TECHNICAL STATEMENT
RE: CONSTRUCTION PERMIT CERTIFICATIONS
WTZP-LD 15 KW-DA 383.4 M AMSL CH. 31
PORTSMOUTH, OHIO

INTRODUCTION

Eagle Broadcasting Group, Inc. (the "Applicant"), licensee of digital low power television broadcast station WTZP-LD, Facility ID No. 68009, seeks to modify WTZP-LD's outstanding construction permit (CP) for a minor change in the transmitting antenna location.[1] Due to circumstances beyond the Applicant's control, it is currently not feasible to add WTZP-LD's new repack equipment to the antenna structure that was originally authorized in connection with the new channel obtained in the Special Displacement Window (SDW). For this reason, WTZP-LD is now requesting authority to construct its final repack facility utilizing another nearby tower.

All calculations, elevations and other technical data provided herein have been determined in accordance with the technical standards of the Federal Communications Commission (FCC), unless specifically stated otherwise.

BROADCAST FACILITY MODIFICATION

As stated above, this application seeks authority for WTZP-LD to change the location of its transmitting antenna to another nearby tower. The station will utilize the same equipment originally purchased for constructing the Channel 31 repack facility and thus the antenna will continue to be a horizontally polarized directional Dielectric Model TLP-8E with 1.0 degree electrical beam tilt. As shown in Figure 1, the station intends to install the new antenna at a

[1] See File No. 0000181565. WTZP-LD was previously operating on Channel 50 until the station became displaced as a result of the Incentive Auction. The station was subsequently authorized by the grant of its Special Displacement Window application to relocate to Channel 31. See FCC File No. 0000054002. To avoid a prolonged period of being off-air, the station constructed an interim facility using borrowed transmission equipment and on June 4, 2019 it began broadcasting on the new channel at reduced power and antenna height. This interim facility is currently covered under Special Temporary Authorization, File No. 0000206907.

radiation center height of 45.7 meters above ground level (AGL) or 383.4 meters above mean sea level (AMSL). It also intends to operate the station at a maximum effective radiated power (ERP) of 15 kW as originally authorized.

The new location proposed for WTZP-LD's transmitting antenna is only 6.8 kilometers from the station's existing transmitter site. At this short distance the proposed protected contour will overlap the existing transmitter site as depicted in Figure 2. Therefore, this application is eligible for processing under the normal procedures governing minor changes to digital low power television and TV translator stations.[2]

A detailed *TVStudy* analysis has been performed and the results indicate no interference check failures were found. A copy of the analysis summary is provided in Figure 3. This analysis confirms that a grant of this application will not result in any new interference to other prior authorized stations in accordance with the requirements in 47 C.F.R. §§ 74.709, 74.793(e), 74.793(f), 74.793(g) and 74.793(h).[3]

ENVIRONMENTAL EFFECT

The aforementioned UHF antenna will be collocated on a registered tower that was originally constructed before March 16, 2001.[4] Given that the collocation of the new antenna will not result in a substantial increase in the size of the existing antenna-supporting structure, the criteria outlined in 47 CFR § 1.1307(a) for certain types of facilities that may significantly affect the environment do not apply.[5] With regard to the rules for limiting human exposure to

[2] See 47 CFR § 74.787 – Digital licensing of low power television and TV translator stations. The proposed change in transmitting antenna location is not greater than 30 miles (48 kilometers) and the resulting protected contour will overlap some portion of the protected contour associated with the existing station.

[3] *TVStudy* Program - Version 2.2.5 was utilized to evaluate this proposal based on the default Interference Check template normally used for application processing. The following analysis settings were used: cell size = 1.0 km; profile point spacing = 1.0 km.

[4] See 47 CFR Part 1, App. B, § III.A. An antenna may be mounted on an existing tower constructed on or before March 16, 2001 without such collocation being reviewed through the Section 106 process set forth in the NPA, provided that the mounting of the antenna will not result in a substantial increase in the size of the tower.

