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

*Year 3 - Guarantee Report*  
*February 1, 2021 – March 31, 2022*

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## Project Overview – Year 3 (2021-2022)

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### 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

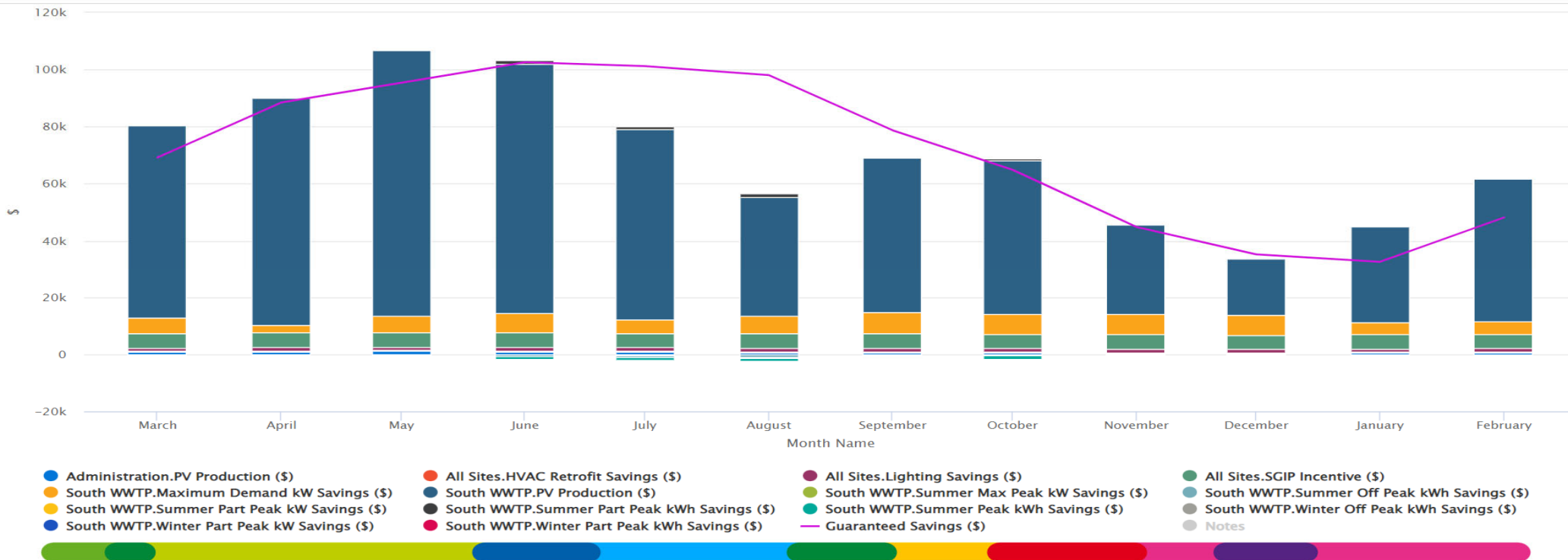
### SGIP Rebates

- 5 Years of rebates totaling \$494,480
- Guaranteed \$49,448 in Year 3. Received \$60,642.

## Overall Project Results - Year 3 (2021-2022)

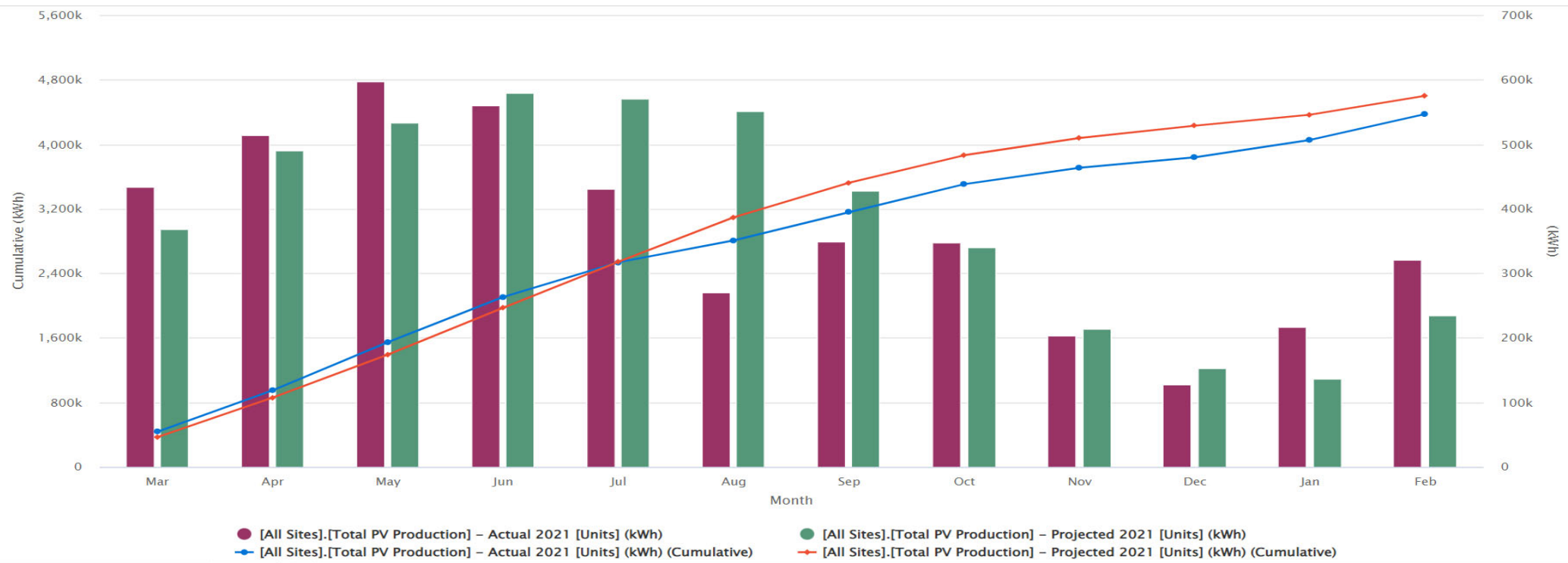
\$830,634 (Actual Savings) vs. \$859,435 (Guaranteed Savings) = **96.6%**

