

MMWEC Continues Emerging Technology Work Worthy of National Award

Progress is being made on several innovative projects for which MMWEC was recognized earlier this summer by a national organization supporting emerging energy technology initiatives.

MMWEC was named 2018 “Power Players Innovative Partner of the Year” by the Smart Electric Power Alliance (SEPA) at SEPA’s Grid Evolution Summit in Washington, D.C. in July.

MMWEC was recognized for work in partnership with its member utilities to implement services that include the procurement, installation and remote dispatch of energy storage systems in a manner that reduces costs for consumers.

MMWEC’s peak load forecasting and remote dispatch services enable the automated dispatch of batteries and other distributed energy resources during peak demand hours. These services result in savings to customers, as they



MMWEC’s SEPA Award

reduce peak loads, which determine a utility’s transmission and capacity costs.

After a trial period with the Sterling Municipal Light Department, MMWEC expanded these services as other members added distributed energy resources to their systems. Since the award was announced, MMWEC has continued its work in these and other areas to assist its members in integrating emerging technologies into their systems.

During the summer, MMWEC has been directly dispatching or directing MLP staff to dispatch over 20 megawatts of load-reducing assets in member territories. This includes 3 megawatts of battery storage, 5 megawatts of natural gas-fired generation and 12 megawatts of temporary diesel generation. MMWEC is remotely dispatching eight distributed energy resources for

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State House Briefing Promotes MLP Value to Consumers, Support for State Initiatives

Massachusetts municipal utilities deliver low-cost, quality electric service to consumers while supporting the state’s energy policies, according to speakers at the MMWEC Municipal Utilities State House Briefing, held June 27 at the Massachusetts State House.

Speakers at the event included Senate President Emerita Harriette L. Chandler (D-Worcester), who was recognized as “A Friend of Public Power” in an MMWEC Board of Directors resolution. Senator Chandler has been a longtime supporter of municipal utilities – she has three in her district – and embraces the public power business model.

State Rep. Thomas A. Golden Jr. (D-Lowell), Chairman of the Joint Committee on Telecommunications, Utilities and Energy, also addressed the legislators and state and municipal utility officials at the briefing. As a resident of a community without a municipal utility, Golden quipped, “I want one.”

Golden went on to highlight municipal utilities’ carbon-free portfolio and their efforts to accelerate the growth of clean energy in the Bay State.

Katie Theoharides, Assistant Secretary for Climate Change in the state Executive Office of Energy and Environ-

mental Affairs, spoke about the collaborative work being done between the state and municipal utilities. These partnerships have helped increase energy efficiency, reduce costs for customers and maximize the benefits of clean energy, she said.

MMWEC Chief Executive Officer Ronald C. DeCurzio demonstrated how municipal utilities have long been ahead of the curve, providing a timeline of the clean energy projects developed by municipal utilities dating back to the 1980s.

By the end of 2018, MMWEC member utilities will have 58.2 megawatts (MW) of wind generation, 47.5 MW of solar and 22.5 MW of energy storage. Three of MMWEC’s members received a total of \$1.64 million in grants through the Advancing Commonwealth Energy Storage (ACES) initiative, a coordinated effort between the Massachusetts Clean Energy Center and the state Department of Energy Resources.

After the speaking portion of the briefing concluded, the event provided an opportunity for municipal utility managers to meet with their legislators to discuss the value municipal utilities bring to the electric utility industry and the innovative carbon-free technologies they are integrating into their distribution systems. ∞



Senator Harriette L. Chandler
A Friend of Public Power

Shrewsbury/MMWEC Partnership Rescues 3.8-MW Landfill Solar Array

Shrewsbury Electric and Cable Operations (SELCO) and MMWEC have joined forces in the development of a new community solar array on top of the capped and closed portion of the Shrewsbury landfill. The project reached full capacity in mid-July.



SELCO Commission Chair Bob Holland, Lt. Gov. Karyn Polito and SELCO GM Michael Hale

The solar array represents a new model for the use of MMWEC's tax-exempt financing authority that enables consumer-owned municipal utilities like SELCO to invest in clean energy projects. The 3.8-megawatt solar array, located on Hartford Turnpike, is producing over four million kilowatt hours of clean, renewable energy annually, or enough to power over 400 single-family homes. It occupies over 12 acres on top of the landfill cap, and includes approximately 12,000 individual solar panels.

