

Exhibit 41 - Statement A
ALLOCATION CONSIDERATIONS
INTERFERENCE ANALYSIS

prepared for
WVLT Licensee Corp.
WVLT-DT Knoxville, Tennessee
Facility ID 35908
Ch. 30 398 kW 551 m

WVLT Licensee Corp. (“WLC”), licensee of analog station WVLT-TV Channel 8, Knoxville, Tennessee, has an application pending to construct WVLT-DT (file number BPCDT-19990921AAL). The pending application proposes a non-directional antenna system, an effective radiated power (ERP) of 414 kW and an antenna height above average terrain (HAAT) of 543 meters. The purpose of the instant amendment is to change the proposed site coordinates, overall structure height, antenna height above ground, HAAT and ERP. No other changes to the pending application are sought.

The site specified herein for WVLT-DT is a new “community” “tall tower” that has been proposed for use for the Knoxville area stations by an independent tower provider (*Richland Towers*). The tower proponent has recently furnished finalized tower data. The site specified in this finalized data is located 2.7 km from the existing NTSC WVLT-TV (Channel 8) site and 1.5 km from the site of the pending WVLT-DT application. FAA approval for the proposed structure has been received (see FAA Aeronautical Study Number 00-ASO-6370-OE) and the structure has been registered with the Commission. The Registration number is 1222895.

The DTV reference ERP and antenna HAAT of 663.5 kW and 382 meters, respectively, for WVLT-DT have been established under **Appendix B** of the Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders in MM Docket 87-268, FCC 98-315, released December 18, 1998, per §73.622(f)(1) of the Commission’s rules. The proposed WVLT-DT facility will operate with 398 kW ERP at 551 meters HAAT¹. Thus, the proposed ERP/HAAT combination exceeds the reference ERP/HAAT combination. Accordingly, as required by §73.622(f)(5),

¹The actual HAAT is 551.3 meters based upon the use of 3-arc second terrain data. This number rounds to 551 meters, the value employed and referenced herein.

Exhibit 41 - Statement A
ALLOCATION CONSIDERATIONS
INTERFERENCE ANALYSIS
(Page 2 of 4)

a study was conducted to evaluate interference to analog and DTV facilities that may be attributed to the proposed WVLT-DT facility.

A detailed interference study was conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, July 2, 1997 ("OET-69").² The interference study examined the net change in interference as experienced by other stations that would result from the proposed facility (in lieu of the reference WVLT-DT).

All stations considered in this study are listed in **Exhibit 41 - Table I**. The results of the interference study, also summarized in **Exhibit 41 - Table I**, indicate that any additional interference to these stations meets the Commission's 2% / 10% interference limits regarding DTV proposals. No interference is predicted to any other station or DTV allotment. Thus, this proposal is believed to be in compliance with the provisions of §73.623(c)(2) of the Commission's rules.

With respect to television stations that have been granted a Class A License or hold a Class A Construction Permit, or are existing Low Power Television (LPTV) stations that are eligible for Class A

²The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. The Longley-Rice computer program input data, following the guidelines established under OET-69, includes a location variability of 50%, a time availability of 10%, a situation variability of 50%, horizontal polarization, 0.005 S/m conductivity, a climate constant of 15, an assumption of a continental temperate climate zone, and a receive antenna height of 10 meters. The service area for each DTV facility under study is that area predicted to receive signal levels of at least 41 dBμ using the Longley-Rice methodology, and within the DTV F(50,90) service contour distance as determined per §73.625(b). In instances where the DTV reference ERP is 50 kW or 1,000 kW, the Grade B contour of the associated analog station (authorized as of April 3, 1997) is used to determine the extent of the DTV station's service area. The F(50,90) DTV service contour level is established by the formula $41 - 20\log[615/(\text{channel mid-frequency})]$ dBμ. The service area for each NTSC facility under study is that area predicted to receive signal levels of at least 64 dBμ using the Longley-Rice methodology, and within the NTSC F(50,50) service contour distance as determined per §73.684(c). The F(50,50) NTSC service contour level is established by the formula $64 - 20\log[615/(\text{channel mid-frequency})]$ dBμ. Comparisons of various results of this computer program to the Commission's implementation of OET-69 show good correlation.

