RTO Insider
Your Eyes and Ears on the Organized Electric Markets
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ISSN 2377-8016 : Volume 2017/Issue 26 July 3, 2017

We Read 79 FERC Comments so You Don't Have to

Stakeholders Argue Positions on 'Five Paths' in State-Market Tension

By Michael Kuser, Amanda Durish Cook and Rich Heidorn Jr.

Following FERC's two-day technical conference on tensions between wholesale electric markets and state energy policy initiatives in early May, the commission invited comments on five potential paths forward (AD17-11).

The paths include a continuation of the status quo (Path 3), with the courts sorting out whether state initiatives — such as the zero-emission credits for Exelon nuclear plants in New York and Illinois — violate federal jurisdiction; changes to the minimum offer price rule (MOPR) (Paths 1 and 5); and market rule changes to accommodate state policies (Path 2) or incorporate them into RTO and ISO pricing (Path 4).

The commission also asked commenters to rate the urgency of the issue and solicited suggestions on how FERC should go forward procedurally.

Seventy-nine commenters responded, although many repeated their past positions and did not provide feedback on the paths the commission outlined. Based on *RTO Insider's* review of the comments, below is a summary of the supporters and detractors of each path.

See related stories (p.22):
- NE Public Power Skeptical of 2-Tier Capacity Auction
- NYISO Sees 'Productive Dialogue' on Carbon Adder
- Doubts About Balancing Markets, Policies in PJM

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Trump Taps Senate Aide, Former Lobbyist for FERC

By Michael Brooks


Glick

The White House late Wednesday announced that President Trump intends to nominate Richard Glick, general counsel for the Democrats on the Senate Energy and Natural Resources Committee, to replace outgoing FERC Commissioner Colette Honorable.

Glick has been with the committee since Feb-

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SPP, Peak Reliability Pitch RC Services for Mountain West

By Tom Kleckner

DENVER — SPP and Peak Reliability extolled their virtues as reliability coordinators (RCs) before the Colorado Public Utilities Commission last week in a bid to provide the reliability function for the Mountain West Transmission Group.

Peak Reliability is Mountain West's current RC. SPP would include the RC function among the bundled services it would provide Mountain West, should the informal collaboration of Western utilities eventually become members of the RTO. (See *Mountain West, SPP Tout RTO Membership to Colo. PUC*.)

The courtship is leaving the Colorado PUC a little queasy.

"This is like if your child poten-

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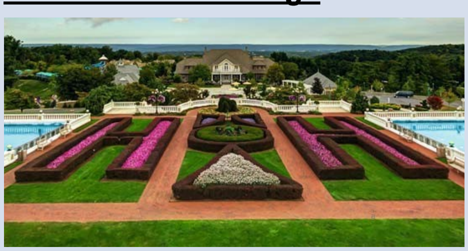
Conference Coverage



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10837 Deborah Drive ◘ Potomac, MD 20854 ◘ (301) 299-0375 ◘ info@rtoinsider.com
◘ www.rtoinsider.com ◘

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CAISO ERCOT ISO-NE MISO NYISO PJM SPP

Editorial

Editor-in-Chief / Co-Publisher
Rich Heidorn Jr. 202-577-9221

Deputy Editor / Senior Correspondent
Robert Mullin 503-715-6901

Production Editor
Michael Brooks 301-922-7687

Contributing Editors
Julie Gromer 215-869-6969
Peter Key

CAISO/West Correspondent
Jason Fordney 571-224-8960

ISO-NE/NYISO Correspondent
Michael Kuser 802-681-5581

MISO Correspondent
Amanda Durish Cook 810-288-1847

PJM Correspondent
Rory D. Sweeney 717-679-1638

SPP/ERCOT Correspondent
Tom Kleckner 501-590-4077

Subscriptions and Advertising

Chief Operating Officer / Co-Publisher
Merry Eisner 240-401-7399

Account Executive
Marge Gold 240-750-9423

Marketing Assistant
Ben Gardner

RTO Insider LLC
10837 Deborah Drive
Potomac, MD 20854
(301) 299-0375

Subscription Rates:

Payment Frequency	PDF-Only	PDF & Web
Annually:	$1,350.00	$1,650.00
Quarterly:	380.00	475.00
Monthly:	150.00	175.00

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Correction

A story in last week's issue (*Load Blocks TO Effort to Delay PJM Transmission-Replacement Talks*) misidentified Alex Stern, of Public Service Enterprise Group, as Alex Fried.

