

MMWEC Dedicates Largest Single Solar Field in Commonwealth

Municipal light department staff and commissioners, elected officials and family members of the late Master Sergeant Alexander Cotton of the 439th Airlift Wing at Westover Air Reserve Base turned out in October for a dedication ceremony and ribbon-cutting for the largest single solar project in the Commonwealth.

The MMWEC/Master Sergeant Alexander Cotton Memorial Solar Project is a 6.9 megawatt AC/10.34 megawatt DC solar farm, constructed on a 35-acre section of MMWEC's Ludlow campus. The project is named in honor of Master Sergeant Cotton, in appreciation of his dedication and service, and in recognition of the long history between MMWEC and neighboring Westover.

Six MMWEC Member municipal light plants are participating in the project, including those located in Boylston, Ipswich, Mansfield, Marblehead, Peabody and Wakefield. EDF Renewables is the project developer.

Generating more than 13,800 megawatt hours (MWh) per year, the project's output is enough to power over 1,500 homes. It is expected to displace nearly 13,220,400 pounds of CO2 emissions from Massachusetts power plants per year, based on current ISO New England average emissions. In addition, the panels feature state of the art bifacial module

technology, meaning they produce energy from direct sunlight, as well as light reflected onto the back of the panels. This results in better year-round

production, including in the winter, when light may be reflecting from snow on the ground.

"MMWEC is pleased to support the participating MLPs in their efforts to incorporate more carbon-free resources into their power portfolios," said MMWEC CEO Ronald C. DeCurzio. "This project is consistent with the MLP Greenhouse Gas Emissions Standard, while helping the light departments maintain stable rates and plan for the future." ∞



Suzette Cotton, wife of Master Sergeant Alexander Cotton, cuts the ribbon at the solar project dedication.

NextZero to Launch Residential Battery Program

In an effort to pave the way for more decarbonization and electrification measures, MMWEC is announcing a new incentive program for residential batteries through the NextZero program.

Through the Residential Battery Program, NextZero will offer a rebate of \$100 per kilowatt-hour (kWh) of battery storage capacity. To qualify, batteries must be either Sonnen or Generac-PWRCell brands and have a storage capacity of 7.5 to 20 kWh. In order to receive the rebate, batteries must be enrolled in the NextZero Connected Homes demand response program, which discharges the batteries during peak energy hours to help the light departments better manage their electric loads. Customers are informed of peak events and given the opportunity to opt out. If customers participate in all peak events, they will be rewarded with a \$30 monthly incentive.

In the event of a power outage, residential batteries disconnect from the grid and provide backup power to critical loads in the home, such as refrigerators and electronics. Batteries are powered by electricity, making them a cleaner alternative to generators, which are powered by carbon-emitting fuels such as natural gas, diesel, or propane. Additionally, homeowners can

charge batteries during off-peak energy hours and use the power stored during peak energy hours to lower electric costs.

Batteries provide even more benefits to homeowners with solar panels. Many solar panel owners are not consuming the full production of their panels during the day when the panels use the sun to generate the most energy. A battery allows the solar system to store the solar energy in the middle of the day and use it later in the day. This means they are using lower cost energy and not using electricity from the grid when the grid electricity is at peak pricing.

"The battery program is a natural fit with NextZero's mission to provide the most efficient, innovative, and equitable path to energy decarbonization," said MMWEC Sustainable Energy Policy & Program Senior Manager Bill Bullock. "Energy storage is key to helping the grid adapt to the clean energy future and the residential battery program helps to ensure that storage is distributed across the communities we serve."

