

Emerging Technologies, Power Markets the Focus of MMWEC Annual Conference

Emerging technologies, distributed generation and the evolution of wholesale power markets were the focus of MMWEC's recent 2016 Annual Conference.

As MMWEC marked four decades of public power joint action, the conference theme of "The Fifth Decade" was established to take a closer look at the evolving electric utility industry and what lies ahead for municipal utilities.

MMWEC also elected directors and officers for the coming year at the conference.

MMWEC staff presentations detailed the array of emerging technologies and trends gaining traction in the industry, including community solar, battery storage, microgrids, nanogrids, combined heat and power, and the growing influence of distributed generation activities.

MMWEC has created emerging technology teams to keep ahead of these developments by:

- researching emerging technologies and pursuing related opportunities for municipal utilities;

- investigating sources of state and federal subsidies and incentives;
- keeping informed of power market rule changes;
- optimizing its Renewable and Solar Energy Certificate (REC and SREC) programs for wind and solar;
- developing an Alternative Energy Certificate administrative and trading program for combined heat and power.

Staff also explained how municipal utilities can use emerging resources like solar, especially in combination with energy storage systems, to reduce their peak loads and capacity costs. In addition, staff outlined MMWEC's strategy for hedging capacity costs by assessing the risks of exposure to volatile capacity prices and implementing hedges that could include capacity ownership and/or capacity contracts.

A case study presented by Sterling Municipal Light Department General Manager Sean Hamilton showed how emerging technologies are being integrated via Sterling's energy storage initiative, the state's first utility-scale battery storage project. The

project was funded in part with a \$1.5 million Department of Energy Resources grant.

Other speakers included:

Stephen Pike, Interim CEO of the Massachusetts Clean Energy Center, who explained how MassCEC can assist municipal utilities

in funding clean energy projects;

Rebecca Tepper of the Massachusetts Attorney General's Office, who updated

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DOER Commissioner Judith Judson discussed emerging technology opportunities.

MMWEC Solar Aggregate Now Includes 109 Projects

The MMWEC Solar Aggregate, created in 2010 to enable Massachusetts municipal utilities and their customers to capture the benefits of the state's solar development initiatives, now includes 109 solar projects.

The total capacity of the solar arrays in the aggregate is 2,497 kW. The projects are located in 13 municipal utility communities: Ashburnham, Groton Holden, Ipswich, Littleton, Middleborough, Paxton, Russell, Shrewsbury, South Hadley, Sterling, Templeton and West Boylston.

The Massachusetts solar development incentive is based upon the production and sale of Solar Renewable Energy Certificates (SRECs). One SREC is created each time a (SREC I) solar project, or an aggregation of solar projects, generates 1,000 kilowatt hours of electricity. The SREC II program applies a factor based on the type of solar generation in the creation of an SREC.

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MMWEC staff have been working to refurbish the Stony Brook power plant's cooling tower. During a recent outage, above, employees completed a three-year project to repair the water distribution system and install new drift eliminators and associated supports. MMWEC is the operator and principal owner of the 527-megawatt Stony Brook plant.

MMWEC Presents Leadership and Service Awards at Annual Conference

MMMWEC recognized two individuals and one light department during its presentation of leadership and service awards at the 2016 MMWEC Annual Conference.

The Francis H. King Leadership Award was presented to Shrewsbury's Electric and Cable Operations.

The award is named in honor of Francis H. "Frank" King, a founder of MMWEC who served MMWEC as president, chief executive officer, gubernatorial appointee to the Board of Directors and president emeritus. A 38-year veteran of the Holyoke Gas & Electric Department, King was one of 15 incorporators of the American Public Power Association and a founder of the American Public Gas Association.



Michael Hale accepts the Francis H. King Leadership Award on behalf of Shrewsbury's Electric and Cable Operations, presented by former MMWEC Chairman H. Bradford White, right.

In 1967, he received APPA's highest honor, the Distinguished Service Award.

The King Award recognizes exceptional leadership and dedication to public power joint action, demonstrated by a long-term commitment to the ideals of public power and the philosophy of MMWEC. Officials of MMWEC or MMWEC Member utilities with at least ten years of involvement in the organization are eligible to receive this award.

SELCO meets several qualifications for this recognition. Former Shrewsbury Manager James E. Baker fought for municipal utility independence in the 1960s by bringing a complaint to the Federal Power Commission,



Stanley W. Herriott, former MMWEC chairman and Ashburnham Municipal Light Department manager, accepts the James E. Baker Service Award from MMWEC CEO Ronald DeCurzio.

challenging the New England Power Company, predecessor of National Grid, for refusing to sell power at wholesale prices to municipal utilities. As a result, the U.S. Court of Appeals later upheld a Federal Power Commission decision that established municipal lighting plants as utilities in their own right, entitled

to purchase power directly from wholesale suppliers.

