

TECHNICAL SUMMARY
APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
LMS FILE NO. 0000073401
LPTV STATION WLZE-LD
FORT MYERS, FLORIDA
CHANNEL 27 15 KW (ND)

1. It is proposed to replace WLZE-LD's authorized/existing 463 meter (1519 foot) tower with a new 463 meter (1519 foot) tower. The new tower (ASRN 1319288) will be located immediately adjacent to (within 51 meters of) the authorized/existing tower. Operation is proposed on channel 27 with a nondirectional antenna maximum effective radiated power (ERP) of 15 kW using a Dielectric model TLP-16A, horizontally polarized nondirectional antenna. The antenna radiation center height will be 331 m AMSL. No other changes are proposed.

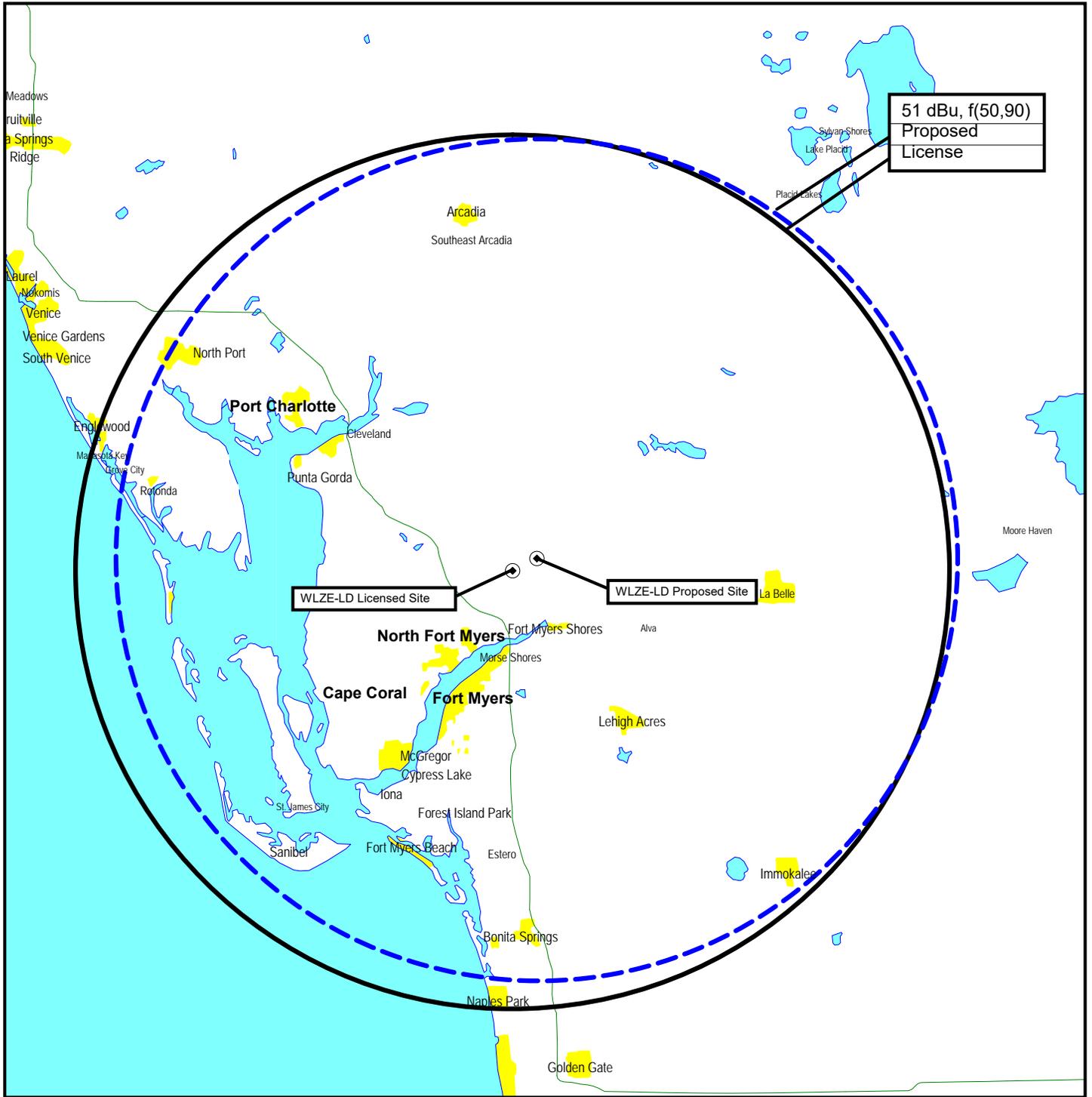
2. Figure 1 demonstrates that there is overlap of the licensed (Ch. 20) and proposed (Ch. 27) 51 dBu, f(50,50) protected contours as required by Section 73.3572(a)(2)(ii) for minor change applications. Furthermore, the site move will be less than the 48 km limit.

