ENGINEERING EXHIBIT

Incentive Auction Channel Reassignment

Application for Minor Modification of Digital Television Station Licensed Facility

prepared for

Thomas Broadcasting Company
WOAY-TV Oak Hill, WV
Facility ID 66804
Ch. 31 320 kW 218 m

Thomas Broadcasting Company ("Thomas") is the licensee of digital television station WOAY-TV, Facility ID 66804, Oak Hill, WV. Reassignment of WOAY-TV from Channel 50 to Channel 31 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (*"CCRPN"*, DA 17-317, released April 13, 2017). The WOAY-TV reassignment facility was recently constructed, and WOAY-TV is now licensed (file# 0000087696) to operate on Channel 31 at 320 kW effective radiated power ("ERP") with a nondirectional antenna at 210 meters height above average terrain ("HAAT"). *Thomas* herein seeks a Construction Permit ("CP") for a minor modification of the licensed reassignment facility to provide corrected geographic coordinates and ground elevation. The corrections result in an increase of antenna HAAT to 218 meters.

The pre-auction Channel 50 facility employed a side-mount antenna near the top of the WOAY-TV tower. Pursuant to the WOAY-TV reassignment CP (file# 0000028013), the Channel 31 antenna was installed at the top-mount position, in place of WOAY-TV's former analog Channel 4 antenna.

The WOAY-TV tower structure corresponds to FCC Antenna Structure Registration ("ASR") number 1053536, previously having an overall structure height above ground of 218.8 meters with the former analog Channel 4 antenna. The top-mount antenna replacement resulted in a reduction in the structure's overall height by 16.2 meters to 202.4 meters above ground level.

Following replacement of the top-mount antenna, the FAA was notified of the reduction in height. In processing the FAA notification, it was determined that the structure's geographic coordinates and ground elevation as specified on the prior FAA determination and the FCC Antenna Structure Registration ("ASR", number 1053536) require correction. The existing and corrected coordinates and elevation data for WOAY-TV are listed below.

	Licensed WOAY-TV	Corrected WOAY-TV
Latitude (NAD-83)	37° 57′ 26.0″	37° 57′ 26.6″
Longitude	81° 09′ 02.0″	81° 09′ 02.0″
Site Elevation (m AMSL)	609.6	617.5
Antenna C/R (m AGL)	192.1	192.1
Antenna C/R (m AMSL)	801.7	809.6
Antenna C/R (m HAAT)	210.1	218.1

Thus, corrections of 0.6 second geographic latitude and 7.9 meters ground elevation are necessary. The antenna radiation center height above ground level is unchanged at 192.1 meters. Due to the corrected ground elevation there are increases in the resulting antenna height above mean sea level ("AMSL") by 7.9 meters and antenna HAAT by 8.0 meters.

The FAA issued a Determination of No Hazard (2019-AEA-11752-OE) on November 26, 2019. The FCC ASR was then modified on December 13, 2019, and now reflects the corrected site data.

The transmitting antenna is an elliptically polarized nondirectional Dielectric model TFU-31JTH/VP-R O4 (25 percent vertical polarization). The horizontally polarized ERP is 320 kW and the vertically polarized ERP is 80 kW.

Figure 1 supplies a map that demonstrates compliance with §73.625(a)(1) regarding coverage of the entire principal community. The proposed facility's predicted population exceeds 95 percent of the *CCRPN* baseline facility's population.

At 320 kW ERP and 210 m HAAT, the licensed WOAY-TV noise limited service contour ("NLSC") extends slightly beyond that of the *CCRPN* facility and complied with §73.3700(b)(ii), having resulted from the initial filing requirement within 90 days of the release of the *CCRPN*.

The modifications sought herein provide an NLSC which slightly exceeds that of the licensed facility, due to the increased antenna height AMSL. A comparison map of the WOAY-TV licensed, proposed, and reassignment NLSC is provided as Figure 2.

