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DIGITAL LPTV FACILITY MINOR CHANGE APPLICATION WHWV-LD TELEVISION CHANNEL 21

APPLICATION ENGINEERING STATEMENT

FCC FACILITY ID: 68037
HUNTINGTON, WEST VIRGINIA

ENGINEERING NARRATIVE

Minor Change Application

WHWV, seeks to MODIFY its current license permit to specify a new antenna site, a new antenna system, and its effective radiated power (ERP).

The maximum effective radiated power (ERP) will be 15.0 kilowatts using horizontal polarization only. The proposed antenna is a PSI "PSILP16OI", a directional UHF slot antenna, employing 0.75 degrees of electrical beam tilt. A full-service filter mask is to be employed. The facility requested is not contingent upon a grant or channel move of any other known facility at the time of filing.

Modification Compliance:

Pursuant to 47 CFR §74.787(b) the instant application is considered a "minor" change because;

- There is no change in transmitting antenna location such that the protected service contour resulting from the change does not overlap some portion of the protected service contour of the authorized facilities of the existing station as illustrated in Figure 1, Present & Proposed Service Contours.
- There is no change in transmitting antenna location greater than 30 miles (48 km) from the reference coordinates of the existing station's licensed location, as noted below:

CALCULATED DISTANCE BETWEEN EXISTING LICENSED AND PROPOSED SITES

SITE	LAT (NAD83)	LON (NAD83)	(KM)	(MI)
CURRENT/EXISTING LIC	38-42-18.2 N	82-12-12.8 W	21.686	13.475
PROPOSED (CP APP)	38-30-36.3 N	82-13-09.5 W		

FCC Tower Registration (ASR) 1035121 - FAA Notification:

The proposed mounting structure is a 313.9 meter AGL existing communications tower and has been issued an FCC ASR number of 1035121. No changes in the supporting structure is required that would require notification to the FAA or ASR modification.

Antenna Elevations:

The center of radiation of the proposed antenna is 151.8 meters AGL, 460.0 meters AMSL. The ground elevation at the site is 308.2 meters.

FCC TVStudy Results:

FCC TVStudy Cell Size 1.0 km, Profile Spacing 1.0 km

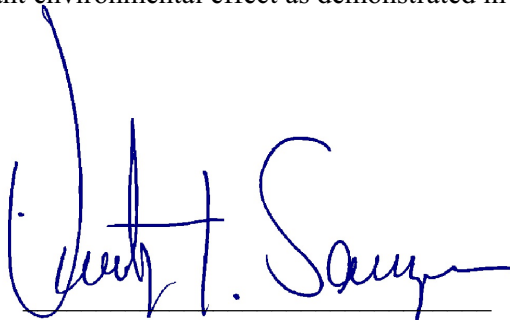
The results of a interference study of the proposal using the FCC TVStudy program (Version 2.2.5), shows that no prohibitive interference will occur from the proposal. A copy of the summary report has been included in this application.

The applicant accepts any incoming interference that is predicted to exist to the proposed facility by any authorized or pending, primary or secondary TV station at the time this application is submitted.

Environmental Evaluation Statement:

The environmental evaluation statement concerning this proposal has been included in this application and can be found as a separate file upload within the application. A grant of this proposal would NOT be an action which would have a significant environmental effect as demonstrated in the environmental evaluation statement.

March 20, 2024

A handwritten signature in blue ink, reading "Timothy Z. Sawyer". The signature is written in a cursive style with a large initial "T" and "S".

Timothy Z. Sawyer, Consulting Engineer

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WHWV-LD LIC

FCC LMS File: 0000143055
FCC Facility ID: 68037
NAD 83 Latitude: 38-42-18.20 N
NAD 83 Longitude: 082-12-12.80 W
ERP: 2.00 kW
Channel: 21
Frequency: 515.0 MHz
Ant. RCAMSL Height: 286.0 m
Horiz. Pattern: Directional

WHWV-LD HUNTINGTON WV
PRESENT AND PROPOSED SERVICE CONTOURS
CH 21 LPTV UHF FCC 51 DBU F(50,90)

PROPOSAL IS IN COMPLIANCE WITH LPTV MINOR CHANGE RULES

FIGURE 1

FCC 51 DBU F(50,90) PREDICTED
SERVICE CONTOURS

FCC 30-MILE SITE MOVE
MINOR CHANGE RULE

WHWV-LD MOD

PROPOSED
FCC Facility ID: 68037
NAD 83 Latitude: 38-30-36.30 N
NAD 83 Longitude: 082-13-09.50 W
ERP: 15.00 kW
Channel: 21
Frequency: 515.0 MHz
Ant. RCAMSL Height: 460.0 m
Horiz. Pattern: Directional