Exhibit 41 - Statement A
ALLOCATION CONSIDERATIONS
INTERFERENCE ANALYSIS
(Page 3 of 4)

status,³ it is noted that the pending application for WVLT-DT was filed prior to December 31, 1999. Accordingly, the pending application was not required to provide protection to any station eligible for Class A status.⁴

The instant amendment specifies a site 1.5 km distant from the site of the original application, and specifies a comparable ERP/HAAT combination (398 kW, 551 m) to the ERP/ HAAT combination proposed in the original application (414 kW, 543 m). The resulting sets of interfering contours that may impact Class A facilities from the proposal as amended are slightly changed from those of the pending application. Both the original application and the instant amendment cause interference, as determined by §73.623(c)(5)(i), to the following Class A facilities:

Channel	Call		City		State	Lat	Distance
Applicant/Licensee						Long	Bearing
28Z	WEZK-LP	LIC	CA Zn:	KNOXVILLE	, TN	36- 0-36	2.68
S JERRY KISSINGER				5.90 kW	OM	83-55-57	53.34
28Z	WEEE-LP	APP	TX Zn:	KNOXVILLE	, TN	35-57-46	7.03
MILLARD V OAKLEY				11.50 kW	OM	84- 1-23	238.85
30-	WAPK-LP	LIC	TX Zn:	BRISTOL, VA & KINGSP,	TN	36-25-54	170.57
C. PHILIP BEAL	-TRUSTEE/OWNER	TV UNL		42.90 kW	OM	82- 8-15	72.98
32+	WEEE-LP	LIC	TX Zn:	KNOXVILLE	, TN	35-57-46	7.03
MILLARD V OAKLEY				45.00 kW	OM	84- 1-23	238.85

Further study determined that, with respect to the existing application, the instant proposal decreased interference to WEZK-LP and WAPK-LP, and increased interference to WEEE-LP (LIC & APP). However, §73.623(c)(5)(iii) allows for the use of the terrain dependent Longley-Rice point-to-point propagation model, per OET-69, in support of a request for waiver of §73.623(c)(5)(i). Accordingly, a

³See June 2, 2000 Public Notice *Certificates of Eligibility for Class A Television Station Status*, DA 00-1224.

⁴See December 7, 1999 Public Notice "*Community Broadcasters Protection Act of 1999*" Sets Deadline of December 31, 1999 for Full Service TV Stations to File Letters of Intent to Maximize their DTV Facilities, DA 99-2739.

Exhibit 41 - Statement A
ALLOCATION CONSIDERATIONS
INTERFERENCE ANALYSIS
(Page 4 of 4)

detailed interference study was conducted in accordance with OET-69.⁵ The results of this study are summarized in **Exhibit 41 - Table II**. As shown therein, the instant amendment will not increase interference to any Class A station with respect to the pending application. Thus, on the basis of an OET-69 analysis, the proposal complies with the Commission's requirements with respect to the protection of Class A stations. If a waiver of the Commission's contour overlap rule is required (§73.623(c)(5)(i)), then one is respectfully requested on behalf of the applicant for the reasons stated above.

It is therefore believed that the instant proposal complies with the Commission's allocation Rules and policies regarding NTSC, DTV, and Class A stations.

⁵The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein, except that a cell size of 1 km was employed. The Longley-Rice computer program input data, following the guidelines established under OET-69, includes a location variability of 50%, a time availability of 10%, a situation variability of 50%, horizontal polarization, 0.005 S/m conductivity, a climate constant of 15, an assumption of a continental temperate climate zone, and a receive antenna height of 10 meters. The service area for each Class A facility under study is that area predicted to receive signal levels of at least 74 dBμ using the Longley-Rice methodology, and within the NTSC F(50,50) 74 dBμ contour. Comparisons of various results of this computer program to the Commission's implementation of OET-69 show good correlation.

