losses	5,868,300	5,882,848
Match of Reassignment	---	100.25%

The nearest FCC monitoring station is 36.1 km distant at Powder Springs, GA. Using the FCC propagation curves, the proposed F(50,90) signal level at the monitoring station is 21.3 mV/m, which is above the 10 mV/m threshold of §73.1030(c) where further analysis may be required. Here, the proposal's signal strength at the monitoring station is slightly lower than that from the licensed WUPA Channel 43 facility (21.5 mV/m).

Directional AM station WQXI (Fac ID 30825, 790 kHz, Atlanta, GA) is located 1.4 km from the WUPA site. The WUPA tower structure is not base insulated or detuned at an AM frequency and the proposal will not result in a change in overall tower height. Thus, pursuant to §1.30002(d), construction of the proposed WUPA facility is not considered to be a significant modification with respect to possible pattern distortion to WQXI, and *ATS* is not required to install detuning apparatus to the existing tower.

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.

Human Exposure to Radiofrequency Electromagnetic Field

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 10 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 $7.5 \mu\text{W}/\text{cm}^2$, which is 1.9 percent of the general population/uncontrolled maximum permitted exposure limit. This is 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.

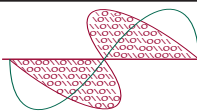
The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power 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	Proposed Coverage Contours
Figure 2	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 28, 2017	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600