The FCC's NLSC expansion "freeze" Public Notice[1] of April 5, 2013 (DA 13-618) is not applicable to reassigned stations that "have not yet completed the transition to their post-auction channels," according to the subsequent Public Notice[2] of July 22, 2019. While WOAY-TV has commenced operation on its reassignment Channel 31, the necessary corrections were identified as part of its final steps in the transition to notify the FAA of the reduction of overall tower height that resulted from implementing the channel reassignment. WOAY was assigned to make the transition to Channel 31 at phase 7 (testing period start date October 19, 2019 and phase completion date January 17, 2020). WOAY-TV commenced operation on Channel 31 near the beginning of phase 7, and this modification application to cover the site corrections is being submitted prior to the end of phase 7 (still within the designated phase 7 transition period). If a waiver of the freeze is necessary, then one is requested on behalf of *Thomas* for the reasons described above.

Interference study per FCC OET Bulletin 69[3] 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.

---

[1] *"Media Bureau Announces Limitations on the Filing and Processing of Full Power and Class A Television Station Modification Applications, Effective Immediately, and Reminds Stations of Spectrum Act Preservation Mandate,"* DA 13-618, Public Notice, released April 5, 2013.

[2] *"Media Bureau Lifts the Freeze on the Filing of Minor Modification Applications that Expand the Contour of Full Power and Class A Television Stations for Certain Repacked Stations, Effective Immediately,"* DA 19-684, Public Notice, released July 22, 2019.

[3] FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004. 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.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

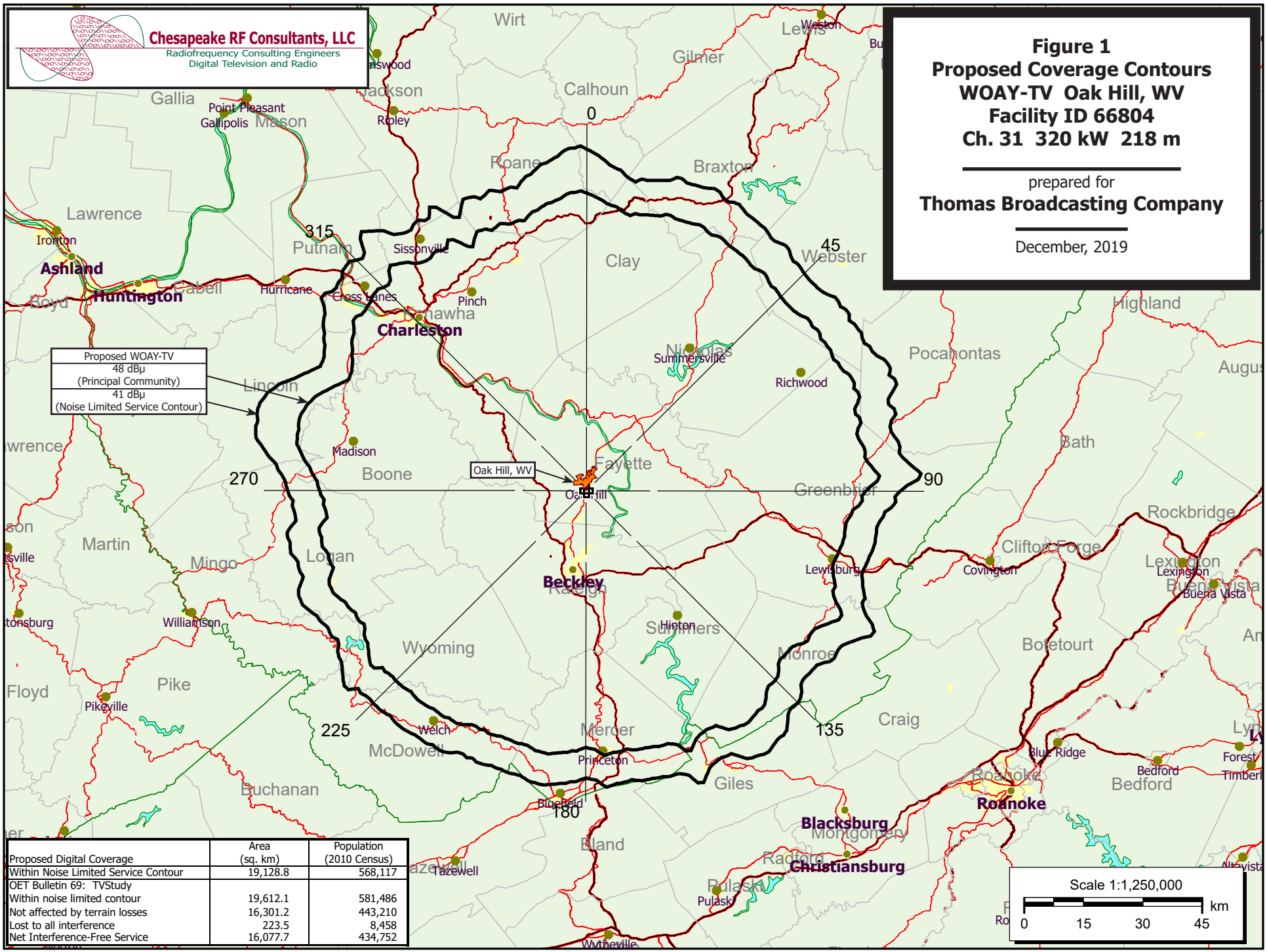
The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent antenna relative field in downward elevations (pattern data shows less than 10 percent relative field at angles 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 3.7 $\mu W/cm^2$, which is 1.0 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	Coverage Contour Comparison
Table 1	TVStudy Analysis of Proposal
Form 2100	Saved Version of Engineering Sections of FCC Form at Time of Upload

