Q2 2025

# Assembly Report

CITY AND BOROUGH OF SITKA
ELECTRIC UTILITY DEPARTMENT
RON VINSON, ELECTRIC UTILITY DIRECTOR

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# QUARTERLY SUMMARY

## GENERAL OVERVIEW

Quarter two (Q2) was largely focused on wrapping up budget planning for FY26, keeping FERC-related initiative moving forward, and initializing capital and operational projects funded in this year's supplemental appropriation.

Budget planning for FY26 was successfully developed and approved by the Assembly in this quarter. The operational budget focused on ensuring various areas of funding would be well-tracked for future reporting. Additionally, remarkable operational budget activities included increases in the areas of training, uniforms (safety clothing), and subscriptions (peer collaboration organizations). These increased areas are intended to help develop a foundation of success for the Utility. Overall the operational budget was passed with just under a 5% reduction in costs from the FY25 budget. Capital budgeting included funding to address an appropriate amount of capital improvements that could be completed with current staffing levels.

FERC compliance activities continued moving forward with a significant focus on follow-up to FERC inspection requests and the Green Lake Hydropower Development relicensing efforts. Activities this quarter included continued completion of FERC security requests such as development of security-related policy. Additionally, this quarter included the annual FERC inspection of both the Green Lake Development and Blue Lake Development. Both inspections yielded minor recommendations for safety signage near the dam structures. Beyond the signage recommendations, FERC requests were unremarkable. Lastly, FERC activities including continued efforts for Green Lake Development relicensing that included the completion of a dam overtopping study, watershed passage study, a recreational impact study, and a historic findings study.

The E2C project has moved forward in successful partnership with the Sustainability Coordinator, the Pacific Northwest National Labs, and the National Renewable Energy Labs. This quarter included progress in the areas of risk register development, water modeling, microgrid modeling, workforce development analysis, and student intern program development. During this quarter the team focused on moving forward with activities that will enable the utility to utilized weather and flow data to model generating scenarios and their impacts of the overall transmission and distribution system. This modeling will enable the Utility to optimize use of water and energy in an effort to improve ratepayer reliability, service quality, and costs.

The Utility teamed-up with the Public Works Department this quarter to perform services for a number of CBS projects including the GPIP Haulout, the Crescent Harbor Restroom Replacement, the Critical Secondary Water Project, and the Airport Improvement Project. Each support activity was productively completed with a specific effort to help reduce costs for the CBS. In support of the Critical Secondary Water Project, the Utility invested time this quarter modifying operations to ensure flow reduction in the Sawmill Creek to allow for effective streambed work to occur.

The Utility spent time this quarter successfully completing a temporary repair of the Green Lake spare transformer, and successfully completing the relay upgrade at the Marine Street Substation. Additional projects were in various stages of planning and execution. Details of these projects have been included on pages 5 & 6.

Lastly, each quarter the Utility focuses on a number of training activities. This quarter the Utility continued to participate in annual security trainings. Additionally, the Operations Team, Relay Control Team, and the Mechanic Team were all provided with industry-specific and discipline-specific training.

## CURRENT CHALLENGES

Current challenges that the Department are facing include:

