

**Engineering Statement  
WLAE-TV New Orleans, LA  
Channel 23  
January 2, 2023**

In this application, the licensee of WLAE-TV (WLAE) channel 23 proposes to replace its current antenna and transmission line with a broadband antenna that it will share with station WYES-TV (WYES) channel 28.

The new antenna will have a higher gain and the new transmission line will be more efficient allowing the currently authorized effective radiated power (ERP) of 168 kW to increase to 310 kW. In that the new antenna is larger than the current antenna the height of the center of radiation will decrease from 274 m AMSL to 269.6 m AMSL to fit the available aperture. Likewise, the directional antenna pattern will change slightly to accommodate the needs of the two stations, WLAE and WYES.

An interference study using the FCC's TVStudy software with the default settings shows the proposed facility will not cause any non-de minimis interference to other stations requiring protection. A copy of the TVStudy interference analysis is provided in Appendix A.

A further study indicates the proposed new facility will not cause any loss of service compared to the currently authorized facility. The predicted Terrain-Limited service population for the currently authorized facility is 1,674,703 and a TVStudy analysis of the predicted service for the facility proposed in this application when evaluated inside the noise limited contour of the currently authorized facility indicates no loss of predicted Terrain-Limited service population (See coverage map in Appendix B). Furthermore, the City Grade service contour of the proposed facility will continue to fully encompass the city of license (See Appendix C).

In view of the above and the supporting information provided in the appendices, it is believed that WLAE is justified in requesting this change and that it would be in the public interest to grant its request.

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Senior Partner  
Meintel, Sgrignoli & Wallace LLC

## APPENDIX A

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: 01954\_12272022\_WLAE\_18819, Model: Longley-Rice  
Start: 2022.12.27 13:41:11

Study created: 2022.12.27 13:41:11

Study build station data: LMS TV 2022-12-26

Proposal: WLAE-TV D23 DT APP NEW ORLEANS, LA  
File number: 01948\_12072022\_WLAE\_18819  
Facility ID: 18819  
Station data: User record  
Record ID: 1772  
Country: U.S.  
Zone: III

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	KWBJ-CD	D22	DC	LIC	MORGAN CITY, LA	BLDTA20090512AAZ	124.2 km
Yes	WTNO-CD	D22	DC	LIC	NEW ORLEANS, LA	BLANK0000200629	18.4
No	KDCG-CD	D22	DC	LIC	OPELOUSAS, LA	BLANK0000180483	197.3
No	WHLT	D22	DT	LIC	HATTIESBURG, MS	BLANK0000068599	172.3
Yes	WDPM-DT	D23	DT	LIC	MOBILE, AL	BLCDT20090420AAD	235.7
No	WVUA-CD	D23	DC	LIC	TUSCALOOSA/NORTHPORT, AL	BLANK0000202527	421.7
No	KLPB-TV	D23	DT	LIC	LAFAYETTE, LA	BLEDT20130820AAH	227.1
Yes	WWJX	D23	DT	LIC	JACKSON, MS	BLCDT20110824ABD	233.1
No	WSRE	D24	DT	LIC	PENSACOLA, FL	BLANK0000090765	235.7
No	WGMB-TV	D24	DT	LIC	BATON ROUGE, LA	BLANK0000113571	132.9

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:

WQNO 690 L DAN D NEW ORLEANS, LA BMML20170703AFC

WQNO 690 L DAN N NEW ORLEANS, LA BMML20170703AFC

Record parameters as studied:

Channel: D23

Latitude: 29 58 58.00 N (NAD83)  
Longitude: 89 57 9.00 W  
Height AMSL: 269.6 m  
HAAT: 269.6 m  
Peak ERP: 310 kW  
Antenna: DIE TFU\_24DSC\_VP\_R\_4P200\_HRP\_CH\_23\_FCC\_F 0.0 deg  
Elev Pattn: DIE TFU\_24DSC\_VP\_R\_4P200\_VRP\_CH\_23\_FCC\_F  
Elec Tilt: 1.00

39.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	138 kW	271.0 m	79.3 km
45.0	218	269.8	81.9
90.0	269	269.3	83.2
135.0	38.4	269.5	72.3
180.0	65.6	269.0	75.1
225.0	159	269.6	80.0
270.0	276	269.3	83.4
315.0	150	270.4	79.7

