BUSINESS OF THE CITY COUNCIL
CITY OF MERCER ISLAND

AB 6878
March 3, 2026
Consent Agenda

AGENDA BILL INFORMATION

TITLE:	AB 6878: Reservoir Standby Generator Replacement Project Closeout	☐ Discussion Only ☒ Action Needed: ☒ Motion ☐ Ordinance ☐ Resolution
RECOMMENDED ACTION:	Accept the completed Reservoir Standby Generator Replacement Project and authorize staff to close out the project.	

DEPARTMENT:	Public Works
STAFF:	Jason Kintner, Chief of Operations Kellye Hilde, Deputy Director Clint Morris, Capital Division Manager Christopher Marks, Utilities Engineer
COUNCIL LIAISON:	n/a
EXHIBITS:	1. Construction Photos
CITY COUNCIL PRIORITY:	3. Make once-in-a-generation investments to update and modernize aging infrastructure, capital facilities, and parks.

AMOUNT OF EXPENDITURE	$ 1,417,566
AMOUNT BUDGETED	$ 1,605,279
APPROPRIATION REQUIRED	$ n/a

EXECUTIVE SUMMARY

The purpose of this agenda bill is to accept the completed Reservoir Standby Generator Replacement Project (WU0119/90.40.0038) and authorize staff to close out the project.

- Washington State Department of Health regulations (WAC 246-290-420) require public water systems to maintain continuity of service during power outages.
- The Reservoir Standby Generator provides emergency power to the Reservoir Booster Pump Station and the emergency well at Rotary Park.
- The existing 235-kilowatt diesel generator, originally installed in 1975, was undersized, had exceeded its useful life, and required replacement to ensure reliable emergency operation.
- The Reservoir Standby Generator Replacement Project (Exhibit 1):
    - Replaced the existing 235-kilowatt generator with a new 500-kilowatt generator installed outside the building;
    - Installed a new automatic transfer switch, manual transfer switch, and portable generator connection port; and
    - Replaced the existing diesel fuel storage tank.
    - The project was included in the Water Capital Improvement Program since 2019 with an initial budget of $360,000.

- On July 13, 2023, AB 6183 appropriated an additional $1,245,279 from the Water Fund to bring the project budget to $1,605,279, and authorized award of the construction contract to McClure and Sons, Inc.
- Construction began on July 21, 2023, and final completion was reached on June 3, 2025.
- Upon project closeout, $187,713 in unspent project budget will be returned to the Water Fund.

BACKGROUND

Washington State Department of Health drinking water regulations (WAC 246-290-420) require public water systems to maintain continuity of service and protect public health during emergency conditions, including power outages. On Mercer Island, this reliability is provided primarily through standby diesel generators. To support long-term reliability, the City's Capital Improvement Program funds a systematic replacement of generators serving both water and sewer utility facilities.

The City's reservoir site houses an emergency backup generator that serves both the Reservoir Booster Pump Station and the emergency well at nearby Rotary Park. The existing diesel generator, originally installed in 1975, had been in service for more than 47 years and had reached the end of its useful life, necessitating replacement to maintain reliable emergency power.

In 2019, the City retained Murraysmith to evaluate electrical system loads and prepare design documents for generator replacement. The original project scope proposed replacing the existing 235-kilowatt unit with the same capacity within the building; however, a detailed load analysis determined 235-kilowatt capacity was insufficient to meet current operational demands and future improvements, including the booster chlorination system planned for 2023 and pump system upgrades planned for 2024. To ensure adequate capacity and long-term reliability, the replacement generator size was increased to 500 kilowatts.

The larger generator footprint, combined with limited available floor space inside the pump station building, led to the decision to locate the new unit outside the building. During design, the existing automatic transfer switch was determined to be obsolete, with replacement parts no longer available. As a result, the project scope was expanded to include installation of a new automatic transfer switch and infrastructure to accommodate connection of a portable generator. The addition of portable generator connection ports is now standard practice for City generator upgrades, as they enhance operational flexibility and strengthen emergency response capability in the event of permanent generator failure.

Final design was completed in 2022, and the project was advertised in the Fall of that year. Five construction bids were received and opened on October 20, 2022. The lowest responsive bid was received from McClure and Sons, Inc. in the amount of $1,138,555. Following City Council's approval of AB 6183, the Reservoir Standby Generator Replacement Project (90.40.0038) budget was set at $1,605,279, and a notice to proceed was issued to McClure and Sons, Inc. on July 13, 2023.

ISSUE/DISCUSSION

PROJECT DESCRIPTION

The purpose of this project was to replace the existing 235-kilowatt emergency generator located inside the Reservoir Booster Pump Station with a new 500-kilowatt generator installed outside the building. The work also included installation of a new automatic transfer switch, manual transfer switch, and portable generator connection port; relocation of the existing diesel fuel storage tank; and modification of an existing rockery wall to accommodate the exterior placement of the new generator. Exhibit 1 shows photos of the project before, during, and after construction.

Although the Notice to Proceed was issued in July 2023, long lead times and site constraints delayed delivery of the new generator until June 2024, approximately eleven months later than anticipated. This delay extended the construction schedule and compounded congestion at the reservoir site, where work associated with the North and South Reservoir Tank Improvements Project and the Booster Pump Station Upgrades Project was occurring concurrently. The overlapping projects limited site access and slowed remaining civil and electrical work.

A critical component of the project was the electrical cutover plan. Because the Reservoir Booster Pump Station supplies domestic water and fire flow to most of Mercer Island, service interruptions were not permitted. The cutover plan outlined the sequence of work required to route temporary power to all critical equipment while the existing generator and transfer switch were removed and the new system was placed into service. This work was successfully completed in January 2025 during the winter months to avoid peak summer water service demand and minimize operational risk. After operational testing and completion of punch list work, final project completion was reached on June 3, 2025.

PROJECT EXPENDITURES

The project experienced minor changes during construction, including replacement of the existing 1,000-gallon fuel storage tank (rather than relocation) and the addition of a refueling station at the new tank. These additions were largely offset by the removal of final site paving that had originally been included in the contract. Final paving has been deferred to coordinate with upcoming reservoir security improvements and future storm drainage upgrades at the site.

Other unforeseen construction items were paid for using the approved construction contingency and included additional charges from Puget Sound Energy (PSE) for power utility connections, Brown & Caldwell for programming integration, and Valley Electric for electrical support services. A summary of final project costs is provided in Table 1 below.

Table 1

RESERVOIR STANDBY GENERATOR REPLACEMENT (WU0119/90.40.0038) PROJECT COSTS		
PROJECT ELEMENTS	**ORIGINAL BUDGET (AB6183)**	**ACTUAL EXPENDITURES**
Design Phase *(Murraysmith, Inc.)*	$77,013	$59,081
Construction Contract *(McClure & Sons, Inc.)*	$1,138,555	$1,116,905
Construction Contingency *(PSE/Brown and Caldwell/Valley Electric)*	$227,711	$59,602
Construction Support Services *(Consor North America, Inc.)*	$50,000	$89,585
Project Management/Utility Team *(City Staff)*	$62,000	$65,390
Inspection Services *(City Staff)*	$50,000	$27,003
Total Project Cost	**$1,605,279**	**$1,417,566**
Budget Remaining		***$187,713***

Upon project closeout, $187,713 in unspent project budget will be returned to the Water Fund.

RECOMMENDED ACTION

Accept the completed Reservoir Standby Generator Replacement Project (WU0119/90.40.0038) and authorize staff to close out the project.