



## MMWEC Members Save \$4.1 Million in 2022, \$24.5 Million Overall from Peak Forecasting

**M**MMWEC Members continue to reap the benefits of the Peak Forecasting and Remote Dispatching program. The program resulted in more than \$4.1 million in avoided energy costs in 2022.

Since fall 2016, MMWEC has offered peak forecasting services to its Members, alerting them when potential energy peaks will occur. Since October 2017, MMWEC has also offered remote dispatching services in which MMWEC analysts remotely dispatch Members' distributed energy resources (DERs), such as utility-scale batteries, to operate during peak hours. Municipal light plants' (MLPs') costs are impacted by peaks, so running the DERs off the electric grid during peak hours reduces costs for the MLPs and their customers.

Year-round, MMWEC remotely dispatches five batteries in Member MLP territories in Sterling, Wakefield, and Templeton as well as a flywheel system in West Boylston. MMWEC also dispatches five additional DERs at two Member systems, two DERs at non-MMWEC Member systems, and provides dispatch instructions to two MLPs to run their own DERs locally. Additionally, MMWEC offers a program for Members to rent temporary DERs during the summer months. In 2022, five MLPs participated in the summer program.

MMWEC aims to meet the monthly National Grid and Eversource transmission peaks as well as the ISO-NE capacity peak. Last year, MMWEC successfully predicted the ISO-NE capacity peak. MMWEC had an 83% success rate for predicting the Eversource transmission peaks, and a 75% success rate for the National Grid transmission peaks.

According to MMWEC Director of Energy Markets Justin Connell, peak forecasting has grown increasingly difficult.

"When most of our peak shaving programs were originally created, Member participants were generally first to take advantage of peak shaving opportunities knowing that there would be an imminent expansion of market penetration of incremental behind-the-meter peak shaving resources as well as passive demand response," Connell says. "Because of this, peaks are flatter with less day-to-day separation, forcing us to find creative and reliable ways to factor these considerations into our forecasting models."

There were deviations between National Grid and Eversource monthly peak days and ISO-NE's peaks several times during 2022, but the MMWEC analyst team has devised a plan to address that issue.

"We are working to incorporate a granular load-zone specific reliability load forecast that could drive transmission load data for purposes of development of an additional transmission modeling tool to augment and supplement our current peak identification tools," says Analyst Ryan Martin.

From 2017 through 2022, MMWEC's Peak Forecasting and Remote Dispatching program has saved Members and participating light departments \$24.5 million in avoided transmission and capacity costs. Connell says the analyst team predicts that peaks will continue to grow more difficult to predict and may result in dispatching for longer periods during non-traditional hours, but the team is well positioned to continue helping its Members save.

"We are striving for continuous improvement and keeping a constant eye on real-time conditions while identifying and incorporating additional data points and trends into our models," Connell says. ∞

## MMWEC, Member Light Departments Advocate for Public Power on Capitol Hill

**M**MMWEC representatives and Member light department managers joined their fellow New England public power colleagues at this year's American Public Power Association (APPA) Legislative Rally.

MMWEC senior staff members Ronald C. DeCurzio, Chief Executive Officer, Justin Connell, Director of Energy Markets, and Kate Roy, Director of Communications and External Affairs, were joined by MMWEC Member Managers Sean McKeon of the Princeton Municipal Light Department (PMLP), Barry Tupper of the Holden Municipal Light Department (HMLD), and Sean Hamilton of the Sterling Municipal Light Department (SMLD), in several meetings on Capitol Hill.

The group, as part of the Northeast Public Power Association (NEPPA), traveled to Washington, D.C. for the rally – the first

fully in-person event since 2020.

The group met with staff from several congressional offices and committees to discuss issues important to public power. Issues covered included the Inflation Reduction Act, supply chain issues, transmission, and winter reliability. ∞



*MMWEC employees and Member managers at the Legislative Rally.*

## MMWEC Pooled Loan Program Helps MLPs Finance Needed Energy Facilities, Equipment

**M**MMWEC's Pooled Loan Program, created in 2014 through MMWEC's unique legislative authority, continues to offer MMWEC Member light departments an alternative financing option for energy facilities and equipment.

