



LAKE WORTH BEACH

Electric
UtilitiesSM

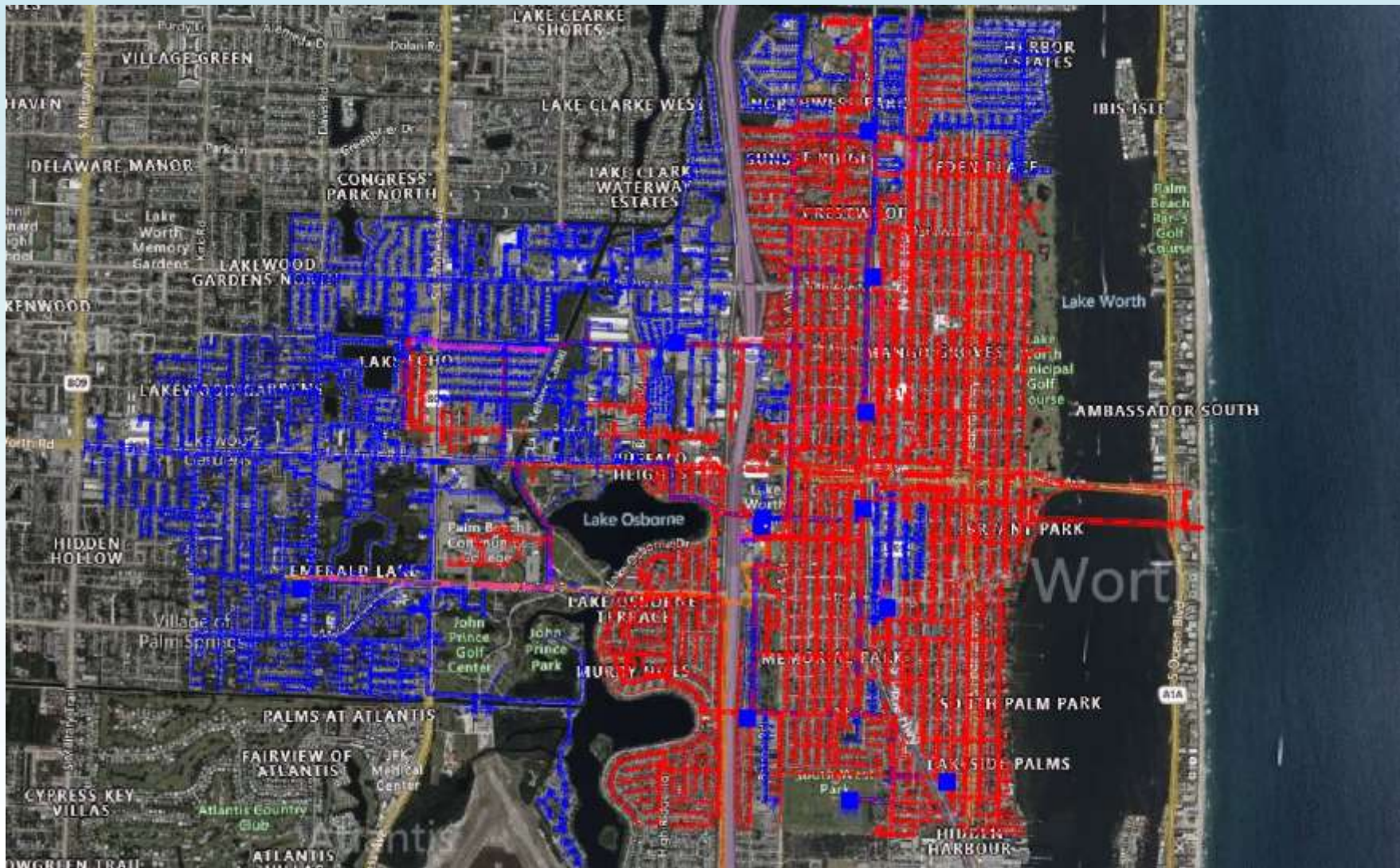
CITIZEN OWNED ENERGY

Agenda

- SHRIP (Progress Review)
- DOE Grant Topic Area 2 cost share; 1:1
- Series 2020 Bond, Series 2022 and Series 2025 Bond Balances
- Independent Engineer's Study and Opinion
- Appendix – 2020, 2022, 2025 Consolidated Utility Revenue Bond Project Allocations



