

Case Study: Granite Construction Granite Construction Achieves \$860K Annual Savings with Stem

GRANITE®

Location

Stockton, CA

Facility Type

Construction Plant

Solutions

Energy Storage, Utility Bill
Optimization

Energy Storage System Size

4.6 MW / 8.9 MWh

Annual Savings

\$860K Across Five Sites

Commercial Operation Date

August 2018

Incorporated in 1922, Granite Construction is one of the largest diversified construction and construction materials companies in the United States as well as a full-suite provider in the transportation, water infrastructure and mineral exploration markets serving North America and Guam.

Faced with rising demand charges and changing rate structures, Granite pursued energy storage to gain the flexibility to buy energy at the most inexpensive times and use stored power when costs are higher. Granite first installed Stem energy storage at its French Camp site, near Stockton, California, in 2018. The success of that project moved Granite to install Stem systems at four other locations. In 2020, the combination of Stem's Athena smart energy software and a storage-friendly tariff saved Granite \$860,000 on utility bills.

“Athena is key to making the system function, as it can monitor the grid and know when to switch to battery power. The other companies we considered for battery storage had similar storage systems but lacked Athena's AI capabilities. Ultimately, we chose Stem because of their knowledge of battery systems and many installations throughout California. Granite needed an energy storage provider who could work with all three big utilities, as our sites span all of them.”

Chris Herne

Corporate Plant Equipment Manager, Granite Construction



Challenge

Granite explored energy storage as a means of reducing high demand charges. Many providers had similar-looking systems, but only Stem offered the smart energy software capabilities that were essential to optimizing batteries to maximize savings. And with a footprint across California, Granite needed a provider who could work with all three of the state's major investor-owned utilities.



Solution

Granite chose Stem for our knowledge of battery systems, our installation expertise throughout California, and our best-in-class Athena software. Athena's predictive analytics, which combine tens of thousands of historical, forecasted, and real-time data points, are ideal for allowing Granite to switch to stored battery power to save on energy costs. Installing storage also allowed Granite to qualify for PG&E's Option S tariff, which greatly increased potential savings.



Results

Athena's AI capabilities monitor grid conditions and automatically switch Granite's plants to battery power during peak demand times. In 2020, Stem's Athena software and the Option S tariff saved Granite \$85K at the French Camp location and \$860K across all five of its Stem systems. More installations are in progress.

To learn more about Stem's solutions, contact stem.com/contact-us.