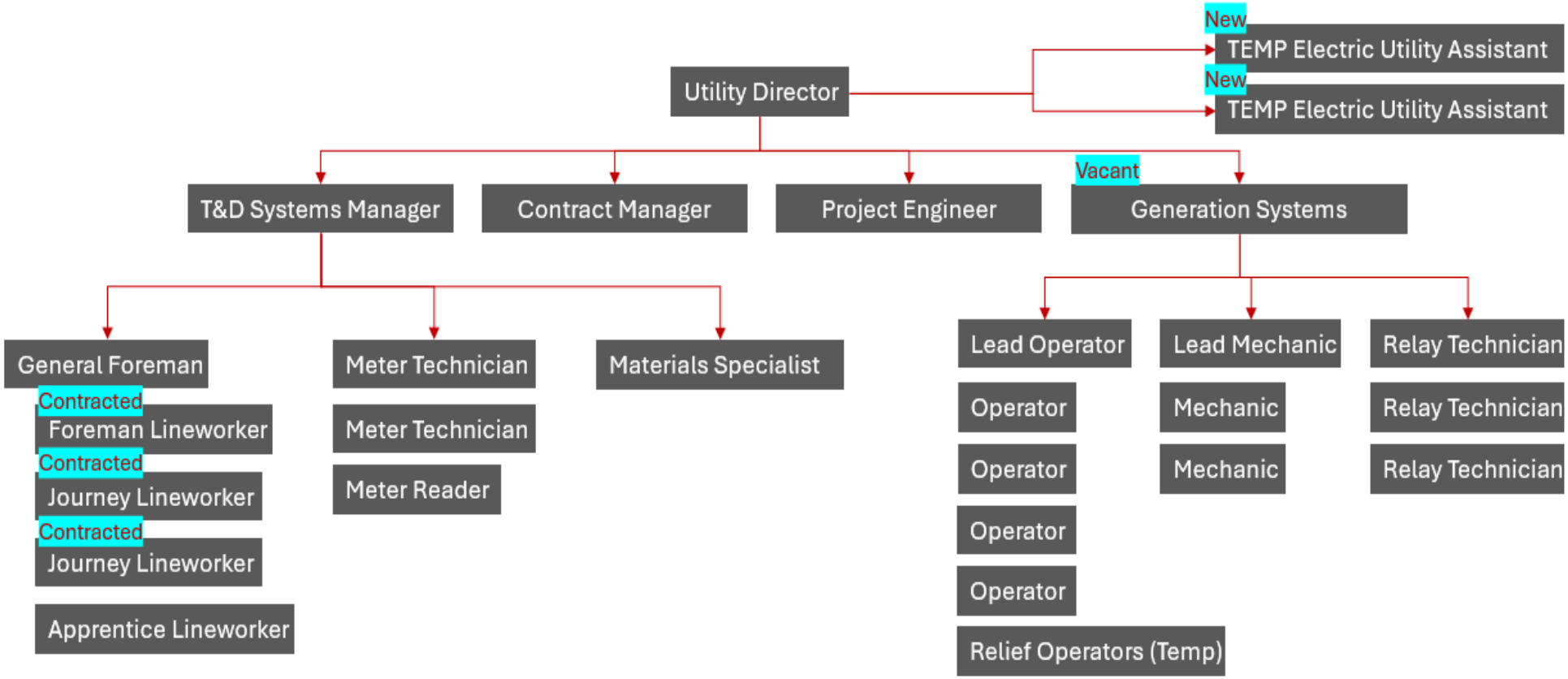
- Equipment deficiencies – The Department has been rooting out historical deficiencies, as part of risk management. So far, a fair number of deficiencies have been identified and are being recorded for inclusion into the FY27 budget, or outright addressed with the FY26 budget.
- Safety Deficiencies – The Department is currently challenged by several unaddressed areas of safety management. These areas include lacking fall protection, lack of spill prevention, containment, and countermeasure (SPCC) plans, and several other areas. In March a safety consultant was tasked with performing a safety audit for the Department. Findings from this audit are being evaluated and prioritized into a larger plan to improve department safety management practices.
- Regulatory Compliance – Insurance requirements continue to increase. The Department has made budget requests and plans for FY26 to continue to meet increasing requirements. Regulatory requirements that have been imposed have been very reasonable in nature, but do come at a cost of staff time and funding.
- Personnel - Vacancies (Journey Lineman, Generation Manager) continue to lead to increasing transmission line work costs. These costs expand beyond capital work, as the line worker unit has to be augmented by contractors. In June, a new augmentation contract was solicited and received a low bid that will yield some savings compared to prior year contracts. In addition to this, the department is in need of engineering staff to keep up with upcoming projects.
- Inventory Management – The Department is facing challenges with an aging and unsupported inventory management software. This has resulted in inaccurate Department inventory. The Department performed a physical inventory count in the first quarter and the second quarter, both of which have yielded improved data. Following the June inventory, data was uploaded into the CBS's Computerized Maintenance Management Software (CMMS) successfully. The Department is currently utilizing the CMMS's inventory management module to track inventory for the FY25 audit.
- Preparing for upcoming projects – The Department is currently working on projects that are underway and preparing for projects that are coming up. Preparation for upcoming projects includes contractor solicitation development, which has been a slow process.

## NEXT QUARTER LOOK AHEAD

During the coming quarter the Department is looking forward to kicking off and completing a number of critical utility projects and tasks including:

- ☐ IBEW Collective Bargaining Negotiations (continued)
- ☐ FERC Security Upgrades – Address security concerns from FERC through risk assessments (continued)
- ☐ Insurance Compliance – Addressing maintenance concerns identified by insurance providers (continued)
- ☐ Staffing - Recruiting for vacant positions (continued)
- ☐ Offboarding of student assistants
- ☐ Marine Street, A-Side PLC upgrade
- ☐ Feeder switch radio/communications updates
- ☐ GPIP Pedestal Installation for Haulout
- ☐ Onboard consultants for various projects that are currently without internal PM support (continued)
- ☐ Perform fall protection evaluation with consultants
- ☐ Perform DGA monitoring on trouble transformers (continued)
- ☐ Procure Green Lake Excitation Replacement Project parts and materials
- ☐ Issue Professional Services Roster to solicit professional services

## ELECTRIC DEPARTMENT ORGANIZATIONAL CHART




Key Notes:

- Full-Time Employees: **25**
- Temp Employees: **6** (including relief operators)
- Vacant Positions: **4**
- Journeyman Lineman Positions- 2 prospective candidates
- (2) New temp. student positions (in collaboration with E2C program)

## TOP CAPITAL PROJECTS

### MARINE STREET SUBSTATION – SIDE A REFURBISHMENT

The Marine Street Substation is split into two sides, “A” and “B”, each of which provides system redundancy in the case that equipment failure occurs. This substation distributes electricity to most of the city and ensuring reliability through the A-B redundancy is critical to provide reliable power to the community. This project includes replacing all relays within the substation with updated models that are supported. Existing relays within the facility are dated to a point at which they are no longer active industry models and therefore are less likely to have support in the case of failure. This project was successfully completed, tested. and commissioned during June.