Exhibit 41 - Table I
INTERFERENCE ANALYSIS RESULTS SUMMARY

prepared for
WVLT Licensee Corp.
WVLT-DT Knoxville, Tennessee
Ch. 30 398 kW 551 m

DTV Facilities

<u>Stations Considered</u>	<u>City, State Channel</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Calculated “Before” Service Population (2)</u>	<u>Calculated “After” Service Population (3)</u>	<u>--- Net “New” Interference --- (“2 percent” test)</u>		<u>Percentage Reduction of Baseline Population (“10 percent” test) (6)</u>
						<u>Population (4)</u>	<u>Percentage (5)</u>	
WTCI-DT (Ref 50 kW)	Chattanooga, TN 29	148.5	752,000	729,222	728,997	225	0.03	3.06
WTCI-DT (CP 200 kW)	Chattanooga, TN 29	148.5	752,000	842,553	836,218	6,335	0.84	0.00
WSLS-DT (Ref 773.7 kW)	Roanoke, VA 30	366.0	1,141,000	1,137,989	1,137,963	26	0.00	0.27
WSLS-DT (CP 950 kW)	Roanoke, VA 30	366.0	1,141,000	1,095,619	1,095,619	0	0.00	3.98
WIAT-DT (Ref 166.3 kW)	Birmingham, AL 30	381.7	1,333,000	1,332,375	1,332,375	0	0.00	0.05
WIAT-DT (CP 1,000 kW)	Birmingham, AL 30	381.6	1,333,000	1,459,828	1,459,828	0	0.00	0.00
WBIR-DT (Ref 767.9 kW)	Knoxville, TN 31	1.8	1,194,000	1,194,049	1,194,004	45	0.00	0.00
WBIR-DT (CP 760.0 kW)	Knoxville, TN 31	1.9	1,194,000	1,198,752	1,198,707	45	0.00	0.00
WAGT-DT (Ref 60.4 kW)	Augusta, GA 30	345.3		----- no interference caused by proposal -----				

Exhibit 41 - Table I
INTERFERENCE ANALYSIS RESULTS SUMMARY
 (Page 2 of 4)

<u>Stations Considered</u>	<u>City, State Channel</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Calculated “Before” Service Population (2)</u>	<u>Calculated “After” Service Population (3)</u>	<u>--- Net “New” Interference --- (“2 percent” test)</u>		<u>Percentage Reduction of Baseline Population (“10 percent” test) (6)</u>	
						<u>Population</u> (4)	<u>Percentage</u> (5)		
WAGT-DT (CP 200.0 kW)	Augusta, GA 30	345.2			----- no interference caused by proposal -----				
WAGT-DT (App 400.0 kW)	Augusta, GA 30	345.2			----- no interference caused by proposal -----				
WKOH-DT (Ref 50 kW)	Owensboro, KY 30	364.3			----- no interference caused by proposal -----				
WKOH-DT (CP 63.3 kW)	Owensboro, KY 30	364.2			----- no interference caused by proposal -----				
WRGT-DT (Ref 133.5 kW)	Dayton, OH 30	414.7			----- no interference caused by proposal -----				
WRGT-DT (App 425.0 kW)	Dayton, OH 30	414.6			----- no interference caused by proposal -----				

NTSC Facilities

<u>Stations Considered</u>	<u>City, State Channel</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Calculated “Before” Service Population (2)</u>	<u>Calculated “After” Service Population (3)</u>	<u>--- Net “New” Interference --- (“2 percent” test)</u>		<u>---Total Interference--- from DTV only (“10 percent” test)</u>	
						<u>Population</u> (4)	<u>Percentage</u> (5)	<u>Population</u> (7)	<u>Percentage</u> (8)
WPBA(TV) (Lic)	Atlanta, GA 30	250.4	3,025,438	2,912,259	2,912,294	235	0.01	49,213	1.63

Exhibit 41 - Table I
INTERFERENCE ANALYSIS RESULTS SUMMARY
(Page 3 of 4)

<u>Stations Considered</u>	<u>City, State Channel</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Calculated “Before” Service Population (2)</u>	<u>Calculated “After” Service Population (3)</u>	<u>--- Net “New” Interference --- (“2 percent” test)</u>		<u>---Total Interference--- from DTV only (“10 percent” test)</u>	
						<u>Population (4)</u>	<u>Percentage (5)</u>	<u>Population (7)</u>	<u>Percentage (8)</u>
WUXP-TV (Lic)	Nashville, TN 30	257.2	1,376,342	1,312,870	1,312,653	217	0.02	31,748	2.31
WUXP-TV (CP)	Nashville, TN 30	257.2	1,486,099	1,409,436	1,408,863	573	0.04	33,842	2.28
WHCP(TV) (Lic)	Portsmouth, OH 30	317.1	461,606	344,577	344,550	27	0.01	3,026	0.66
WHCP(TV) (CP)	Portsmouth, OH 30	317.1	561,220	429,335	429,281	54	0.01	6,271	1.12
WKOP-TV (Lic)	Knoxville, TN 15	1.9		----- no interference caused by proposal -----					
WCTE(TV) (Lic)	Cookeville, TN 22	126.5		----- no interference caused by proposal -----					
WKZX(TV) (Lic)	Cookeville, TN 28	126.1		----- no interference caused by proposal -----					
WKSO-TV (Lic)	Somerset, KY 29	151.4		----- no interference caused by proposal -----					
WNTV(TV) (Lic)	Greenville, SC 29	182.7		----- no interference caused by proposal -----					
WNSC-TV (Lic)	Rock Hill, SC 30	296.0		----- no interference caused by proposal -----					