The NextZero Residential Battery Program will launch on January 2, 2023. Bullock said that as the program grows, the NextZero team will be working to add additional battery brands to the program. ∞

MMWEC Members Band Together for Mutual Aid After Hurricane Ian

Hurricane Ian left a path of destruction after landing in Florida, leaving millions without power this fall. Public power utilities around the country banded together to travel down to the storm's hardest hit areas to help with storm cleanup and power restoration. In a mutual aid effort organized by the Northeast Public Power Association (NEPPA), 56 public power utility workers were sent to Florida including employees from 11 MMWEC Members/program participants: the municipal light plants (MLPs) in Belmont, Chicopee, Groton, Holden, Holyoke, Mansfield, Marblehead, Peabody, Sterling, Wakefield, and West Boylston.

In late September, after passing through the Caribbean, Hurricane Ian hit landfall in southwestern Florida as a category four storm, traveling through the Florida peninsula and then up to Georgetown, South Carolina. The storm left 2.6 million homes and businesses in Florida without power. Twenty-two of Florida's public power utilities were impacted with peak outages reaching more than 212,000 customers.

Wakefield Municipal Gas and Light Department General Manager Pete Dion said sending workers to mutual aid efforts provides mutual benefits.

"First, it is important to help others devastated by catastrophic weather events, but it also provides an opportunity for our team to see how other linemen in other municipals operate," said Dion.



PMLP workers clean up tree limbs

restoration efforts. Damaged trees and tree limbs were

Mutual aid crews left Massachusetts on September 27 and headed first to Jacksonville, FL to provide assistance. From there, crews were sent 200 miles south to the city of Bartow, where crews performed a variety of cleanup and power

removed and transformers were repaired and replaced. Crews also repaired broken power poles, installed new poles, and reconnected primary and secondary power lines to poles and houses. Workers ran overhead conductors and completed home service restorations. NEPPA crews restored power to an estimated 3,000 customers in Bartow.



MMED employees repair a utility pole in Bartow, FL

This is not the first time MMWEC Members have assisted one another in the aftermath of a storm. In August 2020, heavy rainstorms and wind caused outages and damages across Massachusetts. After the storm, several MMWEC Members, including the MLPs in Ashburnham, Chicopee, Holyoke, South Hadley, and Shrewsbury, received assistance in storm cleanup and power restoration. MMWEC Member MLPs including Groton, Marblehead, Templeton, Wakefield, and West Boylston were sent to other Massachusetts MLP territories in need in the wake of that storm.

According to Mansfield Municipal Electric Department (MMED) General Manager Joe Sollecito, MLPs helping each other out is a core value of public power utilities.

"Being a part of a public power community, it is essential for us to respond when another utility is in need," Sollecito said. "Several times in the past 10 years, we have been in need of mutual aid and we greatly appreciate the outside assistance to minimize outages and restore customers as soon as possible. This is what makes public power a very special industry."

Mutual aid crews returned to Massachusetts on October 6 and 7. Crews were initially assigned for two-week shifts, but due to the robust response of public power utilities, restoration work was completed earlier than expected. ∞

Stony Brook Energy Center Completes Annual Maintenance Outage

The annual fall maintenance and improvement outage at MMWEC's Stony Brook Energy Center (SBEC) has been completed. The majority of the plant was offline for two weeks, while a peaking turbine returned to service two weeks later.

Nearly 100 maintenance, repair, inspection and preventative tasks were performed during this year's outage at SBEC, which consists of a 354-megawatt intermediate unit and a 172-megawatt peaking unit. The major tasks completed include the replacements of an exhaust expansion joint, starting clutch, safety valve, and heat recovery steam generator circulating pump motor. State-required boiler inspections and borescope inspections were performed on all the turbines.

All annual testing of electrical testing and transformers were

completed. The CO2 fire suppression system controls and activation devices also were tested.

All tasks were completed two days earlier than planned. The preventative maintenance and repair tasks completed ensure that SBEC remains a reliable asset to the ISO New England grid. ∞



SBEC crews unload hydrogen into the hydrogen storage system

WMGLD To Build Energy Park in Town

Wakefield Municipal Gas and Light Department (WMGLD) has reached a major milestone in its innovative Energy Park project. On November 19, the town of Wakefield voted to approve an easement that will allow the light department to build an Energy Park that will harness the technology of energy storage and solar power and leverage it into energy and cost savings for the town.