### GREEN LAKE DAM FAILURE DETECTION

This project is focused on installing failure monitoring systems at the Green Lake Dam, in alignment with FERC requests. This project will focus on installing dam monitoring cameras, improved elevation sensors, and failure alarming instrumentation to alert those that may be impacted by a failure event. This project kicked off during the first quarter and is expected to begin construction in the third quarter of 2025. Site planning was wrapped-up in June and the project is on-track for Q3 completion.

### GREEN LAKE POWERPLANT REFURBISHMENT – PHASES II & III

The scope of this project includes the refurbishment of both hydropower units at the Green Lake Powerplant. This project has been selected for Department of Energy funding through the 247 Program. The FY26 budget request will bring the CBS portion of the funding to $7M. The CBS received unofficial award from the DOE that the remaining $3M is likely to be funded through the DOE’s 247 program.

### FERC COMPLIANCE

The scope of this project includes continuing the FERC relicensing process for the Green Lake Development. This project also includes the development of FERC Part 12D reporting for Blue Lake and Emergency Action Plan (EAP) updates for the Blue Lake and Green Lake Developments. During this quarter, FERC-requested studies moved forward. These studies were requested as part of the licensing process, to inform FERCs licensing requirements. Specifically, watershed analysis along the Green Lake Road was completed to determine sufficient culvert and drainage sizing for roadway crossings.

### METER REPLACEMENT PROJECT

The scope of this project includes the replacement of existing revenue meters to facilitate remote meter reading. This improvement will improve meter data collection and reduce the potential for meter reading error. The budget of this project was planned for $860k, with additional funding for four years to continue upgrading meters. This project will be managed by both internal and external resources. Externally, the manufacturer of the City’s meters will be utilized to provide project management and engineering support. The contract for this work was completed during this quarter. Work is anticipated to kick-off in the second quarter of 2025.

| **Legend:** | | |
|---|---|---|
| Meeting Objectives | At Risk of Missing Objectives | Missing Objectives |

## NSRAA WATER TURNOUT PROJECT

The scope of this project is to develop a new water turnout to meet water commitments to NSRAA. During this quarter NSRAA and the Department met and developed high-level scoping for the projects and outlined a rough schedule of tasks to take place. NSRAA will continue to work with their engineer to develop specifications for the new takeoff. The Department will continue to work with NSRAA to approve specifications and develop further planning.

## 69kV DISCONNECT SWITCH REPLACEMENT PROJECT

The scope of this project includes the replacement of eleven (11) 69kV disconnect switches that are beyond their life expectancy and prone to increased failure rates. Funding for these replacements was obtained through reallocation of existing switchyard upgrade funding. Work was completed to develop specifications for new switches and new switches were ordered during this quarter. New switches have a one-year lead time. Installation is anticipated to occur next spring (2026).

## REFERBISH GREEN LAKE SPARE TRANSFORMER

The scope of this project includes the testing and re-gasketing of one single-phase power transformer that serves as a spare unit for the Green Lake Powerplant. This unit currently serves as a spare and is critical to be operational. Recent evaluations have indicated that the transformer may have gas leak issues. Planning work occurred during this quarter. On-site work is anticipated to be completed in May of 2025.

## REPLACE GREEN LAKE UNIT EXCITATION

The scope of this project includes the full replacement of the unit excitation controls, cabinets, and associated transformers at the Green Lake Powerplant. Existing unit excitation has outdated components and has experienced age and design related failures at an undesirable frequency. Replacement of the system will improve reliability associated with Green Lake unit start-ups. This reliability will help unit startup times, as such, provide a better service to rate-payers.