MINOR CHANGE
CONTOUR OVERLAP
SHADED AREA

Created on: 03/15/2024
NED 3 Second US Terrain

Scale 1:750,000



TZSTC
2024

MARCH

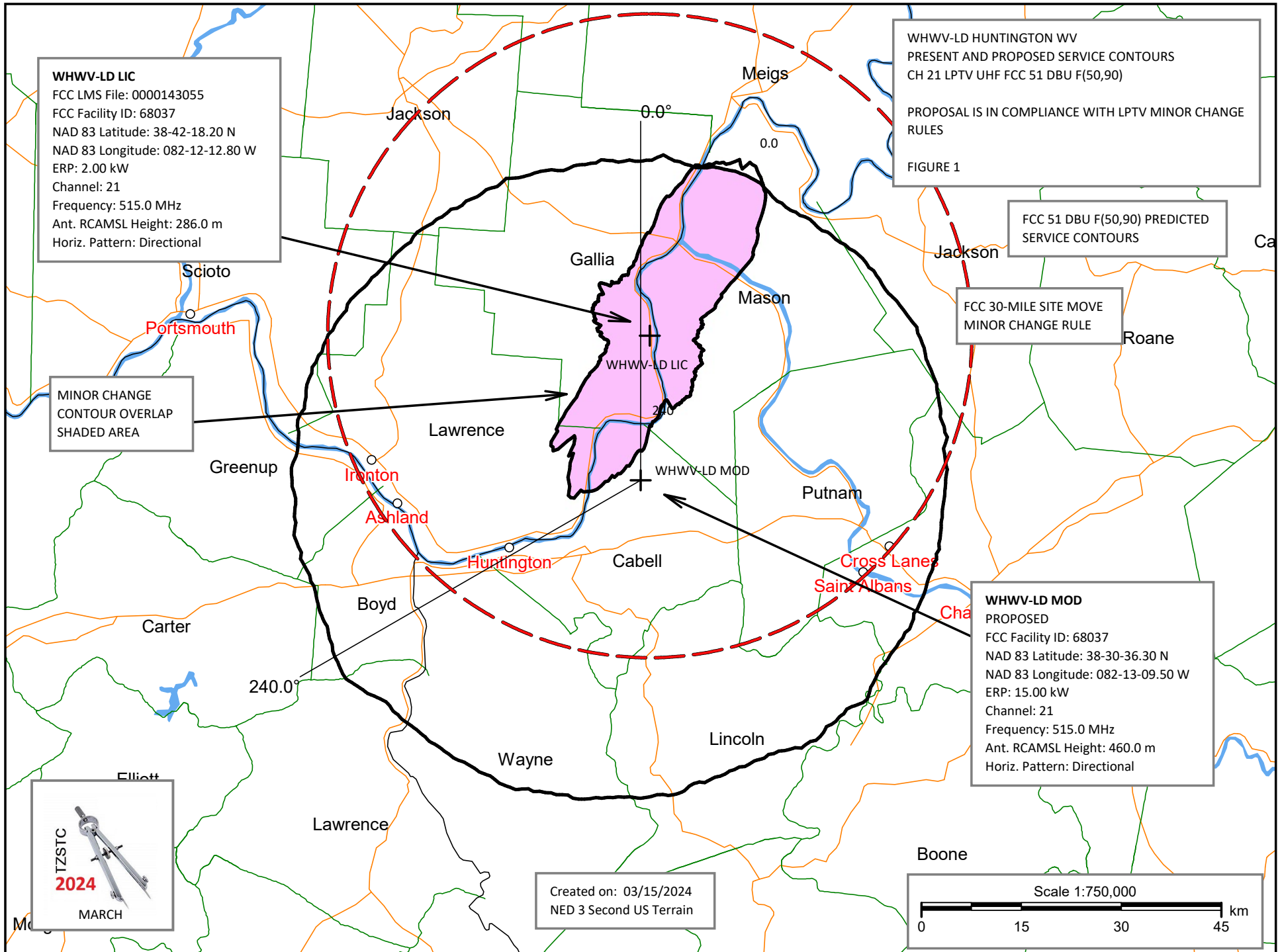


FIGURE 2 WHWV-LD PSILP16OI
Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
10.0	1.0
20.0	0.98
30.0	0.95
40.0	0.91
50.0	0.87
60.0	0.82
70.0	0.76
80.0	0.71
90.0	0.66
100.0	0.63
110.0	0.61
120.0	0.6
130.0	0.6
140.0	0.62
150.0	0.64
160.0	0.66
170.0	0.67
180.0	0.67
190.0	0.67
200.0	0.66
210.0	0.64
220.0	0.62
230.0	0.6
240.0	0.6
250.0	0.61
260.0	0.63
270.0	0.66
280.0	0.71
290.0	0.76
300.0	0.82
310.0	0.87
320.0	0.91
330.0	0.95
340.0	0.98
350.0	1.0

