
ENGIE and Selma-Kingsburg-Fowler Photovoltaic and Battery Storage Project

Year 4 - Guarantee Report
March 1, 2022 – February 28, 2023



Project Overview – Year 4 (2022-2023)

Solar PV

- Guaranteed Savings Program for 20 Years beginning March 1, 2019
- Daily Monitoring and Annual Maintenance Services

Battery Storage System

- Guaranteed Savings Program for 20 Years beginning March 1, 2019
- Daily Monitoring and Annual Maintenance Services

Lighting Efficiency Retrofits

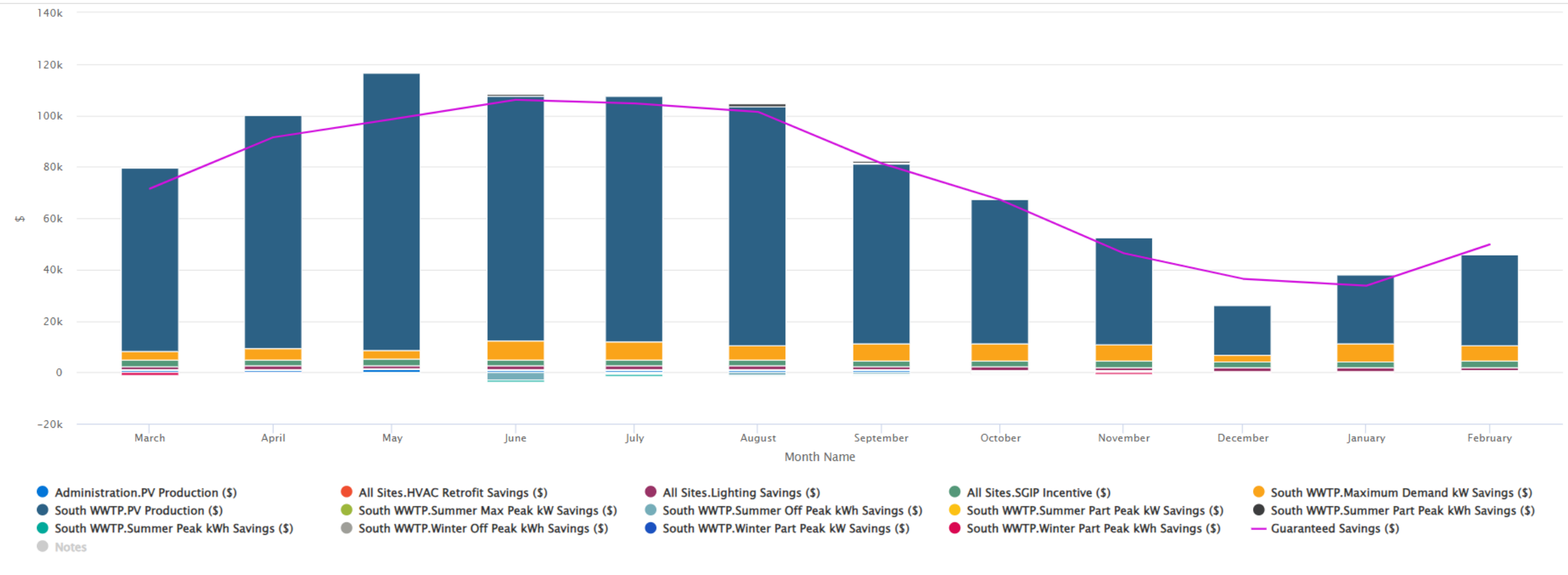
HVAC Retrofits

SGIP Rebates

- 5 Years of rebates totaling \$494,480
- Guaranteed \$49,448 in Year 4. Received \$28,801.

