

MMWEC Annual Conference: “Charging Forward” Addresses Evolving Hybrid Grid

Addressing the needs of the evolving electric customer and adapting to the new hybrid grid were just some of the areas of focus for the 2019 Massachusetts Municipal Wholesale Electric Company (MMWEC) Annual Conference. The conference, entitled, “Charging Forward,” was held May 1 and 2 at the Colonial Hotel in Gardner, Mass.



Ken Holt of Dominion Energy

The first day of the conference, aimed at MMWEC project participants, included presentations on all of MMWEC’s projects, including Seabrook Station, Millstone Unit 3, Stony Brook Energy Center, Wyman Station and Berkshire Wind. Attendees also received updates on two projects under development—Berkshire Wind Phase 2, which is expected to reach commercial operation in July, and a peaking generator to be located in Peabody, Mass., which is scheduled to go online in 2021.

MMWEC staff presented on its innovative peak alert forecasting and remote dispatch services, which help its municipal utility members determine when they should deploy their energy storage systems and other distributed energy resources. Attendees also had the opportunity to visit the Ashburnham Municipal Light Plant battery storage unit and see it

dispatched live by staff located in MMWEC’s offices in Ludlow.

The evening’s speakers included Dennis Murphy of Ventry Associates, who provided updates on pending state legislation with potential impacts on municipal utilities; Eric Johnson of ISO New England, who addressed the hybrid grid and where ISO-NE sees the industry going in the future; and Will Lauwers of the state Department of Energy Resources, who provided details on the emerging technology initiatives being developed in the state.

The second day of the conference began with a presentation by Jordan Grimes of Morgan Stanley. Grimes presented his insights into market trends and the outlook for wholesale power prices, load growth and peak demand.

Following Grimes’ talk, MMWEC staff addressed various topics, including changing the traditional municipal light plant (MLP) customer relationship, the ways that technology is driving new relationships between MLPs and customers, and the MMWEC strategy for incorporating carbon-free resources into the power portfolio. MLP managers, staff and commissioners learned about MMWEC efforts and programs addressing the evolving hybrid grid, and how they can be proactive in meeting the needs of customers. ∞



Eric Johnson of ISO-NE

MMWEC Honors Light Department, Two Public Power Champions with Awards

MMWEC honored two municipal officials and a municipal light department with awards at the 2019 MMWEC Annual Conference.

The Francis H. King Leadership Award, named in honor of Francis H. “Frank” King, a founder of MMWEC, went to the Ipswich Electric Light Department (IELD). IELD Manager Jonathan Blair accepted the King award on behalf of IELD. IELD is a founding member of MMWEC, and representatives from the department have served MMWEC in many roles. IELD participates in several of MMWEC’s power supply projects including Millstone, Seabrook, Stony Brook, Berkshire Wind, and Berkshire Wind Phase 2. IELD also participates in all of MMWEC’s energy efficiency programs including the HELPS, GO,



Jonathan Blair

and Electric Vehicle programs.

The James E. Baker Service Award, named in honor of MMWEC founder and public power pioneer James E. Baker, was given to Diane Dillman. Dillman was the longtime manager of the Paxton Municipal Light Department, and served the Massachusetts public power community with distinction in many capacities. Dillman worked as manager of the Paxton light department for 12 years, during which time she worked tirelessly to bring the benefits of public power to the people of Paxton. She served as a director on the MMWEC Board of Directors and as chairperson of MMWEC’s Audit Committee, providing the board with guidance during a time of change



Diane Dillman

MMWEC Charges Forward with New Battery

In keeping up with industry trends, MMWEC recently purchased and installed a residential battery system at its administrative office building in Ludlow. The system uses a battery controller and hybrid inverter system manufactured by Pika Energy, a leader in clean energy products, and Panasonic's lithium ion battery technology. MMWEC's system is rated at 13.5 kilowatt hours of storage and is tied into its existing 9 kilowatt solar project installed in 2009.



