

**THE UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY
COMMISSION AGENDA ITEM**

SUBJECT: J.G. Beacham Water Treatment Plant Switchgear Modernization

DATE: December 27, 2023

BUDGET INFORMATION:

Revenue:	\$2,232,444	FY24 Replace & Upgrade WTP Facilities Designated Projects
Capital Expenses:	\$957,269	FY24 WTP Facilities Designated Projects
	\$722,610	Available for Sodium Hypochlorite Improvements
	<u>\$43,040</u>	Expenditures & Encumbrances
	\$509,525	Available for Switchgear Modernization

FUNDING SOURCE: Water & Sewer Enterprise Fund

COMMISSION ACTION REQUESTED ON: February 6, 2024

PURPOSE:

To request the Mayor and Commission:

- a. Approve the J.G. Beacham WTP Switchgear Modernization to the back-up power generators in the amount of \$509,525; and
- b. Authorize the Mayor and appropriate staff to sign all documents related to the work authorization.

HISTORY:

1. On September 7, 2004, the Mayor and Commission (M&C) approved an appropriation in the amount of \$40,666,355 for the construction and upgrade of the J. G. Beacham Water Treatment Plant (JGB WTP).
2. In 2008, construction and upgrades to the JGB WTP were completed, increasing the treatment capacity to 36 million gallons per day.
3. In 2016, the J. G. Beacham Water Treatment Plant celebrated 80 years of service to the Athens-Clarke County community.
4. On June 6, 2023, the M&C adopted the FY24 Capital Budget, which included the project Replace and Upgrade Facilities and Equipment.
5. On October 1, 2023, Public Utilities Department (PUD) was notified by Yancey the controls for the power generators switchgear were obsolete and needed to be upgraded.

FACTS & ISSUES:

1. The JGB WTP treats raw water from the North Oconee and Middle Oconee River, as well as the Bear Creek Reservoir and delivers millions of gallons of potable water throughout Athens-Clarke County.
2. The existing Programming Logic Controllers (PLC's), transducers, Communication Modules and Touchscreen Processors (TSP) are obsolete. The main electrical switchgear was installed in 2005 during the construction upgrades. The life cycle of generator controls is typically 15 to 20 years depending on proper maintenance. Staff has attempted to purchase replacement parts on electrical components of similar age with no success. The parts are no longer manufactured as technology advances.
3. The switchgear from utility power to emergency generator power is vital to protecting public health. Failure of an obsolete relay could lead to a loss of pressure in the distribution system leading to a potential need for a boil water advisory.
4. Project Schedule:

Issuance of Notice to Proceed/Equipment Purchase (52-week lead time)	March 2024
Equipment Installation	March 2025
Project Completion	April 2025
5. This recommendation supports the following ACCGov Strategic Plan Goal & Strategy:
 - Built and Natural Infrastructure Goal, Strategy C: *Provide adequate funding for maintenance of existing and newly constructed infrastructure*

OPTIONS:

1. Mayor and Commission:
 - a. Approve the J.G. Beacham Water Treatment Plant Switchgear Modernization to the back-up power generators in the amount of \$509,525; and
 - b. Authorize the Mayor and appropriate staff to sign all documents related to the work authorization.
2. Mayor and Commission deny the request.
3. Mayor and Commission defined option.

DEPARTMENT RECOMMENDED ACTION: Option 1 a & b

DEPARTMENT: Public Utilities

Prepared by: Hollis Terry IV

Hollis Terry IV

December 27, 2023

Hollis Terry IV

Date:

ADMINISTRATIVE COMMENTS:

ADMINISTRATIVE RECOMMENDATION: Option #1 a & b

John H. Wilf

January 11, 2024

Manager

Date:

ATTACHMENTS: