# **Great Lakes Water Authority**

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# **Legislation Text**

File #: 2023-005, Version: 1

Contract No. 2101167
Cyber Security, Ovation, Instrumentation and Controls Upgrades and Updates O&M

Agenda of: January 25, 2023

Item No.: 2023-005

Amount: \$35,285,413.00

**TO:** The Honorable

**Board of Directors** 

**Great Lakes Water Authority** 

**FROM:** Suzanne R. Coffey, P.E.

Chief Executive Officer

**Great Lakes Water Authority** 

**DATE:** January 4, 2023

RE: Contract No. 2101167

Cyber Security, Ovation, Instrumentation and Controls Upgrades and Updates

Vendor: Emerson Process Management

#### **MOTION**

Upon recommendation of Navid Mehram, Chief Operating Officer - Wastewater Operating Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to enter into Contract No. 2101167, "Cyber Security, Ovation, Instrumentation and Controls Upgrades and Updates" with Emerson Process Management, at a cost not to exceed \$35,285,413.00 for a duration of three (3) years, with two (2) one (1) year renewal options; and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

## **BACKGROUND**

GLWA operational teams utilize the Ovation Distributed Control System (DCS) to monitor and control the process equipment required to treat and transport water and wastewater. The Ovation DCS was supplied and configured by Emerson in the year 2000. It was later upgraded in 2013. The GLWA Ovation system is large, complex, and comprises over 2,000 networked assets, including controllers, servers, workstations, meters, instruments, drives, and printers. The Ovation DCS spans all GLWA

sites, including the Water Resource Recovery Facility, System Control Center (SCC), Water Treatment Plants, Treated Water Booster Stations, Wastewater Collection Pump Stations, and Combined Sewer Overflow (CSO) facilities. Reliable and secure services provided by the Ovation DCS include, process monitoring and control, historical data archiving, and reporting.

#### JUSTIFICATION

The Ovation DCS is the backbone of our Supervisory Control and Data Acquisition (SCADA) system and is essential for successful operations. It is a core component for our operations and maintenance teams to maintain regulatory compliance while enhancing operational efficiency. Emerson Process Management Power & Water Solutions is the manufacturer of the DCS system. The services provided through this contract will include the replacement of hardware, servers, workstations, network equipment, and power supplies, and software that are at the end of their useful life. The newly upgraded software configuration will enhance visualization, alarming, energy management, and maintenance efficiency. The contract includes allowances for direct manufacturer support, software patches, onsite field engineering services, and spare parts. This contract will significantly improve the cybersecurity posture of the GLWA SCADA system.

### FINANCIAL PLAN IMPACT

**Summary:** The proposed contract will be available organization-wide for the maintenance and upgrades of GLWA Ovation System. The FY 2024 budget and five-year financial plan were based on actual expenses under the previous contract. The current contract has the potential to exceed the FY 2024 budget and five-year financial plan. Contractual services and capital outlay projects are dependent on several factors such as, delays in estimated start and end dates, environmental constraints, and other unforeseen circumstances that can cause the expenses to fluctuate from fiscal year to fiscal year. Numerous tasks for this contract are on an "as needed" basis. Therefore, the utilization of this contract may experience fluctuations. Any annual shortfall will require a budget amendment that will be offset by other operational budgets or unallocated reserves. The financial plan will be adjusted accordingly during the FY 2025 budget and five-year plan preparation to accommodate the proposed contract amount for the "as needed" tasks.

Funding Source: Operations and Maintenance (O&M - Water 5910, Wastewater 5960)

Improvement & Extension (I&E - Water 5506, Wastewater 5404)

Cost Centers: Water Treatment Plants (882131, 882141, 882151, 882161, & 882171)

Systems Operations Control (882301)

Wastewater Process Control Center (892222)

Expense Types (depending on task): Scheduled projects include:

617900 - Contractual Operating Services: Software licensing and network support

617903 - Contractual Professional Services: Ovation Facility Upgrades

622301 - Repairs & Maintenance - Hardware: repairs and upgrades to controls equipment

622302 - Repairs & Maintenance - Software: Process control systems support services

901100 - Capital Outlay over \$5,000 (I&E: Capitalized)

# Estimated Cost by Year and Related Forecast Variance: See table below.

Fiscal Year	<u>O&amp; M</u>	<u>I&amp;E</u>	<u>Total</u>
FY 2023 Budget (Prorated)	\$620,400.00	\$1,042,500.00	\$1,662,900.00
FY 2024 Financial Plan	1,747,499.00	9,411,500.00	11,158,999.00
FY 2025 Financial Plan	1,840,199.00	7,053,900.00	8,894,099.00
FY 2026 Financial Plan	1,947,999.00	2,161,000.00	4,108,999.00
FY 2027 Financial Plan	1,955,299.00	490,000.00	2,445,299.00
FY 2028 Financial Plan (Prorated)	1,345,807.34	0.00	<u>1,345,807.34</u>
Total Financial Plan	\$9,457,203.34	\$20,158,900.00	\$29,616,103.34
Maximum Proposed Contract	\$15,766,245.00	\$19,519,168.00	\$35,285,413.00
Variance (positive/(negative))	(\$6,309,041.66)	\$639,732.00	(\$5,669,309.66)

#### **COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on January 11, 2023. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

## **SHARED SERVICES IMPACT**

Use of this contract will involve upgrades and maintenance to facilities operated by GLWA on behalf of DWSD. Operational expenditures are governed by Shared Service Agreement OPS-008. System upgrades would be covered by an approved Cost Sharing Agreement between GLWA and DWSD.