

The Puyallup School District’s powerED Program is working to maximize efficiency and utility cost savings for energy and water through low and no-cost opportunities. This report will share utility use data as it becomes available.

PROGRAM HIGHLIGHTS

Program highlights that have occurred during the month of May:

- During the month of June, McKinstry identified another 25 separate pieces of equipment that were showing various faults resulting in improper operation or causing them to run continuously. Nearly all these faults were identified using Reveal Analytics. PSD HVAC technicians and building automation vendors are working to correct the issues.
- In conjunction with recommendations from McKinstry powerED program, PSD Operations team began making modifications to how the HVAC systems operated across the district in December 2023, reducing excessive equipment runtime through schedule adjustments equipment programming modifications, and physical repairs. From January through May 2024, Electrical consumption (by unit) is **down 6.5%** and Natural Gas is **down 13.2%** from the same period the year before. This is weather normalized, meaning weather fluctuations have been accounted for and removed as a variable.
- Tacoma Public Utility reported in June that the most recent billing data from May shows that Rogers HS is currently at **178% of the savings goal** for year one of the TPU CSEM target of 2% reduction in electrical consumption! There are still savings opportunities to capture at that campus, and that isn’t even considering the capital improvements planned for the next few years.
- McKinstry is working with PSD Operations team and Building Automation System vendor, JCI, to test programming modifications to the HVAC system targeted at reducing the electric consumption at multiple sites during summer operations. This is being conducted with the longer-term goal of making programming modifications that will be able to be easily implemented for future summer breaks. Currently there are five schools undergoing the test programming and will be expanding the number of schools in the coming couple weeks pending test results.

UPCOMING AREAS OF FOCUS

- Buildings will continue to undergo programing modifications over the summer to their HVAC systems with as per mentioned in the Programming Highlights section above. PSD and McKinstry are taking a measured approach to verify that changes can be made during future summer breaks without adverse effects. This is a long-term approach intended to capture electrical savings annually for years to come.
- Continue to leverage Reveal Analytical and KPI tools to identify mechanical systems that are not operating efficiently, with an emphasis on mechanical cooling systems during the warmer months. This will represent the first significant opportunity to test some of the analytical tools that are designed specifically to identify faults associated with the cooling systems.
- Over the course of the summer, McKinstry will be on site at multiple sites to assist in testing building pressure to validate any potential issues that may arise from programming changes to HVAC programming changes.

SAVINGS SNAPSHOT

As Energy Conservation Measures are implemented, utility data will be collected and analyzed to determine Energy Savings. Savings data requires multiple months of utility data to collect, and we expect to start sharing savings by summer of 2024.

ELECTRIC SAVINGS



6.5 %
(kWh)

NATURAL GAS SAVINGS



13.2 %
(Therms)

SAVINGS IMPLEMENTED

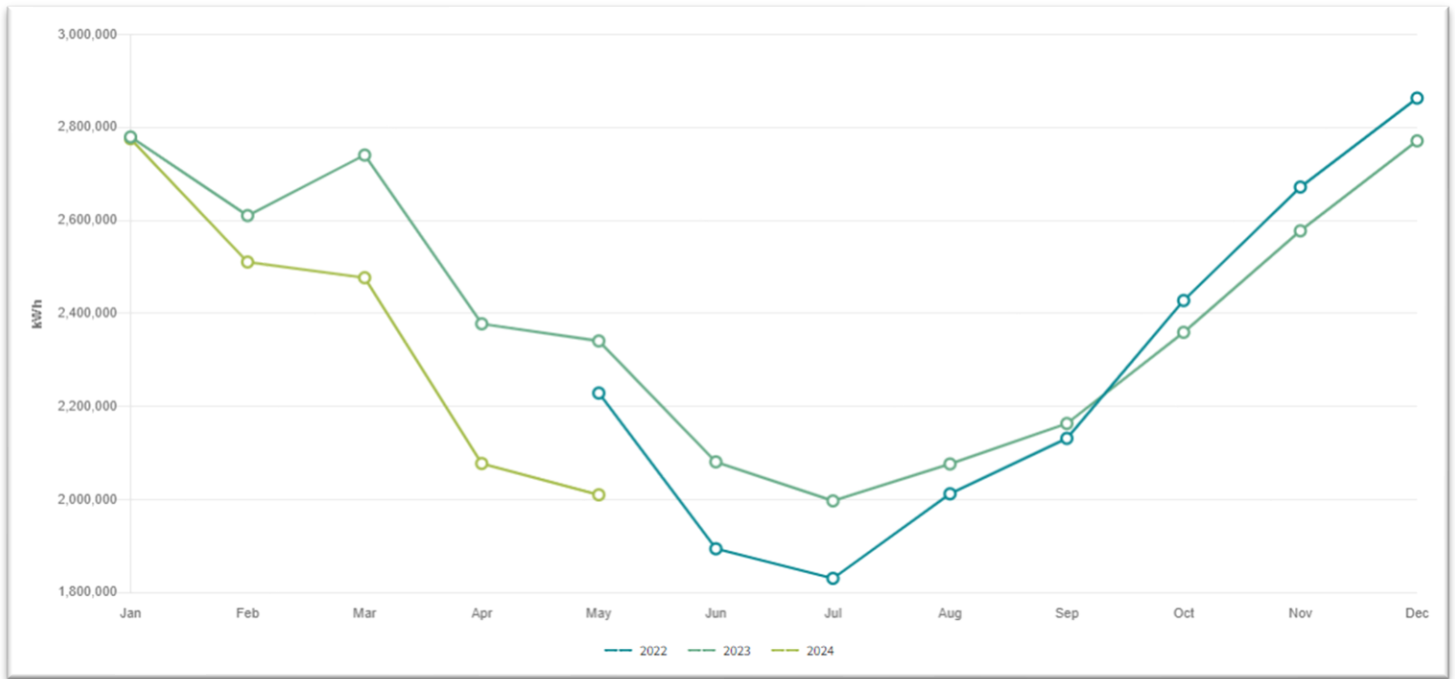


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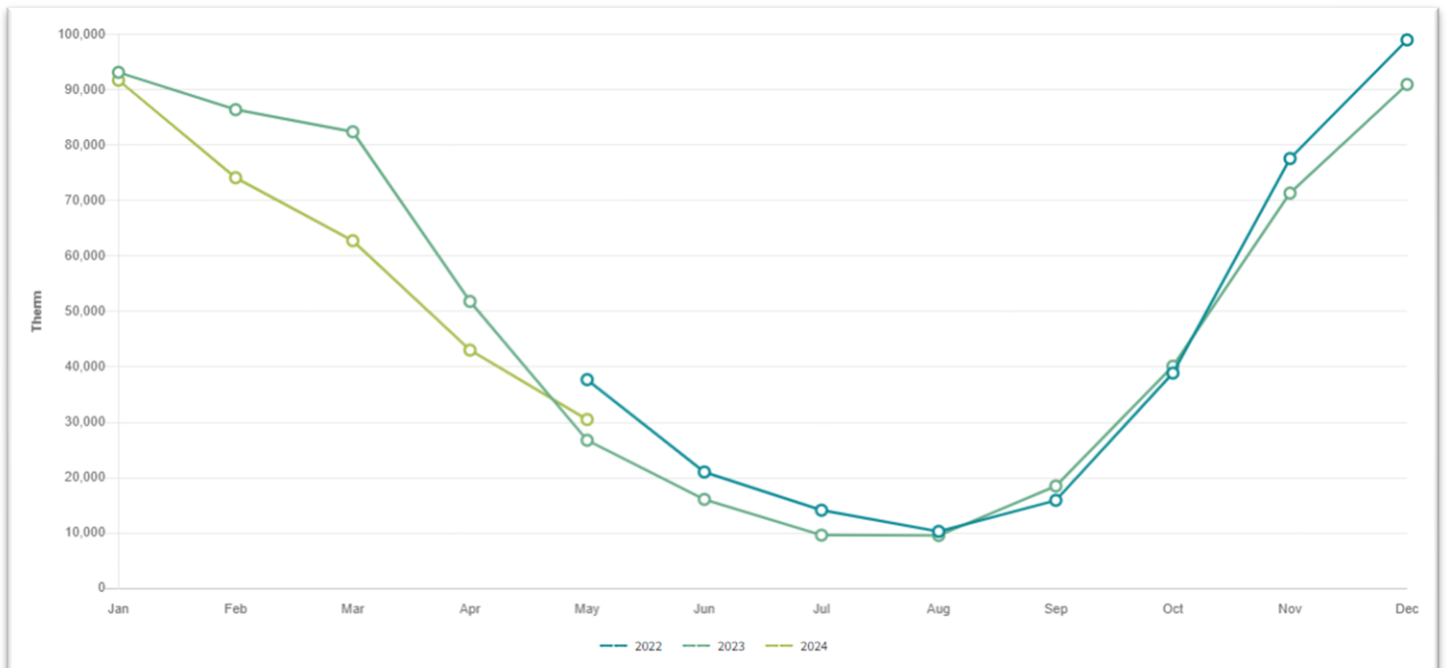


powerED Progress Report – June 2024

PREVIOUS 24 MONTHS ELECTRIC CONSUMPTION BY UNIT (kWh)



PREVIOUS 24 MONTHS NATURAL GAS CONSUMPTION BY UNIT (THERMS)





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