Established under the acts of the Commonwealth of Massachusetts c 775, MMWEC was granted the authority to enter into contracts with municipal light departments utilizing a Take or Pay contract agreement which binds the light department to provide payment of "unconditional obligations imposed without regard to whether the facility is undertaken, completed, operable or operating". Should the light department have insufficient funds available to pay the obligations, they are required to raise rates to pay its obligations to MMWEC. This Take or Pay language is what provides the credit worthiness of MMWEC when procuring financing through Financial Institutions.

The program, designed by MMWEC with DPU approval, allows Member light departments the opportunity to tap into various financial tools, including bonds, leases and loans, to finance projects to reduce their overall costs. The program's structure and flexibility are unique among other financing programs offered by joint action agencies across the country. Some of the benefits of the program include the ability of MMWEC to issue tax-exempt debt, which leads to lower rates for the participants, and the debt issued is in the name of MMWEC and is NOT debt of the city or town.

To date, ten MMWEC Members have tapped into the Pooled Loan Program to fund 14 projects. They include projects such as energy storage systems, wind and solar facilities and substations. The most recent projects funded have been

located in Holden, South Hadley and Groton.

In 2021, the Holden Municipal Light Department used the fund to renovate the Chaffin Substation, including the installation of transformers and related equipment. Also in 2021, South Hadley Electric Light Department accessed the program for advanced metering infrastructure (AMI) and fiber installation as part of its Fiberspring network. The AMI and fiber allow for smart grid applications, such as distribution automation and demand side management. In 2022, Groton Electric Light Department took advantage of the program for its AMI project, which it uses for on-demand meter reading, demand response, bi-directional metering for solar integration, time-of-use-rates, and dynamic pricing.

In total, nearly \$70 million has been financed through the Pooled Loan Program.

Through the Pooled Loan Program, MMWEC uses its history of accessing the public bond market and of negotiating and implementing cost-effective bank lending agreements to provide Members with lower all-in financing costs. The program benefits from economies of scale in the financing process, as well as MMWEC's name recognition with bank lenders and investors.

MMWEC Treasury and Financial Services Manager Maria McCarthy says the Pooled Loan Program is yet another example of the benefits of joint action.

"MMWEC is pleased to be able to offer its Members such a nimble financing tool, which allows them to continue to keep costs low while providing superior service in an ever-evolving industry," McCarthy says. "The flexibility of the program allows the MLPs to take advantage of it in a way that meets their unique needs." ∞

## Zoe Eckert Named MMWEC Sustainable Energy Policy and Program Senior Manager

**M**MMWEC has named operational sales and marketing professional Zoe Eckert as its new Sustainable Energy Policy and Program Senior Manager. Eckert joined the MMWEC organization on March 6.

Eckert began her career at MassLive where she worked in marketing roles. During her time at MassLive, Eckert said she developed an enthusiasm for working for meaningful organizations that have a direct impact on the local community. That led her to her next role at Valley Solar, a local solar and energy storage company.

At Valley Solar, Eckert began as Marketing Director, but her role evolved to Director of Sales Operations and Marketing. She managed all marketing initiatives, coordinated the sales team, and oversaw customer lifecycle fulfillment for solar and energy storage, as well as program development and implementation. This role also helped Eckert develop a passion for sustainability, which she carried on to her new role at MMWEC.



Zoe Eckert

"I learned about the impact of the electrical grid from the stance of reliability and how different sources of energy impact the environment," Eckert said. "I realized how important sustainability is to our communities and our world. It's a field I want to stay in."