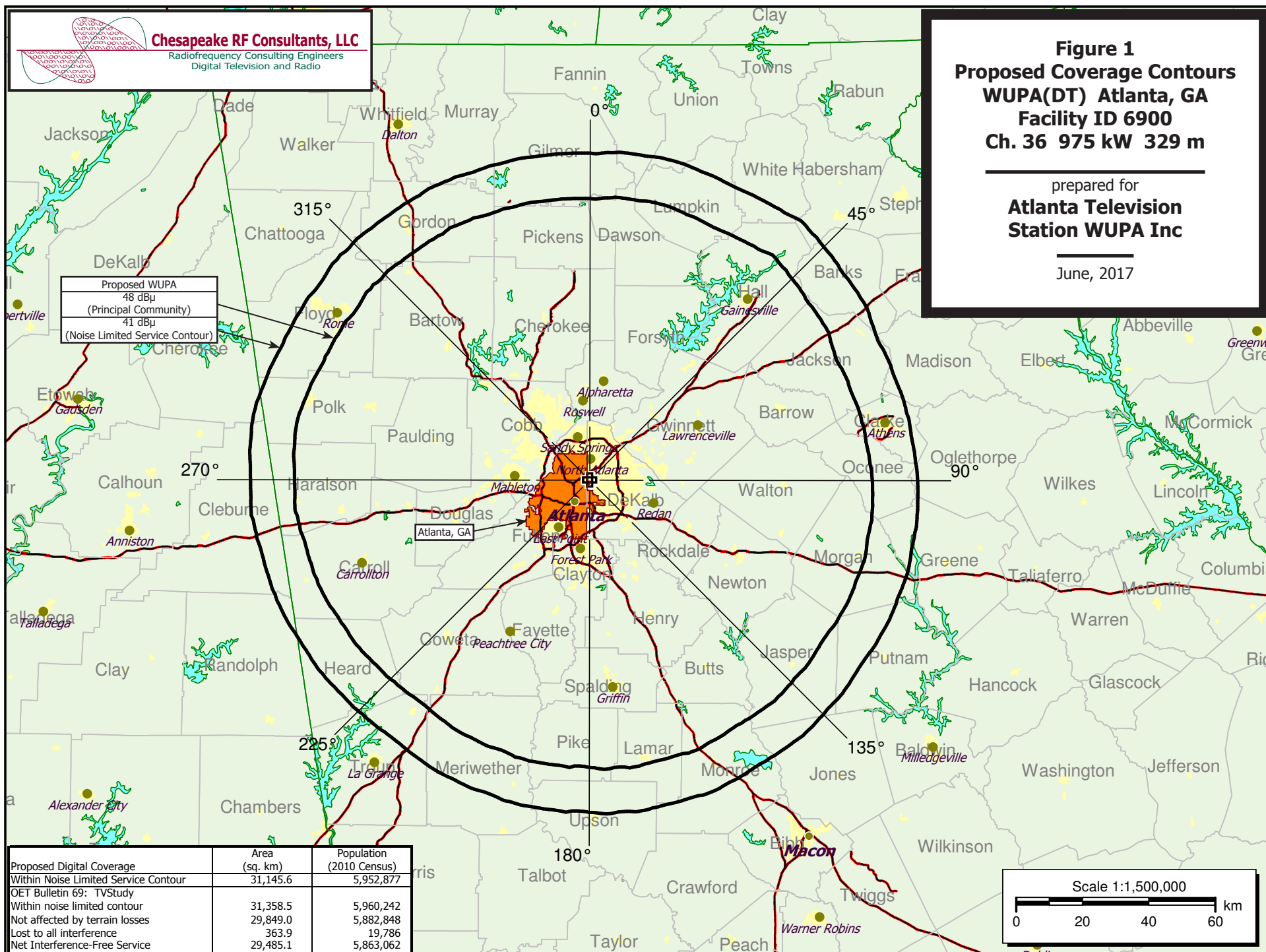
Chesapeake RF Consultants, LLC

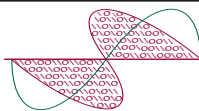
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Proposed Coverage Contours
WUPA(DT) Atlanta, GA
Facility ID 6900
Ch. 36 975 kW 329 m

prepared for
Atlanta Television
Station WUPA Inc

June, 2017





Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 2
Proposed Contour Expansion
WUPA(DT) Atlanta, GA
Facility ID 6900
Ch. 36 975 kW 329 m

prepared for
Atlanta Television
Station WUPA Inc

June, 2017

WUPA Reassignment
874 kW 329 m HAAT
40.86 dBu Contour
(Red - Solid)
40.86 dBu Distance plus 1%
(Red - Dashed)

Proposed WUPA
40.86 dBu Contour
(Blue - Solid)

