

The background of the slide features a complex, abstract line drawing in a light blue color. The lines are thick and fluid, creating a sense of movement and interconnectedness. The drawing starts with a large, irregular shape at the top left, which then flows downwards and to the right, eventually forming a more intricate, tangled pattern at the bottom. The overall effect is that of a hand-drawn sketch or a digital brushstroke, set against a solid black background.

**stem**

# Energy Storage for Electric Cooperatives

## Reduce Costs for Co-op Members with Energy Storage

Stem offers cooperative utilities and the solar developers who serve them a turnkey solution that gets projects in the ground with lower risk and greater efficiency. Through our Athena™ software and our team's extensive knowledge and expertise in delivering many innovative utility projects, we help co-ops deploy energy storage to deliver meaningful value to their members.

# Innovative Solutions for Innovative Utilities

U.S. electric cooperatives have been at the vanguard of renewable energy adoption for several decades, having deployed nearly 9 GW of wind and solar capacity to date. Always on the lookout for innovative ways to serve their members and reduce costs, many co-ops are increasingly turning to energy storage. As the cost of energy storage continues to decline and the cost of wholesale transmission and capacity charges continues to increase, many co-ops are finding energy storage to be an effective way of delivering savings to their members. In addition to driving down wholesale demand charges, energy storage provides multiple additional benefits such as integrating renewable energy, providing resilience to members, and earning revenues through wholesale market participation.

## Utility-Focused Support

Stem offers integrated, end-to-end support to ensure energy storage delivers maximum benefits to electric cooperatives and their members. Our expert team consults with co-ops and developers to analyze all possible use cases and determine the best hardware and services solution for the utility's specific needs. Stem supports communications protocols like DNP3 allowing for seamless integrations with utility dispatch platforms. Stem has also built a proprietary utility user platform, which enables utility operators to schedule dispatches with a simple user interface and provides real-time operating visibility into system status and available capacity. Our AI platform, Athena™, maximizes energy storage performance via industry-leading forecasting, optimization, and controls. Stem's services, from initial project design to performance and asset management, are built with the utility in mind to optimize savings, reduce costs, and mitigate risk.

## Entire Lifecycle Support for Energy Storage

<b>Project Design</b> Market expertise, financial modeling and analysis, ESS size selection	<b>Operations Management</b> Warranty management, system health monitoring, preventative maintenance	<b>Value Stream Optimization</b> Wholesale demand charge management, solar charging, energy arbitrage, T&D deferral, microgrids
<b>Deployment</b> Procurement, EPC technical advising, interconnection support, utility signal integration	<b>Dispatch Management</b> Real-time operating visibility, capacity forecasting, scheduled or real-time dispatching, aggregated dispatch for Virtual Power Plants	<b>Performance Management</b> Data reporting, performance guarantees, market settlement

# Project Spotlights



## Confidential Customer Arkansas

### Use Cases

Wholesale Demand Charge Management, Solar Charging

### Storage System Size

7 MW / 14 MWh



## Holy Cross Energy Colorado

### Use Cases

Wholesale Demand Charge Management, Solar Charging, Solar Forecasting

### Storage System Size

5 MW / 15 MWh



## Cape & Vineyard Electric Cooperative Oak Bluffs, MA

### Use Cases

SMART Incentive Management, Solar Charging, Backup Power

### Storage System Size

58 kW / 232 kWh



## About Stem

# 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 artificial intelligence and machine learning to automatically switch between battery power, onsite generation and grid power. Athena™ helps lower energy costs, stabilize the grid, reduce carbon emissions, and solve renewable intermittency across the world's largest network of distributed energy storage systems.

For more information, visit [www.stem.com](http://www.stem.com)

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