Chesapeake RF Consultants, LLC
Joseph M. Davis, P.E. December 19, 2019
207 Old Dominion Road Yorktown, VA 23692 703-650-9600



Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	19,128.8	568,117
OET Bulletin 69: TVStudy		
Within noise limited contour	19,612.1	581,486
Not affected by terrain losses	16,301.2	443,210
Lost to all interference	223.5	8,458
Net Interference-Free Service	16,077.7	434,752

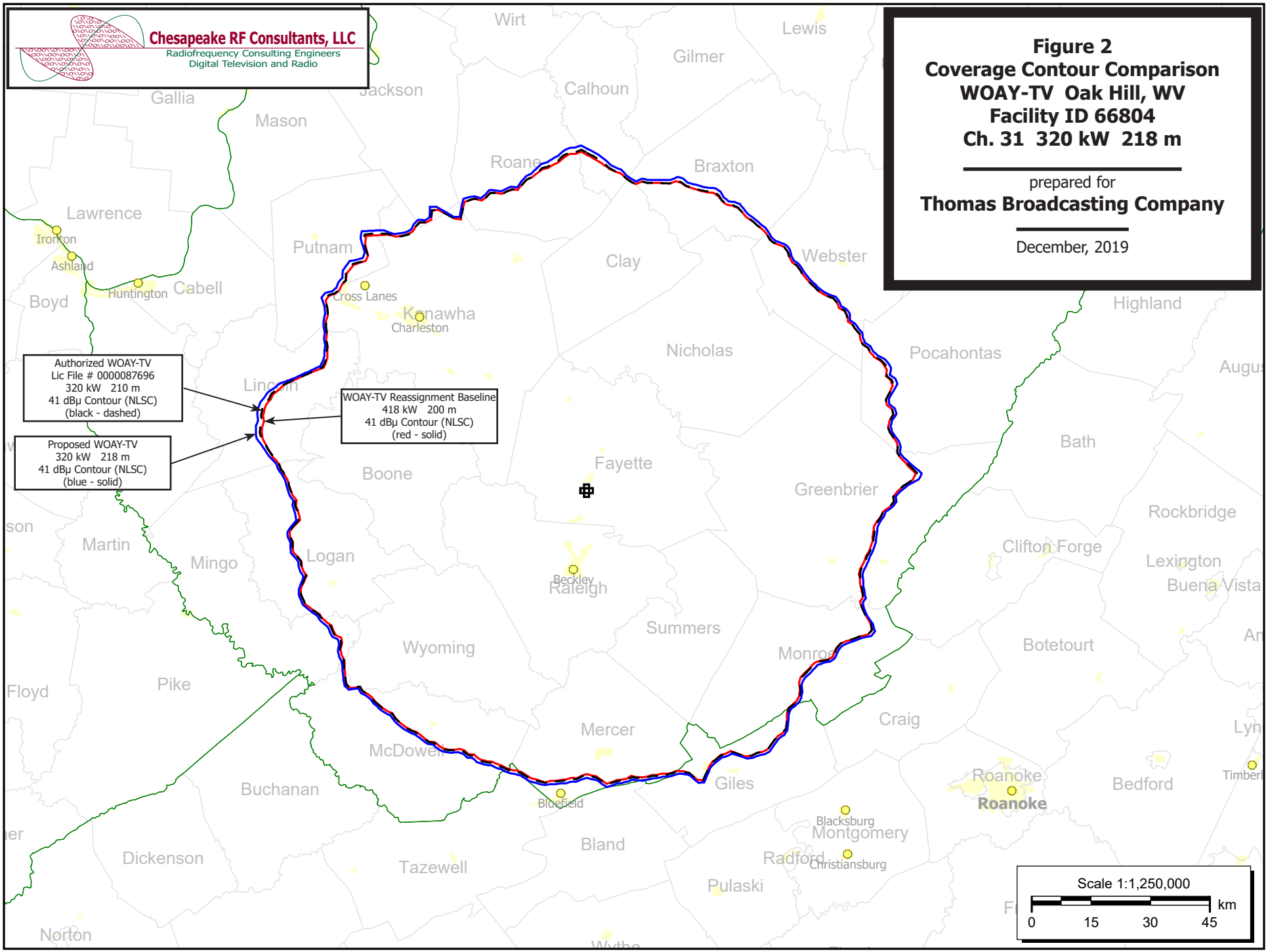

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio
Figure 2
Coverage Contour Comparison
WOAY-TV Oak Hill, WV
Facility ID 66804
Ch. 31 320 kW 218 m
prepared for
Thomas Broadcasting Company
December, 2019
Authorized WOAY-TV
Lic File # 0000087696
320 kW 210 m
41 dBµ Contour (NLSC)
(black - dashed)
Proposed WOAY-TV
320 kW 218 m
41 dBµ Contour (NLSC)
(blue - solid)
WOAY-TV Reassignment Baseline
418 kW 200 m
41 dBµ Contour (NLSC)
(red - solid)
Scale 1:1,250,000
km
0
15
30
45
Wirt
Lewis
Gilmer
Calhoun
Jackson
Gallia
Mason
Roane
Braxton
Lawrence
Ironton
Ashland
Huntington
Cabell
Boyd
Putnam
Clay
Webster
Cross Lanes
Kanawha
Charleston
Highland
Nicholas
Pocahontas
Lincoln
Boone
Fayette
Greenbrier
Bath
Martin
Mingo
Logan
Beckley
Raleigh
Summers
Rockbridge
Clifton Forge
Lexington
Buena Vista
Wyoming
Monroe
Botetourt
Floyd
Pike
Mercer
Craig
McDowell
Buchanan
Giles
Bluefield
Roanoke
Bedford
Blacksburg
Montgomery
Dickenson
Bland
Radford
Christiansburg
Tazewell
Pulaski
Norton

Table 1 WOAY-TV TVStudy Analysis of Proposal

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

```
tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: WOAY-TV_corr,  Model: Longley-Rice
Start: 2019.12.19 11:17:16

Study created: 2019.12.19 11:17:16

Study build station data: LMS TV 2019-12-17

    Proposal: WOAY-TV D31 DT APP OAK HILL, WV
 File number: WOAY-TV corr
 Facility ID: 66804
Station data: User record
   Record ID: 2906
     Country: U.S.
        Zone: I

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX   Call      Chan       Svc Status  City, State              File Number            Distance
No   WKMR      D30        DT  LIC     MOREHEAD, KY             BLANK0000075044        198.8 km