Rotation Angle = 270

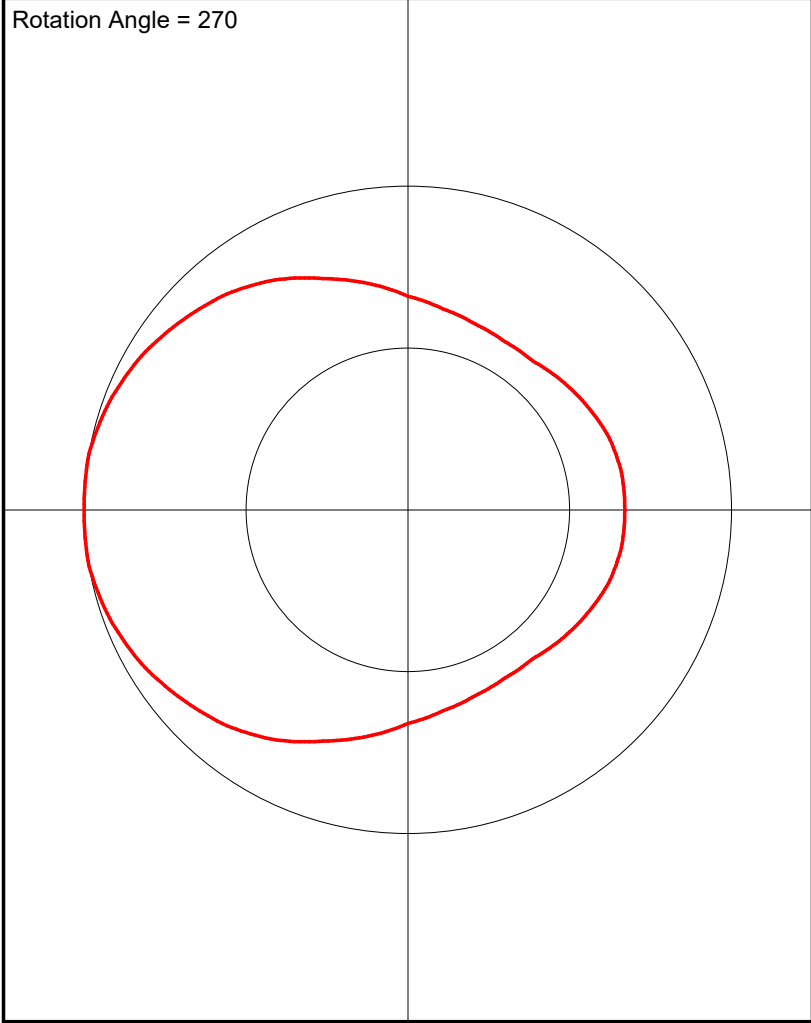


FIGURE 3 - WHWV-LD MINOR CHANGE - FCC TVSTUDY SUMMARY REPORT

Proposal: WHWV-LD D21 LD APP Huntington, WV
 File number: WHWV-LD FINAL
 Facility ID: 68037
 Station data: User record
 Record ID: 752
 Country: U.S.

Build options:
 Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WYMT-TV	D20	DT	CP	HAZARD, KY	BLANK0000185947	168.9 km
No	WLWT	D20	DT	LIC	CINCINNATI, OH	BLANK0000157838	210.7
No	WHSV-TV	D20	DT	LIC	HARRISONBURG, VA	BLANK0000063970	256.3
No	WOVA-LD	D20	LD	LIC	PARKERSBURG, WV	BLANK0000120282	109.1
No	WFYI	D21	DT	LIC	INDIANAPOLIS, IN	BLEDT20100803ADB	376.0
No	WRLW-CD	D21-	DC	LIC	SALEM, IN	BLANK0000112941	336.4
Yes	WKYT-TV	D21	DT	LIC	LEXINGTON, KY	BLANK0000074953	197.6
No	WWJ-TV	D21	DT	LIC	DETROIT, MI	BLANK0000125983	445.0
No	W21DV-D	D21	LD	LIC	BRYSON CITY, NC	BLANK0000080638	363.6
No	WUNG-TV	D21	DT	LIC	CONCORD, NC	BLANK0000113063	378.3
No	W34EP-D	D21	LD	CP	SAPPHIRE VALLEY,ETC., NC	BLANK0000226121	366.6
No	WQDI-LD	D21	LD	LIC	CANTON, OH	BLANK0000079989	334.0
Yes	WBNS-TV	D21	DT	LIC	COLUMBUS, OH	BLCDT20021025ABK	176.7
No	WSEE-TV	D21	DT	LIC	ERIE, PA	BLANK0000074552	432.6
No	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000112577	291.1
No	WPNT	D21	DT	LIC	PITTSBURGH, PA	BLANK0000233496	291.1
No	W14CX-D	D21	LD	CP	KNOXVILLE, TN	BLANK0000195611	318.9
No	WKNX-TV	D21	DT	CP	KNOXVILLE, TN	BLANK0000224661	316.5
No	WUXP-TV	D21	DT	LIC	NASHVILLE, TN	BLANK0000233007	474.8
Yes	WWCW	D21	DT	LIC	LYNCHBURG, VA	BLANK0000199504	262.5
Yes	W21EA-D	D21	LD	LIC	PARKERSBURG, WV	BLANK0000160509	109.2
No	W21DZ-D	D21	LD	LIC	ROMNEY, WV	BLANK0000208185	315.7
No	WCVN-TV	D22	DT	LIC	COVINGTON, KY	BLANK0000228948	206.5
No	WOCB-CD	D22	DC	LIC	MARION, OH	BLANK0000072129	212.7
No	WSAZ-TV	D22	DT	LIC	HUNTINGTON, WV	BLANK0000213703	0.0
No	WSAZ-TV	D22	DT	LIC	HUNTINGTON, WV	BLANK0000233420	0.0

