



DEPARTMENT OF UTILITIES

Department of Utilities
Water Treatment Facility
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MEMORANDUM

Date: January 15, 2025

To: Chairperson Brad Firkus and Members of the Finance Committee

CC: Chris Stempa, Director of Utilities
John Pogrnt, Water Operations Supervisor
Kelli Rindt, Enterprise Accounting Fund Manager

From: Ryan Rice, Deputy Director of Utilities

Subject: **Finance Committee Action: Award Sole Source Purchase of Appleton Water Treatment Facility Emergency Generator Control Equipment to Fabick Power Systems for a cost of \$653,837 with a contingency of \$46,163 for a total not to exceed \$700,000.**

BACKGROUND:

The Appleton Water Treatment Facility (AWTF) has two Caterpillar (CAT) diesel powered generators that are utilized for emergency backup power. Each generator is 2,500 horsepower and can generate up 1,850 kilowatts of electricity (each). One generator can supply enough electricity to satisfy all the AWTF operational needs when a disruption of grid power occurs. In May 2024, one of the generators developed an issue within the controls which caused it to fail and couldn't operate. The local CAT dealer and servicer, Fabick Power Systems (Fabick CAT) completed a repair and successfully returned the generator to operation. However, Fabick CAT stated that availability for replacement parts of this equipment vintage is minimal and that our risk exposure would be high if a major component were to fail.

The city has been engaged in contract for capacity with WPPI Energy for nearly 20 years which provides a monthly payment to have our generators "standby ready" when called upon to provide power back to the grid. The type of circumstances that result in us being called upon are related to a loss of power caused by extreme weather-related events or electrical capacity constraints caused by extremely high customer demand. The payment to the city ranges from \$7,400 to \$8,700 each month. It is critical to have the generators fully functional for treatment plant emergency operation but also to satisfy capacity contract obligations and preserve associated revenue that is generated from it each year.

The 2025 AWTF budget approved by Common Council included \$700,000 for replacement of AWTF generator control panels.

QUOTATION

Fabick CAT provided a quote of \$653,837 for replacement of the generators control system which includes:

- System Generator Paralleling Switchgear Controls
- Medium Voltage Switchgear Protective Relays
- Generator Controls
- Integration
- Commissioning & Testing

JUSTIFICATION

Failure of the generators control system in the absence of grid power jeopardizes treatment and risks interruption of City water supply, along with the continuing WPPI payments.

As the original equipment manufacturer (OEM) Fabick CAT, has provided maintenance related contract services on the CAT generators at the Water and Wastewater facilities. Fabick CAT's familiarity with these units and their expertise with the equipment ensures the successful completion of the project and continued reliability of operation.

The quote by Fabick CAT employs the current mechanism of the switchgear and replaces the programming and controls with new equipment.

As part of our due diligence, Fabick CAT was asked to also provide an estimate for new generators, controls, and associated equipment of the same capacity as the current system. If a new installation was chosen, all new wiring, switchgear, and facility considerations would be needed. The estimate is between \$2.7M and \$3.2M not including installation by a mechanical/electrical contractor.

RECOMMENDATION:

I am recommending the approval of a sole source purchase of Appleton Water Treatment Facility Emergency Generator Control Equipment to Fabick Power Systems for a cost of \$653,837 with a contingency of \$46,163 for a total not to exceed \$700,000.

If you have any questions regarding this project, please contact Ryan Rice at 920-832-5945.

Encl: Finance Department Sole Source Request Form