

As a leading renewable energy project developer, financier, and long-term owner and operator, Kearsarge Energy L.P. creates recurring value by working with local communities to meet the growing demand for commercial and utility-scale renewable energy projects.

Kearsarge partnered with Stem to operate a large-scale, front of meter energy storage system located on a former landfill in Haverhill, Massachusetts. The 2MW / 9MWh energy storage system, paired with 3.6MW of solar PV generation, was the largest Massachusetts project that participated in New England wholesale energy markets through Stem's existing partnership with Kearsarge.

Stem's strong knowledge and flexibility to navigate the ISO New England wholesale market makes them a preferred energy storage services provider for Kearsarge. Their team's outstanding customer service and understanding of warranties simplifies the process for us as we collaborate on effective reporting and monetization of revenues through Athena.

Andrew Bernstein

Managing Partner, Kearsarge Energy L.P.



Location

Haverhill, MA

ISO/RTO Region

ISO New England

Solutions

Solar Plus Storage, MA SMART Optimization, Wholesale Energy Markets

Energy Storage System Size

2MW / 9MWh plus 3.6MW solar PV

Stem Operational Date

March 2021 - October 2022



Challenge

Focusing on distressed municipal holdings like brownfield sites, Kearsarge wanted to augment renewable energy generation with battery energy storage to reduce wholesale demand charges, increase grid resilience, and maximize energy savings. Energy storage expertise was needed to provide market bidding, dispatch scheduling, data management, and performance reporting.



Solution

Stem assisted Kearsarge with project management and leveraged our Athena software to enable the project to deliver value via ISO New England wholesale markets and Massachusetts' Clean Peak Standard. Athena also supported incentive compliance with the federal investment tax credit and the Solar Massachusetts Renewable Target (SMART) program.



Results

Since the announced partnership in September 2019, Stem has partnered closely with Kearsarge on a growing portfolio of large-scale solar plus storage projects. The Haverhill project resulted in energy savings, increased revenues, maintenance and upkeep savings, and tax payments estimated to total at least \$3.9 million for the city over the project's lifetime.