## REPLACE CR0 (SUBMARINE DISTRIBUTION CABLE) FROM O'CONNEL BRIDGE TO ALEUTSKI IS.

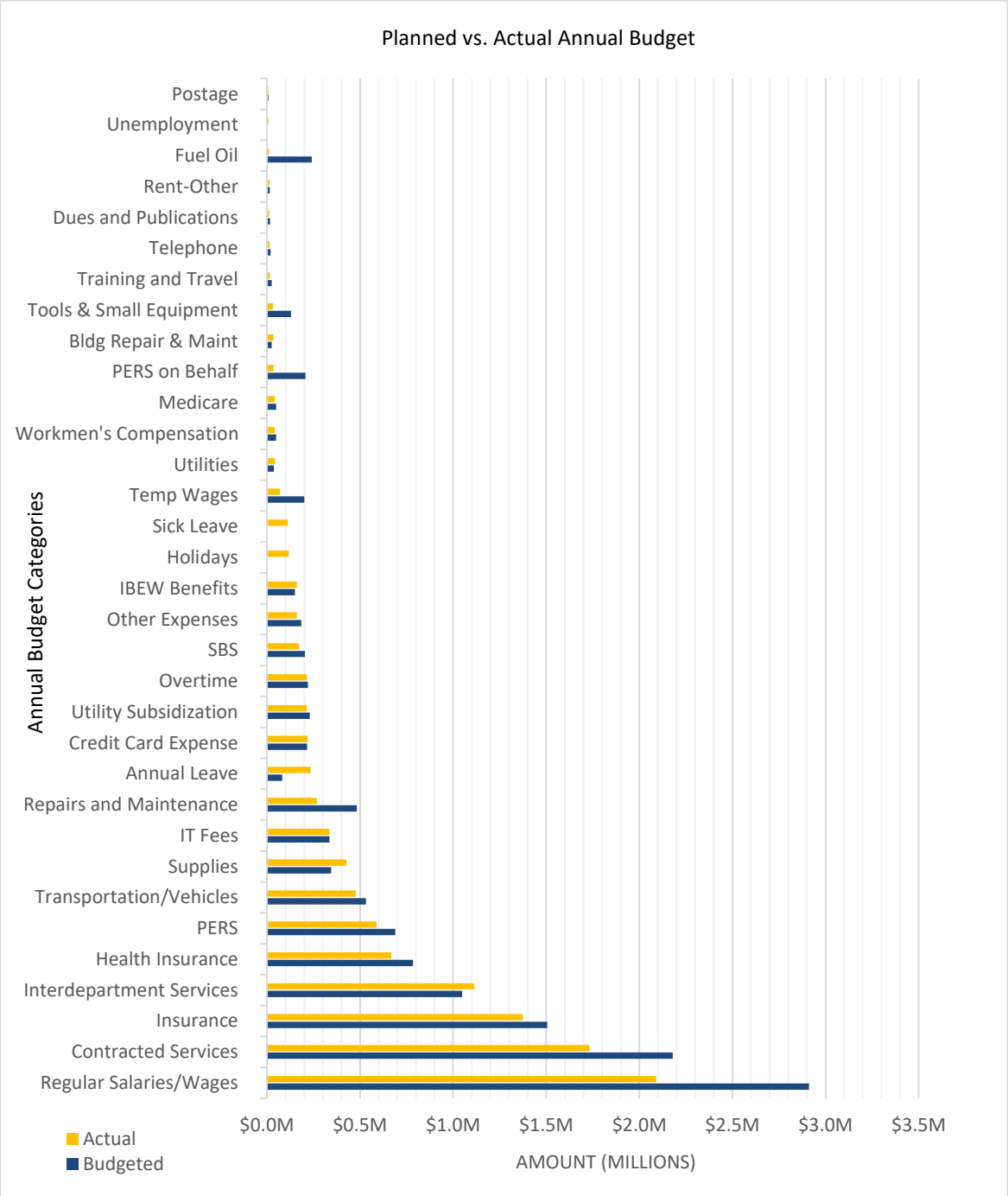
The scope of this project includes the full replacement existing underwater cable that currently stretches between the O'Connell Bridge to Aleutski Island. The existing underwater cable is beyond its service life and degraded. The said underwater cable is the initial run of distribution cable that serves many of the electrified islands south of Japonski Island. Replacing the cable will additionally include a significant amount of permitting to meet requirements mandated by the US Army Corps of Engineers, the NOAA, and DNR. This project is currently being synchronized with the CBS Sea Walk Project to ensure that project phases do not impact island reliability. This project is currently being initialized by moving forward with all necessary permitting. This project appears to have adequate funding and is anticipated to be completed by January 2026.

**Legend:**

| Meeting Objectives | At Risk of Missing Objectives | Missing Objectives |
|---|---|---|

## BUDGET

The following chart outlines operational encumbrances, expenses, and remaining budget through 06/30/2025
Total expenses to date are 87% of budgeted (cost) ; we are currently through 100% of the budgeted year (time)



## KEY OPERATIONAL PROJECTS

| Project Description | Scope | Schedule | Budget |
|---|---|---|---|
| Solicit Qualified Professional Services to Support Projects | Issue an RFQ for professional support services. These external services will help augment CBS's team to ensure that project management, engineering, and other technical services can be performed. | This project was executed on-schedule. The solicitation occurred this quarter and 9 consultant firms have been successfully added to the new roster. | N/A |
| Solicit T&D Support Services | Solicit T&D Support Services to replace existing, expiring contract. These services augment the CBS's line crew staffing, which has been difficult to recruit for. | | N/A |
| Quarterly Preventative Maintenance | Work teams performed various preventative maintenance procedures across all assets | In alignment with equipment specifications or as deemed by Department based on conditions | |
| Quarterly SCADA Maintenance | Perform quarterly SCADA backups and system updates | These services were performed while the services-providing contractor was in-town for the Marine Street Relay Replacement Project in June (on-schedule) | Within Budget; savings were realized from coordination with Marine Street Project |
| Quarterly Diesel Backup Generator Operation and Oil Sampling | Perform quarterly oil sampling and maintenance run of D4 and D5 diesel backup generators | Task was performed in June, on-schedule | Within Budget |
| Safety and Security Training | The department engaged in OSHA-required safety training and FERC-required security training | Completed | Within Budget |