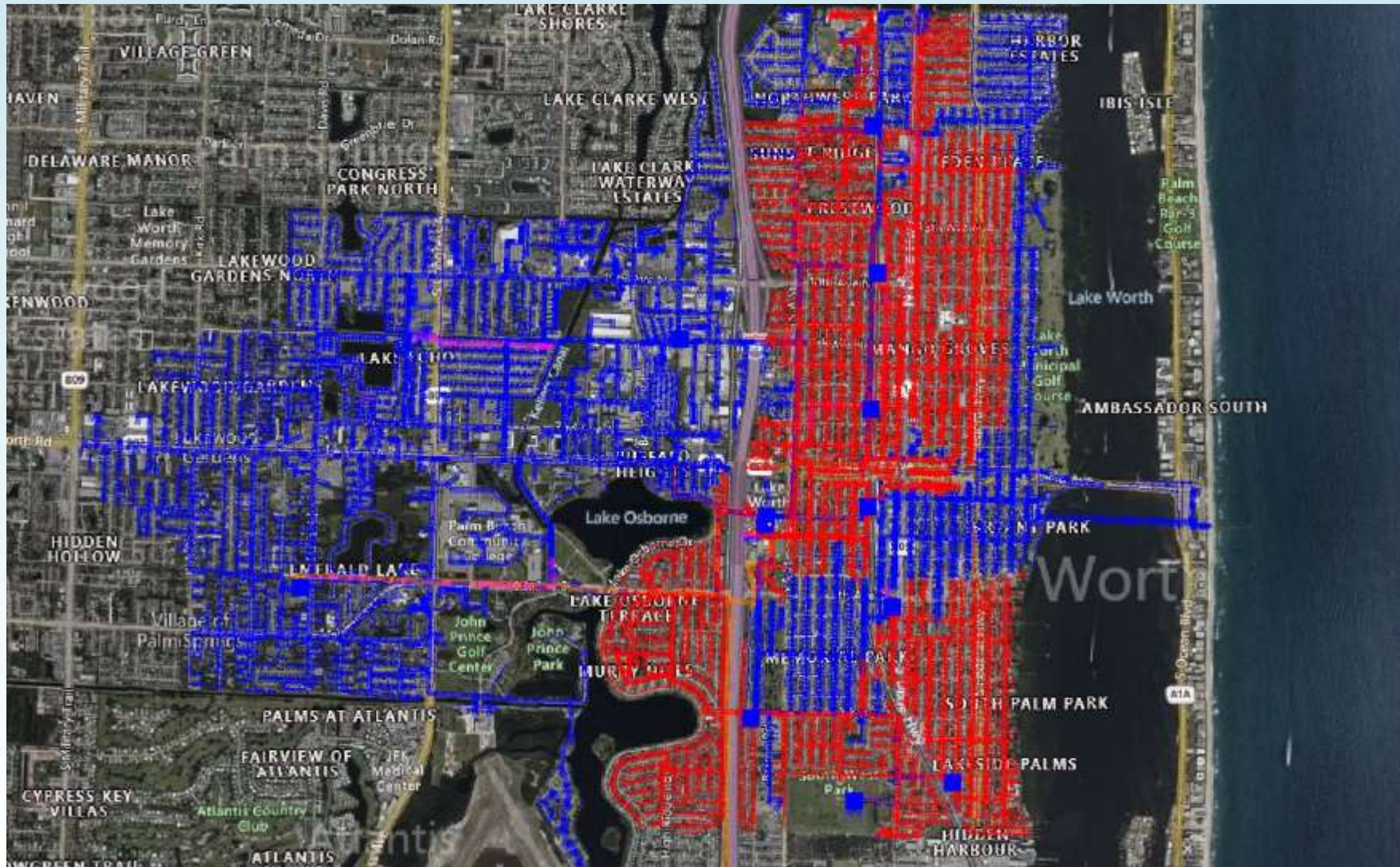
PRE-SHRIP



4kV

26kV

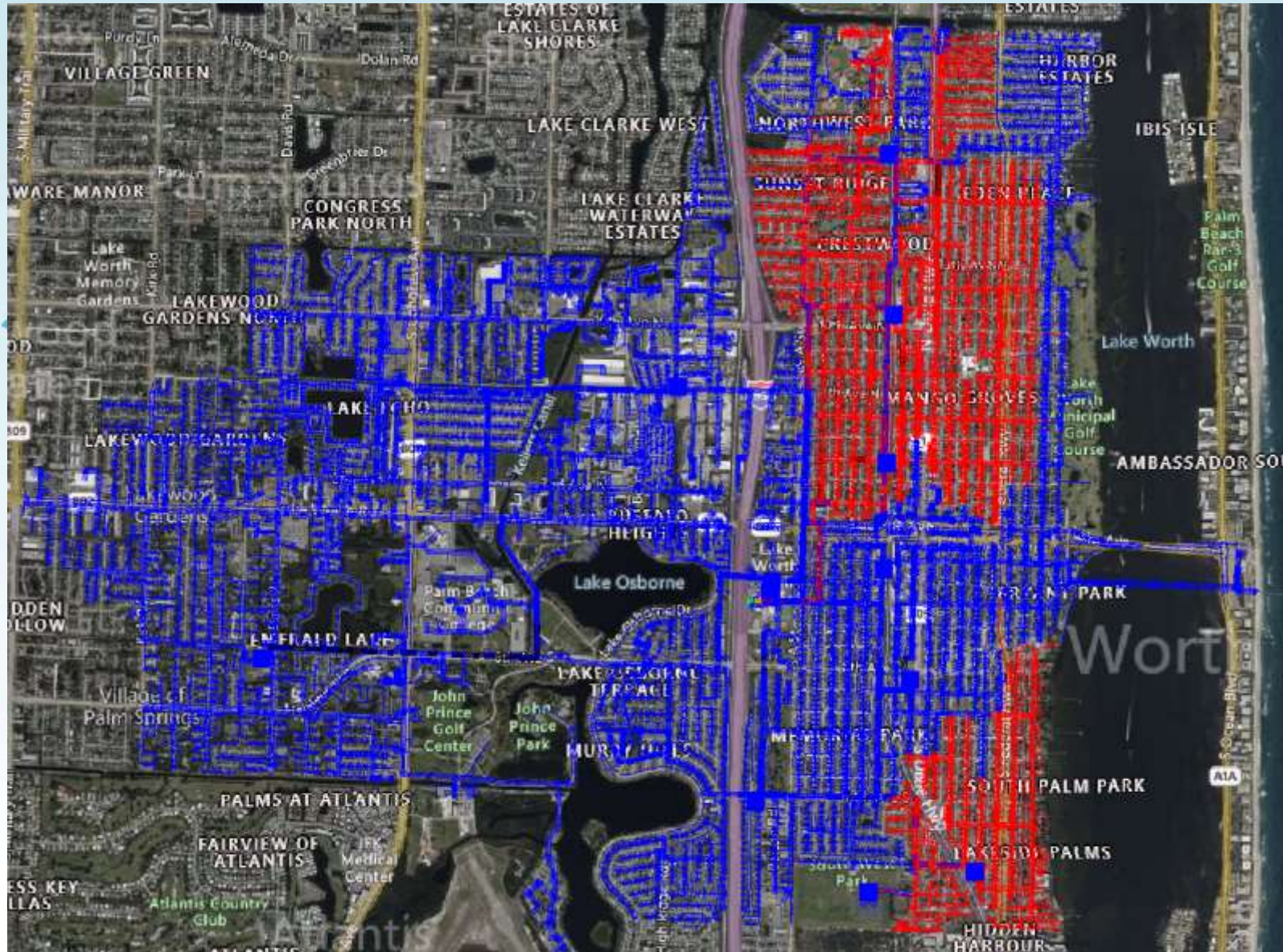
TODAY



4kV

26kV

Post Series 2025 Bond

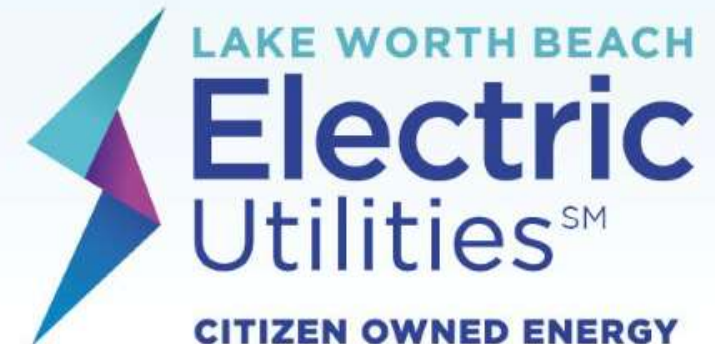


4kV

26kV

Historical Look Back

- ✓ 10/29/2024: City Commission approved acceptance on of the Department of Energy (DOE) Grid Resilience and Innovation Partnership (GRIP) grant totaling nearly \$23.4 million in funding towards a series of five projects.
- ✓ Grant award requires **\$23,462,167** matching contribution from the City!
- ✓ Series 2025 Bond includes funds required for Grant matching and further support of SHRIP.



Grant Cost Share

Since the DOE award cycle did not align to the City budget cycle, there was a need to identify the source of funds necessary for the “1st Project Year’s” cost share of \$10,349,707

- EU Staff performed a technical review of the Series 2022 Bond funded projects to determine which, if any, projects could be deferred (not voided!) to establish the cost share to get started
- EU Staff identified projects which could be deferred for the cost share match for the 1st Project Year cost share from those projects identified in the Series 2022 Bond funding
- The funds for the remainder of the Cost Share (\$13,599,707) are included in Series 2025 Bond

Cost Share

\$10,349,707 Project Year 1 (cost share has been identified using Series 2022 Bond funds)

