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DIGITAL LPTV FACILITY
MODIFICATION OF CONSTRUCTION PERMIT
MINOR CHANGE APPLICATION
WSRG-LD
FCC FACILITY ID: 68090
SCRANTON, PENNSYLVANIA

FEBRUARY 2024

ENGINEERING NARRATIVE

Minor Change Application:

WSRG -LD seeks to modify its existing construction permit to specific a slightly different antenna elevation and antenna rotation. No change in antenna site location is proposed. The antenna type and model remains as previous authorized. The antenna, a PSI PSILP12OI is a horizontally polarized directional UHF slot antenna system. 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.

Maximum Effective Radiated Power (ERP) is 15-kilowatts, horizontal polarization only.

Modification Compliance:

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

- The proposed operation’s protected service contour results in overlap to some portion of the protected service contour of the authorized facility (the station license) as illustrated in Figure 1, “Present & Proposed Service Contours.”
- There is no change in transmitting antenna location ***greater than 30 miles*** (48.27 km) from the reference coordinates of the existing station licensed antenna location, as noted below:

CALCULATED DISTANCE BETWEEN EXISTING LICENSE AND PROPOSED SITES

SITE	LAT (NAD83)	LON (NAD83)	(KM)	(MI)
CURRENT/EXISTING	41-51-49.3 N	075-48-34.7 W	48.00	29.82
PROPOSED MOD	41-26-09.1 N	075-43-42.3 W		

FCC Tower Registration - 1026644

FAA Notification Not Required.

The proposed antenna mounting structure is 104.5 meters in overall height above ground level (AGL). No change in the overall height of this structure will occur. This is an existing communication tower that does not require further FAA notification. The antenna is to be side-mounted on the supporting structure at the 51.82 meter AGL level.

Antenna Elevations:

The ground elevation at the site is 630.6 meters above mean sea level (AMSL). The center of radiation of the proposed antenna is 51.82 meters above ground level (AGL). The center of radiation is 682.42 meters above mean sea level (AMSL), as tabulated below:

ALL ELEVATIONS IN METERS

GROUND ELEVATION	630.6
SUPPORTING STRUCTURE OVERALL HEIGHT AGL	104.5
ANTENNA HEIGHT AGL	51.82
ANTENNA RCAMSL	682.42

FCC TVStudy Parameters Requested and Results:

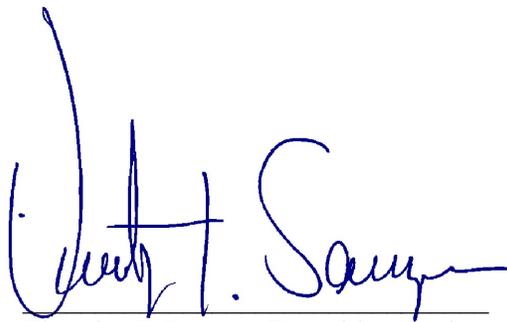
FCC TVSTUDY STUDY PARAMETERS REQUESTED	
STUDY CELL SIZE	1.0
STUDY PROFILE SPACING INCREMENT	1.0

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. A Study cell size of 1.0, with a 1.0 profile spacing (the standard settings) was used within the study area.

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.

February 15, 2024



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WSRG-LD LIC EXISTING

FCC LMS File: 0000164337
FCC Facility ID: 68090
NAD 83 Latitude: 41-51-49.30 N
NAD 83 Longitude: 075-48-34.70 W
ERP: 2.50 kW
Channel: 32
Frequency: 581.0 MHz
Ant. RCAMSL Height: 596.9 m
Horiz. Pattern: Directional

WSRG - LD SCRANTON, PA
PRESENT AND PROPOSED SERVICE CONTOURS
CH 32 LPTV UHF FCC 51 DBU F(50,90)

