

# stem

## Clean Energy Projects for Public Power & Municipal Utilities

Stem offers a turnkey solution that allows public power and municipal utilities to design, install, and operate clean energy projects with lower risk and greater efficiency. Through our Athena® platform and our team's extensive knowledge and expertise, we help utilities deploy solar and storage to maximize resilience, lower costs, and support customer carbon emission reduction goals.



# Proven Success in Clean Energy Portfolios

Stem operates the world's largest digitally connected energy storage network across more than 40 utility territories throughout North America and within various ISO markets. Our extensive portfolio includes the first-ever municipal energy storage virtual power plant (VPP) with Austin Energy and a 33MWh energy storage system for Orange County Sanitation District to help deliver wastewater services to 2.6 million customers. In September 2022, our Southern California fleet of 86MW of stored energy responded to a 5-hour flex alert during heatwave-driven blackouts by delivering much-needed capacity – enough to power 103,000 homes.

Stem's front-of-the-meter, utility-level solutions empower public power and municipal utilities to control costs by mitigating peak impacts and unlock new revenue streams such as those from wholesale markets. With Stem's Athena platform providing a single pane of glass to manage your entire portfolio, you are positioned to maximize the value of your clean energy assets as you expand deployments across your service territory. Stem's solutions help public power organizations accelerate carbon reduction goals by integrating renewables like solar and deliver enhanced resiliency to customers.



## Seamless Integration with Utility Control Centers

Stem supports communications protocols like DNP3, allowing for seamless integrations with utility dispatch platforms. We have responded to more than 83,000 grid services site dispatches. By feeding event information into Stem's optimization, Athena can optimize the dispatch of the ESS around a use case (e.g. coincident peak mitigation) while also meeting goals for solar charging, energy shifting, and other objectives. And Athena's applications for public power and municipal utilities enable operators to schedule dispatches with a simple user interface and provide real-time operating visibility into system status and available capacity.



## Lifecycle Support & Professional Services

As part of the Inflation Reduction Act (IRA), which was signed into law in August 2022, public power and municipal utilities now have a pathway to capture direct cash payments via the Investment Tax Credit (ITC), which offers a rate as high as 50% of a storage or solar project's cost. Instead of relying on third-party owners and PPAs to monetize these tax incentives, utilities can now own assets directly without the risk of leaving money on the table. Stem works with our utility partners to navigate optimal strategies to maximize these direct pay ITC benefits.



## Diverse and Reputable Supply Chain Vendors

Stem has the largest and most advanced suite of storage products on the market, with hardware combinations including AC- and DC-coupled solutions by top tier OEMs like Tesla, Sungrow, Powin, and SYL. Leveraging years of procurement expertise, Stem competitively sources hardware with the flexibility to find the right combination of equipment and warranties for public power projects. Stem's experience and hardware flexibility can help manage supply chain complexities, like increasing emphasis on domestic sourcing key to capturing full value through the IRA.



## Unparalleled Operational Support

Stem offers full operational support through 24/7 site monitoring, alarm detection, and real-time controls, allowing us to respond to site and market conditions within seconds. We quickly diagnose and resolve both software and hardware issues to maximize availability, allowing utility operators to maintain focus on delivering cost-effective, reliable service to their communities.



## World-class Clean Energy Optimization Platform

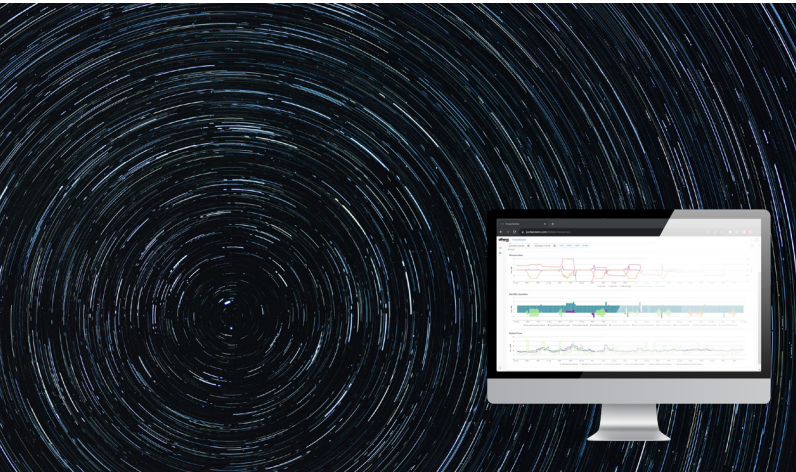
As the world's most utilized, validated, and successful optimization software for clean energy resources, Stem's Athena platform helps maximize performance of clean energy assets via industry-leading forecasting, optimization, and controls.



On Friday, Aug. 14, the first day California ordered rolling blackouts, Stem, an energy company based in the San Francisco Bay Area, delivered 50 megawatts — enough to power 20,000 homes — from batteries it had installed at businesses, local governments and other customers.



# Project Spotlights



## Central Coast Community Energy & Silicon Valley Clean Energy

### California

**Software Solution:** PowerBidder™ Pro

Stem's Athena® PowerBidder™ Pro application will support scalable bid optimization management and maximize the value of multiple energy storage systems for these community choice aggregators. Under this software-only contract, they will use Stem's advanced price forecasting and optimization features to manage and execute trading strategies for a growing portfolio of utility-scale assets in CAISO.



## Hawaii Electric Company (HECO)

### Hawaii

**Use Cases:** Energy Storage, Solar Plus Storage, Demand Response, Sustainability, Virtual Power Plant

**Storage System Size:** 4MW / 8MWh, 1MW VPP

Stem was the utility's key partner in designing and implementing its first energy storage pilot, which was among the first of its kind in the U.S. With the support of a \$1M federal grant, Stem and HECO successfully deployed a 1MW (VPP) on Oahu across 29 customer sites.



## Orange County Sanitation District

### California

**Use Cases:** Energy Storage, Utility Bill Optimization, Demand Response

**Storage System Size:** 4.95 MW / 32.56 MWh

Stem's Athena® enables four value streams for OC San: receiving revenue by allowing the ESS owners to use the available plant demand; achieving energy savings and UBO by charging the batteries during lower energy costs and discharging at peak energy costs; discharging when a momentary peak demand exceeds the average monthly peak during an unexpected cogeneration system shutdown; and receiving California's SGIP funding, successfully deployed a 1MW (VPP) on Oahu across 29 customer sites.

Proud Member



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About Stem, Inc.

**Stem is a global leader in AI-driven  
clean energy solutions and services.**

Stem (NYSE: STEM) is dedicated to accelerating the energy transition and transforming the grid. We offer flexible, integrated solutions to improve returns and maximize the economic, environmental, and resiliency value across energy assets. Our trusted energy optimization platform empowers our partners & customers to deploy and unlock the full potential of clean energy assets at scale. Learn more at [stem.com](https://stem.com).

**[For more information, contact sales@stem.com.](mailto:sales@stem.com)**

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