Distance to Canadian border: 1454.3 km

Distance to Mexican border: 816.3 km

Conditions at FCC monitoring station: Powder Springs GA  
Bearing: 47.5 degrees Distance: 655.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 313.2 degrees Distance: 1784.4 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%

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Interference to BLANK0000200629 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTNO-CD	D22	DC	LIC	NEW ORLEANS, LA	BLANK0000200629	

Undesireds:	WLAE-TV	D23	DT	BL	NEW ORLEANS, LA	DTVBL18819	18.4 km
	WLAE-TV	D23	DT	APP	NEW ORLEANS, LA	01948_12072022_WLAE_18	18.4
	WHNO	D21	DT	LIC	NEW ORLEANS, LA	BLCDT20050413AAK	12.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
5947.4 935,813	5947.4 935,813	5542.7 927,245	5204.6 926,498	6.10 0.08

Undesired	Total IX	Unique IX, before	Unique IX, after
WLAE-TV D23 DT BL	160.7 5,666	8.0 3	
WLAE-TV D23 DT APP	494.9 4,727		346.1 750
WHNO D21 DT LIC	396.7 8,565	244.0 2,902	248.0 4,588

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Interference to BLCDT20090420AAD LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WDPM-DT	D23	DT	LIC	MOBILE, AL	BLCDT20090420AAD	

Undesireds:	WLAE-TV	D23	DT	BL	NEW ORLEANS, LA	DTVBL18819	235.7 km
	WLAE-TV	D23	DT	APP	NEW ORLEANS, LA	01948_12072022_WLAE_18	235.7
	WDES-CD	D22	DC	LIC	DESTIN, FL	BLANK0000059931	108.0
	WHLT	D22	DT	LIC	HATTIESBURG, MS	BLANK0000068599	178.6
	WVUA-CD	D23	DC	LIC	TUSCALOOSA/NORTHPORT, AL	BLANK0000202527	283.2
	WSRE	D24	DT	LIC	PENSACOLA, FL	BLANK0000090765	0.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33720.0 1,365,977	33537.3 1,364,744	33429.7 1,363,959	33362.0 1,363,243	0.20 0.05

Undesired	Total IX	Unique IX, before	Unique IX, after
WLAE-TV D23 DT BL	59.7 665	47.8 451	
WLAE-TV D23 DT APP	131.4 1,412		115.5 1,167
WDES-CD D22 DC LIC	16.0 0	16.0 0	16.0 0
WHLT D22 DT LIC	27.9 257	15.9 43	12.0 12
WVUA-CD D23 DC LIC	7.9 77	7.9 77	7.9 77
WSRE D24 DT LIC	8.0 0	8.0 0	8.0 0

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Interference to BLCDT20110824ABD LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WWJX	D23	DT	LIC	JACKSON, MS	BLCDT20110824ABD	

Undesireds:	WLAE-TV	D23	DT	BL	NEW ORLEANS, LA	DTVBL18819	233.1 km
	WLAE-TV	D23	DT	APP	NEW ORLEANS, LA	01948_12072022_WLAE_18	233.1

KLPB-TV	D23	DT	LIC	LAFAYETTE, LA	BLEDT20130820AAH	266.8
KSLA	D23	DT	LIC	SHREVEPORT, LA	BLANK0000192887	344.3
WMDN	D24	DT	CP	MERIDIAN, MS	BLANK0000035927	158.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7883.8	518,866	7867.7	518,846	7835.5	518,327	7839.5	518,493	-0.05	-0.03