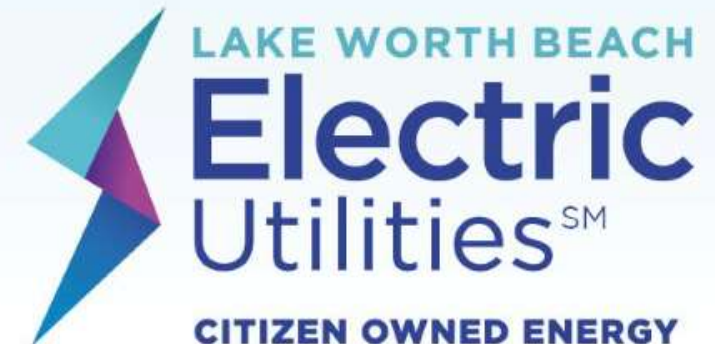
\$ 3,513,786 Project Year 2

\$ 3,420,387 Project Year 3

\$ 3,374,873 Project Year 4

\$ 2,803,414 Project Year 5

\$23,462,167 Total



Series 2020, Series 2022 & Series 2025 Bond Status

Status of Bond Fund Usage as of August 18, 2025

Bond Series	<u>Column 1</u> Total Bond Proceeds	<u>Column 2</u> Total Encumbered	<u>Column 3</u> FY23-FY24, FY25 YTD (Internal Labor & Mat'ls)	<u>Column 4</u> Grant Cost Share (1st year only)	<u>Column 5 *</u> Bond Balances Remaining	<u>Column 6</u> Percent Expended
2020 Bond	\$44,771,745	\$43,279,802	\$1,491,943	\$0.00	\$0.00	100%
2022 Bond	\$40,460,375	\$22,974,349	\$1,238,761	\$10,349,707	\$5,915,756	85.4%
2025 Bond	\$34,977,875	\$0.00	\$1,740,444	\$3,250,000	\$29,987,431	14%
Totals	\$120,209,995	\$66,254,151	\$4,471,148	\$13,599,707	\$35,903,187	70.1%

*Funds which are not yet encumbered but needed to ensure completion of Critical Projects

2022 Bond Projects

Deferred Projects	Estimated \$		Non Deferred Projects (Have critical impacts on electric system reliability)	Estimated \$
12 th Ave S Substation (Design)	\$ 1,000,000		Canal 26kV new Substation and Circuits Hardening	\$ 5,714,000
12 th Ave S Substation (Circuits Design)	\$ 555,000		6 th Ave S Substation Relocation Construction	\$ 3,700,000
Aging Underground Cable Replacement	\$ 500,000		6 th Ave S Distribution Feeders Conversion	\$ 10,136,000
Main Yard Capacitator Banks	\$ 500,000		Intracoastal Waterway / Lagoon Crossing	\$ 3,000,000
1E05 Phase 1	\$ 3,000,000		French Ave, 1W13, OH to UG Conversion	\$ 1,325,000
1E05 Phase 2	\$ 1,479,690		I-95 at 7 th Ave N crossing - OH to UG conversion	\$ 458,019
1E05 Phase 3	\$ 250,000		New 1W18 Circuit Design	\$ 2,500,000
6 th Ave S Distribution Circuits	\$ 3,046,819		Line Truck Replacements	\$ 580,500
Fault Alert & Testing Devices	\$ 18,198		Cultural Plaza, 1900 Renovation, EV Chargers	\$ 2,046,375
Deferred Projects Total	\$ 10,349,707		Engineering Support Services	\$ 160,000
			NERC CIP, Security Cameras	\$ 33,972
Grant Cost Share Projects			Dissolved Gas Analyzers, System Reclosers	\$ 475,000
Sectionalizing Devices	\$ 7,876,250		Total which cannot be deferred	\$ 30,128,866 **
Fiber Optic Connections	\$ 3,882,989		** Equals 2022 Bond Column 2 + Column 3 + Column 5 of slide 8	
Solar Interconnection & Battery Storage	\$ 4,368,657			
Advanced Metering Infrastructure (AMI)	\$ 6,369,979		Total Projects which cannot be deferred	\$30,128,866
Meter Data Management System (MDM)	\$ 964,295		Deferred Projects for Grant Match Total	\$10,349,707
TOTAL Grant Projects Cost Share	\$ 23,462,170		2022 Bond Grand Total	\$40,460,375

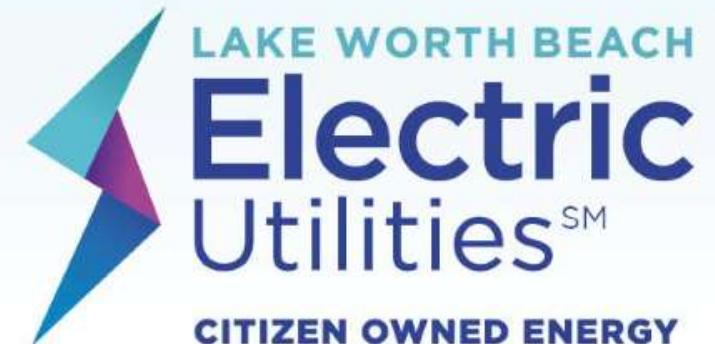
Independent Engineer Analysis

Conclusion:

“The City of Lake Worth Beach Electric Utility has taken decisive steps over the past five (5) years to modernize its infrastructure, reduce operational risk, and position itself for long-term reliability and sustainability. Through retirement of older generation units, increased renewable energy entitlements, investment in advanced distribution technology, and planning for secondary transmission interconnection, CLWB is demonstrating prudent utility stewardship.”

