



Broward County

Legislation Text

File #: 22-300, Version: 1

Broward County Commission Regular Meeting

Director's Name: Jonathan Daniels

Department: Port Everglades

Division: Director's Office

Information

Requested Action

A. MOTION TO APPROVE advance payment to Florida Power and Light ("FPL") in the amount of \$495,000 for an engineering study to develop a preliminary design and detailed cost estimate for a new electrical substation and duct bank distribution facilities at Port Everglades to provide additional power distribution capacity to provide shore power to serve cruise ships at eight cruise terminals.

ACTION: (T-10:31 AM) Approved.

VOTE: 8-0. Commissioner Ryan voted in the affirmative telephonically. Commissioner Moskowitz was not present.

B. MOTION TO ADOPT budget Resolution within the Port's Operating Fund in the amount of \$495,000 for the purpose of providing funding for design services associated with the construction of an electrical sub-station and power distribution facilities at Port Everglades.

ACTION: (T-10:31 AM) Approved Resolution No. 2022-091.

VOTE: 8-0. Commissioner Ryan voted in the affirmative telephonically. Commissioner Moskowitz was not present.

Why Action is Necessary

A. Broward County Board of County Commissioners ("Board") approval is required to make advance payment to FPL.

B. Board approval is required to transfer budget from reserves.

What Action Accomplishes

Provides the funding required to engage FPL to undertake engineering and design services and produce a preliminary design and detailed engineering cost estimate necessary to provide the electrical infrastructure needed to deliver shore power to cruise ships at eight terminals within Port Everglades.

Is this Action Goal Related

Yes

Previous Action Taken

None

Summary Explanation/Background

THE PORT EVERGLADES DEPARTMENT RECOMMENDS APPROVAL.

This action supports the Broward County Board of County Commissioners' ("Board") Value of "Ensuring economic opportunities for Broward's diverse population and businesses" and the Goal to "Increase the economic strength and impact of revenue-generating County enterprises balancing economic, environmental, and community needs," and the Value of "Encouraging investments in renewable energy, sustainable practices and environmental protection" and the Goal to "Seek funding for, implement policies and pursue projects promoting, the use of alternative energies and sustainable practices."

The potential use of shore power by cruise ships while in port at Port Everglades has been studied a number of times by the Port since 2009, most recently in Element 4 of the Port Everglades Master/Vision Plan Update approved by the Board on June 16, 2020 (Item No. 70). On June 1, 2021 (Item No. 23), the Board approved the 2020 Broward County Climate Change Action Plan. Policy Objective 18 of that Plan directed staff to re-evaluate the feasibility of shore power at Port Everglades. Port staff reengaged with Florida Power and Light ("FPL") and the representatives of the cruise lines sailing from Port Everglades. All of the cruise lines expressed a need for the ability for their ships to connect to shore power while at berth. Shore power enables vessels to shut down their petroleum-fueled auxiliary engines and connect to the power grid while in port, resulting in significant reductions in localized air pollution and greenhouse gas emissions. The cruise lines have committed to use shore power while in port once it becomes available, and to discuss mechanisms to pay for the systems.

Preliminary discussions with FPL concluded that a new power distribution sub-station, located on FPL property within the port, will need to be constructed and corresponding power distribution duct banks installed on County property to distribute power from this new sub-station to new vaults to be located near cruise terminals 2, 4, 18, 19, 21, 25, 26, and 29 in the Midport and Northport areas of Port Everglades. The new infrastructure is required to provide sufficient power to meet the future power demands for shore power-capable cruise ships calling at Port Everglades.

In order for FPL to proceed with the engineering design study for the power distribution sub-station and duct bank distribution facilities, a \$495,000 engineering deposit is required (see Exhibit 1). As is noted in the FPL letter, the deposit will be applied towards the overall project cost if the County proceeds with the project. FPL has also provided a Scope of Work and timeline for the engineering phase of the project (see Exhibit 2). A map detailing the potential location of the new sub-station and duct bank power distribution route is also attached (see Exhibit 3).

The estimated cost for FPL to construct the electrical distribution system portion of the project is \$35 million over a period of up to 3 years, depending on project sequencing. Per existing FPL Tariffs, the Port Everglades share of that cost, referred as customer Contribution In Aid of Construction ("CIAC") will be offset by an estimate of FPL energy revenue from system use during the first four years of operation. While the potential amount of that CIAC offset will be better defined during the engineering and design period, FPL staff estimates that could be up to \$28 million, thus reducing the Port's net payment to FPL to \$7 million, less the \$495,000 credit from the engineering deposit.

In addition to the FPL electrical distribution system, delivering shore power to cruise ships will also require the Port to construct additional duct banks from the FPL vaults to each cruise berth, as well as to install the dockside transformers, metering, switches, and cabling systems needed to connect to the ship. The cost of that additional equipment is estimated at between \$5 million to \$10 million per terminal. Port staff intends to engage its General Planning Consultant Services contractor, Moffatt & Nichol, Inc., to further develop plans for this part of the infrastructure.

Since the cost of this infrastructure has not been budgeted previously, Port staff intends to pursue grant funding opportunities at the federal and state level, and to work with the cruise lines to offset a portion of the costs. Port staff anticipates the cruise lines will contribute through either additional capital cost recovery charges under their existing Cruise Terminal and Berth User Agreements, or through the payment of separate port fees based on use.

As vessel owners and operators are implementing ways to reduce air emissions generated by in-port activities, the ability to supply shore power is becoming an important consideration for companies doing business with Port Everglades. As a steward of the environment, protection of the natural resources is a guiding principle for the Port's activities. Approval of this item will allow the Port to begin a thorough study of the electrical infrastructure improvements and associated costs required to make shore power a reality at Port Everglades.

Source of Additional Information

Jonathan Daniels, Chief Executive & Port Director, Port Everglades Department, (954) 468-3516
Neil J. Kutchera, Assistant Port Director, Energy and Innovation, Port Everglades Department (954) 468-3520

Fiscal Impact

Fiscal Impact/Cost Summary

The source of funding for the Engineering Deposit is the Port Everglades Operating Fund Reserve.