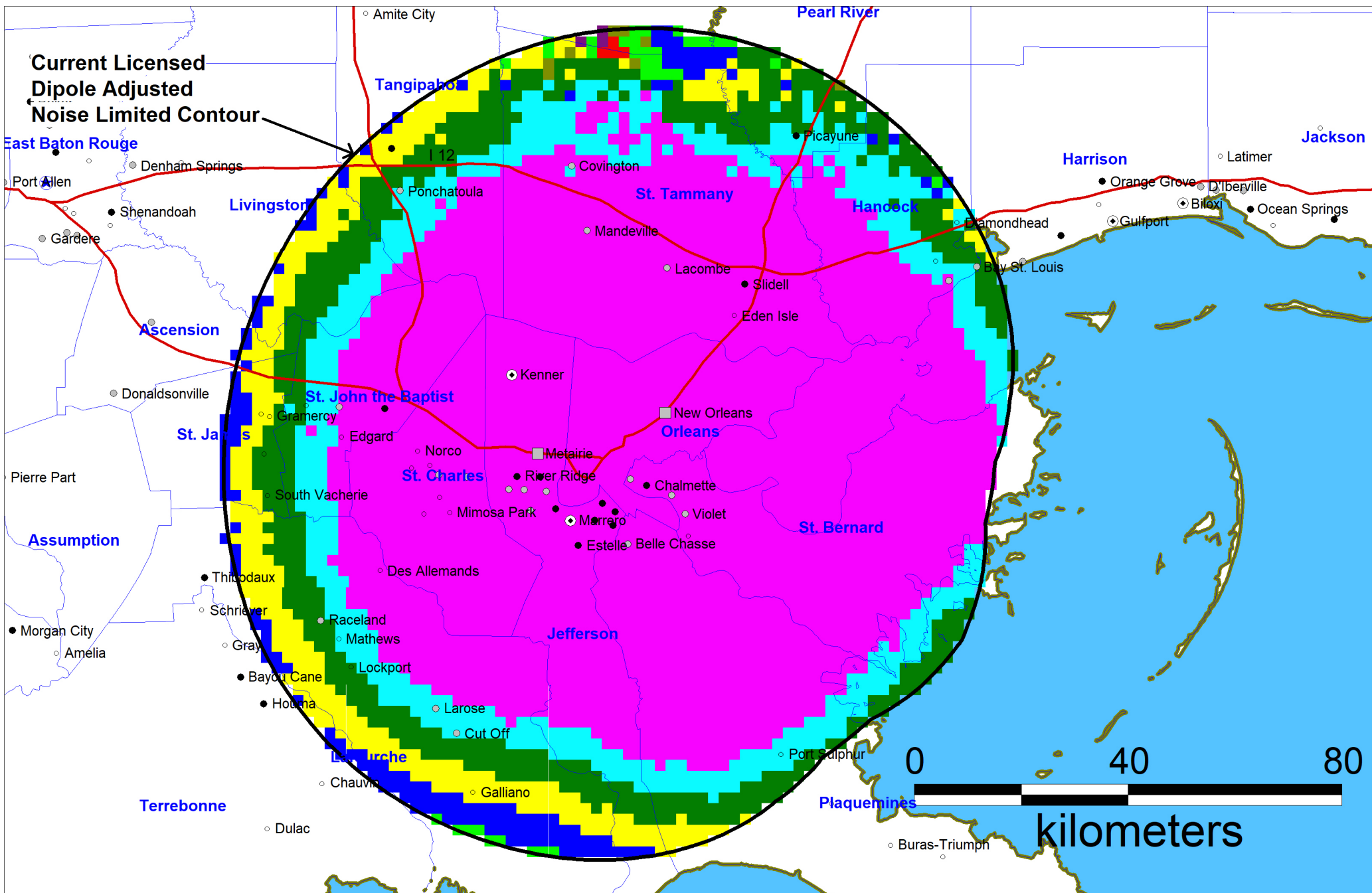
Undesired		Total IX		Unique IX, before		Unique IX, after	
WLAE-TV D23 DT BL	28.2	441	24.1	441			
WLAE-TV D23 DT APP	24.2	275	20.1	275			
KLPB-TV D23 DT LIC	8.1	78	4.0	78	4.0	78	
KSLA D23 DT LIC	4.0	0	0.0	0	0.0	0	