Later, Shrewsbury was well represented in MMWEC leadership by Tom Josie, who managed SELCO for 25 years, until 2010. Josie served MMWEC in many capacities, including nine years as a Director of MMWEC and as a member of MMWEC's Audit and Legislative committees.

The tradition continues today, as the Shrewsbury light department continues to be a valued and involved member of the MMWEC organization.

The James E. "Jim" Baker Service Award was awarded to Stanley W. Herriott, who served the Ashburnham Municipal Light Department for 17 years, retiring as general manager in 2014.

Named in honor of Shrewsbury's former manager, the Baker Award recognizes distinguished service to the MMWEC organization, including service as a director, officer, or member of an MMWEC committee.

In addition to his service to Ashburnham, Herriott has been a longtime supporter of MMWEC. He served on the MMWEC Board of Directors for six years, including two years as Chairman. He also served several years on the Board's Administrative and Audit committees, and served as chairman of the Audit Committee. During his time on the Board of Directors, Herriott provided strategic direction, leadership, guidance and support to MMWEC.

The Philip W. Sweeney Public Service Award was presented to longtime Groton Electric Light Commissioner Rodney R. Hersh.

The Sweeney Public Service Award, named in honor of the director of MMWEC, chairman of the Marblehead Municipal Light Department Board of Commissioners and a member of the APPA Policy Makers' Council, recognizes exceptional service to the public or in the public arena that advances the goals and perception of public power in the eyes of the public or public officials.

Hersh is the longest running commissioner in the history of Groton Electric Light, having served for 23 consecutive years. His dedication and commitment to serving GELD customers and long tenure on the board have earned him accolades from his colleagues and management at GELD, making him a deserving candidate for this recognition. ∞



Groton Electric Light Commissioner Rodney W. Hersh accepts the Philip W. Sweeney Public Service Award from Groton Electric Manager Kevin Kelly.

Transmission Refunds Could Reach \$234 Million Under Initial Law Judge Decision

Under an initial decision issued by a Federal Energy Regulatory Commission (FERC) administrative law judge, New England consumers could see millions of dollars in refunds of excessive transmission charges. The refunds, which the Massachusetts Attorney General estimates could be as high as \$234 million, result from the FERC judge's ruling on a complaint supported by MMWEC and others challenging the return on equity (ROE) used to set regional transmission rates. MMWEC maintains in a "brief on exceptions" filed with the FERC that the judge's ruling does not go far enough, and that the ROE should be even lower than the level ordered in the decision.

The initial decision reduces the allowed ROE to 9.59 percent for rates that were in effect between January 2013 and April 2014, and to 10.9 percent from July 2014 to October 2015. MMWEC is seeking a base ROE of less than 9 percent for both periods.

The April 21 brief, supported by a coalition that includes MMWEC, the Massachusetts Attorney General, other attorneys general and consumer advocates, takes issue with core findings in the initial decision.

A key component of the decision not to implement an even larger ROE reduction is a determination that financial market conditions are currently "anomalous." MMWEC is challenging this finding, which is key in the decision's reliance on certain alternative ROE analyses. The judge found those analyses, due to market anomalies, justify selecting an ROE above the traditional "midpoint" of a proxy group of ROEs of comparable companies. According to the decision, the alternative analyses support an ROE set at the midpoint of the upper half of the proxy group array, or the so-called "top quarter." MMWEC contends that there is no market condition "anomaly," let alone one that justifies an above-midpoint result.

While FERC set the ROE at the "top quarter" level in an earlier ruling—which MMWEC and others have appealed to federal court—the Commission made clear that its decision was not a rule for all time.

MMWEC argues that the facts have changed, and, even if the earlier "anomaly" finding was correct, that the methodology used to set the transmission ROE at the top quarter is inapplicable to more recent market conditions. ∞

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attendees on litigation undertaken by her office, MMWEC and others that could provide more than \$300 million in transmission refunds to consumers;

Massachusetts Department of Energy Resources Commissioner **Judith Judson**, who discussed emerging technology opportunities for municipal utilities and cited the need for regulations to catch up with today's technology in the utility industry; and

Eric Fins, senior policy advisor to U.S. Rep. Joseph D. Kennedy's office, an advocate of public power interests on Capitol Hill, who spoke of the need to continually educate legislators about wholesale market issues.



Sean Hamilton

the Sterling Municipal Light Department; Jeffrey R. Cady, manager of the Chicopee Electric Light Department; and Joseph M. Sollecito, director of the Mansfield Municipal Electric Department. John Driscoll, general manager of the Templeton Municipal Light & Water Plant, was elected to fill the remaining year of a vacated 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, Holyoke Gas & Electric Department general manager; Glenn Trueira, Peabody Municipal Light Plant general manager; and Kevin P. Kelly, Groton Electric Light Department manager.