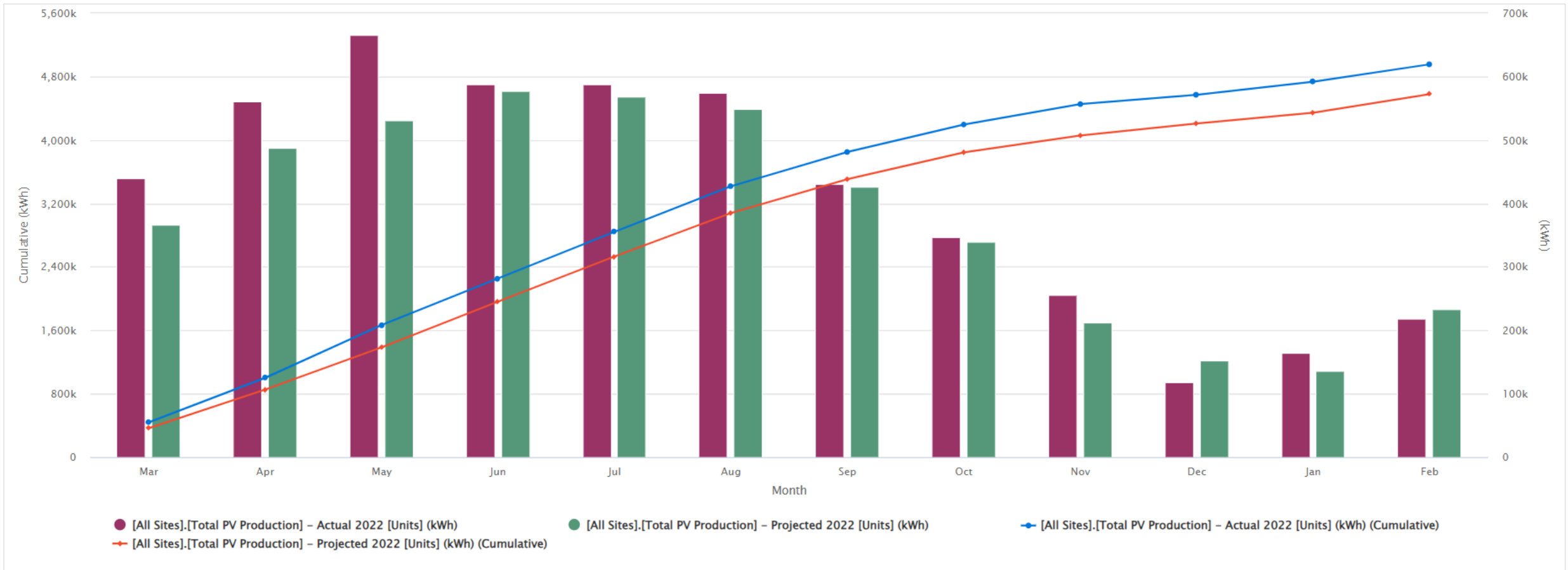
Overall Project Results - Year 4 (2022-2023)

\$919,951 (Actual Savings) vs. \$888,065 (Guaranteed Savings) = **103.6%**



Solar Photovoltaic Systems Performance - Year 4 (2022-2023)

4,953,837 kWh (Actual Production) vs. 4,577,608 kWh (Guaranteed Production) = **108.2%**



Solar Photovoltaic Systems O&M - Year 4 (2022-2023)

February 2022 - March 2023 Scheduled Maintenance

Electrical PM: May 2022

Panel Washing: August 2022

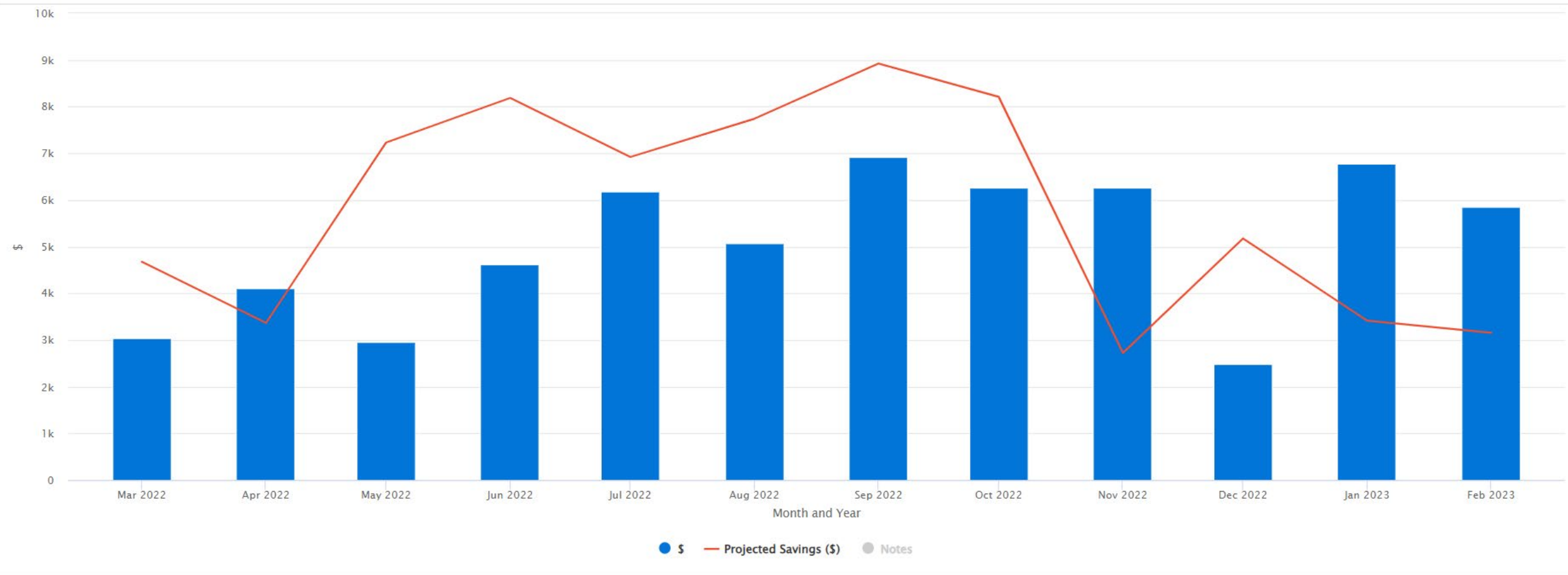
February 2022 - March 2023 Operational Issues or System Failures/Repairs

No operational issues or system failures/repairs were performed in Year 4.