Mid-Atlantic Conference of Regulatory Utilities Commissioners

PSEG, Dynegy CEOs Provide Clashing RXs for Market Woes

By Rory D. Sweeney

PSEG CEO Ralph Izzo | © *RTO Insider*

Dynegy CEO Robert Flexon | © *RTO Insider*

HERSHEY, Pa. — Attendees at last week's Mid-Atlantic Conference of Regulatory Utilities Commissioners conference heard strikingly different prescriptions for how to fix the wholesale energy markets from the CEOs of New Jersey utility Public Service Enterprise Group and independent power producer Dynegy.

In a presentation last Monday, PSEG CEO and Chairman Ralph Izzo argued that there's a "missing money problem" among non-emitting generators. While net-metered residential solar generators are paid a premium of up to $415/MWh for being emissions-free in New Jersey, nuclear units receive no premium for having the same attribute and are paid PJM's clearing price in their zone.

"We believe that wholesale power markets are experiencing some basic failures," he said.

PSEG operates the Salem and Hope Creek nuclear plants in New Jersey and is a part owner of the Peach Bottom nuclear plant in Pennsylvania. With low-cost natural gas and subsidized renewables keeping energy prices low, owners of nuclear plants say the facilities are losing money and might be closed unless the states where they're located cough up zero-emissions premiums for them as well. Such discussions are ongoing in Ohio, Pennsylvania, New Jersey and Connecticut. So far, only Exelon has been successful in securing credits for its units in Illinois and New York.

Izzo also called for changing customers' bills to ensure that they see the premium they're paying for solar. Customers of PSEG's utility arm, Public Service Electric and Gas, have indicated that they're unwilling to pay more than $5/month for additional renewable energy, but they're already paying this much and aren't aware of it because "we don't tell them," he said.

"Over the last three years, New Jerseyans have paid over $400 million a year for renewable energy credits, producing less than 2% of the in-state electricity," he said. "I think that they are deserving of a transparent conversation on matters such as that, and I would be the first to champion the continued payment of that, but they are deserving of knowing about it."

Speaking Tuesday, Dynegy CEO Robert Flexon stressed the favorable economics of his mainly coal- and gas-fired merchant generation fleet. He argued that subsidies for uneconomic units create a "subsidy death spiral" that pushes other units into becoming uneconomic and seeking a subsidy of their own. The result is a dismantling of the market's basic function to procure energy at the lowest possible cost.

"That's kinda what we signed up for," he said.

Flexon argued that "utilities have a different DNA than a merchant generator" in that they are "leaning heavily on their core competency of dealing with the politics — which the [independent power producers] aren't nearly as good at — and working special deals that upset the flow of the marketplace."

When utilities are losing money, they go to governments for help, he said.

"You need to help yourself," he said. "What I think is the biggest threat to reliability is the lack of coordination between the states and PJM, and the states doing things to take the economic generators and push them to the side."

Dynegy originally sought a bailout for its Illinois coal units while Exelon was seeking the one it ultimately received for its nuclear units. When state support became unlikely, Dynegy pivoted to fight the zero-emissions credits (ZECs), joining a federal lawsuit challenging the state's action.

Flexon called on regulators to require utilities to "match" any subsidies they receive with equal reductions to their annual dividend distribution. He cited FirstEnergy receiving an annual $250 million distribution modernization rider in Ohio while it distributes $600 million in annual dividends. He said it is unfair for Exelon to receive millions in ZECs over the next 12 years for five of its nuclear plants when it is able to pay $1.1 billion in dividends.

"I would say to the regulators, if you're going to give them the money, you ought to look to their dividend," he said. "If you want to shore up the balance sheet, I need the company match."

In a panel discussion focused on wind energy, panelists also blamed utilities for artificially stalling market forces, but they defended renewable subsidies.

"The electric utility industry is an industry made of large institutions, and these large institutions have billions of dollars invested in assets that they own and operate, so my concern is that [they believe] renewable energy is a threat to the existing [way] of doing business," said **Markian Melnyk**, president of Atlantic Wind Connection.