Jeffrey Cady

Director, Officer Elections

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

Representatives of MMWEC's 20 member municipal utilities also voted to fill three, three-year terms on the MMWEC board. They elected Sean Hamilton, general manager of



John Driscoll



Joseph Sollecito

Charmaine White of Springfield is a gubernatorial appointee to the board. Other town representatives on the board are Luis Vitorino, representing the town of Ludlow, and Cornelius Flynn, representing the Town of Hampden.

The MMWEC board consists of 12 director positions, with seven directors elected by the MMWEC membership, two appointed by the governor and three representing the towns of Ludlow, Wilbraham and Hampden. ∞

FERC Affirms Exemption for Renewable Resources Using MMWEC Self-Supply Argument

MMMWEC's argument in support of an exemption for self-supplied resources from power market rules is alive and well. The problem is, the argument is being used to justify an exemption for renewable energy resources, not self-supplied resources.

Certain of the rules adopted as part of ISO New England's Forward Capacity Market (FCM) restrict the ability of consumer-owned utilities to receive credit for energy resources they build or buy to meet their customers' electricity needs. MMWEC has been seeking a "self-supply" exemption from the FCM rules for years, most recently when ISO-NE added a "sloped demand curve" mechanism to moderate capacity price swings.

The ability of the mechanism to moderate price swings was cited as justifying a self-supply exemption in the PJM power market, and MMWEC, along with the New Hampshire Electric Cooperative, and the support of the American Public Power Association and the National Rural Electric Cooperative Association, reasoned the same would apply in New England. MMWEC argued that the exemption for self-supply was needed because the ISO-NE capacity market rules were undermining the public power business model by limiting the right of consumer-owned utilities to make their own resource choices and receive full credit for those resources in wholesale power markets. But the request for a self-supply exemption was rejected by the Federal Energy Regulatory Commission (FERC), and that determination was affirmed on appeal

(brought by MMWEC and NHEC) by the United States Court of Appeals.

That regulatory history aside, the FERC ruled in an April 8, 2016 order that a limited exemption from the FCM rules is reasonable for renewable resources, largely because the sloped demand curve will mitigate the potential price impacts of the exemption. The FERC also observes that the exemption will protect consumers from the prospect of paying twice to meet the same capacity need. MMWEC raised the identical concern in seeking a self-supply exemption, noting that consumer-owned utility customers could pay twice if a power plant built and paid for by those customers failed to "clear" the FCM capacity auction, making it ineligible to receive capacity payments. In those circumstances, the utility would be required to purchase from the FCM auction the same amount of capacity it built on its own, thereby obligating customers to pay twice to meet the same capacity supply obligation.

"Consumer-owned utility customers could pay twice if a power plant built and paid for by those customers failed to 'clear' the FCM capacity auction, making it ineligible for capacity payments."

The recent FERC order is a clarifying "order on voluntary remand" from the D.C. Circuit Court of Appeals, where generators appealed the FERC's order granting the exemption for renewables. If the generators take the case back to the Court of Appeals, and the court upholds the FERC's (and MMWEC's) reasoning supporting an exemption from the FCM market rules, there may be an opportunity for MMWEC to return to FERC with expanded arguments in support of an exemption for self-supply.[∞]

MMWEC Solar Aggregate Includes 109 Projects Continued from Page 1

The initial state SREC program, which began in 2010, had the goal of incenting 400 megawatts (MW) of solar photovoltaic (PV) projects in Massachusetts. After achieving more than the 400 MW goal in 2014, the program was expanded to include SREC II with a goal of 1,600 MW of PV capacity. The SREC II program reached its goal this year and is continuing to accept solar projects until January 2017, after which the DOER is expected to roll out the next solar program (SREC III).



Under the SREC I program, the MMWEC Aggregate has generated 10,811 megawatt hours of electricity, creating 10,811 SREC Is valued at \$3.6 million. Under the SREC II program, the MMWEC Aggregate has generated 220 SREC IIs valued at \$64,000. Four-

hundred-eighty SREC-Is and 46 SREC-IIs are expected to be generated in the first quarter of 2016.

MMWEC works with power generators, investor-owned utilities, banks and brokers to sell the SRECs. MMWEC disperses the proceeds to each Aggregate participant in accordance with their pro-rata share of the generation.

As with other joint action initiatives, it is more efficient and economical for members and project owners, particularly the owners of residential PV projects, to sell SRECs through the MMWEC Solar Aggregate. The MMWEC Solar Aggregate avoided potential brokerage charges of over \$326,000 on its SREC sales by avoiding charges that can run as high as seven percent of the sale. [∞]



Massachusetts Municipal Wholesale Electric Company

MMWEC

A non-profit, public corporation and political subdivision of the Commonwealth
Joint Action and economies of scale for Massachusetts municipal utilities

327 Moody Street, Ludlow, MA 01056

(413) 308-1392

mmwec@mmwec.org

www.mmwec.org