

EXECUTIVE BRIEF

ELECTRIC UTILITY MEETING

AGENDA DATE: April 28, 2020

TITLE:

Ratification of Task Order No. 3 with TEAMWORKnet for professional engineering services

SUMMARY:

Ratification of Task Order No. 3 provides for professional engineering services to develop 100% design for replacing and/or upgrading the Main Substation Protection and Control System inclusive of a new Control House for the City of Lake Worth Beach at a cost not to exceed \$230,500.

BACKGROUND AND JUSTIFICATION:

The City issued a Request for Qualifications (RFQ 18-303) seeking qualifications from professional consulting companies/firms for professional engineering services for engineering studies, reports, design and construction phase services. The City selected and awarded TEAMWORKnet with a continuing professional services agreement.

The Main Yard Substation is located at the Power Plant, adjacent to System Operations and is in need of new relay and protection equipment, as well as a secure structure to house the new equipment. The current configuration has legacy equipment located in System Operations with 138kV and 26kV relay and protection equipment located in enclosures in multiple locations throughout the substation.

The proposed upgrades include a new CAT 5 storm rated control house, new 138kV and 26.4kV bus protection relays and new DC batteries for relay and protection equipment. The new control house will also serve as a central location to house SCADA equipment and serve as an emergency control room if needed. The City Manager under emergency authority had approved this agenda item prior to submitting for ratification.

Project benefits include:

- Category 5 storm rated control house for all 138kV and 26.4 kV Main substation relays
- New 138kV and 26.4 kV bus protection and breaker failure schemes
- The new control house will serve as an emergency control room to house SCADA communications equipment.
- Remove legacy control equipment form System Operations to new control house
- New DC battery backup for relay and protection equipment and controls

TEAMWORK net has provided a proposal to design the project for \$230,500.

MOTION:

Move to approve/disapprove Task Order No. 3 TEAMWORKnet for the Main Substation Control House Protection and Control Upgrade 100% Design at a cost not to exceed \$230,500.

ATTACHMENT(S):

Fiscal Impact Analysis

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2020	2021	2022	2023	2024
Capital Expenditures	\$230,500	0	0	0	0
Operating Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income	0	0	0	0	0
In-kind Match	0	0	0	0	0
Net Fiscal Impact	\$230,500	0	0	0	0
No. of Addn'l Full-Time Employee Positions	0	0	0	0	0

B. Recommended Sources of Funds/Summary of Fiscal Impact: Funds have been identified in account No. 421-6034-531-6315, as part of the FY 2019 Capital funds roll-over.

Account Number	Account Description	Project Number	FY20 Budget	Current Balance	Agenda Expenditure	Balance
421-6034-531.63-15	Improve Other than Build/Infrastru	SH1802	\$4,582,688	\$2,435,585	-\$230,500	\$2,205,085

C. Department Fiscal Review: Edward Liberty, Electric Utility Director