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Mid-Atlantic Conference of Regulatory Utilities Commissioners

Analysts Provide Insight into Wall Street Perspective

By Rory D. Sweeney

HERSHEY, Pa. — A panel of financial analysts at last week's Mid-Atlantic Conference of Regulatory Utilities Commissioners conference peeled back the curtain on elements of their decision-making that can sometimes infuriate energy company executives and state officials alike.

The moderator, Diane Burman of the New York Public Service Commission, set the tone for the discussion by recounting her earliest memory of Wall Street workers. Her mother had warned her never to speak to them — a message that was reaffirmed when she joined the commission.

"The financial health of our energy industry is extremely, extremely important," she said. "As commissioners, we struggle with what that means, and with what we do … good, bad or indifferent."

The panel assured the audience that regulators have a major influence over how utilities are viewed by the financial sector. "We pretty much watch everything you do," said **Steve Fleishman** of Wolfe Research. "We also care about how you communicate why you're doing it."

Analysts' perception of the relationship between utilities and their regulators is the "primary driver of credit ratings," said **Lesley Ritter** of Moody's Investor Services.

Heike Doerr of S&P Global Market Intelligence said that one of the things that lowers ratings of commissions is inconsistency and uncertainty. Political influence tends to be a negative factor, she said.

One of the reasons why is because continuity can't always be anticipated from state to state. "Ideally, we'd do things on a national-policy basis," said **Anthony Ianno** of Morgan Stanley.

Fleishman noted another issue with a diminished federal vision.

"We're moving into clearly 'all of the above' territory, and the one risk of that is it could get expensive," he said, referring to recent moves by state legislatures to financially prop up certain types of generating resources. "If you support 'all of the above,' that means we're paying for 'all of the above.'"

He warned that "it's crunch time" for states to determine which resources are most important to them.

"If states really have a view that they want to preserve nuclear or they want to preserve coal, they're going to have to make that call relatively soon. … Now's the time to make it clear what you're trying to do," he said. "There just needs to be an understanding that there's costs to it, and there could be downsides to market functioning. … Maybe there'll be a chance to do it in a more coordinated manner that keeps the functioning of markets in place.

"If we don't figure this out," Ianno warned, "what will end up happening is that those who can afford it will disaggregate from the grid, and the rest of the ratepayers will absorb all of the costs associated with the grid, and that's a broken model."

Doerr explained that her company's state rankings are far more dynamic than might be expected. "It's not just if your state is making improvement; it's the pace at which improvement is coming relative to other states," she said. "Many of you have companies operating in your jurisdictions that operate in other states, so the pipe needs to be upgraded everywhere."

Analysts also complained about "black box" rate settlements that don't provide any clarity on details like rate base or return on capital.

"If the law doesn't allow it, why not change the law so there's more transparency?" Ianno asked.

PSEG, Dynegy CEOs Provide Clashing RXs for Market Woes

Continued from page 3

He referenced the assertions by Izzo and Flexon that the renewable sector is subsidized and "undercuts" their business. "My concern is that the federal government would hear that message and then take action to try to limit the advancement of renewable energy," he said.

Avangrid's Eric Thumma also defended existing pathways for renewables development, such as state renewable portfolio standards, joking that "it's hard to take my blankie and my teddy bear away from me."

State goals have proven effective, he said. "We know the RPS works. We know that it gets projects built."

Beth Treseder of DONG Energy agreed. "We, too, are primarily looking to the states for leadership," she said, but added that her company is also investigating how it can "take advantage" of the current federal focus on infrastructure development to improve critical ports and transmission lines.

For states themselves, the push to meet constituent demand for both cheap and environmentally conscious power means focusing on both costs and results.

"We're balancing the economic and the environmental in our state," Delaware Public Service Commissioner Kim Drexler said. "In my opinion, we're really looking at the least expensive way to meet those requirements."

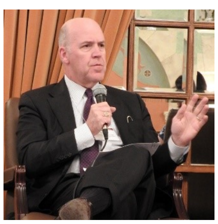
Mid-Atlantic Conference of Regulatory Utilities Commissioners

Panelists Debate Transmission Needs, Costs

By Rory D. Sweeney

HERSHEY, Pa. — Near the end of the final panel at last week's Mid-Atlantic Conference of Regulatory Utilities Commissioners conference, PJM's **Stu Bresler** was asked what it would take for the RTO to take the lead on developing a large-scale, regional transmission line from Virginia to New York City to help take advantage of offshore wind capabilities in the Atlantic Ocean.