Contours plotted per FCC TVStudy
method utilizing 8 radials for HAAT

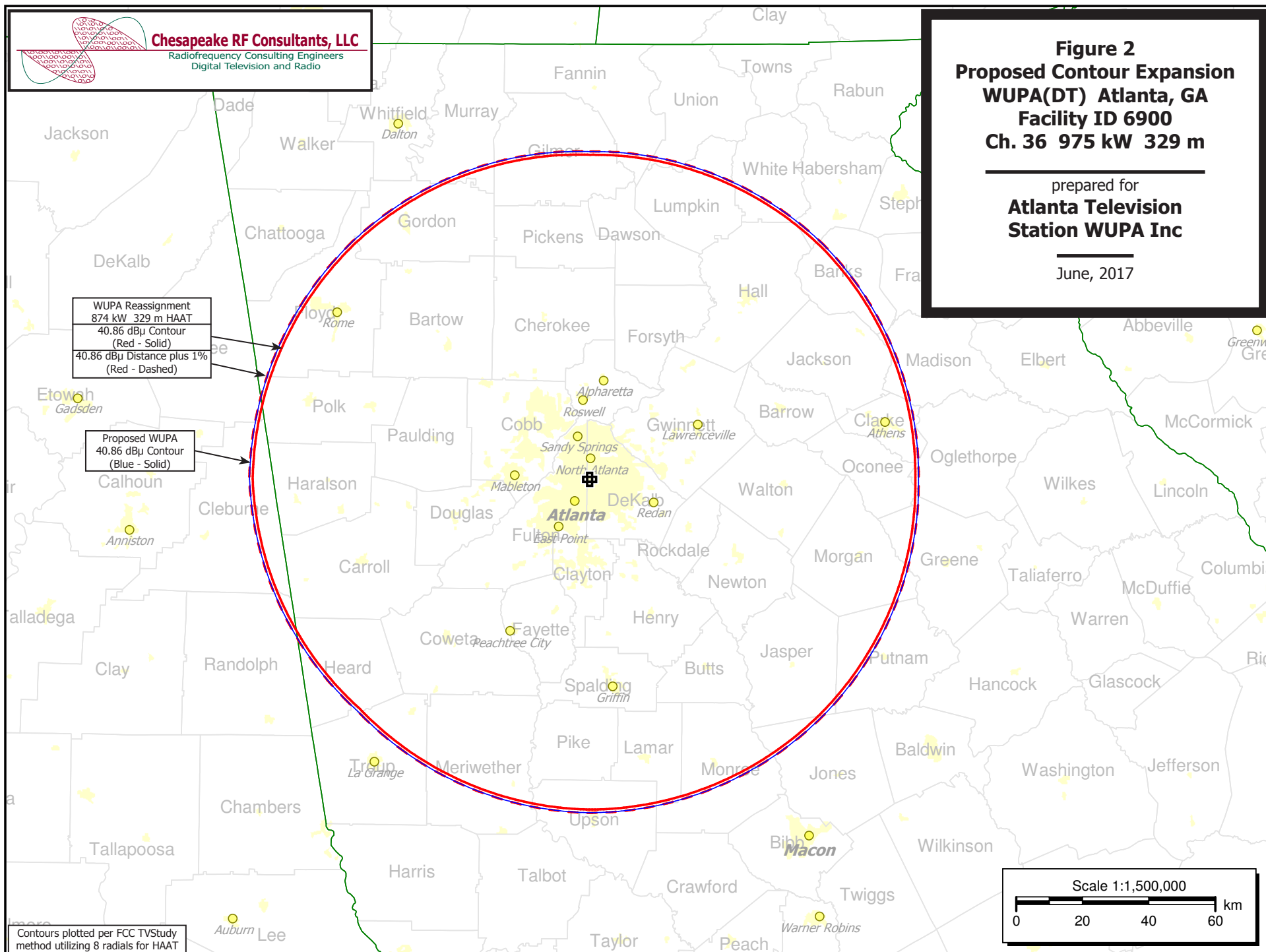
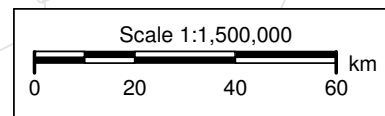


Table 1 WUPA OET Bulletin 69 Interference Study
(page 1 of 9)



tvstudy v2.2.2
Database: localhost, Study: WUPA 975KW_PROP, Model: Longley-Rice
Start: 2017.06.28 11:42:11

Study created: 2017.06.28 11:42:05

Study build station data: LMS TV 2017-06-27 LMSTV

Proposal: WUPA D36 DT APP ATLANTA, GA
File number: WUPA 975KW PROP
Facility ID: 6900
Station data: User record
Record ID: 663
Country: U.S.

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	143.2 km
WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	158.4
WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	211.9
WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	177.9
WTVY	D36	DT	LIC	DOTHAN, AL	BLCDT20090901AAL	346.9
WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	288.3
WFXG	D36	DT	BL	AUGUSTA, GA	DTVBL3228	235.9
WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	338.6
WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	352.8
WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	280.0

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:
WQXI 790 L DAN D ATLANTA, GA BML20061226ABR
WQXI 790 L DAN N ATLANTA, GA BML20061226ABR

Record parameters as studied:

Channel: D36
Latitude: 33 48 26.40 N (NAD83)
Longitude: 84 20 21.50 W
Height AMSL: 615.4 m
HAAT: 328.6 m
Peak ERP: 975 kW
Antenna: Omnidirectional

40.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	975 kW	316.0 m	98.7 km
45.0	975	325.8	99.6
90.0	975	318.1	98.9
135.0	975	327.2	99.8
180.0	975	331.0	100.1
225.0	975	315.4	98.6
270.0	975	354.8	102.2
315.0	975	340.7	101.0

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

Distance to Canadian border: 886.7 km

Distance to Mexican border: 1490.8 km

**Proposal is within coordination distance of FCC monitoring station
**Proposal exceeds field strength limit at FCC monitoring station
Conditions at FCC monitoring station: Powder Springs GA
Bearing: 279.9 degrees Distance: 36.0 km
ERP: 975 kW Field strength: 103.1 dBu, 142.7 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 296.8 degrees Distance: 1977.2 km

Table 1 WUPA OET Bulletin 69 Interference Study
(page 2 of 9)



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 DTVBL64338 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL64338 BL, scenario 2
Proposal causes no interference.