MMWEC's Emerging Technologies team suggested the project in February 2019 as a means to help employees and members understand the potential benefits and pitfalls in residential energy storage. The 9 kilowatt solar system at MMWEC has a comparable output to what municipal light plant (MLP) customers would install on their homes today, utilizing less than half the panels used on the original MMWEC array installed more than a decade ago. On a sunny day, the battery takes an hour and a half to fully charge. With high demand for electricity to supply HVAC loads, the battery could power MMWEC's office building for about 10 minutes. In a residential setting, it could power a home for a day or more if recharged by a backup generator or solar project.

"MMWEC's Emerging Technology Team aims to understand and stay ahead of evolving technology which includes doing our own testing and exploration on new products that we think could have major impacts and benefits to our MLPs," said Jason Viadero, of the MMWEC Emerging Technologies Team. "This is an opportunity to investigate technology and determine how it

can be best optimized for homeowners in our territories."

MMWEC's Emerging Technologies Team hopes to use their findings to collaborate with member MLPs to create customer incentives for battery projects and offer dispatching services to operate the devices during peak demand hours.

MMWEC's battery will run from noon to 6 p.m. daily to help reduce the building's demand energy costs. It has a 10 year warranty, and an expected useable lifespan of 12-15 years based on the number of cycles the system will do per year. ∞

MMWEC Honors.....continued from page 1

in the industry and within MMWEC.

The Philip W. Sweeney Public Service Award, named in honor of Philip W. Sweeney, a director of MMWEC, chairman of the Marblehead Municipal Light Department Board of Commissioners, and member of the American Public Power Association (APPA) Policy Makers' Council, was given to Mansfield Municipal Electric Department (MMED) Commissioner Jess Aptowitz. Aptowitz has served MMED



for 12 years over four terms. His two primary goals are to keep public power both affordable and reliable for the people he serves. His tireless service for MMED has resulted in the department being ranked in the lowest tier of cost providers in the state and repeatedly recognized as a 'Reliable Public Power (RP3)' award recipient from the APPA. ∞

Directors, Officers Elected to MMWEC Board

Several officers and directors were elected to new terms at May 2 meetings of the MMWEC membership and Board of Directors.

Peter D. Dion, general manager of the Wakefield Municipal Gas & Light Department, was re-elected by the MMWEC membership to his tenth one-year term as president of MMWEC.

Michael J. Flynn, a gubernatorial appointee and Town of Wilbraham representative to the MMWEC board, was elected by the board to his sixth one-year term as chairman.

Representatives of MMWEC's 20 member municipal utilities also voted to fill one, three-year term on the MMWEC board. They elected Michael Hale,

general manager of Shrewsbury Electric and Cable Operations.

Additionally, Charles Orphanos, manager of Peabody Municipal Light Plant, was elected to fill the remaining year of the three-year term of former PMLP Manager Glenn Trueira, who retired earlier this year.

Sean Hamilton, general manager of the Sterling Municipal Light Department, and Joseph M. Sollecito, director of the Mansfield Municipal Electric Department, were each re-elected to a new three-year term.

Additional MMWEC officers for the coming year, as elected by the board, are Ronald C. DeCurzio, chief executive officer and secretary; Matthew J. Ide,

treasurer; Stephen J. Smith, assistant treasurer; Peter H. Barry, general counsel; and Nancy A. Brown, assistant secretary.

Other MMWEC directors, elected previously by the membership, are James M. Lavelle, general manager of the Holyoke Gas & Electric Department; John Driscoll, general manager of the Templeton Municipal Light & Water Plant; and Kevin P. Kelly, manager of the Groton Electric Light Department. Charmaine White of Springfield is a gubernatorial appointee to the MMWEC board. Other town representatives on the board are Luis Vitorino, representing the Town of Ludlow; and Cornelius Flynn, representing the Town of Hampden. ∞

MMWEC Educates Ludlow Seniors on Pipeline, Electrical Safety

Ludlow seniors learned the dos and don'ts of electrical and gas/pipeline safety at the Ludlow Senior Center recently. The event was sponsored by Ludlow-based Massachusetts Municipal Wholesale Electric Company (MMWEC).

As owners of a 5.6-mile natural gas pipeline in the Town of Ludlow, MMWEC presents this safety program at the Ludlow Senior Center annually as part of its pipeline public awareness

program. Attendees enjoyed coffee and pastries while learning the ins and outs of electrical and gas safety.

