



Sterling Municipal Light Department Energy Storage Units Result in \$1 Million in Avoided Costs to Date

Sterling, MA -- April 16, 2019 – The Sterling Municipal Light Department is marking a major milestone related to the department’s two energy storage systems.

In March, SMLD celebrated over \$1,000,000 in avoided costs to the light department, thanks to the two systems.

SMLD’s first energy storage system, a 2-megawatt, 3.9-megawatt-hour utility scale battery from NEC Energy Solutions, was the first of its kind in Massachusetts when it first went online in December 2016. The project was designed to provide Sterling with up to 12 days of emergency backup power to critical public facilities during severe weather events, as well as lower utility costs by dispatching the battery during peak load periods.

The system prompted the Massachusetts Municipal Wholesale Electric Company (MMWEC), Sterling’s joint action agency, to enhance its own peak load forecasting capabilities and develop a remote dispatch system. After successfully calling several monthly peak loads for Sterling, MMWEC began remotely dispatching the battery from its offices in Ludlow beginning in October 2017.

In early 2018, SMLD teamed up with Origis Energy to develop the first community solar-plus-storage project in the state. The project paired a 1-megawatt, 2-megawatt-hour energy storage system with a 1-megawatt community solar project. The battery is energized exclusively by the solar system.

By the time MMWEC began remotely dispatching SMLD’s second energy storage system in June 2018, the utility had already avoided more than \$500,000 in costs by strategically dispatching its first battery during peak usage periods. MMWEC has been successful in calling the peak with 100 percent accuracy. Today, both systems cumulatively have saved the light department over \$1,000,000.

Joe Curtin, Chairman of the SMLD Board of Commissioners, said the true partnership between SMLD and MMWEC is responsible for these tremendous cost savings for customers.

“With the direction and vision of the SMLD employees and Board members, both past and present, SMLD became a pioneering leader in utility scale energy storage projects in the region,” Curtin said. “MMWEC was our partner on this project from the beginning, offering their professional expertise and guidance along the way, culminating in the development of the peak load forecast model and remote dispatching of our energy storage systems. The SMLD and its Board is grateful for the assistance that MMWEC has provided for this and other projects to successfully navigate the ever changing electric energy market.”

“MMWEC is thrilled to be a part of SMLD’s trailblazing initiatives in energy storage,” said Matthew Ide, MMWEC Executive Director of Energy & Financial Markets. “This project set the stage for the resulting peak load forecasting and remote dispatch system, which several other MMWEC members are now utilizing.”

“We would like to thank our partners who made all of this possible,” said SMLD General Manager Sean Hamilton. “They include SMLD commissioners, staff and operations crew, along with the Town of Sterling; Judith Judson from Massachusetts Department of Energy Resources; Dr. Imre Gyuk of the U.S. Department of Energy; Daniel Borneo and Dr. Raymond Byrne of Sandia National Laboratories; Todd Olinsky-Paul of CEG and CESA; MMWEC; Scott Reynolds, of Reynold’s Engineering LLC, ; Mike Barrett of PLM; Josh Teigiser of Origis Energy; Sachin Patel of Last Mile Energy, Arlen Orchard and SMUD for project technical information, and Jared Carpenter and Jim Frawley for grant technical information.”

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