"My knee-jerk, flippant answer is a whole lot of money," said Bresler, PJM's senior vice president of markets and operations. "It's difficult at this point to build a reliability case for that kind of infrastructure investment. I think what's required is more a business case for the generation to say that level of investment is rational."



PJM would know. Every month, a heated debate flares up at its Transmission Expansion Advisory Committee meetings to examine the details, costs and necessity of proposed transmission projects. American Municipal Power's **Ed Tatum** often leads the discussion.

As a member of a panel on transmission replacement earlier at the conference, Tatum revealed that when he was brought on at AMP, he was given a mission to reduce its members' transmission costs. He responded that controlling their costs would be a more reasonable goal.

That could be because much of the transmission grid needs replacement, and transmission owners are often sensitive to any implication they're overbuilding the system. Tatum's fellow panel participant, Jodi Moskowitz of Public Service Electric and Gas, took exception to that suggestion in her opening remarks.

"We don't look at the issue quite that way, in terms of if the transmission system is overbuilt," Moskowitz said. "We think that the appropriate focus is to make sure that we have a safe, reliable grid for many years to come, but make sure we are planning and building in a cost-effective way."

And even that might be more expensive than customers want to pay. Speaking on the fuel mix panel with Bresler, Rich Sedano of the Regulatory Assistance Project said the one-day-in-10-years loss-of-load expectation that PJM and other grid operators use is a handy standard, but not necessarily indicative of what the market will bear.

"If you ask people how much they're willing to pay to keep the lights on, it's a lot less than the imputed one-day-in-10-years standard," he said.

That clash over cost versus demand would be cleared up through increased competi-

Moskowitz

Segner

tion and cost-containment measures in transmission construction, LS Power's Sharon Segner said. "If you read the [court] orders on why competition was upheld, it's because of the argument for the consumer benefits of competition."

While Segner said that cost containment offers price assurance, Moskowitz cautioned that there will always be "uncontrollable issues" that occur during construction.

Expressing the states' perspective, West Virginia Public Service Commissioner Brooks McCabe called for restraint on all sides. During the transmission panel, he urged slowing down the decisions to construct large-scale projects and to revisit the "fundamental ground rules" to "tweak" when and how projects should be addressed.

On the fuel mix panel, he urged everyone to "lighten up" because the "hard work" would not be solved immediately. Retaining baseload units is important, he said, because "that's our security blanket."

Matt Crozat of the Nuclear Energy Institute had a mixed reaction to that message. He said he can't be relaxed like McCabe because "I know that if I lose nuclear plants, I can't get them back."

Rich Sedano (left) and Brooks McCabe | *© RTO Insider*

Matt Crozat | *© RTO Insider*

Renewable Energy Conference

Panel: NY Renewables Need Clear Regulations

By Michael Kuser

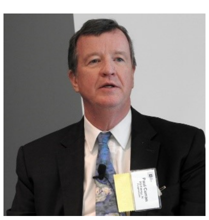
© RTO Insider

POUGHKEEPSIE, N.Y. — New York's push to derive half its electricity from clean energy by 2030 must be accompanied by regulatory consistency to develop the necessary resources, panelists said at an energy forum last week.

State regulatory policy contains inherent conflicts that hinder renewable development, **Paul DeCotis**, senior director of energy and utilities at West Monroe Partners, said during the June 28 Renewable Energy Conference, hosted by the Business Council of New York State and the Hudson Renewable Energy Institute at Marist College.

DeCotis, who formerly served as energy secretary and chair of the state energy planning board for two New York governors, led a panel on regulatory structure.

Speaking about Long Island solar projects unlikely to be built because they're proposed for green space, DeCotis said, "It goes against the policy of the state of New York on the one hand, in terms of renewable energy development, but it supports other green space initiatives. There's always going to be an inherent policy conflict, which makes these goals even more difficult to attain. So it does take some certainty of regulatory environment, and it takes time."



DeCotis noted that he and fellow panelist **Paul Curran** — managing partner of BQ Energy, a Poughkeepsie-based developer of wind and solar projects on brownfield sites — started talking about the state's need for additional transmission infrastructure investments in 2007. Those projects are likely to come online in 2020.

"That's 13 years for transmission to be built," DeCotis said.

Consistency is Key

"I can play by any rules ... but to the extent that the rules keep changing, it gets very difficult," Curran said. "From a regulatory point of view, we love consistency."