MMWEC Power Generation Engineer Anthony Stevens explained that homeowners and contractors are required by law to verify a pipeline is not in the area before beginning any kind of digging. Verification can be done by calling Dig Safe® by dialing 811 or by visiting www.digsafe.com.

Stevens also spoke to seniors about gas safety and described the warning signs of gas leaks, including hissing and blowing gas, foul odors, dead vegetation over rights of way, and excessive water bubbling in a wetland area along a right of way. Seniors were also given information on what to do if they



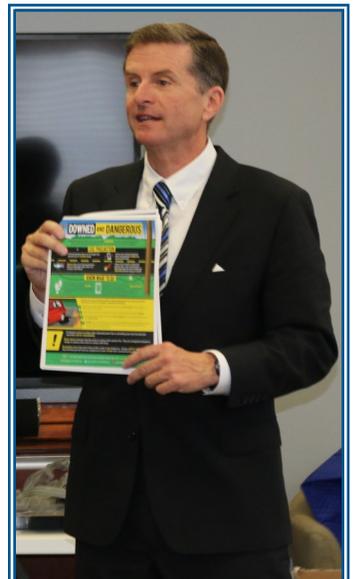
MMWEC engineer Anthony Stevens discusses pipeline safety.

suspect a gas leak: call 911, refrain from turning appliances and lights on or off, and leave the area.

Ray Gouley of the R.F. Gouley Company addressed electrical safety. He discussed how to properly operate and store space heaters, what electronics and appliances should not be plugged into power strips, and proper maintenance of smoke and carbon monoxide detectors. Gouley used props, including fried power strips and tangled extension cords, to stress the importance of properly managing electrical tools.

Gouley also discussed how to safely install and use generators and instructed seniors to always operate the systems outside homes and not overload them by plugging in too many devices at a time. They should also be positioned a safe distance from doors, windows, and vents, and should be installed by a qualified electrician. Gouley recommended that seniors bring their own carbon monoxide detectors with them for out of town trips since hotels are not required to install them in guest rooms.

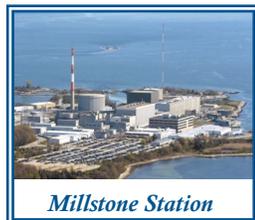
Attendees were given electrical safety guides and pipeline informational brochures to take home with them to use as reference tools. ∞



Ray Gouley of the R.F. Gouley Company explains electrical safety hazards.

Millstone Station Extends Operation by 10 Years

Dominion, principal owner and operator of Millstone Unit 3, has reached an agreement with Eversource and United Illuminating which will allow the Millstone Nuclear Power Station to continue its operation for the next 10 years.



Millstone Station

MMWEC owns 4.8% of Millstone Unit 3 on behalf of its 28 Project Participants.

The agreement process began in early December 2018 when the Connecticut Public Utilities Regulatory Authority (PURA) issued a decision that categorized Millstone as “an existing resource at risk for retirement.” This allowed Millstone to qualify for special consideration in the state’s solicitation for up to 12 million megawatt hours of zero-carbon electricity power. Dominion submitted a bid for Millstone to participate.

At the end of December 2018, the Connecticut Department of Energy and Environmental Protection (DEEP) selected

Millstone as a winner of the zero-carbon auction. This decision included a 10-year proposal from Millstone for nine million megawatt hours of output per year, which roughly equals 50% of the facility’s 2,100 megawatt hour output.

For the next three years, Millstone will receive compensation based on energy-only pricing since the plant is no longer considered at risk for early retirement. In addition, Dominion and the Connecticut utilities negotiated for Millstone to receive higher prices based on the plant’s environmental, economic, and grid benefits from 2022 to 2029.

MMWEC will retain the environmental attributes for the benefit of its Project Participants. Since MMWEC’s share of Millstone is in the ISO-New England market and not included in this new bid, the procurement agreement between Dominion and the Connecticut utilities will not impact MMWEC’s Participants’ entitlements.