**Legend**

- Meeting Objectives
- At Risk of Missing Objectives
- Missing Objectives

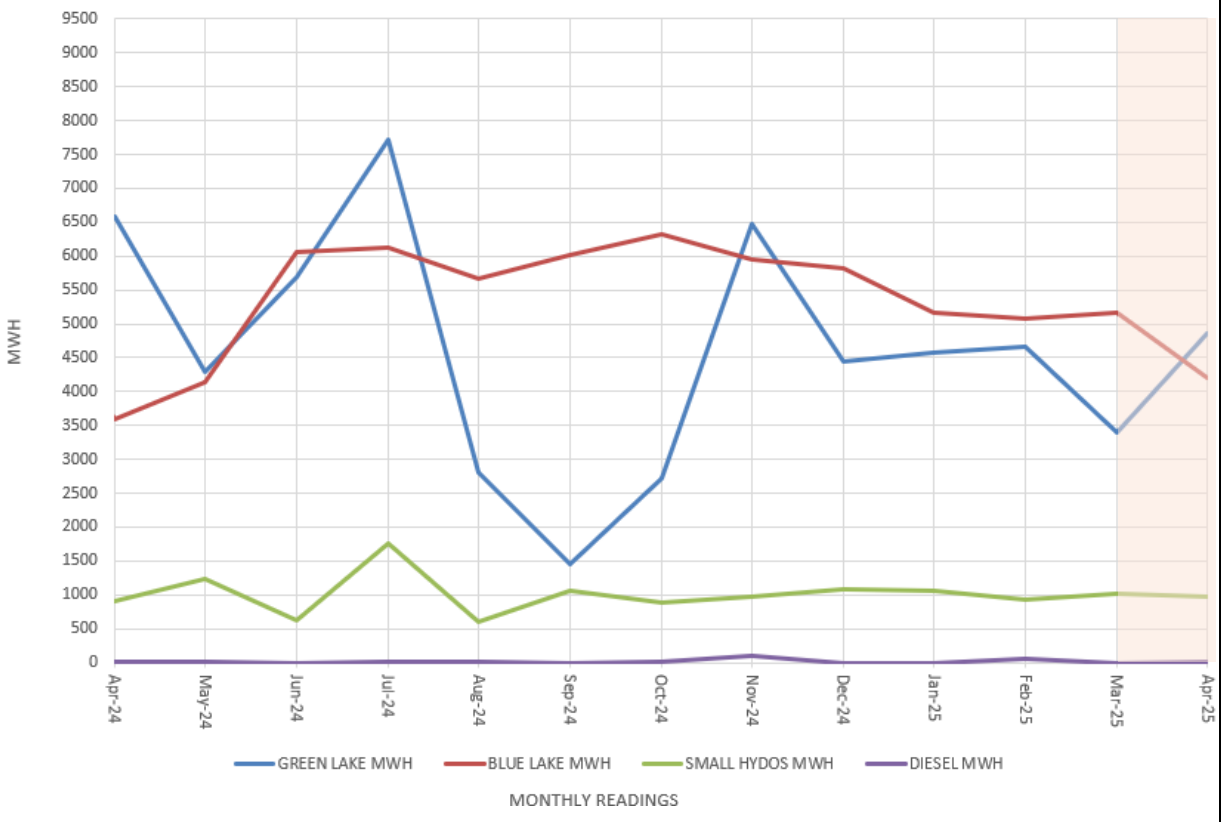
## PERFORMANCE MEASURES

### UNIT POWER GENERATION – APRIL 2025

**Performance Measure:** generation (by type & unit) possible vs. actual

| Generation Unit | Generation Type | Possible Generation | Actual Generation |
|---|---|---|---|
| Green Lake Unit 1 | Hydropower (9.3MW) | 6,896 MWH | 2,611 |
| Green Lake Unit 2 | Hydropower (9.3MW) | 6,896 MWH | 2,254 |
| Blue Lake Unit 3 | Hydropower (5.3MW) | 3,943 MWH | 1,458 |
| Blue Lake Unit 4 | Hydropower (5.3MW) | 3,943 MWH | 1,628 |
| Blue Lake Unit 5 | Hydropower (5.3MW) | 3,943 MWH | 1,116 |
| Blue Lake Fish Valve Unit | Hydropower (1.8MW) | 1,116 MWH | 985 |
| Jarvis Unit 1 | Diesel (backup) | Non-Op | Non-Op |
| Jarvis Unit 2 | Diesel (backup) | 1,860 MWH | 5 |
| Jarvis Unit 3 | Diesel (backup) | 1,860 MWH | 0 |
| Jarvis Unit 4 | Diesel (backup) | 3,348 MWH | 2 |
| Jarvis Unit 5 | Diesel (backup) | 9,672 MWH | 0 |