No broken panels were recorded for this maintenance period.

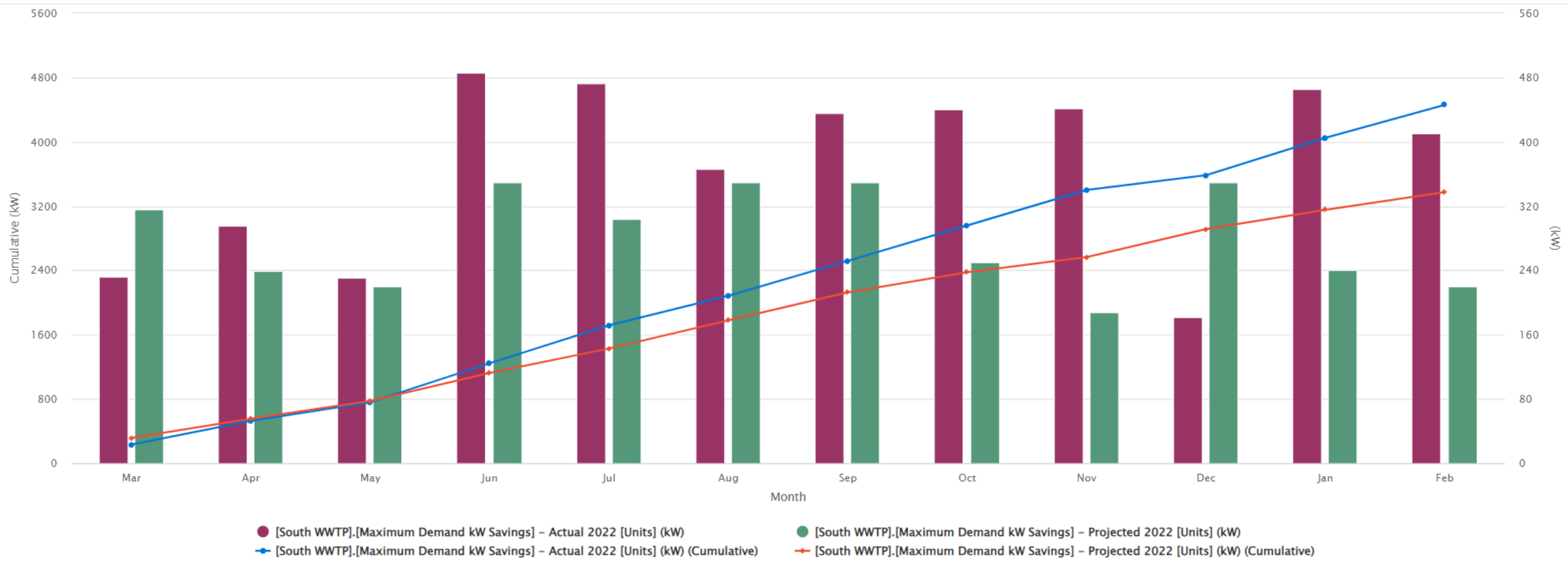
Battery Storage System Performance - Year 4 (2022-2023)

\$60,546 (actual savings) vs. \$69,699 (projected savings) = **86.9%**



Battery Storage System Performance - Year 4 (2022-2023)

4,458 kW (actual reduction) vs. 3,373 kW (projected reduction) = **132.2%**



Battery Storage System Performance O&M - Year 4 (2022-2023)

February 2022 - March 2023 Scheduled Maintenance

Routine maintenance was performed during repair visits (see below)

February 2022 - March 2023 Operational Issues or System Failures/Repairs

- 5/4/22 – BESS#1 Non-operational. Local controller wasn't pinging. Resolved 5/19/22 when field tech installed SharkBoard (upgraded computer) and restored battery to full operation.
- 5/19/22 – BESS#1 had HVAC unit fail. Field tech visited the site on 05/27/2022 and Replaced Kooltronics AirCond with new system.
- 12/2/22 – BESS#2 alarming. All the batteries were inspected for any sign of damage or loose connection and then power cycle the units to full production. No loss of service occurred.

Battery Storage System Q&A

1. How does the battery system operate?
 - Operates on an algorithm that uses current utility tariff, historical load profile and weather to predict optimal charge/discharge strategy to maximize utility bill savings.
2. What causes the battery system to miss on savings projections?
 - When facility loads are erratic/unpredictable (extreme weather, excessive equipment usage, etc.), the battery is often not able to react quickly enough to prevent a new max demand for the billing cycle.
 - Operational efficiency improvements and/or load shifting is a beneficial organic way of reducing utility bills, however, it will limit the battery system's opportunities to shave demand and rate arbitrage.
3. Guaranteed Savings vs. Utility Bill Savings
 - Comprehensive guarantee to compensate for any single underperforming measure.
 - Savings are calculated using a network of revenue grade meters that report live data to ENGIE's software platform. We calculate savings with kw/kwh measurements that should translate to a similar utility bill reduction but are never going to be exact to the Utility.



Thank You