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Capacity market changes rejected by participants; MMWEC, others file appeal

Here we go again. Changes in New England's capacity market ordered by the Federal Energy Regulatory Commission (FERC) are, to say the least, unpopular. In December, ISO New England's first proposal to redesign the market to comply with the FERC order received a near-unanimous thumbs-down from market participants.

In a January FERC filing, ISO-NE states that more time is needed to implement the FERC-ordered changes and that additional discussion among stakeholders to resolve issues is far preferable to "costly and time-consuming litigation over a proposal ... that was opposed by almost all market participants." The changes were ordered by FERC last April and confirmed in January 2012.

The situation is reminiscent of the controversy that surrounded the last major change in the region's capacity market, which ended up being resolved in a settlement agreement spurred by Congressional action. Opposition to the FERC-approved 2005 Locational Installed Capacity (LICAP) proposal resulted in a provision, included in

the Energy Policy Act of 2005, conveying "the sense of Congress that the (FERC) should carefully consider the states' objections" to LICAP. The ensuing LICAP settlement negotiations resulted in creation of a Forward Capacity Market (FCM), which is the subject of the current controversy.

It's already too late to keep disputes over the FERC's capacity market changes out of court, as MMWEC (jointly with the New Hampshire Electric Cooperative),

MMWEC objects to the FERC order primarily because it sharply limits the right of public power entities to self-supply their capacity requirements ...

NStar, and the New England Power Generators Association have each filed a petition for review of the FERC order in the U.S. Court of Appeals for the DC Circuit. Others are likely to appeal.

The capacity market controversies center around a long-held contention by generators that New England capacity market revenues are insufficient and that the region will face reliability issues unless

major changes are made. In fact, current low capacity prices have little to do

with the structure of the FCM and everything to do with market conditions, including a large surplus of capacity and slow-growing demand.

The generators also contend that low

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The above photo of the Berkshire Wind Power Project is featured in the American Wind Energy Association 2012 calendar for the month of January. About 12,000 copies of the calendar are distributed to 2,400 AWEA members, 300 media contacts, all members of Congress, regulators and other national audiences. More about Berkshire Wind on Page 3.

Refunding bond issue saves 28 utilities \$16.8 million

The 28 Massachusetts municipal utilities participating in MMWEC's Seabrook and Millstone projects will save \$16.8 million between now and 2016 as a result of a Jan. 26 refunding bond issue by MMWEC.

With bond market conditions in its favor, MMWEC issued \$164.8 million in tax-exempt refunding bonds with a total interest cost of 1.2%. Proceeds of the bond issue and other available funds will be used to refund and retire approximately \$214 million in higher-interest bonds issued by MMWEC in 2001.

The debt service savings will be realized over the life of the bonds, which mature between 2012 and 2016.

Including the January refunding bonds, MMWEC has approximately \$300 million in debt outstanding, all of it associated with

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prices are a consequence of the influx into capacity auctions of new capacity that is being bid in as a “price taker” (effectively, through a zero bid). This capacity includes resources “self-supplied” by public power systems. Complicating the equation are Renewable Portfolio Standards (RPS) and public policy objectives that require construction of renewable energy resources despite their above-market costs.

The ability of public power systems to meet capacity requirements through “self-supply” was a cornerstone of the settlement that created the FCM. However, the FERC orders at issue constrain the ability to meet capacity needs in this manner because FERC requires that new self-supplied resources meet minimum bidding requirements, that will be imposed through a new “Minimum Offer Price Floor” rule or “MOPR.”

Under the MOPR, a zero offer price would be mitigated, or increased, to an administratively-determined minimum level that is supposed to reflect the cost of entry into the marketplace for new resources. With a higher, mitigated price, new self-supply offers would be unlikely to clear in the FCM auction, leaving the owners of such resources with no capacity credit for their resources and an obligation to purchase capacity from generators that did clear in the auction. The result will be higher capacity prices for existing generators and higher costs for public power and other consumers.