MMWEC currently owns the project and is leasing it to SELCO. SELCO will operate and maintain the array. When the lease period expires, SELCO will be sole owner and operator of the array. The partnership and unique lease ar-

angement between MMWEC and SELCO came about after the project fell through twice with the original private developers over the period of three years and public bidding solicitations. MMWEC then assumed ownership of the project and provided financing through its loan lease program. MMWEC's expedited procurement and project development processes allowed it to meet the construction and economic timetables, enabling SELCO to take advantage of the financial benefits of the solar array.

Through virtual net metering and using SELCO's advanced energy metering system, 100 percent of the output of the array is being offered to individual SELCO customers through an optional community-shared solar program. The project allows SELCO to supply over 40 percent of its energy to customers from renewable and carbon-free sources.

"This partnership between MMWEC and SELCO represents a new service MMWEC is providing to help meet its members' needs and objectives," says Matthew Ide, MMWEC Executive Director of Energy & Financial Markets.

"MMWEC is pleased to be able to provide the capital and engineering expertise, and through joint action, see this project to completion."

SELCO General Manager Michael Hale said the partnership led to the project's success.

"Without MMWEC's commitment, this project would never have happened - period," Hale said. ∞

HELPS Program Welcomes New Energy Audit Firm

MMMWEC's Home Energy Loss Prevention Services (HELPS) program has contracted with a new company to provide residential energy audits to customers of its participating municipal utilities.

The Center for EcoTechnology is a non-profit organization with a mission to help people and businesses save energy and reduce waste. With offices in Pittsfield and Northampton, CET was founded more than 40 years ago. It began providing residential home energy audits through the HELPS program in July.

Brian Sewell, MMWEC's Energy Efficiency Program Manager, said CET is a great fit for MMWEC.

"Like us, they are a mission-driven non-profit," Sewell said. "And like us, they are exceptionally tuned to the educational needs of our member customers. Their goal is to work with residential customers to answer questions and make their homes as comfortable and energy efficient as possible."

CET has a team of six auditors, with staff trained specifically on the HELPS program. The program will have access to the full auditing staff, which allows HELPS to better handle high volume times of year and get audits processed in an efficient manner. CET has its own call center, with two

staff members available to answer calls on



the HELPS toll free line (888-333-7525) related to scheduling energy audits. In an effort to maintain continuity of program services, CET also has staff available to join MMWEC in conducting community educational events designed to take residents through an audit step by step, and answer questions about ways to improve the energy efficiency of their homes.

CET auditors wear HELPS-branded badges when visiting homes to conduct energy audits so that residents can be sure of the auditor's identity.

HELPS is the leading residential energy conservation service for Massachusetts municipal utility customers. It serves the customers of municipal utilities in the communities of Ashburnham, Chicopee, Boylston, Groton, Holden, Holyoke, Hull, Ipswich, Marblehead, Paxton, Peabody, Princeton, Russell, Shrewsbury, South Hadley, Sterling, Templeton, Wakefield and West Boylston. ∞

New Compromise Law Boosts Clean Energy, Recognizes Municipal Utility Model

The Massachusetts legislature on July 31 passed a compromise clean energy bill that addresses issues including the renewable portfolio standard, a clean peak standard, and battery storage targets. Gov. Charlie Baker signed the legislation into law on Aug. 9.

The legislation, a conference committee compromise of differing House and Senate energy bills, includes an increase in the state's renewable portfolio standard, which requires retail electric sellers to purchase renewable energy or buy renewable energy certificates to prove that a percentage of the power they sell is renewable. Previously, the percentage of renewable energy required was 13 percent, increasing one percentage point per year. The new law raises the RPS requirement to two percentage points a year for ten years, then by one percentage point per year thereafter. Municipal light plants (MLPs) are exempt from the RPS, although the percentage of clean energy in the portfolio of MMWEC member MLPs exceeds the state standard by far.

The law also creates a clean peak standard in an effort to integrate more clean energy into the energy mix to meet peak demand. Under the law, the state will set an initial clean peak target, which will be increased by a quarter of a percent of sales each year. Qualifying resources include certain types of new energy storage systems or demand response resources that generate, dispatch or discharge electricity to the distribution system during seasonal peak

periods or reduce load on the system. MLPs, several of which already are reducing their peak loads using energy storage systems, are not subject to the clean peak standard.

In addition, the law increases the state's energy storage target from 200 megawatts to 1,000 megawatts by 2025, and increases incentives for adding energy storage. Incentives include the use of alternative compliance payments to develop pilot programs and the use of energy efficiency funds if certain criteria are met. Electric distribution companies are required under the law to submit annual reports documenting the energy storage systems in

their service territory. MLPs are exempt from the reporting requirement.