No   WHIZ-TV   D30        DT  CP      ZANESVILLE, OH           BLANK0000068718        230.6
Yes  WDBJ      D30        DT  CP      ROANOKE, VA              BLANK0000029919        121.9
No   WETA-TV   D31        DT  CP      WASHINGTON, DC           BLANK0000029879        371.1
Yes  WGHP      D31        DT  CP      HIGH POINT, NC           BLANK0000034212        265.3
Yes  WDTN      D31        DT  CP      DAYTON, OH               BLANK0000082150        332.5
Yes  WYTV      D31        DT  LIC     YOUNGSTOWN, OH           BLANK0000081168        347.2
No   WATM-TV   D31        DT  CP      ALTOONA, PA              BLANK0000028661        372.1
No   WKTC      D31        DT  LIC     SUMTER, SC               BLANK0000093003        428.4
Yes  WBXX-TV   D31        DT  LIC     CROSSVILLE, TN           BLANK0000081641        349.5
No   WHRO-TV   D31        DT  CP      HAMPTON-NORFOLK, VA      BLANK0000081777        429.8
No   WOUB-TV   D32        DT  LIC     ATHENS, OH               BLANK0000068360        174.0
No   WKPT-TV   D32        DT  LIC     KINGSPORT, TN            BLANK0000070485        190.8
No   WCAV      D32        DT  LIC     CHARLOTTESVILLE, VA      BLANK0000092578        233.9

Non-directional AM stations within 0.8 km:
WOAY 860 L ND1 C OAK HILL, WV BL
WOAY 860 L ND1 D OAK HILL, WV BL
WOAY 860 L ND1 N OAK HILL, WV BL

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D31
   Latitude:  37 57 26.60 N (NAD83)
  Longitude:  81  9  2.00 W
Height AMSL: 809.6 m
       HAAT: 218.1 m
   Peak ERP: 320 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
  Elec Tilt: 0.75

40.4 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg    320 kW   295.0 m   86.9 km
 45.0        320      218.7     78.8
 90.0        320      236.8     80.1
135.0        320      192.0     76.7
180.0        320      151.9     73.6
225.0        320      197.3     77.2
270.0        320      187.8     76.4
315.0        320      265.1     82.7

Distance to Canadian border: 426.9 km

Distance to Mexican border: 1991.1 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 69.0 degrees   Distance: 399.5 km
```

