

EXECUTIVE BRIEF REGULAR MEETING

AGENDA DATE: March 25, 2021

DEPARTMENT: Electric Utility

TITLE:

Task Order No.3 with Power Engineers, Inc., to provide engineering design and construction services for the new 138kV Canal Switchyard

SUMMARY:

This Task Order No. 3 authorizes Power Engineers Inc., to complete engineering design and construction package for the new 138kV Canal Switchyard and ancillary components in the amount not to exceed \$1,138,439.

BACKGROUND AND JUSTIFICATION:

The City previously issued a Request for Qualifications (RFQ 18-302) to provide letters of interest and Professional Qualifications from consulting firms to develop alternatives for the City that improve electric transmission system reliability and electric supply economics. Power Engineers Inc., was selected under RFQ 18-302, Electric Transmission and Generation Options, to provide professional services.

On, December 13th, 2018, the City Commission approved Task Order No. 2 to Power Engineers to evaluate options for a second 138kV Transmission Tie-Line to the Florida Power & Light ("FPL") electric transmission system. Power Engineers evaluated several conceptual options and routes to bring an additional electric high voltage transmission tie-line to the City. The initial conceptual study yielded a proposed route for the new 138kV tie-line along the existing tie line route, to be comprised of underground and overhead segments, from the City's Hypoluxo switching station to the City's main transmission yard on College Street.

Ensuing discussions with FPL in regards to alternative tie line routing options resulted in an agreement with FPL to provide a connection between the City's electric transmission system to the FPL electric transmission system at the City's Canal Substation on Davis Road. The agreement with FPL involves City constructing and owning a new 138kV switching station at the City's existing Canal Substation site to provide a point of interconnection to the FPL electric transmission system. FPL will build, own, and operate the extension of their electric transmission system to the Canal Substation switching station. The project benefits to City by partnering with FPL to construct the second tie-line to the Canal Substation is an estimated to be a \$16 million dollar net benefit to the City.

Design and construction for the City's new 138kV switching station will consist of a 4-breaker ring bus, electric measurement devices, relay protection and communications equipment, control house, installation and replacement of the existing overhead protection ground wire (OPGW) with a new OPGW that will provide both grounding and fiber optic communication capabilities, and installation of several new transmission poles at the Canal Substation.

Construction of the new interconnection at the Canal Substation will provide the City an additional source of 138kV electric power from the FPL electric transmission system, will provide greater reliability of service to our customers, and will reduce the City's tie-line construction

costs. The time-line for design and construction is approximately 18 months with a targeted in-service date of December 2022. The costs associated with this Task Order No. 3 are not to exceed \$1,138,439.

MOTION:

Move to approve/disapprove Task Order No. 3 to Power Engineers, Inc., to complete the engineering design and construction package for the new 138kV Canal Switchyard not to exceed \$1,138,439.

ATTACHMENT(S):

Fiscal Impact Analysis

Power Engineers Task Order No.3 – 138kV Canal Switch Yard Design

FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2021	2022	2023	2024	2025
Capital Expenditures	\$1,138,439	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	\$1,138,439	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. 421-6034-531-63.16, Project No. SH2001.

Account Number	Account Description	Project Number	FY21 Budget	Current Balance	Agenda Expenditure	Balance
421-6034-531-63.16	Improve Other than Build / Infrastructure	SH2001	\$11,000,000	\$10,948,435	\$1,138,439	\$9,809,996