PROPOSAL IS IN COMPLIANCE WITH THE LPTV MINOR
CHANGE RULES

FIGURE 1

FCC 30-MILE SITE MOVE
MINOR CHANGE RULE

MINOR CHANGE APP
CONTOUR OVERLAP

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

WSRG-LD CP MOD

PROPOSED
FCC Facility ID: 68090
NAD 83 Latitude: 41-26-09.10 N
NAD 83 Longitude: 075-43-42.30 W
ERP: 15.00 kW
Channel: 32
Frequency: 581.0 MHz
Ant. RCAMSL Height: 682.42 m
Horiz. Pattern: Directional

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2024

2-15-2024

Created on: 02/15/2024
NED 3 Second US Terrain

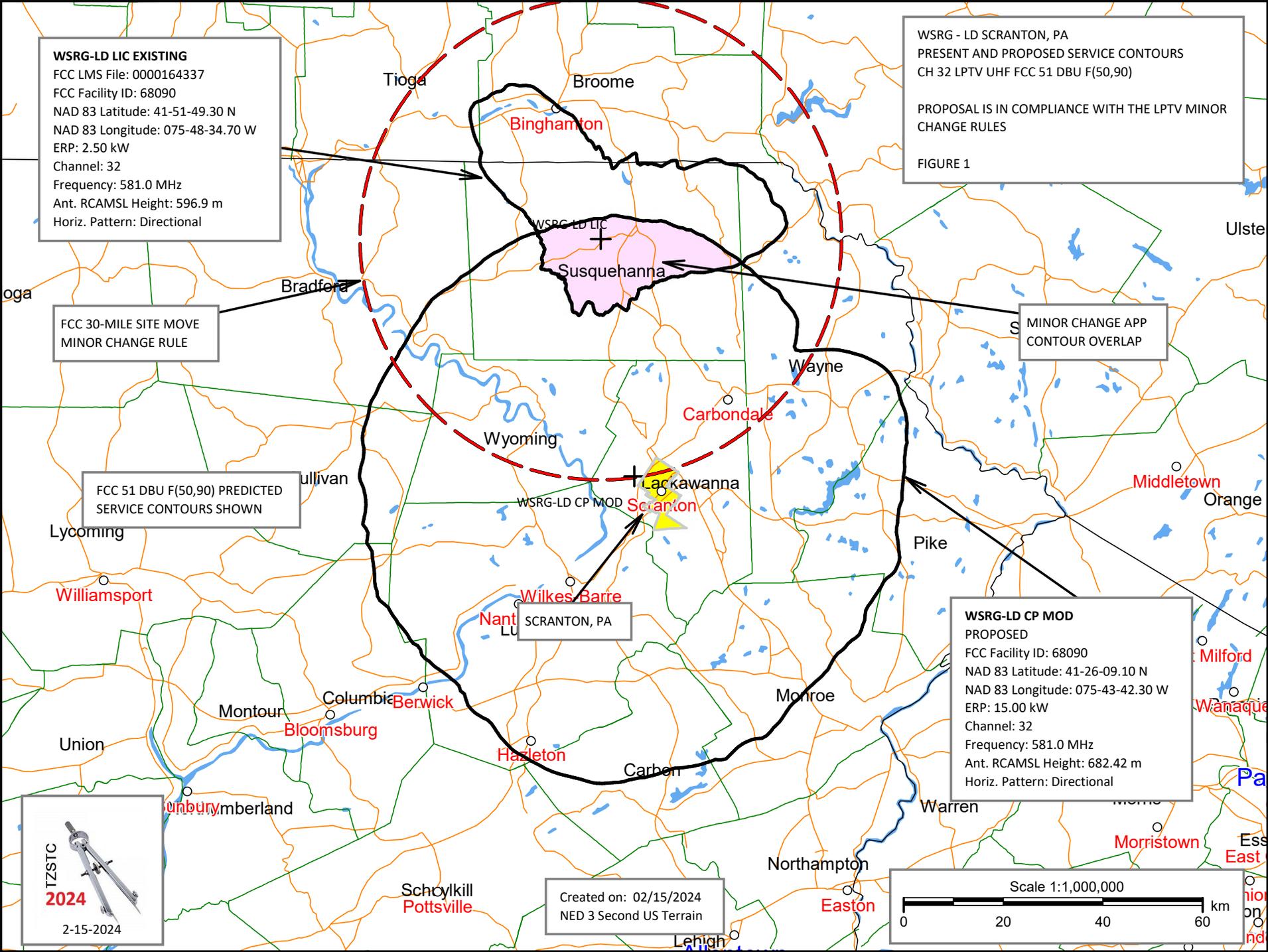
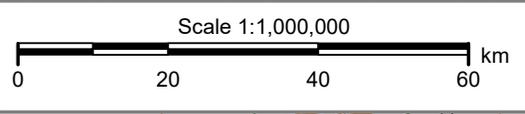