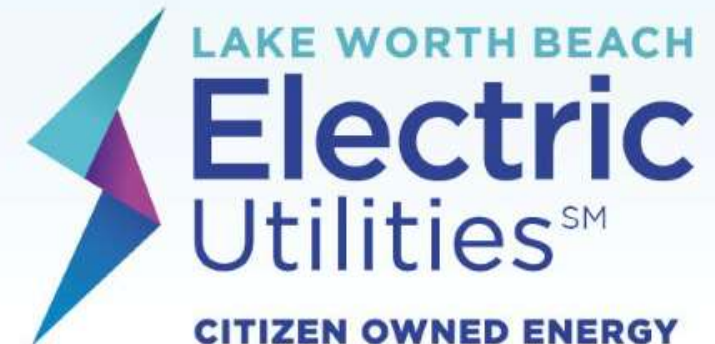
Recommendation:

“Based on our review of historical performance, generation entitlements, infrastructure assessments, and planned capital projects, United Utility Engineering, Inc. finds that the City of Lake Worth Beach Electric Utility is making appropriate and well-justified investments to enhance the reliability and resilience of its electric system.”



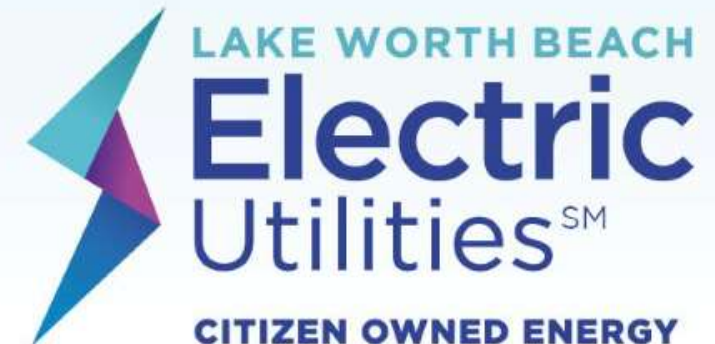
APPENDIX – Capital Investment Plans STATUS

- Series 2020 Consolidated Utility Revenue Bond Projects (Electric)
- Series 2022 Consolidated Utility Revenue Bond Projects (Electric)
- Series 2025 Consolidated Utility Revenue Bond Projects (Electric)



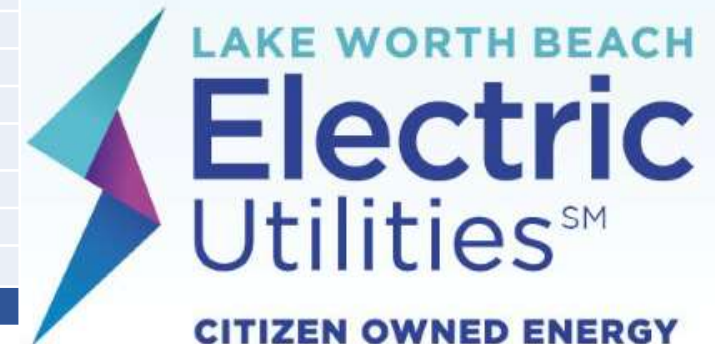
2020 Consolidated Utility Revenue Bond Projects