[5] See 47 CFR Part 1, App. B, § I.C. A substantial increase in size means: "*(1) The mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or (2) The mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed*

radio-frequency (RF) energy in 47 CFR § 1.1307(b), this application seeks authority to operate a low power television broadcast antenna in full compliance with those guidelines as described in more detail below. This determination was made based on the following technical parameters:

Frequency:	572 - 578 MHz (UHF Ch. 31)
ERP:	15.0 kW
Antenna Type:	Dielectric Model TLP-8E
Antenna Polarization:	Horizontal
Antenna Height:	45.7 meters AGL
Site coordinates (NAD83):	38-43-21.5 NL, 083-00-05.1 WL
Site elevation:	337.7 meters AMSL
Overall tower height:	82.6 meters AGL
FCC ASRN:	1043740 (Constructed in 1987)

Using the methodology for predicting power density levels for television broadcast antennas outlined in OET-65, the above parameters are estimated to produce a maximum power density of 13.88 μW/cm² at points 2 meters above ground (approximate human head height).[6] This power density calculation was derived from OET-65 Equation 10 shown below.

$$S = \frac{33.4\ (F^2)\ ERP}{R^2}$$

Where: S = power density in μW/cm²
F = relative field factor
ERP = power in watts
R = distance in meters

A relative field factor of 0.23 was used for the above power density calculation, which is the highest value for the proposed antenna at angles greater than 10 degrees below the horizontal. The maximum exposure limits applicable to Channel 31, as determined in accordance with 47 CFR § 1.1310 for uncontrolled and controlled situations, are 381 μW/cm² and 1,907 μW/cm² respectively. Because the worst-case exposure level determined for the

four, or more than one new equipment shelter; or (3) The mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or (4) The mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site."

[6] FCC Office of Engineering and Technology, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, OET Bulletin 65, Edition 97-01 (1997) (OET-65).

proposed facility is not more than 5 percent of those guidelines and considering the requirements for signage and access control will be implemented as appropriate for compliance with the new rules adopted in the *RF Report and Order*, no further showing of compliance with the RF exposure rules appears to be necessary.[7] For all the reasons stated above, this minor change application has been found to comply with the criteria in 47 CFR § 1.1307(a) and (b) and thus does not require further environmental processing in accordance with 47 CFR § 1.1306.