As the Sustainable Energy Policy and Program Senior Manager, Eckert is responsible for leading and directing the advocacy, development, and management of life-cycle execution of all emerging and existing sustainable energy, energy efficiency, and demand management programs for MMWEC and Member systems and the policies that govern them. She also manages the cross discipline Emerging Technologies team and oversees all aspects of the NextZero residential and commercial decarbonization program.

"I look forward to learning more about emerging markets and technologies and being part of an organization that is always looking forward to determine how to sustainably build energy portfolios," Eckert said. ∞

## Ashburnham Light Plant Manager Kevin Sullivan Retires

**K**evin Sullivan, Ashburnham Municipal Light Plant (AMLP) general manager, is retiring after some six years at the helm. Sullivan's last day with the utility was March 4.

Sullivan had a long career in the utility industry. His first public power position was at the Reading Municipal Light Department, where he was hired as the engineering and operations manager in 2008. He was hired as the assistant superintendent at the Wellesley Municipal Light Plant in 2014, and began his role as general manager at AMLP in 2017.

Sullivan counts the installation of the department's 3 megawatt (MW), 5 megawatt hour (MWh) lithium ion battery as one of his biggest accomplishments in Ashburnham. An early adopter of energy storage technology, AMLP received an Advancing Commonwealth Energy Storage (ACES) grant through the Massachusetts Clean Energy Center in 2017. The battery came online in January 2019.

"We started that project October 1, and it was online and generating January 1," Sullivan said of the project. "I knew it was the right thing to do."

While it's no surprise that Sullivan cites the pandemic as one of his biggest challenges as manager, he says the recent complete renovation of AMLP's office building and garage was also challenging. While the work was being completed, staff had to vacate the space.

The building received numerous efficiency upgrades, including all new insulation, down to the garage floor. They also flip-flopped the layout of the building, including moving the front door to improve convenience and expanding the board room.

The work done on the building was recognized by the Baker Administration with a "Leading by Example" award in December 2022.

Sullivan says running a light department is no easy task.

"When you're a general manager, you have roller skates on," he said. "You're going from one challenge to the next. But the light department is in good hands. We have a strong board and management team."

Sullivan expects future uncertainties in the industry in the power supply arena, especially in the area of offshore wind.

"Keeping costs at a reasonably low level is going to be a big challenge," Sullivan said.

AMLP Assistant General Manager Brooke Czasnowski said Sullivan has dedicated the last 15 years to serving Massachusetts public power communities.

"Kevin has been instrumental in developing and implementing many advancements that will continue to benefit the AMLP community for years to come," Czasnowski said. "I have always appreciated Kevin's focus on learning and his unique ability to capitalize on the teachable moments. Kevin continually made it a priority to mentor, empower and develop staff. We wish him the best in retirement!"

Sullivan looks forward to spending time with his five grandchildren and not worrying about the weather. ∞



*Kevin Sullivan with  
DOER Commissioner  
Patrick Woodcock*

## NextZero Decarbonization Program Celebrates One Year Anniversary

**T**he MMWEC NextZero decarbonization program is celebrating its one-year anniversary.

Previously known as the Home Efficiency Loss Prevention Services (HELPS) and Green Opportunity (GO) programs, MMWEC rebranded its residential and commercial energy efficiency programs in February 2022 to NextZero with a focus on decarbonization and helping MMWEC Member municipal light plants (MLPs) aid the Commonwealth in reaching its goal of net zero carbon emissions by 2050. NextZero's mission is to provide the most efficient, innovative, and equitable path to energy decarbonization.

After its first complete year of operation, the NextZero program is off to a strong start. In 2022, more than 1,500 home energy assessments were conducted for NextZero customers by the program's audit partner, the Center for EcoTechnology (CET). CET also performed more than 630 heat pump consultations for NextZero customers, which allow customers to learn more about heat pump technology and whether it is a good fit for their homes.