3. Interference Compliance: As indicated in the attached *TVStudy* analysis summary, WLZE-LD's proposed channel 27 operation meets the FCC's interference protection requirements with respect to all protected facilities based on both the pre- and post-transition allocation environments. A cell size of 1.0 km and a profile resolution of 1.0 km points/km were utilized for the *TVStudy* analysis.

4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 322 meters above ground level. The total DTV ERP is 15 kW (horizontal polarization). A worst-case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation (-60° to -90° elevation). The calculated power density at a point 2 meters above ground level is 4.9 $\mu\text{W}/\text{cm}^2$ which is 1.3% of the FCC's recommended limit of 367.3 $\mu\text{W}/\text{cm}^2$ for channel 27 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Also, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

Figure 1



25 0 25 50
Kilometers

FCC PREDICTED 51 DBU CONTOURS

LPTV STATION WLZE-CD
FORT MYERS, FLORIDA
CH 27 15 KW (ND)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

INTERFERENCE ANALYSIS FOR WLZE-LD
FORT MYERS, FL, CHANNEL 27

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: WLZE-LD CP Mod #85, Model: Longley-Rice
Start: 2021.03.22 12:15:11

Study created: 2021.03.22 12:15:11

Study build station data: LMS TV 2021-03-21

Proposal: WLZE-LD D27 LD APP FORT MYERS, FL
File number: WLZE-LD CP Mod
Facility ID: 41376
Station data: User record
Record ID: 65
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WXDT-LP	N23z	TX	LIC	NAPLES, FL	BLTTL20020730ABD	66.7 km
No	WXAX-CD	D26	DC	LIC	CLEARWATER, FL	BLANK0000001619	126.5
No	WXAX-CD	D26	DC	CP	CLEARWATER, FL	BLANK0000127534	126.5
No	WLRN-TV	D26	DT	LIC	MIAMI, FL	BLANK0000123106	180.7
No	WHDN-CD	D26	DC	CP	NAPLES, FL	BLANK0000003751	66.8
No	WHDN-CD	D26	DC	LIC	NAPLES, FL	BLANK0000001626	66.7
No	W26FI-D	D26	LD	CP	OKEECHOBEE, FL	BLANK0000071804	80.7
No	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLANK0000126256	212.7
No	WSNN-LD	D26	LD	LIC	SARASOTA, FL	BLANK0000059117	91.9
No	W OCD-LP	D27	LD	CP	DUNNELLON, FL	BLANK0000135224	260.9
No	W OCD-LP	N27-	TX	LIC	DUNNELLON, FL	BLTTL20090331AEX	269.3
No	WYME-CD	D27	DC	LIC	GAINESVILLE, FL	BLANK0000098965	324.3
No	WWRJ-LP	D27	LD	CP	JACKSONVILLE, FL	BDFCDTL20091020AAX	387.3
No	WGZT-LP	N27	TX	LIC	KEY WEST, FL	BLTTL20030804AAH	249.9
Yes	WSFL-TV	D27	DT	LIC	MIAMI, FL	BLANK0000070454	179.1
Yes	WRDQ	D27	DT	LIC	ORLANDO, FL	BLCDT20111011AJM	208.5
No	WHFT-TV	D28	DT	LIC	MIAMI, FL	BLANK0000071957	181.8
No	WZVN-TV	D28	DT	LIC	NAPLES, FL	BLANK0000107164	2.5
No	WRBW	D28	DT	LIC	ORLANDO, FL	BLANK0000121965	211.2
No	WDTO-LD	D28	LD	LIC	ORLANDO, FL	BLDTL20130802ABO	209.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D27
Mask: Full Service
Latitude: 26 48 2.80 N (NAD83)
Longitude: 81 45 44.30 W
Height AMSL: 331.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.00

50.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	320.2 m	57.7 km
45.0	15.0	320.0	57.7
90.0	15.0	322.9	57.8
135.0	15.0	326.4	58.0
180.0	15.0	327.2	58.1
225.0	15.0	325.4	58.0
270.0	15.0	323.2	57.9
315.0	15.0	321.3	57.8