Shortfall payment of \$28,801 was made to the district in September 2022.



# Solar Photovoltaic Systems Performance - Year 3 (2021-2022)

4,375,252 kWh (Actual Production) vs. 4,600,611 kWh (Guaranteed Production) = **95.1%**



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## Solar Photovoltaic Systems O&M - Year 3 (2021-2022)

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### February 2021 - March 2022 Scheduled Maintenance

Electrical PM: June 16, 2021

Panel Washing: September 13, 2021

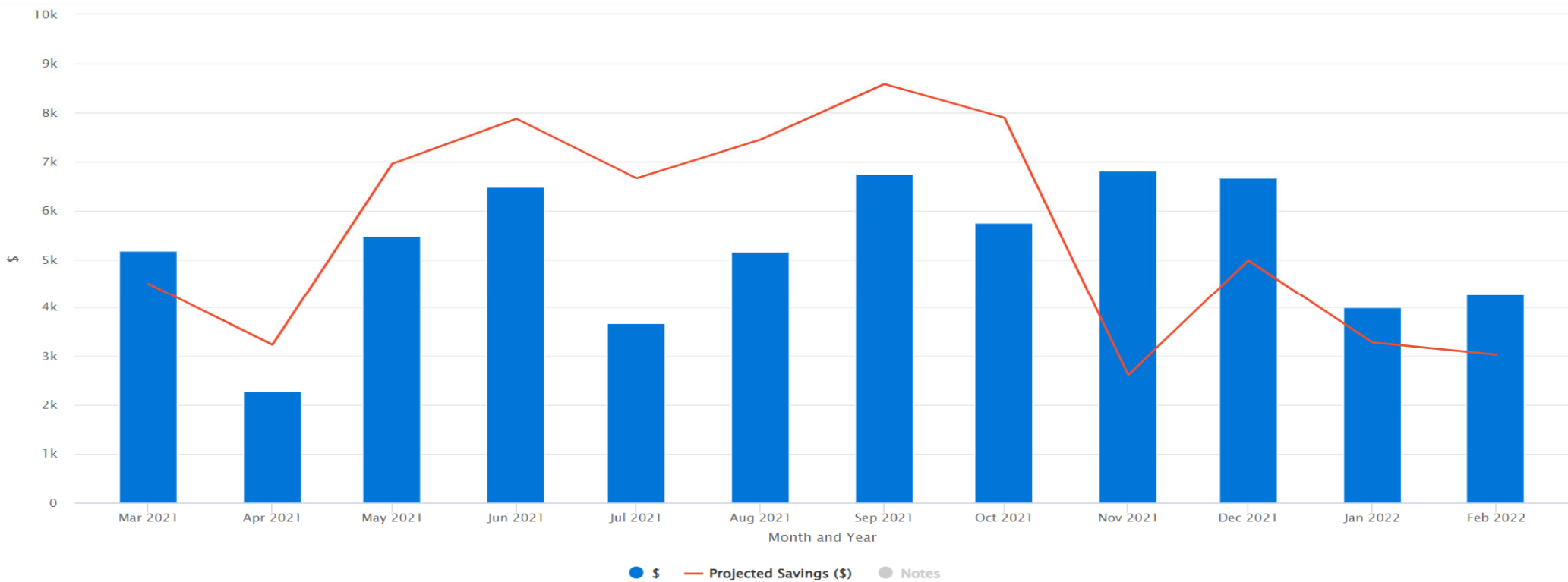
### February 2021 - March 2022 Operational Issues or System Failures/Repairs

Minor warranty repairs performed in Year 3 including two inverter repairs and four tracker part failures that resulted in portions of the systems to be offline for short periods of time.

