



**Interoffice Memorandum**

October 27, 2022

TO: Mayor Jerry L. Demings  
-AND-  
County Commissioners

FROM:  Carrie Mathes, CFCM, NIGP-CPP, CPPO, C.P.M., Manager II, Procurement Division

CONTACT: Michael Hudkins, Manager, Water Reclamation Division  
407-254-9685

SUBJECT: Approval of Purchase Order M108601, South Water Reclamation Facility Caterpillar Generator Switchgear Upgrade

ACTION REQUESTED:

Approval of Purchase Order M108601, South Water Reclamation Facility Caterpillar Generator Switchgear Upgrade, with Ring Power Corporation, in the total amount of \$692,004.38.

PROCUREMENT:

This purchase order will provide the rehabilitation of the South Water Reclamation Facility emergency generator controls. Rehabilitation includes replacing the current, obsolete controls to ensure reliability of backup electrical systems.

FUNDING:

Funding is available in account number 4420-038-1555-0042-6310.

APPROVALS:

The Water Reclamation Division concurs with this recommendation.

DISCUSSION:

This purchase order will provide the replacement of the current, obsolete controls to ensure reliability of backup electrical systems.

Original equipment manufacturer parts are required for this rehabilitation to be compatible with the existing generator controls including paralleling and synchronization via Modbus Remote Terminal Unit protocols thus being able to maintain plant operations.

This equipment, including software/programming is proprietary, and can only be provided by Ring Power Corporation. In order to maintain the manufacturer's warranty (4th unit recently added) on the existing equipment and the proposed equipment, it must be installed by Ring Power Corporation.

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The generators and more specifically these controls provide standby emergency power to the plant when the Orlando Utilities Commission (OUC) utility power is unavailable. This system is a requirement to meet Environmental Protection Agency Class 1 Reliability and Florida Department of Environmental Protection requirements. Failure of these generator controls will result in the plant losing emergency power capabilities, and, with the loss of OUC power, it would result in permit violations and the inability to provide treated reclaimed water to our customers.

In an effort to identify any additional sources able to provide these services, the Procurement Division posted a sole source statement on the County's eProcurement website for a period of 10 business days. No other firms responded to the posting.

Ring Power Corporation has performed similar work across the County for over 10 years. Staff determined that this a unique project to Orange County. The upgrade of the Programable Logic Controllers and Protective Relays are typical at this stage of the life cycle, and the signs of failure are an indication that more will come if not quickly addressed, potentially resulting in significant costs from damage to equipment and personnel. Staff compared this upgrade to 18 repair projects where each item had a critical failure and the system was down. Staff confirmed that the cost to replace the whole system would start at \$1,300,000, which doesn't account for all the rigging and construction labor required to physically remove the old and install the new nor the expenses in keeping backup power available for the duration of time required to do so by the end user. Staff determined that a complete replacement would be more disruptive and expensive than the controls of modernization. The cost to upgrade the current, obsolete controls to ensure reliability of backup electrical systems is determined to be fair and reasonable.