Interference to BLCDT20060627ABT LIC, scenario 1

Desired:	Call WLTZ	Chan D35	Svc DT	Status LIC	City, State COLUMBUS, GA	File Number BLCDT20060627ABT	Distance			
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	158.4 km			
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	158.4			
	WSST-TV	D34	DT	BL	CORDELE, GA	DTVBL63867	119.5			
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	158.7			
	WJTC	D35	DT	BL	PENSACOLA, FL	DTVBL41210	327.3			
	WGSA	D35	DT	LIC	BAXLEY, GA	BLCDT20071120AJC	336.3			
	WBVJ-CD	D35+	DC	LIC	VALDOSTA, GA	BLANK0000004708	224.0			
	WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	343.4			
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	307.7			
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX		
20640.1	689,521	20371.2	685,358	20142.8	681,337	20142.8	681,337	0.00	0.00	
Undesired				Total IX	Unique IX, before		Unique IX, after			
WUPA	D36	DT	BL	16.0	100	16.0	100			
WUPA	D36	DT	APP	16.0	100	16.0	100			
WEAC-CD	D35	DC	BL	116.0	2,392	100.0	2,257	100.0	2,257	
WJTC	D35	DT	BL	4.1	133	4.1	133	4.1	133	
WGSA	D35	DT	LIC	52.4	539	52.4	539	52.4	539	
WMYA-TV	D35	DT	BL	20.0	460	12.0	439	12.0	439	
WTCI	D35	DT	BL	44.0	553	20.0	397	20.0	397	

Interference to DTVBL56548 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL56548 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL56548 BL, scenario 3
Proposal causes no interference.

Interference to DTVBL56548 BL, scenario 4
Proposal causes no interference.

Interference to DTVBL65667 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	177.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	177.9
	W17DJ-D	D34	DC	CP	HUNTSVILLE, AL	BLANK0000024495	125.4
	WATC-DT	D34	DT	BL	ATLANTA, GA	DTVBL13206	147.6
	WVLT-TV	D34	DT	CP	KNOXVILLE, TN	BLANK0000025085	148.4
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	184.3

Table 1 WUPA OET Bulletin 69 Interference Study
(page 3 of 9)



WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	307.7
WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	309.0
WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	281.3
WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	312.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23934.9 1,204,482	19955.4 1,096,484	19370.8 1,073,192	19370.8 1,073,192	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	12.0 357	4.0 102	
WUPA D36 DT APP	12.0 357		4.0 102
WATC-DT D34 DT BL	19.9 512	8.0 257	8.0 257
WVLT-TV D34 DT CP	213.7 10,638	213.7 10,638	213.7 10,638
WEAC-CD D35 DC BL	286.6 6,872	266.7 6,448	266.7 6,448
WLTZ D35 DT LIC	31.8 1,455	19.9 1,286	19.9 1,286
WMYA-TV D35 DT BL	4.0 0	0.0 0	0.0 0
WBBJ-TV D35 DT BL	52.4 4,137	52.4 4,137	52.4 4,137