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

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 284.3 degrees Distance: 2085.8 km

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

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLANK0000029919 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDBJ	D30	DT	CP	ROANOKE, VA	BLANK0000029919	
Undesireds:	WOAY-TV	D31	DT	BL	OAK HILL, WV	DTVBL66804	121.9 km
	WOAY-TV	D31	DT	APP	OAK HILL, WV	WOAY-TV corr	121.9
	WXLV-TV	D29	DT	LIC	WINSTON-SALEM, NC	BLCDT20050624ABB	150.5
	WCHS-TV	D29	DT	LIC	CHARLESTON, WV	BLANK0000059340	204.2
	WIAV-CD	D30	DC	CP	WASHINGTON, DC	BLANK0000090104	331.6
	WKMR	D30	DT	LIC	MOREHEAD, KY	BLANK0000075044	305.9
	WUNU	D30	DT	CP	LUMBERTON, NC	BLANK0000034418	284.6
	WHIZ-TV	D30	DT	CP	ZANESVILLE, OH	BLANK0000068718	342.8
	WYFF	D30	DT	LIC	GREENVILLE, SC	BLANK0000081030	319.3
	WDCO-CD	D30	DC	BL	WOODSTOCK, VA	DTVBL57905	284.7
	WGHP	D31	DT	CP	HIGH POINT, NC	BLANK0000034212	156.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
46715.1	1,626,017	40697.9	1,435,762	39618.9	1,393,515	39607.0	1,393,381	0.03	0.01

Undesired	Total IX		Unique IX, before		Unique IX, after	
WOAY-TV D31 DT BL	170.4	4,518	111.0	4,138		
WOAY-TV D31 DT APP	186.3	4,696			122.9	4,272
WXLV-TV D29 DT LIC	299.2	20,904	159.6	7,193	159.6	7,193
WCHS-TV D29 DT LIC	27.7	109	0.0	0	4.0	0
WIAV-CD D30 DC CP	19.8	144	15.9	144	15.9	144
WKMR D30 DT LIC	107.3	2,036	51.8	1,560	47.8	1,547
WUNU D30 DT CP	350.8	14,919	119.5	3,276	119.5	3,276
WHIZ-TV D30 DT CP	87.0	491	35.6	89	31.6	58
WYFF D30 DT LIC	438.7	21,545	195.4	5,875	195.4	5,875
WDCO-CD D30 DC BL	4.0	0	0.0	0	0.0	0
WGHP D31 DT CP	95.7	6,633	8.0	50	8.0	50

