



## Athena® Bidder

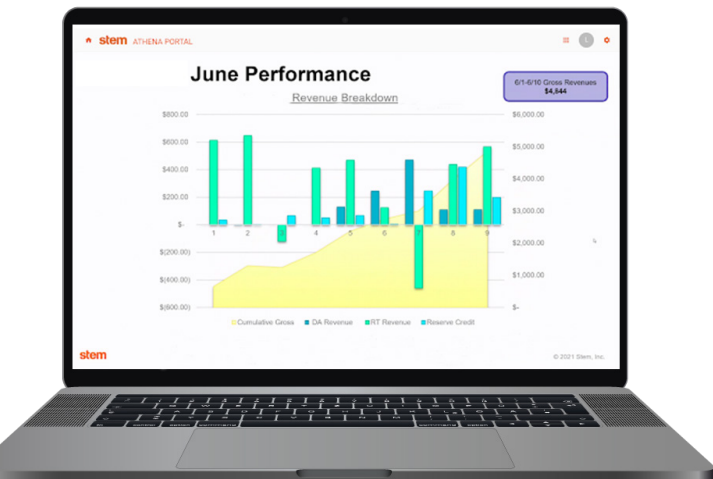
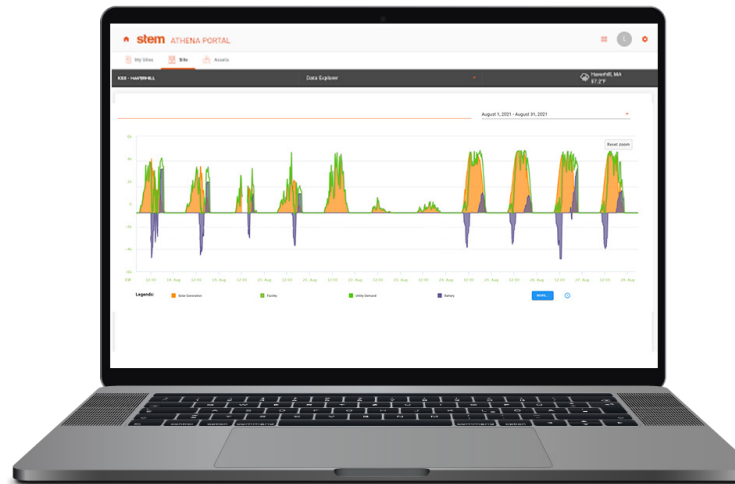
### Real-Time Optimization for Wholesale Market Revenues

Athena® Bidder is Stem's proprietary market operations engine that maximizes asset revenues by automating bid generation and submission. Athena uses cutting-edge forecasts to predict market prices, grid events, and solar generation, and implements the market strategy to bid and dispatch assets and settle transactions via Athena's market integrations. Athena Supervisor provides real-time visibility into how Athena manages and monetizes wholesale energy assets.

## Anticipate the Future

Athena's machine learning algorithms adapt to the specific equipment, location, and market characteristics of each site.

Athena generates a proprietary forecast of nodal prices which inform each asset's bids into wholesale markets. Athena also forecasts solar production and ensures hybrid "solar + storage" power plants comply with ITC and solar charging requirements.



## Maximize Revenues

Athena optimizes wholesale market revenues based on market price and renewable generation forecasts, site constraints, and any additional value available through incentives or other regional programs.

Athena's sophisticated algorithms continuously evaluate the highest-value revenue opportunities and adjust each system's bids in each market interval. Athena responds to cleared bids and dispatch signals, produces shadow settlements, and ensures overall operational integrity. Users can adjust Athena's bid strategies according to preference and risk tolerance. And Athena learns from system performance to automatically improve future forecasts and bids.



## Monitor Performance

Athena provides a window into how your energy assets are performing. Review financial performance and settlement data; key performance attributes including real-time weather, solar production, market bids, battery state-of-charge; and Athena-optimized energy operations, browsing over any look-back period.



### Kearsarge Energy

Haverhill, MA

**Solutions:** Solar + Storage, Incentive Optimization, Wholesale Market Revenues

**ESS Size:** 2MW / 9MWh plus 3.6MW solar PV

**Wholesale Market Revenue Streams:** Energy, capacity, reserves, regulation

## About Stem, Inc.

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

Stem delivers and operates smart battery storage solutions that maximize renewable energy generation and help build a cleaner, more resilient grid. Our customers include Fortune 500 corporate energy users, project developers and installers, and utilities and independent power producers.

Stem's market-leading Athena® software uses advanced AI and machine learning to automatically schedule battery and solar dispatching to maximize project ROI. Athena® maximizes energy revenues, stabilizes the grid, reduces carbon emissions, and solves renewable intermittency across the world's largest network of distributed energy storage systems.

**To learn more about Stem's solutions for hybrid power plants and front of meter (FTM) projects, [contact stem.com/contact-us](https://stem.com/contact-us).**