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 standalone energy storage, solar plus storage, and EV-charging infrastructure 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 86 MW 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.



Athena-integrated EV-charging Infrastructure for **Electrified Fleets**

With energy storage poised to play a unique role as a smart integrator of EVs and distributed energy assets. Stem is well positioned to help customers navigate the transition to electrified fleets. We offer integrated services that include all aspects of eMobility planning, design, and implementation - covering vehicles, charging infrastructure, energy management, on-site energy generation, and storage. When digitally integrated to the EV charging system, Athena unlocks value in utility bill savings, GHG reductions, energy resilience, and many other ways.



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.



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.



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 like standalone storage, solar plus storage, and EV charging - via industry-leading forecasting, optimization, and controls.



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 thirdparty 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 DCcoupled 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.



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 Spotlight



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.grant, Stem and HECO successfully deployed a 1MW (VPP) on Oahu across 29 customer sites.

Proud Member



About Stem

A global leader in artificial intelligence (AI)-driven clean energy storage systems

Stem (NYSE: STEM) provides solutions that address the challenges of today's dynamic energy market. By combining advanced energy storage solutions with Athena®, a world-class AI-powered analytics platform, Stem enables customers and partners to optimize energy use by automatically switching between battery power, onsite generation, and grid power. Stem's solutions help enterprise customers benefit from a clean, adaptive energy infrastructure and achieve a wide variety of goals, including expense reduction, resilience, sustainability, environmental and corporate responsibility, and innovation. Stem also offers full support for solar partners interested in adding storage to standalone, community, or commercial solar projects – both behind and in front of the meter. With the acquisition of AlsoEnergy, Stem is now a leader in the solar asset management space, bringing project developers, asset owners, and commercial customers an integrated solution for solar and energy storage management and optimization.

For more information, visit www.stem.com