MMWEC objects to the FERC order primarily because it sharply limits the right of public power entities to self-supply their capacity requirements, a practice that enables such entities to build or buy electric generation of their choice and to receive capacity credit and payment for their resources in the FCM.

MMWEC has argued at FERC, and will contend before the DC Circuit, that the proposed MOPR reaches far beyond the FERC’s jurisdiction by dictating which resources public power must use to meet their capacity requirements. Interestingly, both the FERC and a federal appeals court have relied upon existence of the self-supply option to turn back past challenges to the FCM. Removal of the self-supply option now threatens to undermine the

basis for those decisions.

Other parties also have substantial concerns with the MOPR. States with RPS requirements and renewable energy advocates are seeking a MOPR exemption for renewable resources, for example, as these above-market resources would be unlikely to clear in FCM auctions or earn capacity revenues if required to bid MOPR levels. On the other hand, generators are seeking application of the MOPR to certain resources that cleared earlier FCM auctions, which would reduce those resources’ impact on future FCM results and would likely increase capacity prices.

The MOPR issue is not New England’s alone. The FERC’s implementation of a similar MOPR structure in the PJM Intercon-

tion (Pennsylvania, New Jersey, Maryland) has led to a spate of appeals in the Third Circuit Court. In addition, the American Public Power Association is mobilizing in opposition to the MOPR issue (both at FERC and the appellate courts), as APPA deems the MOPR a threat to public power rights and an undue burden on consumers.

As the court cases develop, MMWEC also is continuing its participation in ISO-NE committee meetings, where stakeholders are debating how best to modify the FCM design, both to comply with the FERC order and to address long-term regional needs. The ISO’s initial proposal garnered only 2.5% approval among ISO-NE market participants, meaning that crafting an acceptable solution is a very tall order.



Project Spotlight



MMWEC working to preserve Stony Brook Unit 3 assets

The Federal Energy Regulatory Commission (FERC) decision that could scuttle public power rights to self-supply their capacity requirements is among the reasons for delay in construction of MMWEC’s proposed Stony Brook Unit 3, a 280-megawatt, combined-cycle generating unit planned for construction at MMWEC’s Stony Brook Energy Center in Ludlow, MA.

The FERC decision jeopardizes capacity revenues for the proposed unit, which is intended to meet the long-term baseload power requirements of project participants. Other reasons for delays in construction of Unit 3 include slower demand growth, the near-term availability of low-priced energy in New England.

Twenty-four Massachusetts municipal utilities and two other public power entities have invested approximately \$5 million in the development of Unit 3. Permitting for Unit 3 is nearly complete and MMWEC has completed many project development tasks, including regulatory, environmental, siting, design, engineering, contract development and pre-financing work.

As a result, Unit 3’s existing assets include in-hand permits and regulatory ap-

provals, preliminary engineering and legal work, and ongoing efforts to achieve full subscription to the unit’s capacity.

After analyzing the life of and process for renewing existing permits, as well as other factors, MMWEC prepared a plan to preserve and extend the life of the unit’s existing assets to ensure that Unit 3 remains a viable and action-ready option to meet future needs. The plan, which allows for reconsideration at specific funding points, has been approved by Unit 3 participants and the MMWEC Board of Directors.

MMWEC is planning to build Unit 3 as an addition to its 526-megawatt Stony Brook power plant, which is designed to accommodate additional generation and where existing fuel supply and transmission facilities minimize costs and siting issues. MMWEC is the operator and principal owner of the existing Stony Brook plant

“It’s a matter of spending a relatively small amount of money to protect the approximate \$5 million investment in Unit 3 development, as long as the project remains a viable option to meet the long-term needs of the participating municipal utilities,” said MMWEC Chief Executive Officer Ronald C. DeCurzio.

A windy January produces high capacity factor at Berkshire Wind Project

January 2012 was a windy month atop Brodie Mountain, home to the Berkshire Wind Power Project, which is operating well after addressing a variety of startup equipment issues.