Interference to DTVBL65667 BL, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	177.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	177.9
	W17DJ-D	D34	DC	CP	HUNTSVILLE, AL	BLANK0000024495	125.4
	WATC-DT	D34	DT	BL	ATLANTA, GA	DTVBL13206	147.6
	WVLT-TV	D34	DT	BL	KNOXVILLE, TN	DTVBL35908	148.4
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	184.3
	WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	307.7
	WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	309.0
	WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	281.3
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	312.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23934.9 1,204,482	19955.4 1,096,484	19374.9 1,074,715	19374.9 1,074,715	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	12.0 357	4.0 102	
WUPA D36 DT APP	12.0 357		4.0 102
WATC-DT D34 DT BL	19.9 512	8.0 257	8.0 257
WVLT-TV D34 DT BL	209.7 9,115	209.7 9,115	209.7 9,115
WEAC-CD D35 DC BL	286.6 6,872	266.7 6,448	266.7 6,448
WLTZ D35 DT LIC	31.8 1,455	19.9 1,286	19.9 1,286
WMYA-TV D35 DT BL	4.0 0	0.0 0	0.0 0
WBBJ-TV D35 DT BL	52.4 4,137	52.4 4,137	52.4 4,137

Interference to DTVBL65667 BL, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	177.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	177.9
	W17DJ-D	D34	DC	BL	HUNTSVILLE, AL	DTVBL67020	125.4
	WATC-DT	D34	DT	BL	ATLANTA, GA	DTVBL13206	147.6
	WVLT-TV	D34	DT	CP	KNOXVILLE, TN	BLANK0000025085	148.4
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	184.3
	WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	307.7
	WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	309.0
	WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	281.3
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	312.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23934.9 1,204,482	19955.4 1,096,484	19370.8 1,073,192	19370.8 1,073,192	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	12.0 357	4.0 102	
WUPA D36 DT APP	12.0 357		4.0 102
WATC-DT D34 DT BL	19.9 512	8.0 257	8.0 257
WVLT-TV D34 DT CP	213.7 10,638	213.7 10,638	213.7 10,638

Table 1 WUPA OET Bulletin 69 Interference Study
(page 4 of 9)



WEAC-CD D35 DC BL	286.6	6,872	266.7	6,448	266.7	6,448
WLTZ D35 DT LIC	31.8	1,455	19.9	1,286	19.9	1,286
WMYA-TV D35 DT BL	4.0	0	0.0	0	0.0	0
WBBJ-TV D35 DT BL	52.4	4,137	52.4	4,137	52.4	4,137

Interference to DTVBL65667 BL, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	177.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	177.9
	WL7DJ-D	D34	DC	BL	HUNTSVILLE, AL	DTVBL67020	125.4
	WATC-DT	D34	DT	BL	ATLANTA, GA	DTVBL13206	147.6
	WVLT-TV	D34	DT	BL	KNOXVILLE, TN	DTVBL35908	148.4
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	184.3
	WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	307.7
	WKLE	D35	DT	BL	LEXINGTON, KY	DTVBL34207	309.0
	WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	281.3
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	312.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23934.9 1,204,482	19955.4 1,096,484	19374.9 1,074,715	19374.9 1,074,715	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	12.0 357	4.0 102	
WUPA D36 DT APP	12.0 357		4.0 102
WATC-DT D34 DT BL	19.9 512	8.0 257	8.0 257
WVLT-TV D34 DT BL	209.7 9,115	209.7 9,115	209.7 9,115
WEAC-CD D35 DC BL	286.6 6,872	266.7 6,448	266.7 6,448
WLTZ D35 DT LIC	31.8 1,455	19.9 1,286	19.9 1,286
WMYA-TV D35 DT BL	4.0 0	0.0 0	0.0 0
WBBJ-TV D35 DT BL	52.4 4,137	52.4 4,137	52.4 4,137

Interference to BLCDT20090901AAL LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVY	D36	DT	LIC	DOTHAN, AL	BLCDT20090901AAL	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	346.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	346.9
	WJTC	D35	DT	BL	PENSACOLA, FL	DTVBL41210	177.0
	WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	189.2
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	325.9
	WUFT	D36	DT	LIC	GAINESVILLE, FL	BLEDT20040304AAF	348.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
44472.9 974,532	44171.3 971,173	43685.5 965,867	43673.3 965,567	0.03 0.03