**Monthly Generation Production by Plant**

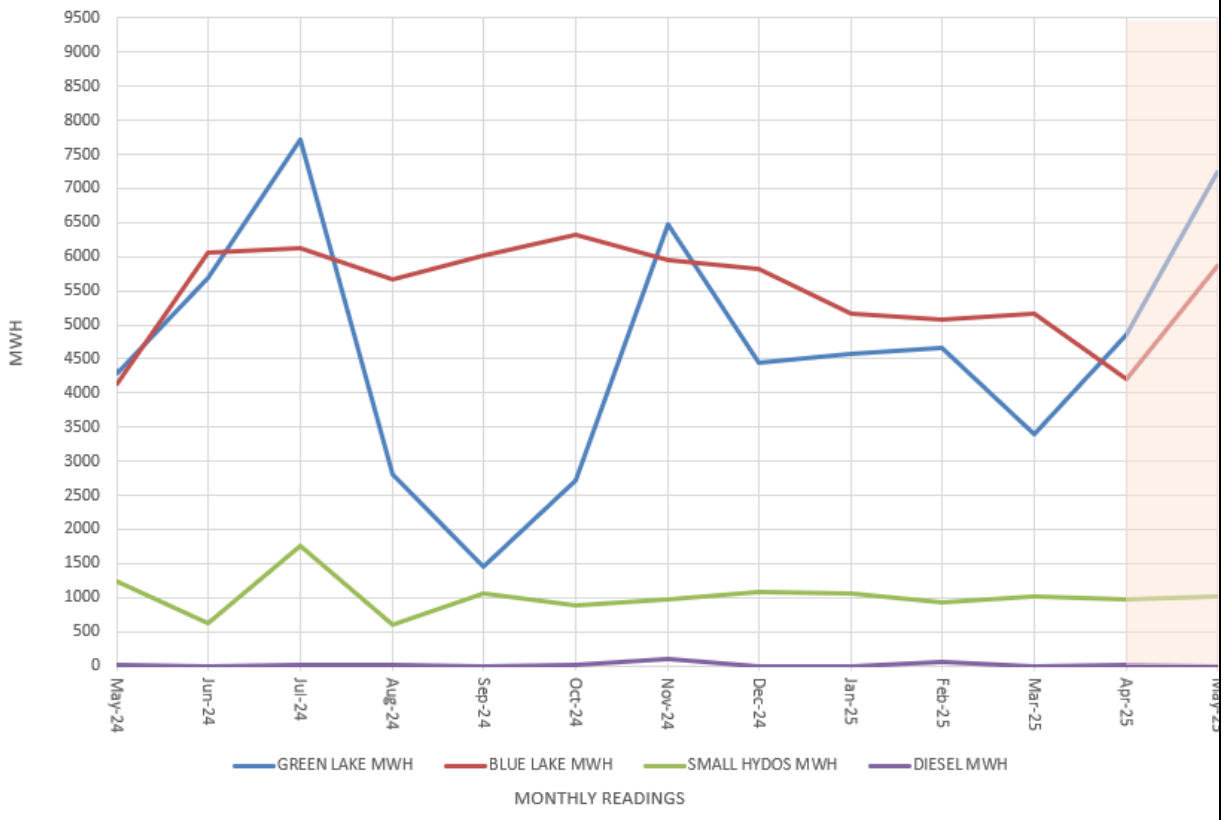


## UNIT POWER GENERATION – MAY 2025

**Performance Measure:** generation (by type) possible vs. actual

| Generation Unit | Generation Type | Possible Generation | Actual Generation |
|---|---|---|---|
| Green Lake Unit 1 | Hydropower | 6,919 MWH | 1,236 |
| Green Lake Unit 2 | Hydropower | 6,919 MWH | 1,033 |
| Blue Lake Unit 3 | Hydropower | 3,943 MWH | 1,551 |
| Blue Lake Unit 4 | Hydropower | 3,943 MWH | 2,239 |
| Blue Lake Unit 5 | Hydropower | 3,943 MWH | 2,075 |
| Blue Lake Fish Valve Unit | Hydropower | 1,116 MWH | 1,014 |
| Jarvis Unit 1 | Diesel (backup) | Non-Op | Non-Op |
| Jarvis Unit 2 | Diesel (backup) | 1,860 MWH | 0 |
| Jarvis Unit 3 | Diesel (backup) | 1,860 MWH | 5 |
| Jarvis Unit 4 | Diesel (backup) | 3,348 MWH | 0 |
| Jarvis Unit 5 | Diesel (backup) | 9,672 MWH | 0 |