The project achieved a capacity factor of 53 percent during January. Since starting commercial operation in May 2011, Berkshire Wind posted a cumulative capacity factor of 33 percent through January.

A project's capacity factor represents the amount of electricity a project actually produces as compared to its potential production. Because wind projects rely on intermittent wind to produce electricity, annual capacity factors of 30-35 percent are generally sufficient to justify construction.

Studies of wind resources on Brodie Mountain identify the site as one of the best inland wind sites in Massachusetts, capable of producing wind energy at an annual capacity factor of approximately 40 percent. Winds on Brodie Mountain are typically stronger in the winter months and lighter in the summer.

A significant number of turbine maintenance events kept Berkshire Wind's capacity factor in the 20's during its initial



months of operation, a situation that turbine manufacturer General Electric (GE) attributes to the turbines being in cold storage during the year-long delay in project construction.

Berkshire Wind is a 10-turbine, 15-megawatt wind farm owned and operated by the Berkshire Wind Power Cooperative Corporation (BWPC). It is the largest operating wind farm in Massachusetts.

The BWPC membership is comprised of MMWEC and 14 Massachusetts municipal utilities based in the communities of Ashburnham, Boylston, Groton, Holden, Hull, Ipswich, Marblehead, Paxton, Peabody, Shrewsbury, Sterling, Templeton, Wakefield and West Boylston.

Both MMWEC and GE have operations and maintenance responsibilities under contracts with the BWPC. GE performs off-site monitoring and control as well as preventive maintenance activities. Six-month preventive maintenance was performed by GE in November 2011.

MMWEC also performs off-site monitoring from its Stony Brook Energy Center and responds to turbine trips and other events requiring visits to the project site, with varying levels of support from GE, depending on specific circumstances.

MMWEC refunding bond issue saves \$16.8M continued from Page 1

MMWEC's ownership interests in the Seabrook Station and Millstone nuclear plants. MMWEC owns 11.59 percent of Seabrook Station and 4.8 percent of Millstone Unit 3.

MMWEC has issued more than \$4.7 billion in bonds since 1976 to finance and refinance its ownership in large New England power plants, including Seabrook Station, Millstone Unit 3 and the fossil-fueled Stony Brook plant, which is operated and principally owned by MMWEC. Bonds issued to finance Stony Brook and another unit were retired in 2008.

Seabrook having applied for a license extension until 2050. The long operating life of these units and relatively short life of the related debt bring significant long-term value to these nuclear assets, the output of which benefits MMWEC's Seabrook and Millstone Project Participants.

"January's refunding bond issue, and the savings it produced, highlight the overall success and value of the MMWEC financing program, which has enabled Massachusetts municipal utilities to develop an independent power supply," said MMWEC Chief Executive Officer Ronald C. DeCurzio. "By 2019, MMWEC will have paid off the mortgages on its existing generation, which will continue producing benefits for project participants long after the debt is retired," he said.

DeCurzio said the sound financial condition of MMWEC and its project participants provides greater flexibility in pursuing new resources to meet longer-term future needs.

The 2012 MMWEC refunding bonds are rated A+ by Fitch Ratings and have A-level ratings from Standard & Poor's, all with a stable outlook.

MMWEC sells the output from its

ownership in Seabrook and Millstone Unit 3 to its project participants, which have signed take-or-pay contracts to pay their



Millstone Station

proportionate share of MMWEC's ownership costs, including plant operating costs and debt service on the bonds.

MMWEC's project participants include Massachusetts municipal utilities based in the communities of Ashburnham, Boylston, Braintree, Danvers, Georgetown, Groton, Hingham, Holden, Holyoke, Hudson, Hull, Ipswich, Littleton, Mansfield, Marblehead, Middleborough, Middleton, North Attleborough, Paxton, Peabody, Reading, Shrewsbury, South Hadley, Sterling, Templeton, Wakefield, West Boylston and Westfield as well as the Pascoag (RI) Utility District.