Last year, more than 2,500 rebates were earned by NextZero customers totaling more than \$440,000. The program offered rebates for induction ranges, heat pump pool heaters, and ground source heat pumps for the first time in 2022. After offering electric yard equipment rebates as a pilot

program to one MLP in 2021, NextZero expanded the program and offered it to all Members. In its first full year, seven Members offered electric yard equipment rebates through NextZero and awarded more than 500 rebates.

The Connected Homes demand response program, which leverages the technology of Wi-Fi-connected devices into cost savings for MLPs and their customers, experienced significant growth in 2022. The program increased from 372 customers and 481 devices at the end of 2021 to 672 customers and 1096 devices by the end of 2022. Additionally, more than 80 free and discounted electric vehicle chargers were distributed to customers who enrolled in the Scheduled Charging Program.

In 2023, NextZero continues to expand its programming and is now offering rebates for residential batteries. MMWEC Energy Efficiency Program Manager Joseph Coles said NextZero will continue to adjust its offerings to incorporate evolving green technology.

"We continue to explore other new and innovative incentives to help MLP customers reduce fossil fuel use, make electric use as efficient as possible, and help reduce the risk of increases to peak electric demand," Coles said. "We are eager to explore ways that we can help MLP customers take advantage of any federal or state grants, incentives, or rebates." ∞

## Marblehead Municipal Light Department Offers Commercial Energy Efficiency Programs

Commercial and industrial customers of Marblehead Municipal Light Department (MMLD) can now save on energy efficiency projects for their businesses. MMLD is offering four cost savings programs for its commercial and industrial customers through the MMWEC NextZero decarbonization program.

MMLD has offered residential rebates and energy efficiency programs to its residential customers since 2008. MMLD General Manager Joe Kowalik says after focusing on the department’s residential customers for so long, he wants to expand energy savings opportunities to its commercial and industrial customers, who represent 21 percent of MMLD’s retail electricity sales.

“We believe the first step in any electrification program should be to help our commercial customers reduce and remove inefficient loads from their monthly consumption of electricity,” Kowalik says.

Kowalik adds that expanding rebate offerings to commercial and industrial customers will help the department reach its decarbonization goals.

“There are no greenhouse gases emitted from a kilowatt of power that doesn’t need to be generated,” Kowalik said. “We are taking the initiative to ensure all of our customers are leveraging today’s new technologies to reduce their energy consumption.”

MMLD is participating in Prescriptive Lighting, Prescriptive HVAC, New Construction and Major Renovation, and Custom



Retrofit programs for commercial customers. The NextZero Prescriptive Lighting Program is a streamlined program for customers who have identified lighting improvement projects and procured cost quotations from licensed contractors.

The Prescriptive HVAC (heating, ventilation, and air conditioning) Program is a fast track program for customers who have identified HVAC projects and received project estimates from licensed installers.

The New Construction and Major Renovation Program targets new construction, major renovation, and end-of-life replacement projects. The NextZero team reviews each application and works with customers to develop a customized plan that may consist of co-funded technical services, custom or prescriptive rebates, or both.

The Custom Retrofit Program is ideal for commercial and industrial customers who are interested in incorporating energy efficiency measures into their businesses, but are unsure of where to start. The NextZero team works with customers and contractors to identify potential projects and complete a cost-effectiveness evaluation based on estimated energy savings.

Kowalik says he looks forward to commercial and industrial customers utilizing MMLD’s new energy savings offerings.

“We’re looking to improve our customer efficiency across the board, so we hope our commercial and industrial customers take us up on our generous new NextZero programs in 2023,” Kowalik says. ∞



*MMWEC received APPA’s “Excellence in Public Power Communications” award for its 2021 Annual Report. It was the third year in a row that MMWEC received the honor.*



*MMWEC again supported local first responders in donating eight Solo stoves for an event honoring Ludlow Police and Fire, as well as the local Sheriff’s Department.*



**Massachusetts Municipal Wholesale Electric Company**

**MMWEC**

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**Joint Action and economies of scale for Massachusetts municipal utilities**

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