

# **EXECUTIVE BRIEF REGULAR MEETING**

**AGENDA DATE:** March 25, 2021

**DEPARTMENT:** Electric Utility

**TITLE:**

Task Order No. 4 with Power Engineers, Inc. to complete a feasibility study and conceptual design for the Intercoastal Waterway underground distribution line

**SUMMARY:**

Task Order No. 4 authorizes Power Engineers Inc., to complete a feasibility study and conceptual design for the Intercoastal Waterway underground distribution line crossing serving the beach Casino Complex in the amount not to exceed \$89,986.

**BACKGROUND AND JUSTIFICATION:**

City issued a Request for Qualifications (RFQ 18-303) to provide letters of interest and Professional Qualifications from consulting companies/firms for civil engineering, geotechnical engineering, surveying, architecture, hydrogeological services, energy management and engineering services. Power Engineers Inc., was one of three firms selected under the Energy Management category for the Continuing Contracts for Professional Services.

The Lake Worth Beach Casino Complex and businesses are currently supplied power through two, 60 plus year old submarine cables crossing the intercoastal waterway from the main-land to the beach. In addition to the aged submarine cables, the site currently lacks emergency power generation leaving the Casino Complex and business owners susceptible to a prolonged outage in the event the submarine cables fail.

In February of 2019, the City Commission approved Task Order No. 4 to E.C. Fennell, P.A. to provide professional engineering and construction management services to reconfigure a portion of the 0602 circuit feeding the Lake Worth beach area. The project entailed engineering design, upgrading the distribution voltage from 4.16 kV to 13.2 kV and providing the infrastructure allowing the Casino Complex and beach area to be powered from FP&L distribution circuits with associated metering and protective capabilities. EC Fennell completed a 90% design package for this project while the City continued negotiations with FP&L for the inter-connection to serve the beach Casino Complex. The request was later denied by FP&L causing the City to seek alternate plans to provide reliable power to the beach Casino Complex.

The current plan is to install two new underground submersible cables crossing the Intercoastal Waterway (ICW) to the beach Casino complex. Power Engineers is proposing to begin the project by conducting a feasibility study to include but not limited to; data acquisition, installation methods either trenchless or horizontal directional drilling (HDD), lay-down areas, potential entry/exit pits, assess environmental permitting requirements and concerns and ICW crossing alignment. In addition, specifications will be developed to complete land survey, bathymetric survey, geotechnical requirements and conceptual plan and profile design for the cable crossing. We are confident in selecting the services of Power Engineers Inc., as their team of professionals have completed in excess of twenty submersible cable crossings for both

transmission and distribution feeders. The feasibility study and conceptual design is anticipated to be completed in fourteen weeks in the amount not exceed \$89,986.

**MOTION:**

Move to approve/disapprove Task Order No. 4 to Power Engineers, Inc., to complete feasibility study and conceptual design for the Intercoastal Waterway underground distribution line crossing serving the beach Casino Complex in the amount not to exceed \$89,986.

**ATTACHMENT(S):**

Fiscal Impact Analysis

Power Engineers TO #4 – Intercoastal Waterway Distribution Crossing Feasibility Study

**FISCAL IMPACT ANALYSIS**

**A. Five Year Summary of Fiscal Impact:**

<b>Fiscal Years</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Capital Expenditures	\$89,986	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	\$89,986	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:**

Account Number	Account Description	Project Number	FY21 Budget	Current Balance	Agenda Expenditure	Balance
421-6034-531-63.15	Improve Other than Build / Infrastructure	SH2129	\$250,000	\$250,000	-\$89,986	\$160,014