Exhibit 41 - Table I
INTERFERENCE ANALYSIS RESULTS SUMMARY
 (Page 4 of 4)

<u>Stations Considered</u>	<u>City, State Channel</u>	<u>Distance (km)</u>	<u>Baseline Population (1)</u>	<u>Calculated “Before” Service Population (2)</u>	<u>Calculated “After” Service Population (3)</u>	<u>--- Net “New” Interference --- (“2 percent” test)</u>		<u>---Total Interference--- from DTV only (“10 percent” test)</u>	
						<u>Population</u> (4)	<u>Percentage</u> (5)	<u>Population</u> (7)	<u>Percentage</u> (8)
WTIU(TV) (Lic)	Bloomington, IN 30	415.1				----- no interference caused by proposal -----			
WUNF-TV (Lic)	Asheville, NC 33	125.6				----- no interference caused by proposal -----			

- Notes:
- (1) For DTV stations, greater of NTSC or DTV Service Population, from FCC Table
For NTSC stations, total population within noise-limited contour
 - (2) Service population after reduction from terrain and interference losses, before consideration of proposal
 - (3) Service population after reduction from terrain and interference losses, considering proposal
 - (4) Net change in population receiving interference resulting from proposal, equals (2) minus (3). A negative number indicates a *reduction* in interference.
 - (5) Proposal’s impact in terms of percentage, equals (4)/(1) times 100 percent: not to exceed *de minimis* limit of 2.0 percent
 - (6) Total interference to DTV stations: equals 100 percent minus [(3)/(1) X 100%]; proposal may not add interference above 10% total. Zero total interference is indicated if (3) is greater than (1).
 - (7) NTSC station total population subject to interference from DTV only sources (considering proposal)
 - (8) Proposal’s impact to NTSC station in terms of percentage, equals (7)/(1) times 100 percent; proposal may not add interference above 10% total

The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission’s August 10, 1998 Public Notice “*Additional Application Processing Guidelines for Digital Television*”

Exhibit 41 - Table II
CLASS A TELEVISION INTERFERENCE SUMMARY
 prepared for
WVLT Licensee Corp.
 WVLT-DT Knoxville, Tennessee
 Facility ID 35908
 Ch. 30 398 kW 551 m

<u>Stations Considered</u>	<u>City, State Channel</u>	<u>Distance (km)</u>	<u>Baseline Population</u> (1)	<u>Service Population</u> (2)	---- <i>Unique Interference</i> ---- <i>from WVLT-DT</i>	
					<u>Population</u> (3)	<u>Percentage</u> (4)
WEZK-LP (LIC)	Knoxville, TN 28 NTSC	2.7	285,044	12,429	0	0.00
WEEE-LP (APP)	Knoxville, TN 28 NTSC	7.0	268,631	129,779	0	0.00
WAPK-LP (LIC)	Bristol, TN 30 NTSC	170.6	273,086	156,880	(2,016)	<i>interference decreases</i>
WEEE-LP (LIC)	Knoxville, TN 32 NTSC	7.0	440,482	367,478	(651)	<i>interference decreases</i>

Notes:

- (1) Total population within protected contour
 - (2) Interference-free service population per OET-69 before consideration of proposal
 - (3) Net change in population receiving interference resulting from proposal
 - (4) Proposal's impact in terms of percentage, equals (3)/(1) times 100 percent: not to exceed zero when rounded to the nearest whole percent
- The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice "*Additional Application Processing Guidelines for Digital Television*"