The repair required for Inverter 2-2 took an extended period of time (3 months) as only Solectria Technicians may perform the repair at the risk of voiding the warranty if ENGIE O&M technicians were to perform the repair.

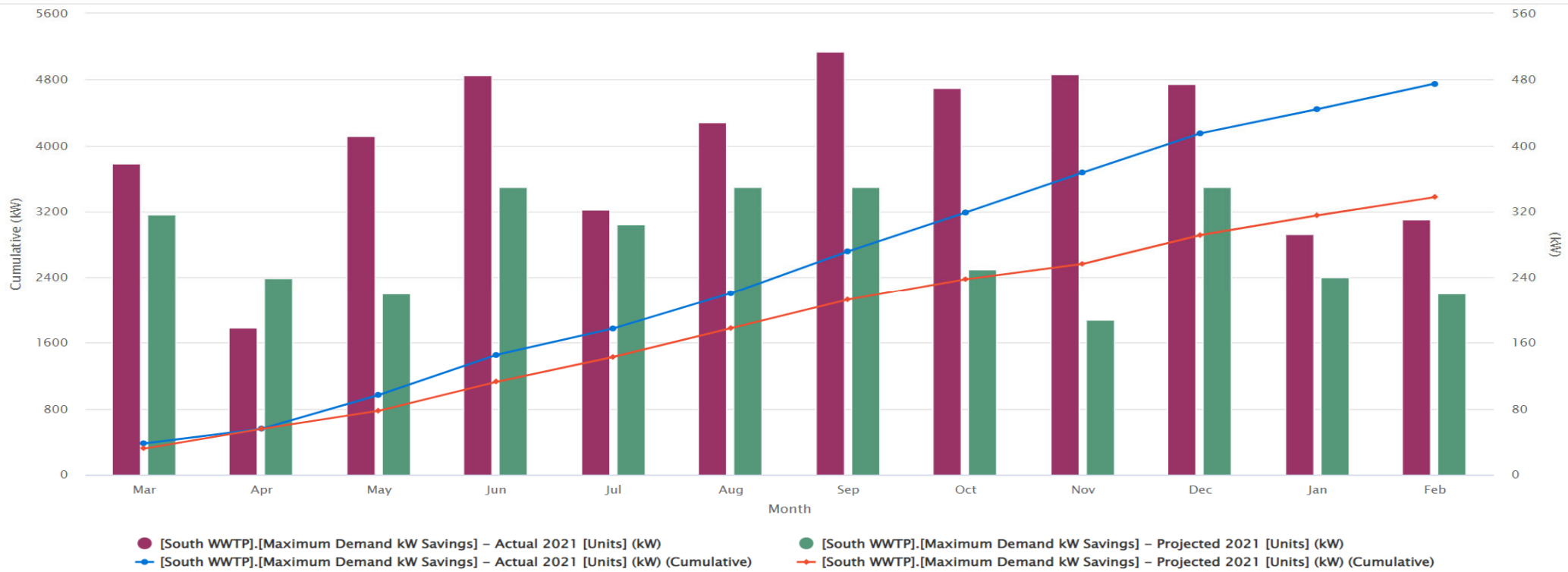
## Battery Storage System Performance - Year 3 (2021-2022)

\$62,505 (actual savings) vs. \$67,030 (projected savings) = **93.2%**



# Battery Storage System Performance - Year 3 (2021-2022)

4,749 kW (actual reduction) vs. 3,373 kW (projected reduction) = **140.8%**



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## Battery Storage System Performance O&M - Year 3 (2021-2022)

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### February 2021 - March 2022 Scheduled Maintenance

Routine maintenance was performed during repair visits (see below)

### February 2021 - March 2022 Operational Issues or System Failures/Repairs

- May 5, 2021 – May 8, 2021: Minnow board faulted. It was replaced with a new VictorBoard.



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## Battery Warranty - Year 3 (2021-2022)

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1. Who manufactured the battery?
  - Samsung SDI Co., Ltd.: battery
  - Princeton Power Systems: inverters and system enclosure
  - GreenCharge Networks (ENGIE Storage): controller assembly
2. Has the battery manufacturer gone out of business?
  - No, Samsung is the battery manufacturer and are still in business. Princeton Power Systems has gone out of business
3. How long is the battery warranty?
  - Samsung battery product warranty is 2 years; extended performance guarantee is 20 years
4. The contract called for the battery to be swapped out in Year 10. If the mfg. went out of business, how are those getting swapped out?
  - Battery manufacturer is not out of business.
  - Regardless of state of operation of battery manufacturer, battery will be replaced by Engie.



# Thank You