WMGLD is planning to build an Energy Park located on an access road to two new high schools in town- Wakefield Memorial High School and Northeast Metropolitan Regional Vocational High School. The Energy Park will consist of two 250-300 kilowatt rooftop solar arrays at each school connected to a five megawatt, 15 megawatt-hour battery energy storage system (BESS) and 2.5 megawatt natural gas generator. The output of solar energy generated from the two solar projects will be consumed by both schools and the excess generated will be stored in the BESS or provided back to the utility grid. The BESS and natural gas generator will be used during peak energy hours to help WMGLD manage its electric load and to lower electric rates for both schools and WMGLD customers.

“The WMGLD will manage, own, and operate the Energy Park with ratepayers in mind, keeping energy costs low and providing significant environmental benefits in preparation for the future,” said WMGLD General Manager Pete Dion. “This project promotes electrification, reduces carbon emissions, and moves towards the state’s net-zero 2050 goal.”

In addition to the BESS and solar arrays, the schools will feature all-electric heating and cooling systems, and provide

charging stations for 10 electric vehicles at each school. There will be a 25-foot natural vegetation buffer between the road and Energy Park, and any trees that will be removed as part of the construction process will be replanted around town.

The Energy Park will also provide emergency back-up power with the BESS, and natural gas generator, eliminating the need for two diesel-fired emergency generators that would normally be required for the schools, saving each school approximately \$1.2 million in construction costs.

While the Energy Park will create substantial energy savings, cost savings, and environmental benefits to the town of Wakefield and both schools, the park will also provide educational benefits for the students to learn about energy management systems, solar arrays, and carbon reduction technologies.

The Energy Park is projected to save WMGLD \$1.5 million annually, making it a 7.5-year project payback. WMGLD plans to take advantage of different grant programs to help fund the Energy Park. The department recently received a \$125,000 grant from the American Public Power Association Demonstration of Energy & Efficiency Developments (DEED) program. The light department is also exploring additional grant funding, including from the Inflation Reduction Act, the American Rescue Plan Act, and potential funding from the state.

After receiving town approval for the easement, the next step for the project is to receive legislative approval for the easement. WMGLD hopes to begin construction in 2023. ∞

AMLP, HG&E Promote NextZero, Energy Efficiency at Community Events

As Massachusetts aims to reach net zero emissions by 2050, it is more important than ever for municipal light plants to educate their customers on electrification and decarbonization measures. Recently, Ashburnham Municipal Light Plant (AMLP) and Holyoke Gas and Electric (HG&E) both promoted electrification and energy savings at community events.

AMLP was a sponsor of and participant in the inaugural “Celebrate Ashburnham Day” held in the town’s downtown area. It featured a number of local businesses and town departments. Six AMLP employees, along with Bill Bullock, MMWEC Sustainable Energy Policy & Program Senior Manager, attended the event.

More than 1,500 people attended the event and AMLP General Manager Kevin Sullivan said the department’s booth was a popular stop. AMLP provided info and resources related to its NextZero energy efficiency offerings, including audits and available incentives. Most customers who stopped at the light department’s booth were interested in appliance rebates, information on mini-splits, and solar panels.

The department also promoted electric vehicles and had its own electric vehicle, a 2019 Chevrolet Bolt, on display for customers to look at and sit in. AMLP purchased the vehicle in

2019, utilizing a grant from the Massachusetts Department of Environmental Protection as well as a dealership incentive from Quirk Chevrolet, offered to MMWEC Members. The department also had its squirt bucket truck on display for attendees to see. AMLP

staff were available to answer any questions from customers.

“We’ve been a part of the Ashburnham community since 1908, so we felt it was important to attend the event and show what AMLP is all about,” Sullivan said.

