



## Legislation Details (With Text)

**File #:** 2022-338      **Version:** 1      **Name:**  
**Type:** Resolution      **Status:** Passed  
**File created:** 7/29/2022      **In control:** Board of Directors  
**On agenda:** 8/24/2022      **Final action:** 8/24/2022  
**Title:** Proposed Amendment No. 3  
Contract No. 2001082  
Standby Generator Preventative Maintenance and Repair Services  
O&M  
**Sponsors:** Cheryl Porter, Terry Daniel  
**Indexes:** Water Operations  
**Code sections:**  
**Attachments:**

Date	Ver.	Action By	Action	Result
8/24/2022	1	Board of Directors	Approved	Pass
8/10/2022	1	Operations and Resources Committee	Recommended for Approval	Pass

### Proposed Amendment No. 3

### Contract No. 2001082

### Standby Generator Preventative Maintenance and Repair Services

### O&M

Agenda of: August 24, 2022

Item No.: **2022-338**

Amount:	Original Contract	\$1,587,500.00
	Amendment No. 1	0.00
	Amendment No. 2	0.00
	Proposed Amendment No. 3	1,025,206.83
	Total Revised Contract	\$2,612,706.83

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Suzanne R. Coffey, P.E.  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** July 29, 2022

**RE: Proposed Amendment No. 3**  
**Contract No. 2001082**  
**Standby Generator Preventative Maintenance and Repair Services**  
**Vendor: Preventive Maintenance Technologies, LLC**

### **MOTION**

Upon recommendation of Cheryl Porter, Chief Operating Officer - Water and Field Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. 2001082 Proposed Amendment No. 3 “Standby Generator Preventative Maintenance and Repair Services” with Preventive Maintenance Technologies, LLC, at an increased cost of \$1,025,206.83 for a total cost not to exceed \$2,612,706.83 with no increase in duration for a total duration of 1,645 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

GLWA operates nine combined sewer overflow (CSO) facilities, 19 booster stations and five water treatment facilities. The CSO facilities provide primary treatment and disinfection when flows exceed the capacity of the Water Resource Recovery Facility (WRRF). Most of these facilities operate and maintain emergency generators as the alternative power source per our National Pollutant Discharge Elimination System (NPDES) permit and the 10 State Standards for Water and Wastewater facilities.

Although Detroit Edison (DTE) provides our primary power supply, GLWA as a customer has experienced several power supply issues over the years. To reduce the impact of these power failures, GLWA maintains a fleet of emergency generators able to supply power to continue water and wastewater processes in emergency situations. Most of the generators and their electrical equipment and controls are original to the facilities, exceeding 20 years of service life. Although the generators are routinely maintained and are expected to have a useful life greater than 20 years, the ancillary electrical equipment and controls have exceeded their useful life.

Additionally, remote indications for generator faults, startups and power transfers are not currently available from the remote control in our Supervisory Control and Data Acquisition (SCADA) screens. This requires operators to physically be present at a facility to transfer the power to the generators during a power outage. Finally, generator equipment and control displays differ between facilities. This creates issues when replacing parts, training operators to be proficient when rotating through facilities, and performing maintenance and testing.

### **JUSTIFICATION**

Since the start of this contract (May 11, 2020), the current contract holder, Preventive Maintenance Technologies LLC, identified deficiencies and made various adjustments/repairs related to preventive and corrective maintenance on the equipment. This was necessary to ensure that the equipment functioned safely and within specification.

As these deficiencies were corrected, the allotments for preventative and repair services were consumed, in which additional funding is now required to maintain the infrastructure for the remaining duration of this contract. Some of the items that were identified and repaired impacted the electronic controls, electro-mechanical relays, automatic voltage regulators, block heaters, strip heaters, base-plate isolation springs, etc.