Respectfully submitted,

Scott Turpie
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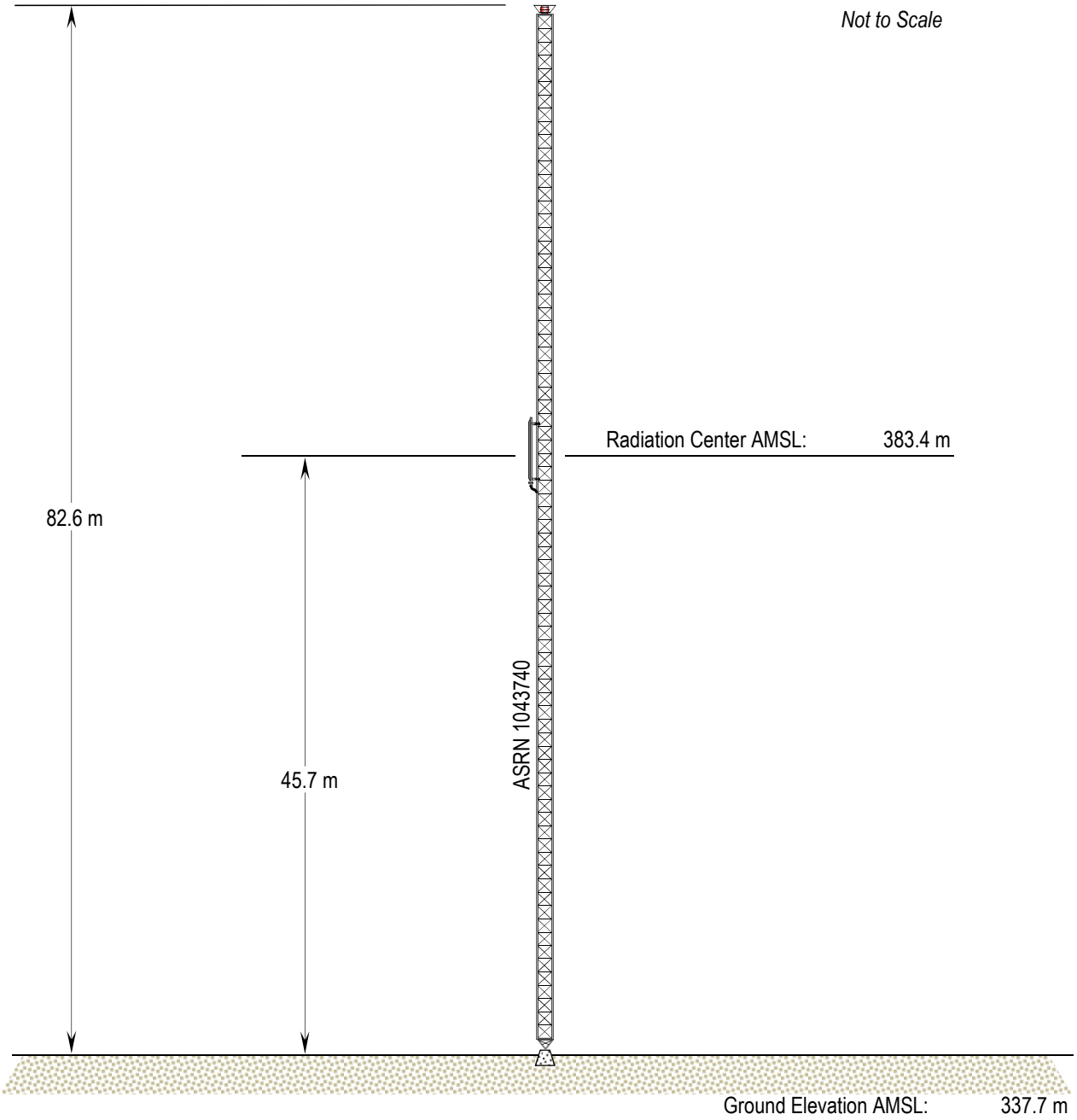
June 28, 2023

Attachments:
Figure 1 – Antenna Sketch
Figure 2 – Minor Change in Location
Figure 3 – TVStudy Summary Results

[7] *Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields; Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies*, ET Docket No. 19-226, Resolution of Notice of Inquiry, Second Report and Order, Notice of Proposed Rulemaking, and Memorandum Opinion and Order, 34 FCC Rcd 11687 (2019) (*RF Report and Order*).