Undesired	Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	145.6 3,020	76.8 2,463	
WUPA D36 DT APP	157.8 3,320		89.0 2,763
WJTC D35 DT BL	160.0 532	156.1 502	156.1 502
WSES D36 DT BL	224.9 1,325	152.1 738	152.1 738
WUFT D36 DT LIC	28.0 1,016	28.0 1,016	28.0 1,016

Interference to BLCDT20090901AAL LIC, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVY	D36	DT	LIC	DOTHAN, AL	BLCDT20090901AAL	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	346.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	346.9
	WJTC	D35	DT	BL	PENSACOLA, FL	DTVBL41210	177.0
	WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	189.2
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	325.9
	WUFT	D36	DT	LIC	GAINESVILLE, FL	BLEDT20040304AAF	348.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
44472.9 974,532	44171.3 971,173	43685.5 965,867	43673.3 965,567	0.03 0.03

Table 1 WUPA OET Bulletin 69 Interference Study
(page 5 of 9)



Undesired		Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	145.6	3,020	76.8	2,463
WUPA D36 DT APP	157.8	3,320		89.0
WJTC D35 DT BL	160.0	532	156.1	502
WSES D36 DT BL	224.9	1,325	152.1	738
WUFT D36 DT LIC	28.0	1,016	28.0	1,016

Interference to DTVBL21258 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	288.3 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	288.3
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	145.2
	WTVY	D36	DT	LIC	DOTHAN, AL	BLCDT20090901AAL	325.9
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	228.5
	WLOO	D36	DT	CP	VICKSBURG, MS	BLANK0000025168	309.5
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	315.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35561.8	1,548,117	34777.0	1,512,839	33836.3	1,479,562	33828.3	1,479,832
							0.02 -0.02

Undesired		Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	387.9	16,097	140.0	6,001
WUPA D36 DT APP	399.9	16,161		148.0
WEAC-CD D35 DC BL	367.9	16,968	196.0	10,127
WTVY D36 DT LIC	300.4	6,708	188.6	3,138
WMAV-TV D36 DT LIC	72.2	2,057	40.1	864
WLOO D36 DT CP	52.1	1,152	20.1	113
WTVF D36 DT BL	100.1	4,198	64.0	1,171

Interference to DTVBL21258 BL, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	288.3 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	288.3
	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	145.2
	WTVY	D36	DT	LIC	DOTHAN, AL	BLCDT20090901AAL	325.9
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	228.5
	WLOO	D36	DT	BL	VICKSBURG, MS	DTVBL84253	309.5
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	315.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35561.8	1,548,117	34777.0	1,512,839	33836.3	1,479,562	33828.3	1,479,832
							0.02 -0.02

Undesired		Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	387.9	16,097	140.0	6,001
WUPA D36 DT APP	399.9	16,161		148.0
WEAC-CD D35 DC BL	367.9	16,968	196.0	10,127
WTVY D36 DT LIC	300.4	6,708	188.6	3,138
WMAV-TV D36 DT LIC	72.2	2,057	40.1	864
WLOO D36 DT BL	52.1	1,123	20.1	113
WTVF D36 DT BL	100.1	4,198	64.0	1,171

Interference to DTVBL3228 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFXG	D36	DT	BL	AUGUSTA, GA	DTVBL3228	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	235.9 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	235.9
	WGSA	D35	DT	LIC	BAXLEY, GA	BLCDT20071120AJC	159.2
	WMYA-TV	D35	DT	BL	ANDERSON, SC	DTVBL56548	142.6
	WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	294.2
	WBFT-CD	D36	DC	BL	SANFORD, NC	DTVBL64400	334.4
	WFXB	D36	DT	BL	MYRTLE BEACH, SC	DTVBL9054	259.5

Table 1 WUPA OET Bulletin 69 Interference Study
(page 7 of 9)