In honor of Public Power Week and Public National Gas Week, HG&E held its second annual community-wide event at Veterans Park to promote the department’s rebates, energy efficiency programs, and electrification incentives.

The event had booths and information featuring HG&E’s appliance, weatherization, and heating and cooling incentives. MMWEC Energy Efficiency Program Manager Joe Coles was on



AMLP had its Chevy Bolt EV on display at Celebrate Ashburnham Day

IELD, SELCO Earn APPA Smart Energy Provider Distinction

Ipswich Electric Light Department (IELD) and Shrewsbury Electric and Cable Operations (SELCO) have been awarded the Smart Energy Provider distinction by the American Public Power Association (APPA).

Launched in 2019, the Smart Energy Provider Program is a best practices designation for utilities that excel across four areas:

smart energy information, energy efficiency and distributed energy resources, environmental and sustainability programs/initiatives, and communication/education and the customer experience. To be considered for the designation, utilities must submit an application that outlines its performance across the four categories. An expert panel reviews the applications



and scores the utilities on a scale of 1 to 100. Utilities receiving a minimum score of 70 are awarded the designation, which lasts two years.

This is the first time IELD has earned the distinction and the second time for SELCO, which earned the distinction in 2020. IELD and SELCO are two of 31 public power utilities that were recognized with the Smart Energy Provider distinction in 2022.

Currently 97 public power utilities hold the Smart Energy Provider distinction, including Holyoke Gas and Electric and Wakefield Municipal Gas and Light Department, which each earned the distinction in 2021.

Utilities that wish to maintain their Smart Energy Provider status must reapply every two years. ∞



AML, HG&E ... Continued from Page 3

site to discuss energy audits available through NextZero and Connected Homes, NextZero's demand response program that rewards customers for enrolling their smart devices. Attendees could also learn about HG&E's commercial audits, fuel assistance and payment plans, as well as zero interest loans for residential and commercial customers. Statewide programs, such as MassCEC opportunities and incentives available

through the Inflation Reduction Act, were also promoted.

Attendees had the opportunity to learn more about driving electric. Marcotte Ford and Gary Rome Hyundai were on site to answer questions about electric vehicles and offer test drives of the Hyundai Ioniq 5 and Ford Mustang Mach E electric vehicles (EVs). Several other models were on display from the dealerships and from local EV owners eager to talk about their decision to go electric.

The event featured other external vendors including the Massachusetts Department of Energy Resources, Valley Bike Share, and the Holyoke fire and police departments.

"The event provides an opportunity to connect with the community and get valuable customer feedback on HG&E programs and initiatives," said HG&E Director of Marketing and Communications Kate Sullivan Craven. "With the winter approaching, we are eager for opportunities to connect with customers and provide education related to conservation, fuel assistance, and energy planning."

SHELD Rebrands Fiber Network

South Hadley Electric Light Department's (SHELD) Fibersonic fiber network, which offers commercial and residential high-speed fiber internet service, has been rebranded to Fiberspring.

"We're all very excited to move forward as Fiberspring," says SHELD General Manager Sean Fitzgerald. "As we upgrade our services and expand into other towns, we decided to take our name and brand to a new level as well. There is no change of ownership or service. Just a fresh approach that reflects new beginnings and healthy growth for South Hadley and the region."

SHELD began its five-year fiber network rollout in 2019. The Fiberspring network currently provides service to more than 1,600 commercial, residential, and municipal customers in South Hadley, covering 70 percent of the town. The department is working on constructing the infrastructure to expand fiber service to the remaining 30 percent of the town.

In addition to serving the commercial and residential customers of South Hadley, Fiberspring recently expanded its fiber internet service to the towns of Shutesbury and Leverett. Fiberspring serves more than 3,100 customers total between the three towns.

SHELD expects to complete its fiber network by 2024. ∞



Massachusetts Municipal Wholesale Electric Company

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