NAD83 Site Coordinates
N. Latitude: 38-43-21.50
W. Longitude: 83-00-05.10

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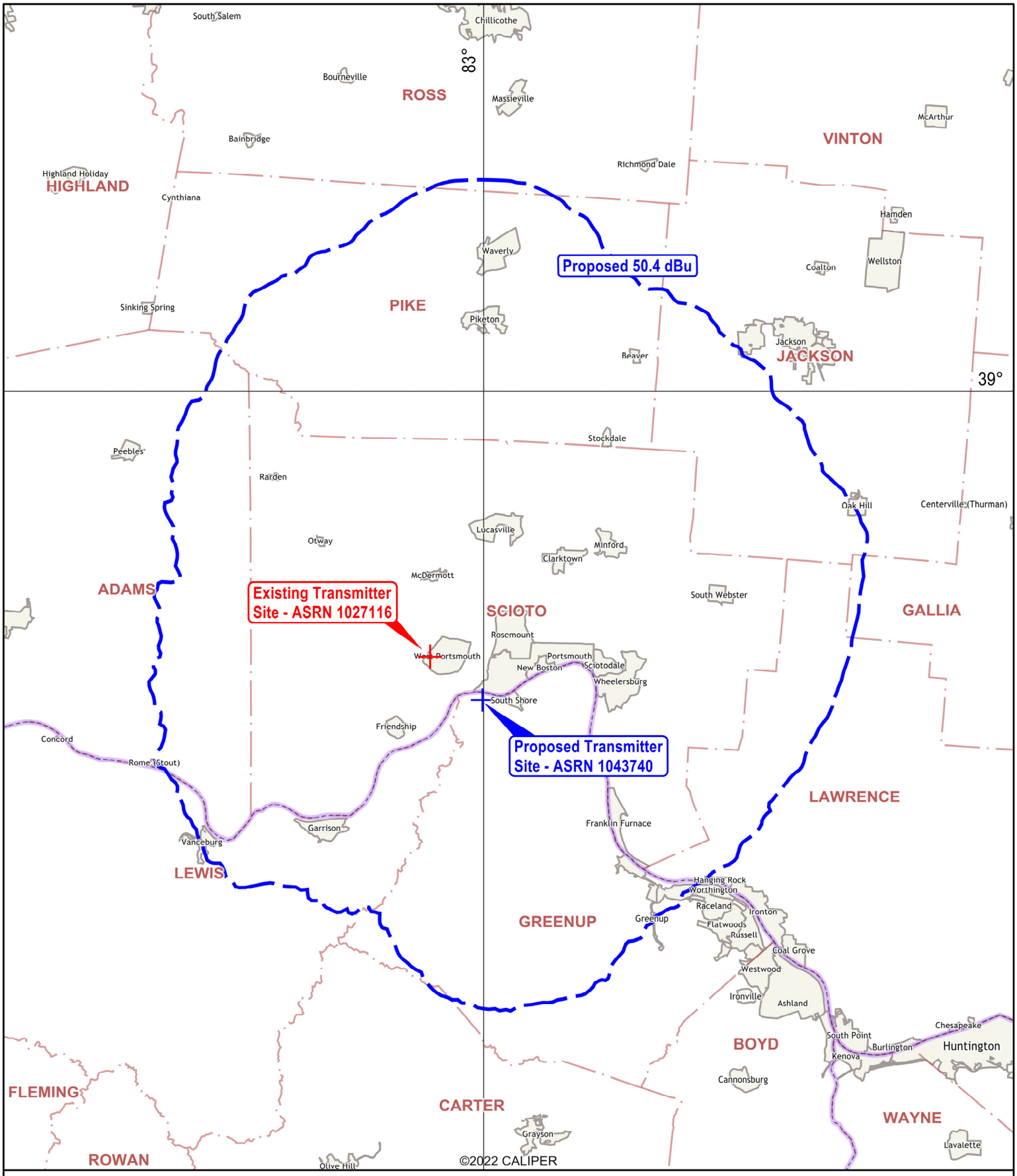
FIGURE 1
ANTENNA SKETCH
WTZP-LD 15.0KW-DA 383.4M AMSL CH. 31
PORTSMOUTH, OHIO

June 2023



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Scale 1:500,000
5 0 5 10 15 20
Kilometers

FIGURE 2
MINOR CHANGE IN LOCATION
WTZP-LD 15.0KW-DA 383.4M AMSL CH. 31
PORTSMOUTH, OHIO

June 2023

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FIGURE 3
Analysis Results Summary
***TVStudy Version** 2.2.5.*

Study created: 2023.06.26 14:51:54

Study build station data: LMS TV 2023-06-25

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    Proposal: WTZP-LD D31 LD APP PORTSMOUTH, OH
 File number: WTZP-LD CP-MOD
 Facility ID: 68009
Station data: User record
   Record ID: 879
     Country: U.S.
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Build options:
Protect pre-transition records not on baseline channel