**Monthly Generation Production by Plant**

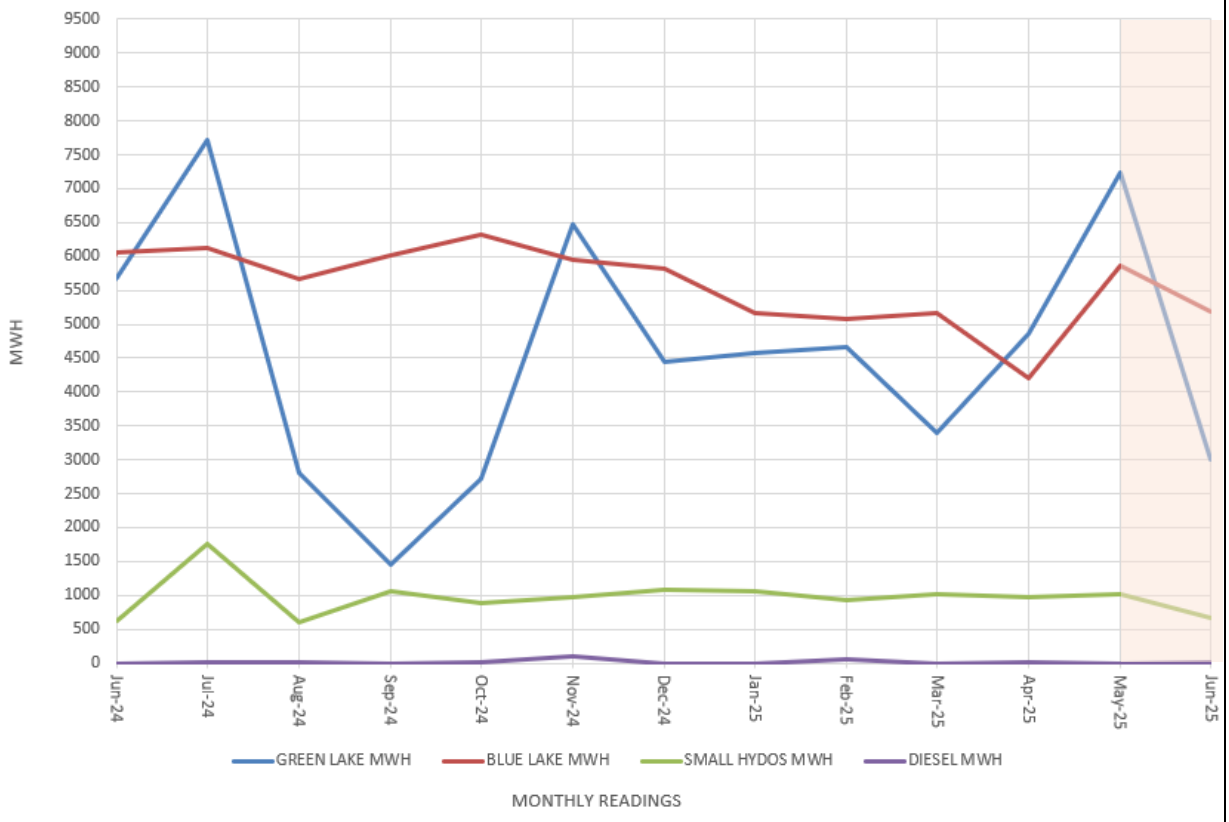


## UNIT POWER GENERATION – JUNE 2025

**Performance** Measure: generation (by type) possible vs. actual

| Generation Unit | Generation Type | Possible Generation | Actual Generation |
|---|---|---|---|
| Green Lake Unit 1 | Hydropower | 6,919 MWH | 1,464 |
| Green Lake Unit 2 | Hydropower | 6,919 MWH | 1,660 |
| Blue Lake Unit 3 | Hydropower | 3,943 MWH | 1,626 |
| Blue Lake Unit 4 | Hydropower | 3,943 MWH | 1,982 |
| Blue Lake Unit 5 | Hydropower | 3,943 MWH | 1,575 |
| Blue Lake Fish Valve Unit | Hydropower | 1,116 MWH | 661 |
| Jarvis Unit 1 | Diesel (backup) | Non-Op | Non-Op |
| Jarvis Unit 2 | Diesel (backup) | 1,860 MWH | 1 |
| Jarvis Unit 3 | Diesel (backup) | 1,860 MWH | 2 |
| Jarvis Unit 4 | Diesel (backup) | 3,348 MWH | 6 |
| Jarvis Unit 5 | Diesel (backup) | 9,672 MWH | 5 |

**Monthly Generation Production by Plant**



## DIESEL GENERATION USE

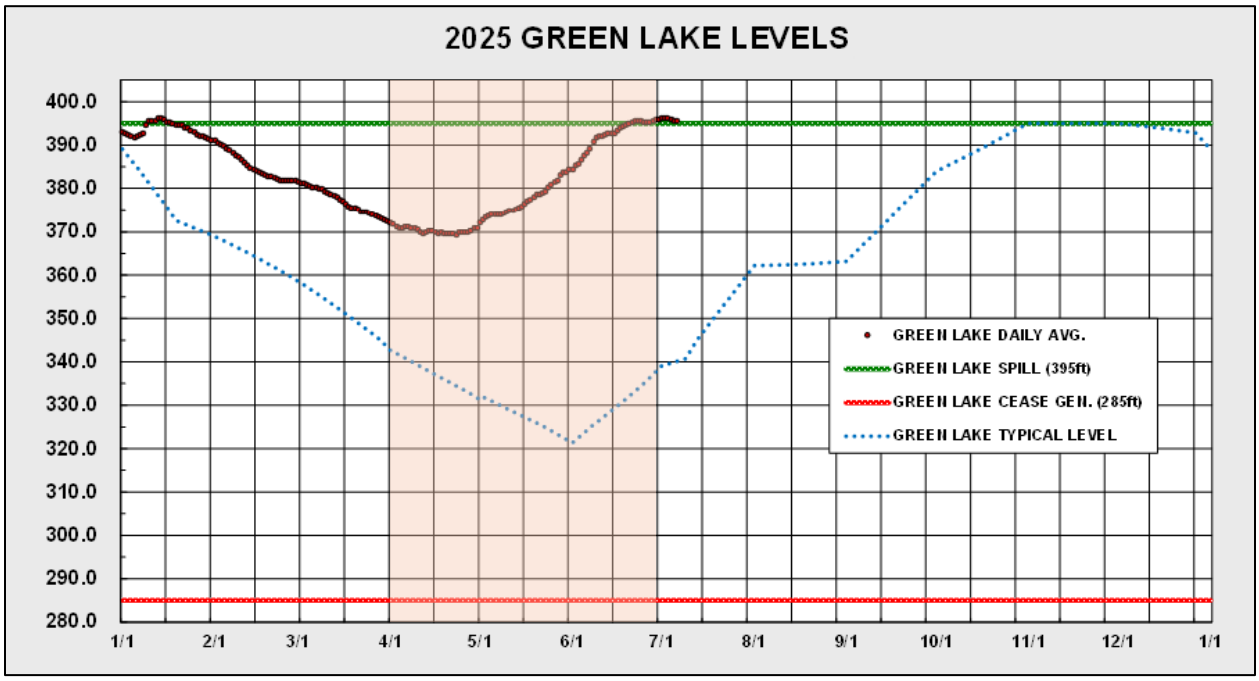
This performance measure monitors the use of diesel fuel for power generation. The Electric Utility Department operates and maintains five diesel powered generators as backup power suppliers to support the communities energy demands when hydropower units become unavailable. Often these backup units are used to supplement power when the hydropower units or transmission lines are taken offline for maintenance. There are also times when these units are operated as a part of their maintenance procedures. It is a goal of the Electric Utility Department to minimize diesel generator use to in-turn reduce related emissions and reduce ratepayer costs.