Seabrook Station

All of MMWEC's remaining debt will be retired by 2019, while the Millstone Unit 3 and Seabrook plants are licensed to operate until 2045 and 2030, respectively, with

New language of the Internet

ISO-NE eMarket upgrades reinforce MMWEC's Strategic Information Technology Plan

Information technology is the lifeblood of ISO New England (ISO-NE), which relies upon a vast network of information systems for gathering, integrating and reporting information required to operate the regional power grid and manage wholesale power markets.

Those participating in the wholesale power marketplace, like MMWEC's member utilities, must have access to and interact with ISO-NE's information systems.

ISO-NE is constantly expanding and upgrading its technological capabilities to accommodate changes in market rules, automate manual functions and improve reporting systems, among other purposes. Market participants have learned there is always a large "software" cost associated with significant market changes.

Currently, MMWEC is upgrading one of the computer systems it uses to interface with ISO-NE, which is launching a new version of its eMarket application on March 27. MMWEC uses the eMarket application to submit daily demand and supply bids on behalf of its member utilities.

ISO-NE is retiring the current version of its eMarket application, replacing it with an advanced web services framework using XML, SOAP and other internet technologies to exchange data with market participants. The user interface also is being upgraded to make use of modern Graphical User Interface (GUI) technology.

The transition has been in process for months and MMWEC staff have been testing its upgraded application in an ISO-NE "sandbox" environment to make sure data transfers are complete and accurate.

In the process of upgrading the eMarket application, ISO-NE is introducing a number of changes in the type of resource data required and how that data is submitted. For example, the new application will require

market participants to submit a generator's Real Time High Operating Limit (RTHOL) value, which represents its physical generation capability, along with its dispatch limits and detailed schedule data.

Essentially, the ISO-NE upgrade is a reflection of changes in the computer languages and codes that enable different software programs and platforms to communicate effectively with each other via the Internet.

"This is the new language of the Internet," said MMWEC's Chief Information Officer Danny Suppin. "And MMWEC needs to be speaking the same language in order to interact effectively with ISO-NE on behalf of its member utilities," he said.

In addition to interacting with ISO-NE, there are a number of other critical MMWEC business processes that rely upon information technology to enhance reliability, efficiency and security. To address its ongoing information technology requirements, MMWEC is following its Strategic Information Technology Plan, which currently involves implementation of a Financial Systems Redesign (FSR) Project.

"The FSR Project is replacing outdated general ledger, accounting, purchasing and financial reporting systems," Suppin said. "FSR is the first part of a comprehensive plan to transform MMWEC's business processes into a sustainable competitive advantage for municipal utilities," he said.

FSR Project implementation, planned for completion before year's end, entails hundreds of specific activities, from the purchase and installation of hardware and software through configuration, testing and final acceptance. The project will change fundamentally MMWEC's financial services technology infrastructure, and building a base of related staff expertise is part of the process.

"What's happening at ISO-NE provides

a measure of external validation for what we're doing at MMWEC," Suppin said. "It reinforces the organization's Strategic Information Technology Plan and shows we're moving in the right direction," he said.

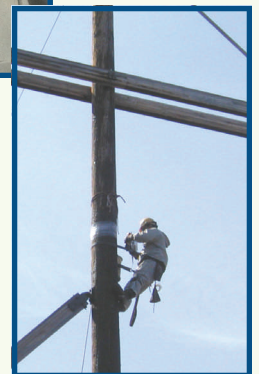
Completion of the FSR Project will provide MMWEC with the first implementation of a new enterprise-wide, strategic applications architecture for extending efficiency, security and other benefits to all critical business functions. Planning for integrating power and investment management systems, data storage, network administration and other functions is under way.



Stony Brook Fall Outage



Left, working to replace a high-voltage bushing on a transformer during the fall outage of MMWEC's Stony Brook power plant.



The outage, completed ahead of schedule, included work on the transmission towers, right.



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