No non-directional AM stations found within 0.8 km
 No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
 Mask: Full Service
 Latitude: 38 30 36.30 N (NAD83)
 Longitude: 82 13 9.50 W
 Height AMSL: 460.0 m
 HAAT: 0.0 m
 Peak ERP: 15.0 kW
 Antenna: PSI-PSILP160I (ID 1011160) 270.0 deg
 Elev Pattn: Generic
 Elec Tilt: 0.75

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	6.53 kW	239.4 m	49.6 km
45.0	5.58	241.5	48.9
90.0	6.73	203.9	47.7
135.0	5.58	247.2	49.2
180.0	6.53	242.4	49.7
225.0	11.9	235.0	52.4
270.0	15.0	238.8	53.8
315.0	11.9	220.6	51.6

Database HAAT does not agree with computed HAAT
 Database HAAT: 0 m Computed HAAT: 234 m

Distance to Canadian border: 352.3 km
 Distance to Mexican border: 1957.7 km

Conditions at FCC monitoring station: Laurel MD

Bearing: 79.5 degrees Distance: 472.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 282.6 degrees Distance: 1980.8 km

No land mobile station failures found

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%

Proposal causes 0.00% interference to BLANK0000074953 LIC scenario 3

Proposal causes 0.10% interference to BLCDT20021025ABK LIC scenario 1

Proposal causes no interference to BLANK0000199504 LIC

Proposal causes no interference to BLANK0000160509 LIC

---- Below is IX received by proposal WHWV-LD FINAL ----

Proposal receives 39.83% interference from scenario 1

Proposal receives 39.83% interference from scenario 2

Proposal receives 39.83% interference from scenario 3

Proposal receives 39.83% interference from scenario 4

No IX check failures found.

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TELEVISION CHANNEL 21
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ENVIRONMENTAL EVALUATION STATEMENT

A grant of this proposal would NOT be an action which would have a significant environmental effect as demonstrated in this environmental evaluation statement. Any changes in equipment, or construction, if necessary will not trigger any event with regards to Section 106 of the National Historical Preservation Act (NHPA).

The proposal does not meet any of the criteria specified in Section 1.1307 of the FCC Rules. More specifically, the proposed facilities are not known to fall within any of the categories enumerated in Sections 1.1307(a)(1)-(7) and will not involve the use of high intensity white lights. Furthermore, operation of the proposed facility will not involve the exposure of workers or the general public to levels of radio frequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. (The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.)

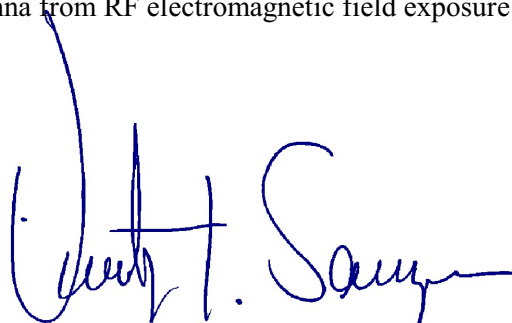
CALCULATED POWER DENSITY AT 2 METERS AGL (0.3 ANTENNA RELATIVE FIELD VALUE) ERP MAX (H)

CR AGL 151.8 M ERP MAX 15.0 KW (H)	MPE ($\mu\text{W}/\text{CM}^2$)	CALCULATED VALUE ($\mu\text{W}/\text{CM}^2$)	% OF MPE	PASS/FAIL
CONTROLLED AREA	1716.7	2.0094	0.12%	PASS
PUBLIC AREA	343.3		0.59%	PASS

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 are posted at the site. The applicant will coordinate exposure procedures with any co-located facilities 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.

March 20, 2024

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