Interference to DTVBL36504 BL, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	352.8 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	352.8
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	179.9
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	185.1
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	315.4
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	393.1
	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	248.4
	KBSI	D36	DT	CP	CAPE GIRARDEAU, MO	BLANK0000025127	277.3
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	344.0
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	283.1
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
36441.7 2,365,383		35337.1 2,348,589		34524.3 2,332,330		34524.3 2,332,351	0.00 -0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WUPA D36 DT BL		28.2	713	16.2	207		
WUPA D36 DT APP		28.2	692			16.2	186
WAVE D36 DT BL		352.1	4,214	216.0	2,761	216.0	2,761
KBSI D36 DT CP		496.4	10,779	404.3	9,947	404.3	9,947
WMAV-TV D36 DT LIC		8.0	14	8.0	14	8.0	14
WVLR D36 DT BL		72.2	2,498	28.1	1,452	28.1	1,452

Interference to DTVBL36504 BL, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	352.8 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	352.8
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	179.9
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	185.1
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	315.4
	WBXI-CD	D36	DC	APP	INDIANAPOLIS, IN	BLANK0000025132	393.1
	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	248.4
	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	277.3
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	344.0
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	283.1
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
36441.7 2,365,383		35337.1 2,348,589		34524.3 2,331,492		34524.3 2,331,513	0.00 -0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WUPA D36 DT BL		28.2	713	16.2	207		
WUPA D36 DT APP		28.2	692			16.2	186
WAVE D36 DT BL		352.1	4,214	220.0	2,871	220.0	2,871
KBSI D36 DT BL		492.4	11,507	404.3	10,785	404.3	10,785
WMAV-TV D36 DT LIC		8.0	14	8.0	14	8.0	14
WVLR D36 DT BL		72.2	2,498	28.1	1,452	28.1	1,452

Interference to DTVBL36504 BL, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	352.8 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	352.8
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	179.9
	WBBJ-TV	D35	DT	BL	JACKSON, TN	DTVBL65204	185.1
	WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	315.4
	WBXI-CD	D36	DC	BL	INDIANAPOLIS, IN	DTVBL70416	393.1
	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	248.4
	KBSI	D36	DT	BL	CAPE GIRARDEAU, MO	DTVBL19593	277.3
	WMAV-TV	D36	DT	LIC	OXFORD, MS	BLEDT20090612AAK	344.0
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	283.1
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX

Table 1 WUPA OET Bulletin 69 Interference Study
(page 8 of 9)



36441.7 2,365,383 35337.1 2,348,589 34524.3 2,331,492 34524.3 2,331,513 0.00 -0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	28.2	713	16.2	207
WUPA D36 DT APP	28.2	692		16.2 186
WAVE D36 DT BL	352.1	4,214	220.0	2,871 220.0 2,871
KBSI D36 DT BL	492.4	11,507	404.3	10,785 404.3 10,785
WMAV-TV D36 DT LIC	8.0	14	8.0	14 8.0 14
WVLR D36 DT BL	72.2	2,498	28.1	1,452 28.1 1,452

Interference to DTVBL81750 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	280.0 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	280.0
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	189.4
	WFXG	D36	DT	BL	AUGUSTA, GA	DTVBL3228	355.7
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	260.7
	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	304.8
	WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	161.7
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	283.1
	WFXR	D36	DT	BL	ROANOKE, VA	DTVBL24813	326.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
27295.1 1,412,728	22832.0 1,300,961	22416.1 1,292,592	22416.1 1,292,592	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	24.2	0	12.1	0
WUPA D36 DT APP	24.2	0		12.1 0
WKAS D36 DT BL	8.0	0	4.0	0 4.0 0
WAVE D36 DT BL	215.6	4,355	95.8	1,783 95.8 1,783
WUNE-TV D36 DT BL	44.2	364	36.2	308 36.2 308
WTVF D36 DT BL	239.9	5,593	124.1	3,021 124.1 3,021
WFXR D36 DT BL	15.9	685	12.0	629 12.0 629