The pricing for Millstone’s 10-year energy proposal will be released at a later date. PURA approved the final contracts between the plan and the Connecticut utilities at the end of March, with a 180-day review period. ∞

Two MMWEC Members Honored by APPA

Two MMWEC members have been recognized by the American Public Power Association (APPA) for reliable performance and safety initiatives.

Ipswich Electric Light Department (IELD) has received a Reliable Public Power Provider (RP₃) Gold Level designation for 2019. The RP₃ designation is given to utilities for excelling in the areas of reliability, safety, workforce development, and system improvement. Applicants are awarded points in each of the four categories based on their practices and accomplishments. Just 254 of the country's more than 2,000 public power utilities hold an RP₃ designation.

"The RP₃ application process has been a useful tool to keep IELD honest and accountable in regards to our reliability processes," IELD Manager Jonathan Blair said. "It has allowed us to keep pace with industry best practices and revisit core operations."

Blair also said gathering the information for the application helped IELD revise and strengthen its procedures, such as their mutual aid agreement, which hadn't been updated recently.

APPA RP₃ designations are awarded for three consecutive years. MMWEC members Holyoke Gas & Electric Department, Mansfield Municipal Electric Department, and Sterling Municipal Light Department all received the designation in 2018. After the three years have passed, municipal utilities have the option to



re-apply for the RP₃ status.

Blair said he plans to use the re-application process as a motivator and catalyst to improve the department's methods and to strive for a "diamond" or "platinum" level designation.

"IELD will keep pursuing ways we can be safer and more reliable," Blair said.

Meanwhile, Sterling Municipal Light Department (SMLD) has been recognized with the APPA Safety Award for 2018, which recognizes utilities with the lowest safety incident rates within their groups.

Groups are determined by worker-hours of exposure. Rates are calculated based on data submitted to the time SMLD has

SMLD had zero SMLD General credits the hon-

diligence in keeping safety a top priority by providing employees with quality equipment and detailed and continued training. Hamilton also keeps the department up-to-date with safety meetings through the Northeast Public Power Association (NEPPA) Safety Program and introduces new topics as needed.

"This award is a way to reflect back on a successful year without accidents while being mindful that safety is an important tool we must use every minute of every day, no matter what the circumstances," Hamilton said. ∞



Three MMWEC Members Participate in "Light Up Navajo"

Crews from light departments in Sterling, West Boylston and Paxton are part of a mutual aid effort to bring electricity to isolated parts of the Navajo Nation.

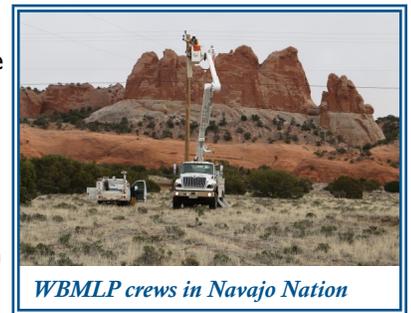
Organized by the American Public Power Association (APPA), "Light Up Navajo" is a multi-week campaign to bring volunteer linemen to the largest Native American territory in the U.S. Prior to the effort, about 15,000 of the 55,000 homes located on the 27,000 square-mile reservation did not have electricity. The homes represent about 75 percent of all unelectrified households in the United States.

Over 100 volunteers from 24 utilities signed on to the six week "Light Up Navajo" effort this spring. Crews from the West Boylston Municipal Light Plant, Sterling Municipal Light Department, Paxton Municipal Light Department and Littleton Light Department are representing Massachusetts municipal utilities.

The lack of electricity in the area means families have to drive over an hour to access running water. Families make this trip once or twice a week to fill 250-gallon plastic tanks with water

for cooking, cleaning and drinking. Many families use coolers and ice to keep their food fresh for a few days.

The movement to get families connected to the grid in the remote western region has been hampered by the high cost of connecting the isolated rural households to the grid, the sensitivity of families to utility costs and the limited availability of government loans. This initiative was developed through a partnership of APPA and the Navajo Tribal Utility Authority. The pilot effort happening this spring is expected to result in connecting over 100 new customers to the grid. It is hoped that the initiative will serve as a model for future electrification projects. ∞



WBMLP crews in Navajo Nation



Massachusetts Municipal Wholesale Electric Company

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