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WKPC-TV	D30	DT	LIC	LOUISVILLE, KY	BLANK0000087420	249.2 km
Yes	WKMR	D30	DT	LIC	MOREHEAD, KY	BLANK0000075044	70.1
No	WZCD-LD	D30	LD	LIC	CINCINNATI-DAYTON, OH	BLANK0000153260	132.3
No	WZCD-LD	D30	LD	CP	CINCINNATI-DAYTON, OH	BLANK0000210341	141.4
No	WHIZ-TV	D30	DT	LIC	ZANESVILLE, OH	BLANK0000125049	160.0
No	WQDE-LD	D31	LD	LIC	Indianapolis, IN	BLANK0000108667	304.8
No	WNIT	D31	DT	LIC	SOUTH BEND, IN	BLANK0000215059	420.1
No	WNIT	D31	DT	LIC	SOUTH BEND, IN	BLANK0000087078	420.1
No	WVUT	D31	DT	LIC	VINCENNES, IN	BLANK0000087466	388.3
No	WKMA-TV	D31	DT	LIC	MADISONVILLE, KY	BLANK0000087442	430.6
No	WMYD	D31	DT	LIC	DETROIT, MI	BLANK0000125639	414.3
No	W31DH-D	D31	LD	LIC	FRANKLIN, ETC, NC	BLANK0000143463	378.5
No	WGHP	D31	DT	LIC	HIGH POINT, NC	BLANK0000158670	427.4
No	W31DI-D	D31	LD	LIC	SPRUCE PINE, NC	BLANK0000130730	325.8
Yes	WDTN	D31	DT	LIC	DAYTON, OH	BLANK0000204146	154.7
No	WYTV	D31	DT	LIC	YOUNGSTOWN, OH	BLANK0000081168	328.1
No	WATM-TV	D31	DT	LIC	ALTOONA, PA	BLANK0000105303	440.7
No	DWWBP-LP	N31+	TX	APP	FREEDOM, PA	BLTTL20040909ABD	321.3
No	WIIC-LD	D31+	LD	LIC	PITTSBURGH, PA	BLANK0000001503	323.1
No	WBXX-TV	D31	DT	LIC	CROSSVILLE, TN	BLANK0000081641	313.5
No	WAHU-LD	D31	LD	LIC	CROZET, VA	BLANK0000177047	402.4
Yes	WOAY-TV	D31	DT	LIC	OAK HILL, WV	BLANK0000096583	182.4
No	W32FD-D	D32	LD	LIC	LOUISA, KY	BLANK0000087487	76.2
No	WDRB	D32	DT	LIC	LOUISVILLE, KY	BLANK0000196709	251.0
Yes	WOUB-TV	D32	DT	LIC	ATHENS, OH	BLANK0000068360	98.7
No	DDWWRD-LP	N32+	TX	APP	DAYTON, OH	BLTTL20071011AAP	141.4
No	WKPT-TV	D32	DT	LIC	KINGSPORT, TN	BLANK0000070485	265.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D31
       Mask: Full Service
   Latitude:  38 43 21.50 N (NAD83)
  Longitude:  83  0  5.10 W
Height AMSL: 383.4 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: DIE TLP-8E 0.0 deg
Elev Pattrn: Generic
  Elec Tilt: 1.00
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50.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	226.3 m	52.0 km
45.0	6.48	134.3	42.1
90.0	0.800	196.3	35.1
135.0	0.265	173.5	28.2
180.0	0.864	120.5	30.8
225.0	0.261	146.4	26.4
270.0	0.968	141.1	32.8
315.0	5.98	131.2	41.5

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 159 m

Distance to Canadian border: 329.5 km

Distance to Mexican border: 1923.2 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 331.0 degrees Distance: 498.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 281.8 degrees Distance: 1909.4 km

Study cell size: 1.00 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%

---- Below is IX received by proposal WTZP-LD CP-MOD ----

Proposal receives 3.49% interference from scenario 1
No IX check failures found.