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 323 m

Distance to Canadian border: 1654.5 km

Distance to Mexican border: 1511.5 km

INTERFERENCE ANALYSIS FOR WLZE-LD
FORT MYERS, FL, CHANNEL 27

Conditions at FCC monitoring station: Vero Beach FL
Bearing: 51.0 degrees Distance: 143.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 310.4 degrees Distance: 2618.2 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%

Interference to BLANK0000070454 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WSFL-TV	D27	DT	LIC	MIAMI, FL	BLANK0000070454	
Undesireds:	WLZE-LD	D27	LD	APP	FORT MYERS, FL	WLZE-LD CP Mod	179.1 km
	WHDN-CD	D26	DC	CP	NAPLES, FL	BLANK0000003751	161.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	23410.5	5,344,938	23410.5	5,344,938	23410.5	5,344,938	0.22 0.00
Undesired			Total IX		Unique IX, before	Unique IX, after	
WLZE-LD D27 LD APP		51.1	0		51.1	0	

Interference to BLCDT20111011AJM LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WRDQ	D27	DT	LIC	ORLANDO, FL	BLCDT20111011AJM	
Undesireds:	WLZE-LD	D27	LD	APP	FORT MYERS, FL	WLZE-LD CP Mod	208.5 km
	WXAX-CD	D26	DC	LIC	CLEARWATER, FL	BLANK0000001619	143.0
	WKMG-TV	D26	DT	LIC	ORLANDO, FL	BLANK0000126256	4.6
	WYME-CD	D27	DC	LIC	GAINESVILLE, FL	BLANK0000098965	188.9
	WSFL-TV	D27	DT	LIC	MIAMI, FL	BLANK0000070454	300.5
	WTXL-TV	D27	DT	LIC	TALLAHASSEE, FL	BLCDT20090217ABY	365.8
	WRBW	D28	DT	LIC	ORLANDO, FL	BLANK0000121965	5.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	38446.2	3,934,766	38445.2	3,934,676	38279.3	3,919,704	0.11 0.08
Undesired			Total IX		Unique IX, before	Unique IX, after	
WLZE-LD D27 LD APP		48.0	3,461		42.0	3,156	
WKMG-TV D26 DT LIC		74.8	8,021		50.5	3,681	
WYME-CD D27 DC LIC		28.3	50		20.2	0	
WSFL-TV D27 DT LIC		6.0	305		6.0	305	
WTXL-TV D27 DT LIC		10.1	54		3.0	4	
WRBW D28 DT LIC		78.1	10,932		54.9	6,592	

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WLZE-LD	D27	LD	APP	FORT MYERS, FL	WLZE-LD CP Mod	
Undesireds:	WXAX-CD	D26	DC	LIC	CLEARWATER, FL	BLANK0000001619	126.5 km
	WHDN-CD	D26	DC	CP	NAPLES, FL	BLANK0000003751	66.8
	WOCB-LP	D27	LD	CP	DUNNELLO, FL	BLANK0000135224	260.9
	WZVN-TV	D28	DT	LIC	NAPLES, FL	BLANK0000107164	2.5
	Service area		Terrain-limited		IX-free	Percent IX	
	10515.3	945,265	10515.3	945,265	10456.4	943,971	0.56 0.14
Undesired			Total IX		Unique IX	Prcnt Unique IX	
WZVN-TV D28 DT LIC		58.9	1,294		58.9	1,294	0.56 0.14

INTERFERENCE ANALYSIS FOR WLZE-LD
FORT MYERS, FL, CHANNEL 27

Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance	
Desired:	WLZE-LD	D27	LD	APP	FORT MYERS, FL	WLZE-LD CP Mod		
Undesireds:	WXAX-CD	D26	DC	LIC	CLEARWATER, FL	BLANK0000001619	126.5 km	
	WHDN-CD	D26	DC	LIC	NAPLES, FL	BLANK0000001626	66.7	
	WOCB-LP	D27	LD	CP	DUNNELLON, FL	BLANK0000135224	260.9	
	WZVN-TV	D28	DT	LIC	NAPLES, FL	BLANK0000107164	2.5	
	Service area		Terrain-limited		IX-free	Percent IX		
	10515.3	945,265	10515.3	945,265	10437.7	933,665	0.74 1.23	
Undesired				Total IX		Unique IX	Prcnt Unique IX	
WHDN-CD	D26	DC	LIC	18.7	10,306	18.7	10,306	0.18 1.09
WZVN-TV	D28	DT	LIC	58.9	1,294	58.9	1,294	0.56 0.14