Project Name	Allocated Funds	STATUS
Utility Software Solutions	\$574,453.00	Suspended
Transmission Line - Canal 138kV Switchyard	\$7,902,197.00	In Service
Transmission Line OPWG - fiber communications	\$491,153.00	In Progress
Canal 8 Bay 26kV Distribution Substation	\$9,911,261.00	In Progress
138KV Tie-Line Static Line	\$234,370.00	In Service
138kV T-Line Distribution Underbuild - Design	\$345,305.00	Completed
Canal Feeder - Construction	\$718,359.00	In Service
Canal Substation Distribution Circuits - Design	\$3,954,631.00	Completed
Canal Substation Modifications - Design	\$476,623.00	Completed
NERC CIP & Security Camera	\$245,000.00	In Progress
Electric Sys Ops Center (Cat 5)	\$420,000.00	In Service
PB County 10th Ave & Boutwell Rd Undergrounding	\$350,000.00	In Service
FDOT & PBC 6th Ave S Improvements	\$454,219.00	In Progress
Main Yd Control House	\$3,365,469.00	In Service
Main Yard Buss insulators	\$529,543.00	In Service
Main Yard GT2 Replacement	\$333,187.00	In Service
SCADA Telemetry	\$175,000.00	Completed
EU/City Fiber & Communications	\$500,000.00	Completed
6th Ave S Substation 6 Bank 26kV - Design	\$759,887.00	Completed
6th Ave E S. Substation - Circuits Design	\$672,548.00	Completed
6th Ave S. Sub – Materials + Construction	\$434,436.00	In Progress
South Loop Conversion	\$667,604.00	In Service
7th Ave N Substation Construction	\$2,120,608.00	In Service
7th Ave N Substation Circuits Construction	\$5,528,930.00	In Service
French Ave. 1W13/0704 Phase 2 Design	\$1,275,000.00	Completed
E08 & ABB Breaker	\$267,055.00	Closed
Underground 3S04 Circuit - FECRR	\$520,868.00	In Service
Distribution Modeling & Trip	\$150,000.00	Completed
Undergrounding & Distribution -Bryant Park, Gulfstream - 4kV-26kV loop	\$863,841.00	In Service
Beach Tie - New ICW cross - Design	\$530,198.00	Completed
Total	\$44,771,745.00	



2022 Consolidated Utility Revenue Bond Projects

Project Name	Allocated Funds	STATUS
138kV Tie-Line Underbuild Distribution Circuits, Materials & Construction (6004 & 6003)	\$3,660,724.00	In Progress
Canal Substation Circuits - Hardening (6001,6003, 6004), Materials & Construction.	\$2,950,500.00	In Progress
Main Yard Capacitor Banks, Study, Engineering, Materials & Install	\$500,000.00	To Grant Match
6th Ave S substation (6-bank station Materials & Construction)	\$5,491,046.00	In Progress
6th AVE S. - Circuits Materials & Construction (0601,0602,0604)	\$8,482,568.00	In Progress –Balance to Grant Match
6th AVE S. - Circuit Materials & Construction (0603 and 1200)	\$1,963,843.00	In Progress
12th Ave S. Substation - Design	\$1,000,000.00	To Grant Match
12th AVE S. substation Circuits - Design	\$555,000.00	To Grant Match
OH to UG - 7th Ave N & I-95 (1E09 & 1N11/0703)	\$380,956.00	In Service
French Ave. 1W13/0704 Phase 2 Materials & Construction	\$1,246,736.00	In Service
NERC Compliance Tech	\$74,025.00	In Progress
Line Truck Replacement	\$580,500.00	In Service
EV Charging Station	\$210,000.00	In Service
Cultural Plaza/Customer Service Renovation	\$1,500,000.00	Cancelled
System Reclosers	\$250,000.00	Completed
Dissolved Gas Analyzers for Transformers & SCADA	\$224,225.00	Completed
Fault Indicators	\$15,000.00	To Grant Match
XPLE UG Cable Replacement @ various locations & Substations	\$500,000.00	To Grant Match
Omicron Testing Equipment	\$110,000.00	Completed
Engineering Services Support	\$160,000.00	Completed
1E05 Phase 1 - 10th to 18th	\$2,999,167.00	To Grant Match
1E05 Phase 2 - RR Tracks 18th Ave N to 24th Ave N	\$1,506,085.00	To Grant Match
1E05 Phase 3 - UG Work @ Lake/Lucerne (W05-E09-E06-3N11-3N12)	\$250,000.00	To Grant Match
Beach Tie - New Lagoon crossing materials & construction	\$3,000,000.00	In Progress
1615 10th Ave N. UG feeder @ A Street	\$350,000.00	In Progress
New Main Yard Feeder 1W18	\$2,500,000.00	In Progress
Total	\$40,460,375.00	