FIGURE 2 WSRG PSI PSILP120I HORZ RELATIVE FIELD VALUES

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

PATTERN PLOT SHOWN IS ROATATED 167 DEGREES

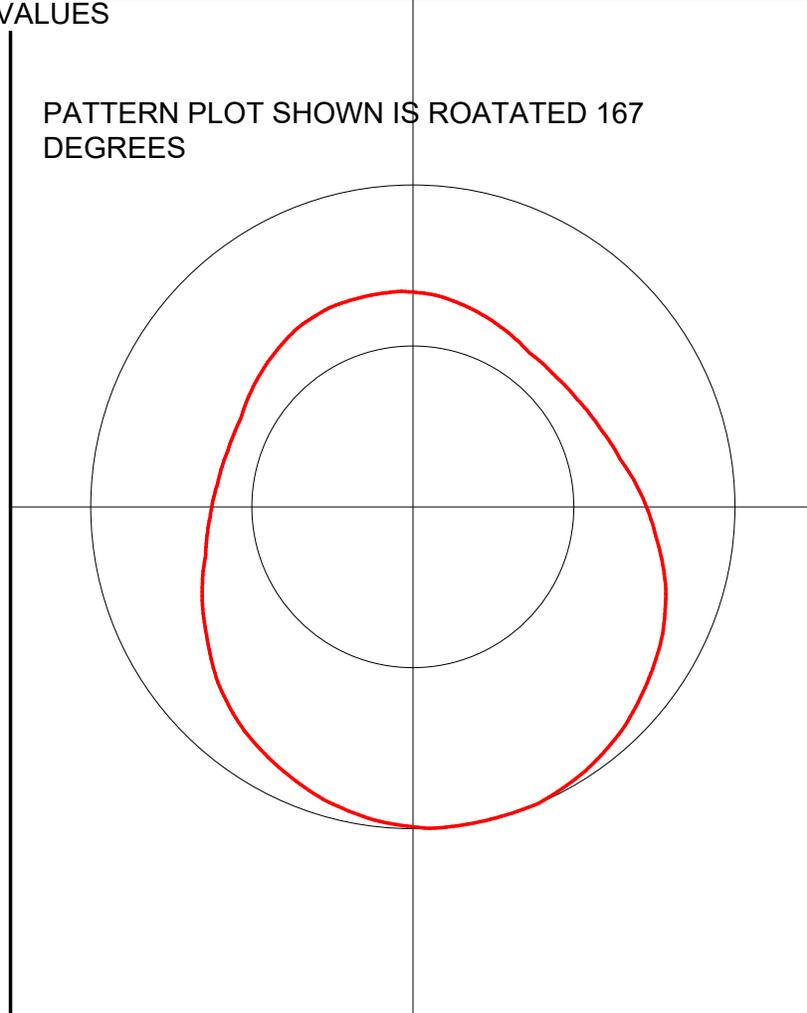


FIGURE 3 - FCC TVSTUDY SUMMARY REPORT - WSRG CP MOD MINOR CHANGE

STUDY PARAMETERS

CELL SIZE 1.0 KM

PROFILE SPACING 1.0 KM

Proposal: WSRG-LD D32 LD APP Scranton, PA
 File number: WSRG-LD MOD OF CP
 Facility ID: 68090
 Station data: User record
 Record ID: 750
 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	WNYP-LD	N24	TX	LIC	New york, NY	BLTTTL20121024AAA	88.0 km
No	WVIT	D31	DT	LIC	NEW BRITAIN, CT	BLANK0000184710	242.6
Yes	WSKG-TV	D31	DT	LIC	BINGHAMTON, NY	BLANK0000116396	71.8
No	WZPK-LD	D31	LD	LIC	HIGHLAND, NY	BLANK0000113730	117.5
No	WZPK-LD	D31	LD	CP	HIGHLAND, NY	BLANK0000233342	147.5
No	WHTV-LD	D31+	LD	LIC	New York, NY	BLANK0000153808	165.9
No	WWTI	D31	DT	LIC	WATERTOWN, NY	BLANK000079855	271.6
No	WATM-TV	D31	DT	LIC	ALTOONA, PA	BLANK0000105303	247.3
No	WLHY-LD	D31	LD	LIC	Lebanon - Harrisburg, PA	BLANK0000197629	184.8
No	WTFX-TV	D31	DT	LIC	PHILADELPHIA, PA	BLANK0000218009	160.5
No	WRNT-LD	D32	LD	LIC	HARTFORD, CT	BLANK0000194535	246.9
No	WRZB-LD	D32	LD	LIC	WASHINGTON, DC	BLANK0000024420	300.3
No	W32FW-D	D32	LD	LIC	ADAMS, MA	BLANK0000179648	250.0
No	WGBX-TV	D32	DT	LIC	BOSTON, MA	BLANK0000117890	384.2
No	WBOC-TV	D32	DT	LIC	SALISBURY, MD	BLANK0000079962	325.8
No	DWBAX-LD	D32z	LD	APP	ALBANY, NY	BLANK0000120720	230.6
No	WNDR-LD	D32	LD	LIC	AUBURN, NY	BLANK0000179218	182.6
No	WUTV	D32	DT	LIC	BUFFALO, NY	BLANK0000136979	317.1
No	WUCB-LD	D32	LD	LIC	COBLESKILL, NY	BLANK0000067798	167.7
Yes	WLIW	D32	DT	LIC	GARDEN CITY, NY	BLANK0000221190	164.7