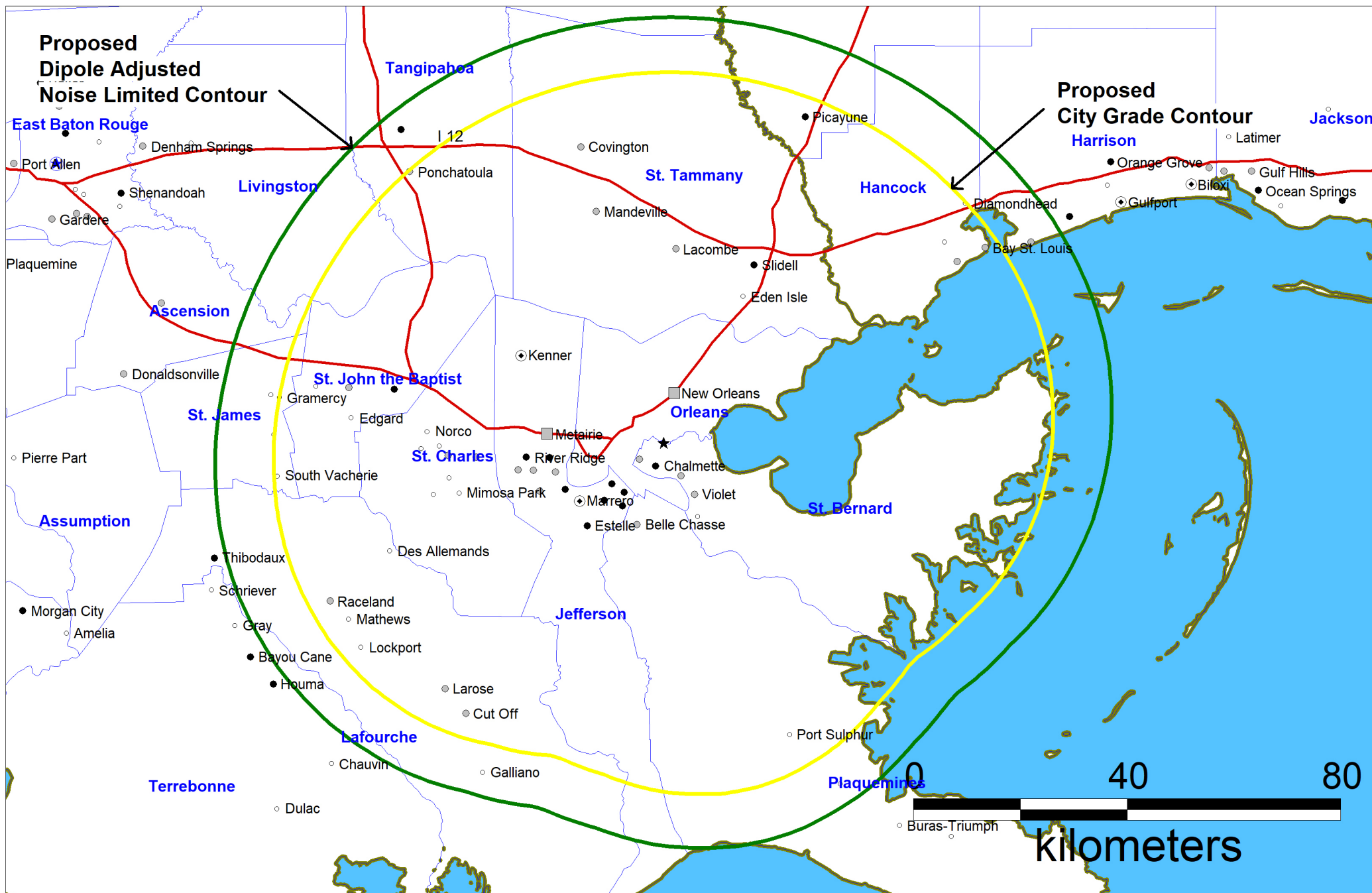
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Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WLAE-TV	D23	DT	APP	NEW ORLEANS, LA	01948_12072022_WLAE_18	
Undesireds:	WDPM-DT	D23	DT	LIC	MOBILE, AL	BLCDT20090420AAD	235.7 km
	WGMB-TV	D24	DT	LIC	BATON ROUGE, LA	BLANK0000113571	132.9

Service area		Terrain-limited		IX-free		Percent IX	
19804.7	1,432,599	19804.7	1,432,599	19784.7	1,432,267	0.10	0.02
Undesired		Total IX		Unique IX		Prcnt Unique IX	
WDPM-DT D23 DT LIC	12.0	332	12.0	332	0.06	0.02	
WGMB-TV D24 DT LIC	8.0	0	8.0	0	0.04	0.00	

# APPENDIX B





**WLAE Channel 23 Noise Limited and City Grade Contours**  
**Proposed Facility ERP 310 kW RCAMSL 269.6 m**