As part of the state's push to procure additional offshore wind, the law also authorizes, but does not require state officials to proceed with another 1,600-megawatt wind procurement by 2035. This comes after the state's recent selection of Vineyard Wind to build an 800-megawatt wind farm off the coast of Martha's Vineyard, following the state's 1,600 megawatt wind procurement passed by the legislature in 2016. Additionally, the bill urges consideration of a single transmission line to an area to serve multiple wind farms, rather than separate transmission lines servicing individual wind projects.

A proposal that would have required "residential energy scorecards" when a house changes ownership was taken off the table earlier in the legislative session. ∞



The two, 8.4-million gallon oil tanks at MMWEC's Stony Brook power plant were cleaned this summer. The 527-megawatt plant burns natural gas as well as oil. Its dual-fuel capability makes Stony Brook a valuable resource to ISO New England when cold winters result in constrained natural gas supplies.

Governors Say Nuclear Plants Bring Value to Region

Five New England governors agree that proper value should be placed on the clean energy attributes nuclear plants bring to the grid.

The governors of Massachusetts, Connecticut, Rhode Island, New Hampshire and Vermont issued a joint statement this month indicating that in order to attract and retain businesses and residents, increased efforts must be made to keep electric rates in New England—among the highest in the nation—as affordable as possible.

As ISO New England works to develop new market incentives to ensure fuel security, the governors point out that Seabrook Station in New Hampshire and Millstone in Connecticut provide 3,500 megawatts of baseload energy that is not dependent on natural gas infrastructure and helps meet regional carbon emissions goals. The governors state "it is important to continue to evaluate cost-effective policies that properly value existing clean energy resources which have significant fuel security implications." ∞

MLPs Gear Up for National Drive Electric Week

Municipal utilities participating in the MMWEC electric vehicle and charger program are gearing up for National Drive Electric Week, which takes place September 8 – 16, 2018.

The nationwide event aims to raise awareness about the benefits of electric and plug-in hybrid electric vehicles. Owners of electric vehicles, plus drivers interested in purchasing an electric vehicle, are encouraged to participate in local events during National Drive Electric Week.

MMWEC’s emerging technologies team has been reaching out to Chevrolet, Nissan and Tesla in an effort to secure representatives for events sponsored by municipal utilities.

To date, four MMWEC members are planning events. The Marblehead Municipal Light Department will host an event on Saturday, September 8 at the Veterans Middle School. The West Boylston Municipal Light Plant will host a ride-and-drive on September 12 at Beaman Memorial Library. The Wakefield Municipal Gas and Light Department will host its event September 13 at the light department. Ipswich Electric Light Department’s event is scheduled for September 15 on the center green.

The MMWEC EV program continues to offer incentives to

residents of member utilities purchasing an EV. Quirk Chevrolet in Braintree is offering \$6,600 off the price of a Chevy Bolt. Meanwhile, Nissan has increased its incentive on the 2018 Leaf to \$5,000 off MSRP or 0% APR financing for 72 months, through September 30.

MMWEC’s EV Charger Incentive program offers the customers of participating utilities a free or discounted level 2 electric vehicle charger, in exchange for participation in a scheduled charging program. Participating utilities include those in Groton, Ipswich, Marblehead, Sterling, Shrewsbury, South Hadley, Wakefield and West Boylston. ∞



Visitors check out the vehicles at an Ipswich Ride-and-Drive Event



Educators participating in the Massachusetts College of Liberal Arts Teach-to-Learn program this summer toured the Berkshire Wind Power Project, owned by MMWEC and 14 of its member municipal utilities.

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member utilities in Holyoke, Ashburnham, Groton, Hull, Shrewsbury, Sterling and Wakefield.

The natural-gas fired generation includes two, 2.5-megawatt natural gas-fired peaking units recently installed by the Wakefield Municipal Gas & Light Department at their Wallace Substation. WMGLD’s second 2.5-megawatt natural gas-fired peaking unit came online in mid-July. Both units and the cost of construction have been funded through MMWEC’s Pooled Loan Program.

The Wakefield units, and other member temporary generators being remotely dispatched by MMWEC, were online and able to run during the August peak load, delivering economic benefits to the light departments.

Meanwhile, the West Boylston Municipal Light Plant has taken delivery of a portion of the equipment required for its 128-kilowatt flywheel energy storage system. The system is expected to be online this fall, and MMWEC will be assisting in its scheduling. ∞



**Massachusetts
Municipal Wholesale Electric Company**

MMWEC

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