Interference to DTVBL81750 BL, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	
Undesireds:	WUPA	D36	DT	BL	ATLANTA, GA	DTVBL6900	280.0 km
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	280.0
	WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	189.4
	WFXG	D36	DT	BL	AUGUSTA, GA	DTVBL3228	355.7
	WKAS	D36	DT	BL	ASHLAND, KY	DTVBL34171	260.7
	WAVE	D36	DT	BL	LOUISVILLE, KY	DTVBL13989	304.8
	WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	161.7
	WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	283.1
	WFXR	D36	DT	BL	ROANOKE, VA	DTVBL24813	326.6

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
27295.1 1,412,728	22832.0 1,300,961	22416.1 1,292,592	22416.1 1,292,592	0.00 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WUPA D36 DT BL	24.2	0	12.1	0
WUPA D36 DT APP	24.2	0		12.1 0
WKAS D36 DT BL	8.0	0	4.0	0 4.0 0
WAVE D36 DT BL	215.6	4,355	95.8	1,783 95.8 1,783
WUNE-TV D36 DT BL	44.2	364	36.2	308 36.2 308
WTVF D36 DT BL	239.9	5,593	124.1	3,021 124.1 3,021
WFXR D36 DT BL	15.9	685	12.0	629 12.0 629

Interference to proposal, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WUPA	D36	DT	APP	ATLANTA, GA	WUPA 975KW PROP	
Undesireds:	WEAC-CD	D35	DC	BL	JACKSONVILLE, AL	DTVBL64338	143.2 km

Table 1 WUPA OET Bulletin 69 Interference Study
(page 9 of 9)



WLTZ	D35	DT	LIC	COLUMBUS, GA	BLCDT20060627ABT	158.4
WTCI	D35	DT	BL	CHATTANOOGA, TN	DTVBL65667	177.9
WTVY	D36	DT	LIC	DOETHAN, AL	BLCDT20090901AAL	346.9
WSES	D36	DT	BL	TUSCALOOSA, AL	DTVBL21258	288.3
WFXG	D36	DT	BL	AUGUSTA, GA	DTVBL3228	235.9
WUNE-TV	D36	DT	BL	LINVILLE, NC	DTVBL69114	338.6
WTVF	D36	DT	BL	NASHVILLE, TN	DTVBL36504	352.8
WVLR	D36	DT	BL	TAZEWELL, TN	DTVBL81750	280.0

Service area	Terrain-limited		IX-free		Percent IX	
31358.5	5,960,242	29849.0	5,882,848	29485.1	5,863,062	1.22 0.34

Undesired	Total IX		Unique IX		Prct Unique IX	
WEAC-CD D35 DC BL	28.2	1,448	20.1	1,380	0.07	0.02
WTCI D35 DT BL	4.0	15	4.0	15	0.01	0.00
WTVY D36 DT LIC	100.0	4,635	84.0	3,662	0.28	0.06
WSES D36 DT BL	84.2	4,745	24.1	399	0.08	0.01
WFXG D36 DT BL	44.0	958	36.0	701	0.12	0.01
WUNE-TV D36 DT BL	20.0	594	12.0	337	0.04	0.01
WTVF D36 DT BL	79.9	2,939	35.9	1,065	0.12	0.02
WVLR D36 DT BL	107.7	10,838	67.8	6,586	0.23	0.11

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	6900
	State	Georgia
	City	ATLANTA
	DTV Channel	36
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	2

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1223132
Coordinates (NAD83)	Latitude	33° 48' 26.4" N+
	Longitude	084° 20' 21.5" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	360.3 meters
	Support Structure Height	321.9 meters
	Ground Elevation (AMSL)	264.3 meters
Antenna Data	Height of Radiation Center Above Ground Level	351.1 meters
	Height of Radiation Center Above Average Terrain	328.6 meters
	Height of Radiation Center Above Mean Sea Level	615.4 meters
	Effective Radiated Power	975 kW

Antenna
Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Non-Directional
	Do you have an Antenna ID?	
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	DIE
	Model	TUM-AP-O4-14/56H-2-T
	Rotation	
	Electrical Beam Tilt	0.70
	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	

Construction
Permit
Certifications

Section	Question	Response
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	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.	No
	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.	Yes
	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.	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