

California is the most dynamic U.S. market for customer-sited energy storage. California's Self Generation Incentive Program (SGIP) incentive, along with its high energy and demand prices, make battery storage one of the most financially attractive energy projects commercial and industrial (C&I) customers can undertake.

Option S is a Pacific Gas & Electric (PG&E) tariff designed for customers with storage. Customers' demand charges are split between a monthly demand charge and a daily demand charge. The daily demand charge, billed according to a customer's daily peak demand, creates an additional cost savings opportunity for energy storage systems (ESS). Energy charges are consistent with those under PG&E's solar-friendly Option R tariff.

Athena[®] Software Optimized for Demand Charge Reduction

Stem's Athena[®] smart energy software identifies both monthly and daily demand peaks to maximize savings under Option S. To reduce daily demand charges, Athena accurately predicts more frequent site peaks and then optimizes battery dispatch during peak periods. This unlocks substantial additional savings that are not possible under tariffs where demand charges are assessed solely on a monthly basis.

Customer Benefits

By enrolling customers in Option S, Stem has reduced customers' utility bills by 10-35% and generated a 30% return on investment (ROI) on the ESS. Option S is ideal for "peaky" loads with low load factors. Examples of optimal load types include aggregates and mining, heavy industrial, food processing, and arenas and event centers. Sites with peak demand over 400kW are most likely to see substantial savings.

Location



Key Benefit

Daily demand charge creates additional savings opportunity with storage

Eligibility

Commercial & industrial customers with energy storage

Best-fit Customers

- Sites with peak load >400 kW
- "Peaky" load profiles
- Heavy industrial, aggregates, food processing, and others

Typical Results

- 10-35% utility bill savings
- 30% project ROI

Eligibility

Option S is available to all existing B-19 Voluntary, B-19, and B-20 PG&E customers, as well as customers on legacy C&I rates that are eligible to transition to the "B" rate. It is available to bundled, Direct Access (DA), or Community Choice Aggregator (CCA) customers. All customers on the Option S tariff must have an ESS onsite, and the ESS inverter capacity must be greater than 10% of the site peak load.

Enrollment

Enrollment under Option S is capped at 50MW per each B-19 Voluntary, B-19, and B-20 site. In order to enroll in Option S, a customer's ESS must first receive Permission to Operate (PTO) from PG&E. PG&E plans to set up a reservation system so that customers can reserve their opportunity to enroll in Option S while they wait for their ESS to be interconnected and deployed.

Project Highlight



Granite Construction Stockton, CA Use Cases: Utility Bill Optimization ESS Size (Fleet): 2.7MW / 4.7MWh Actual 1-Year Savings (Fleet): \$860,000 (in 2020)

Granite Construction, an early adopter of Option S and a Stem customer since 2018, enrolled its Stockton plant soon after the tariff became available. After enrolling six more sites with Stem systems under Option S, Granite realized annual savings of \$860,000. The company is now scoping out additional sites with Stem to capture more Option S value.

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