No	WTKO-CD	D32	DC	LIC	ONEIDA, NY	BLANK0000080049	181.2
No	W32EI-D	D32-	LD	LIC	PORT JERVIS, NY	BLANK0000015198	106.0
No	W32EI-D	N32-	TX	LIC	PORT JERVIS, NY	BLTTTL20121024AAB	88.0
No	WYFX-LD	D32	LD	LIC	YOUNGSTOWN, OH	BLANK0000082699	413.0
No	WMVH-CD	D32	DC	LIC	CHARLEROI, PA	BLANK0000079929	379.8
No	WMVH-CD	D32	DC	CP	CHARLEROI, PA	BLANK0000127551	379.8
No	W32DH-D	D32	LD	LIC	ERIE, PA	BLDTL20101122AHG	365.6
Yes	WHP-TV	D32	DT	LIC	HARRISBURG, PA	BLANK0000080028	154.5
No	WKHU-CD	D32	DC	LIC	KITTANNING, PA	BLANK0000079958	326.7
No	WKHU-CD	D32	DC	CP	KITTANNING, PA	BLANK0000127549	326.7
No	WZPA-LD	D32	LD	LIC	PHILADELPHIA, PA	BLANK0000121505	203.4
No	WCAV	D32	DT	LIC	CHARLOTTESVILLE, VA	BLANK0000092578	450.0
No	WETK	D32	DT	LIC	BURLINGTON, VT	BLEDT20061011ADW	417.2
No	WCCT-TV	D33	DT	LIC	WATERBURY, CT	BLANK0000159940	242.7
No	WCCT-TV	D33	DT	LIC	WATERBURY, CT	BLANK0000234071	242.7
No	WSKG-TV	D33	LD	CP	BINGHAMTON, NY	BLANK0000054938	127.4
No	WGRZ	D33	DT	APP	BUFFALO, NY	BLANK0000220532	273.9
No	WGRZ	D33	DT	CP	BUFFALO, NY	BLANK0000035664	273.9
No	WGRZ	D33	DT	LIC	BUFFALO, NY	BLANK0000137137	273.9
No	W33ET-D	D33	LD	LIC	NEW YORK, NY	BLANK0000213585	164.8
No	W32EI-D	D33	LD	APP	PORT JERVIS, NY	BLANK0000179104	165.4
No	WVVC-LD	D33	LD	LIC	UTICA, NY	BLDTL20110829AAZ	183.3
No	WPSG	D33	DT	LIC	PHILADELPHIA, PA	BLANK0000237957	160.2
No	WPSG	D33	DT	LIC	PHILADELPHIA, PA	BLANK0000218164	160.2
No	WQPX-TV	D33	DT	LIC	SCRANTON, PA	BLANK0000080158	0.2
No	WHTV-LD	N34+	TX	LIC	New York, NY	BLTTTL20070223AHK	88.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D32
 Mask: Full Service
 Latitude: 41 26 9.10 N (NAD83)
 Longitude: 75 43 42.30 W
 Height AMSL: 682.4 m

HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: PSI-PSILP120I (ID 1010500) 167.0 deg
Elev Pattnr: Generic

50.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	6.67 kW	310.3 m	52.2 km
45.0	5.40	219.5	46.3
90.0	7.88	337.1	54.6
135.0	13.3	300.0	55.4
180.0	14.8	403.9	61.2
225.0	10.3	328.2	55.5
270.0	5.84	397.4	55.6
315.0	6.07	347.8	53.7

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 331 m

Proposal 25.51 dBu contour does not cross Canadian border
Distance to Canadian border: 259.2 km

Distance to Mexican border: 2593.4 km

Conditions at FCC monitoring station: Canandaigua NY
Bearing: 322.9 degrees Distance: 207.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 276.5 degrees Distance: 2474.2 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%

Proposal causes 0.45% interference to BLANK0000116396 LIC scenario 1
Proposal causes 0.00% interference to BLANK0000221190 LIC scenario 1
Proposal causes 0.16% interference to BLANK000080028 LIC scenario 1

---- Below is IX received by proposal WSRG-LD MOD OF CP ----

Proposal receives 8.58% interference from scenario 1
Proposal receives 8.58% interference from scenario 2

No IX check failures found.

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WSRG-LD

LPTV CHANNEL 32 OPERATION

FACILITY ID: 68090

SCRANTON, PENNSYLVANIA

FEBRUARY 2024

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.)

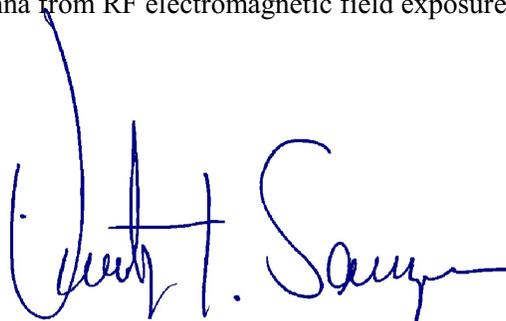
CALCULATED POWER DENSITY AT 2 METERS AGL (0.5 ANTENNA RELATIVE FIELD VALUE) ERP MAX (H ONLY)

CR AGL 51.82 M ERP MAX 15.0 KW	MPE ($\mu\text{W}/\text{CM}^2$)	CALCULATED VALUE ($\mu\text{W}/\text{CM}^2$)	% OF MPE	PASS/FAIL
CONTROLLED AREA	1936.7	50.463	2.61%	PASS
PUBLIC AREA	387.3		13.03%	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.

February 15, 2024

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