Below you will find a brief overview of the deficiencies that Preventive Maintenance Technologies LLC identified:

1. Replacement of vibration isolators between engine frame rail and foundation pad. Cost per generator - \$6,000-\$7,000.
2. Replacement of fuel lines between internal day tank and engine. Cost per generator - \$3,000-\$4,000.
3. Fuel polishing to remove sediment and water from fuel supply. Cost per site - \$8,000-\$12,000.
4. Replace thermostat housings and hoses. Cost per generator - \$6,000-\$7,000.
5. Automatic voltage regulators. Cost per generator - \$5,000-\$8,000.
6. M-slick generator controllers. Cost per generator - \$14,000-\$20,000.

Please note that this list does not comprise the totality of the needed repairs to bring the emergency generators to GLWA reliability standards.

#### **PROJECT MANAGEMENT STATUS**

Original Contract Time	1,645 days (05/11/2020 - 11/10/2024)
Amendment No. 1	0 days (05/11/2020 - 11/10/2024)
Amendment No. 2	0 days (05/11/2020 - 11/10/2024)
Proposed Amendment No. 3	0 days (05/11/2020 - 11/10/2024)
New Contract Time	1,645 days (05/11/2020 - 11/10/2024)

#### **PROJECT ESTIMATE**

Original Contract Price	\$1,587,500.00
Amendment No. 1	0.00
Amendment No. 2	0.00
Proposed Amendment No. 3	1,025,206.83
New Contract Total	\$2,612,706.83

#### **FINANCIAL PLAN IMPACT**

**Summary:** The proposed contract with Preventive Maintenance Technologies, LLC. encompasses Operations & Maintenance expense only. The FY 2023 budget and five-year financial plan was based on the previous contract period. The value of the contract exceeds the current financial plan in total. Potential positive variances of other contractual services as well as the use of this service may vary by year. The financial plan will be adjusted accordingly during the FY 2024 budget preparation to accommodate the proposed contract amount. Sufficient funds will be provided in the Operations & Maintenance (O&M) financial plan for this contract related to contractual operating services and

repairs & maintenance.

**Funding Source:** Operations & Maintenance (O&M) Budget

**Cost Center(s):** Water Works Park.....Water Operations cost center 882131  
Springwells Water Plant.....Water Operations cost center 882141  
Northeast Water Plant.....Water Operations cost center 882151  
Southwest Water Plant.....Water Operations cost center 882161  
Lake Huron Water Plant.....Water Operations cost center 882171  
West Service Ctr Pump Station....Water Operations cost center 882324  
North Service Ctr Pump Station....Water Operations cost center 882329  
Adams Rd Pump Station.....Water Operations cost center 882330  
Franklin Rd Pump Station.....Water Operations cost center 882332  
Wick Rd Pump Station.....Water Operations cost center 882334  
Joy Rd Pump Station.....Water Operations cost center 882335  
Schoolcraft Pump Station.....Water Operations cost center 882336  
Wastewater Director.....Wastewater Operations cost center 892201  
Blue Hill Pump Station.....Wastewater Operations cost center 892343  
Conner Pump Station.....Wastewater Operations cost center 892345  
Fischer Pump Station.....Wastewater Operations cost center 892347  
Freud Pump Station.....Wastewater Operations cost center 892349

**Expense Type(s):** Contractual Operating Services (617900)  
Repairs & Maintenance-Equipment (622300)

**Estimated Cost by Year and Related Forecasted Variance:** See table below.

<u>Fiscal Year</u>	<u>Amount</u>
FY 2020 Budget (Prorated)	\$ 14,300.00
FY 2021 Financial Plan	390,500.00
FY 2022 Financial Plan	353,800.00
FY 2023 Financial Plan	528,300.00
FY 2024 Financial Plan	528,800.00
FY 2025 Financial Plan (Prorated)	<u>223,900.00</u>
Financial Plan Forecast	\$2,039,600.00
Proposed Contract Amount	<u>\$2,612,706.83</u>
Variance (positive/ (negative))	\$ (573,106.83)

### **COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on August 10, 2022. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

### **SHARED SERVICES IMPACT**

This item impacts the shared services agreement OPS-008 between GLWA and DWSD.