Interference to BLANK0000034212 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WGHP	D31	DT	CP	HIGH POINT, NC	BLANK0000034212	
Undesireds:	WOAY-TV	D31	DT	BL	OAK HILL, WV	DTVBL66804	265.3 km
	WOAY-TV	D31	DT	APP	OAK HILL, WV	WOAY-TV corr	265.3
	WUNU	D30	DT	CP	LUMBERTON, NC	BLANK0000034418	134.0
	WDBJ	D30	DT	CP	ROANOKE, VA	BLANK0000029919	156.2
	WKTC	D31	DT	LIC	SUMTER, SC	BLANK0000093003	206.5
	WHRO-TV	D31	DT	CP	HAMPTON-NORFOLK, VA	BLANK0000081777	318.8
	WAXN-TV	D32	DT	LIC	KANNAPOLIS, NC	BLANK0000081193	100.9
	WRPX-TV	D32	DT	LIC	ROCKY MOUNT, NC	BLANK0000081831	152.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
36143.5	4,174,964	35545.4	4,123,106	33802.9	3,741,248	33802.9	3,741,248	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
WOAY-TV D31 DT BL	4.0	195	0.0	0		
WOAY-TV D31 DT APP	4.0	195			0.0	0
WUNU D30 DT CP	479.9	18,855	408.5	15,210	408.5	15,210
WDBJ D30 DT CP	139.2	10,273	139.2	10,273	139.2	10,273
WKTC D31 DT LIC	310.1	50,989	154.6	7,687	154.6	7,687
WHRO-TV D31 DT CP	192.2	33,064	75.9	10,138	75.9	10,138

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

WAXN-TV D32 DT LIC	595.8	236,844	527.9	198,387	527.9	198,387			
WRPX-TV D32 DT LIC	281.1	96,735	180.8	75,135	180.8	75,135			

Interference to BLANK0000082150 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDTN	D31	DT	CP	DAYTON, OH	BLANK0000082150	
Undesireds:	WOAY-TV	D31	DT	BL	OAK HILL, WV	DTVBL66804	332.5 km
	WOAY-TV	D31	DT	APP	OAK HILL, WV	WOAY-TV corr	332.5
	WNIT	D31	DT	LIC	SOUTH BEND, IN	BLANK0000087078	266.3
	WMYD	D31	DT	LIC	DETROIT, MI	BLANK0000081119	316.6
	WYTV	D31	DT	LIC	YOUNGSTOWN, OH	BLANK0000081168	339.9
	WOCB-CD	D32	DC	BL	MARION, OH	DTVBL9939	122.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
32111.0	3,831,757	31755.4	3,819,550	31370.7	3,808,204	31370.7	3,808,204	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WOAY-TV D31 DT BL	39.9	676		35.9	581		
WOAY-TV D31 DT APP	39.9	676				35.9	581
WNIT D31 DT LIC	8.0	146		0.0	0	0.0	0
WMYD D31 DT LIC	276.6	4,880		104.2	1,664	104.2	1,664
WYTV D31 DT LIC	204.4	8,514		32.0	5,280	32.0	5,280
WOCB-CD D32 DC BL	36.2	510		36.2	510	36.2	510

Interference to BLANK0000081168 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WYTV	D31	DT	LIC	YOUNGSTOWN, OH	BLANK0000081168	
Undesireds:	WOAY-TV	D31	DT	BL	OAK HILL, WV	DTVBL66804	347.2 km
	WOAY-TV	D31	DT	APP	OAK HILL, WV	WOAY-TV corr	347.2
	WPTG-CD	D30	DC	CP	PITTSBURGH, PA	BLANK0000074287	88.8
	WBYD-CD	D30	DC	BL	PITTSBURGH, PA	DTVBL68395	88.8
	WMYD	D31	DT	LIC	DETROIT, MI	BLANK0000081119	260.5
	WNED-TV	D31	DT	CP	BUFFALO, NY	BLANK0000034601	261.5
	WDTN	D31	DT	CP	DAYTON, OH	BLANK0000082150	339.9
	WATM-TV	D31	DT	CP	ALTOONA, PA	BLANK0000028661	193.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
32079.2	4,898,622	30913.2	4,535,576	29755.2	4,067,472	29755.2	4,067,472	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
WOAY-TV D31 DT BL	16.1	225		0.0	0		
WOAY-TV D31 DT APP	16.1	225				0.0	0
WPTG-CD D30 DC CP	116.2	89,164		16.0	12,971	16.0	12,971
WBYD-CD D30 DC BL	92.1	71,750		0.0	0	0.0	0
WMYD D31 DT LIC	700.5	353,764		411.1	262,686	411.1	262,686
WNED-TV D31 DT CP	317.2	41,524		144.4	5,399	144.4	5,399
WDTN D31 DT CP	185.1	66,967		32.1	2,313	32.1	2,313
WATM-TV D31 DT CP	204.7	29,547		132.5	16,956	132.5	16,956

Interference to BLANK0000081641 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WBXX-TV	D31	DT	LIC	CROSSVILLE, TN	BLANK0000081641	
Undesireds:	WOAY-TV	D31	DT	BL	OAK HILL, WV	DTVBL66804	349.5 km
	WOAY-TV	D31	DT	APP	OAK HILL, WV	WOAY-TV corr	349.5
	WDGA-CD	D30	DC	CP	DALTON, GA	BLANK0000028635	164.8
	WPCH-TV	D31	DT	LIC	ATLANTA, GA	BLANK0000081575	255.8
	WKMA-TV	D31	DT	LIC	MADISONVILLE, KY	BLANK0000087442	307.6
	WGHP	D31	DT	CP	HIGH POINT, NC	BLANK0000034212	405.9
	WDTN	D31	DT	CP	DAYTON, OH	BLANK0000082150	401.3
	WKTC	D31	DT	LIC	SUMTER, SC	BLANK0000093003	393.2
	WKPT-TV	D32	DT	LIC	KINGSPORT, TN	BLANK0000070485	200.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
49835.0	2,142,759	44431.9	1,984,544	44048.8	1,972,009	44048.8	1,972,009	0.00	0.00

Table 1 WOAY-TV TVStudy Analysis of Proposal

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

Undesired		Total IX		Unique IX, before		Unique IX, after	
WOAY-TV D31 DT BL	16.0	955	12.0	473			
WOAY-TV D31 DT APP	16.0	955			12.0	473	
WDGA-CD D30 DC CP	75.3	3,686	47.6	2,564	47.6	2,564	
WPCH-TV D31 DT LIC	239.5	6,569	191.7	4,622	191.7	4,622	
WKMA-TV D31 DT LIC	40.1	1,246	24.0	421	24.0	421	
WGHP D31 DT CP	8.1	6	4.0	6	4.0	6	
WDTN D31 DT CP	28.0	1,685	28.0	1,685	28.0	1,685	
WKTC D31 DT LIC	4.0	0	4.0	0	4.0	0	
WKPT-TV D32 DT LIC	23.9	817	19.9	335	19.9	335	

Interference to proposal scenario 1
1.91% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WOAY-TV	D31	DT	APP	OAK HILL, WV	WOAY-TV corr	
Undesireds:	WDBJ	D30	DT	CP	ROANOKE, VA	BLANK0000029919	121.9 km
	WGHP	D31	DT	CP	HIGH POINT, NC	BLANK0000034212	265.3
	WDTN	D31	DT	CP	DAYTON, OH	BLANK0000082150	332.5
	WYTV	D31	DT	LIC	YOUNGSTOWN, OH	BLANK0000081168	347.2
	WBXX-TV	D31	DT	LIC	CROSSVILLE, TN	BLANK0000081641	349.5

Service area		Terrain-limited		IX-free		Percent IX	
19612.1	581,486	16301.2	443,210	16077.7	434,752	1.37	1.91

Undesired	Total IX		Unique IX		Prcnt Unique IX	
WDBJ D30 DT CP	8.0	17	8.0	17	0.05	0.00
WGHP D31 DT CP	59.5	1,031	55.6	962	0.34	0.22
WDTN D31 DT CP	83.9	5,273	75.9	5,014	0.47	1.13
WYTV D31 DT LIC	52.3	732	44.2	473	0.27	0.11
WBXX-TV D31 DT LIC	31.8	1,733	27.8	1,664	0.17	0.38

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	66804
	State	West Virginia
	City	OAK HILL
	DTV Channel	31
	Designated Market Area	Bluefield-Beckley-Oak Hill
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	1

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1053536
Coordinates (NAD83)	Latitude	37° 57' 26.6" N+
	Longitude	081° 09' 02.0" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	202.4 meters
	Support Structure Height	182.9 meters
	Ground Elevation (AMSL)	617.5 meters
Antenna Data	Height of Radiation Center Above Ground Level	192.1 meters
	Height of Radiation Center Above Average Terrain	218.1 meters
	Height of Radiation Center Above Mean Sea Level	809.6 meters
	Effective Radiated Power	320 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	TFU-31JTH-R/VP O4
	Rotation	
	Electrical Beam Tilt	0.75
	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 47 C.F.R. Section 1.1306)	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