2025 Consolidated Utility Revenue Bond Projects

Project Name	Allocated Funds	STATUS
Electric Utility New Administration Building	\$8,056,422.00	-
Refresh Truck Fleet - 4 Bucket Trucks, 2 Trouble Trucks, 1 Digger Derrick, 1 Flatbed	\$2,070,000.00	To be Ordered
SUB-TRANSMISSION - E03 OH/UG Replacement/Hardening/Capacity Increase	\$407,630.00	-
SUB-TRANSMISSION - New Main Yard Feeder, 1 W18 Materials & Construction - Extension	\$925,000.00	Design in Progress
SUB-TRANSMISSION - E05 OH/UG Replacement/Hardening/Capacity Increase	\$1,916,865.00	-
SUB-TRANSMISSION - E09 OH/UG Replacement/Hardening/Capacity Increase	\$849,000.00	-
SUB-TRANSMISSION - 5002 Harden / Capacity Increase	\$660,845.00	-
SUB-TRANSMISSION - 5003 Harden / Capacity Increase	\$803,471.00	-
SUB-TRANSMISSION - W12 Hardening/Capacity Increase	\$294,918.00	-
4kV HOUSE CIRCUITS - 4A3N11 to 0703 Conversion / Hardening	\$2,122,585.00	-
4 kV HOUSE CIRCUITS - 4A3N12 to 0602 Conversion / Hardening	\$212,806.00	-
4kV HOUSE CIRCUITS - 4A3N13 to Express Feeder Conversion / Hardening	\$333,874.00	-
4kV HOUSE CIRCUITS - 4A3S05 to 3N12/0602 or extend to 3N11/0703	\$172,553.00	-
18th Ave N Substation - 4 BAY Metal-Clad Enclosed Switchyard	\$3,155,028.00	-
18th Ave N Substation Circuit - 26R1801 Conversion & Hardening	\$296,367.00	-
18th Ave N Substation Circuit - 4R1802 Conversion / Hardening	\$228,270.00	-
18th Ave N Substation Circuit - 4R1803 Conversion / Hardening	\$216,540.00	-
18th Ave N Substation Circuit - 4R1804 Conversion / Hardening	\$294,701.00	-
FAULT REDUCTION - Reactors added to MAIN Yard East and West Bus	\$1,355,000.00	-
Hypoluxo CT/PT Combo Installation	\$195,000.00	-
Hypoluxo Referesh (Wire Trap, SS, etc.)	\$110,000.00	-
Automatic Substation Capacitor Bank - Main Yard for East Bus	\$110,000.00	-
Automatic Substation Capacitor Bank - Main Yard for West Bus	\$110,000.00	-
TPTL3 - Transformer Purchase - Spare Transformer	\$1,437,500.00	-
Turbonet Replacement (Vehicle Tracking and Radio Records)	\$318,500.00	-
TA-2 Grant Match Request	\$3,250,000.00	-
FY25 SHRIP Misc.	\$2,075,000.00	-
FY24 & 23 SHRIP Misc.	\$3,000,000.00	-
Total	\$34,977,875.00	