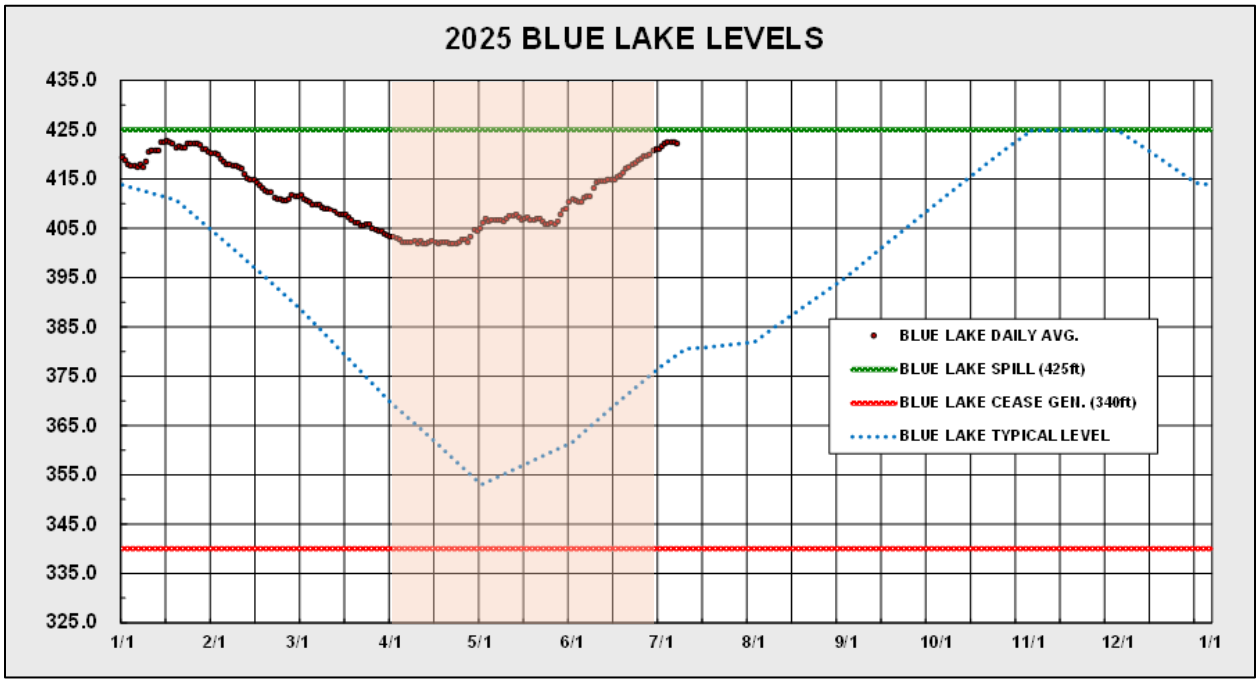
Diesel operation during the second quarter of 2025 was the result of quarterly preventative maintenance procedures and support operations for capital project switching.

| First Quarter 2025 Totals | | |
|---|---|---|
| **Generation Unit** | **Operating Hours** | **Fuel Used (gal.)** |
| Jarvis Unit 1 | 0 | 0 |
| Jarvis Unit 2 | 4.4 | 139 |
| Jarvis Unit 3 | 4.6 | 188 |
| Jarvis Unit 4 | 3 | 314 |
| Jarvis Unit 5 | 1 | 666 |

## WATER PLANNING OUTLOOK

This performance measure monitors the lake elevation levels and identifies where current levels are currently. It is the Departments goal to manage water use in a manner that ensures renewable power production and minimized use of diesel backup generation. Managing water to ensure that levels remain within the Rule Curve (Typical Level – as indicated by the blue line in the graphs), helps guide responsible use of water.

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