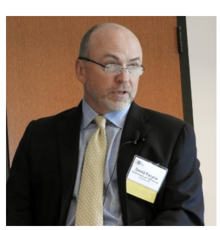
Regarding the troubled solar projects on Long Island, Curran said green space is the wrong location for renewable energy.

"There's landfills all over the place; there's brownfields all over the place — that's the right place," he said.

BQ didn't build any transmission lines at the 35-MW wind farm it constructed in Buffalo. The developer spent just $1 to buy disused substations from a shuttered steel plant that used to draw 300 MW.

"We do the same thing with landfills," Curran said. "There's five or six landfills in the middle of New York City, nothing else can be done with them ... but the closer we get to load centers, New York City, Boston, etc., the more people like Central Hudson [Gas & Electric] value the electricity," adding that NYISO also recognizes the value of siting generation closer to where it's consumed.

Regulators Look to Performance



David Pacyna, CEO of North American T&D Group, said that when he talks to utilities about buying technology, "the concept of interconnecting renewables to make the utility assets perform properly under those scenarios of intermittency and so forth are, if not at the top of the list, very close to it."

NATDG is a private equity fund that buys into technology service providers that sell to utilities in the U.S. and around the world. Prior to working for the company, Pacyna spent 30 years with Westinghouse Electric and Siemens and supervised construction of the Neptune project connecting Long Island with PJM, the Hudson transmission project and the Trans Bay Cable under San Francisco Bay.

"What does take it in hardware and software to make those rules that frustrate all but actually result in electricity coming out of the light socket?" asked Pacyna. "There's a growing recognition [by regulators] of the need to invest in the grid."

On rate designs, Pacyna said regulators in states such as Missouri and Illinois are starting to ask how they can best structure rates to incentivize investment in both grid modernization versus the grid of the future.

"Regulators also are asking how they can use performance-based rates to support investment in distributed energy and renewable resources," he said.

Lack of a Trump Effect

Ray Wuslich, partner at Winston & Strawn, thought it would be easy to make a presentation in Poughkeepsie about the impact of the Trump administration on the power

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Renewable Energy Conference

Renewables Reshaping NY Grid, Policy

By Michael Kuser

POUGHKEEPSIE, N.Y. — While renewable resources currently have only a limited impact on the New York grid, that's set to change as the state advances on its clean energy goals, industry experts said at a conference last week.

The amount of solar in NYISO's interconnection queue has nearly doubled within the past three months — from 850 MW to 1,600 MW, CEO **Brad Jones** said at the Renewable Energy Conference. The Business Council of New York State and the Hudson Renewable Energy Institute hosted the June 28 event at Marist College.

Solar and wind together now account for around 5% of the state's generation, compared with a 20% share for hydropower. That "5% piece of the pie has to grow incredibly, by as much as five times what it is today," to reach the state's Clean Energy Standard goal of having 50% of generation derived from renewable resources by 2030, Jones said.

"On the wind side, we've got 3,300 MW of wind in our queue, and that's not including whatever the state may do with offshore wind," he added. Gov. Andrew Cuomo earlier this year set a target of building 2,400 MW of offshore wind capacity by 2030.

Supply-Demand Mismatch

The Marist campus on the Hudson River sits in the middle of Central Hudson Gas & Electric's service area. The utility serves only 3% of the state's load but leads the state in terms of photovoltaic integration.

"We have over 6,000 [solar] installations interconnected to the grid today ... about 66 MW," **Paul Haering**, Central Hudson senior vice president of engineering, said during a presentation. "So while you think that would have a dramatic impact in terms of our peak load, the reality is, when the sun shines is not when everyone's turning their air conditioners on and coming home from work."

Maximum summer demand for the utility typically occurs at 7 or 8 p.m. The mismatch between PV output and peak usage represents a challenge for how to integrate distributed energy resources while minimizing the need for new transmission infrastructure, according to Haering.

"But if I'm going to replace assets, I replace it with current standards," Haering said. "That means larger wire size and higher-voltage circuits that help us to integrate more PV, which gives me better thermal and voltage profiles in order to be able to support the integration of more PV on the

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Marist College campus on the Hudson River | *© RTO Insider*

Panel: NY Renewables Need Clear Regulations

Continued from page 6

industry. But when he looked at President Trump's energy policies, he found "there wasn't much to go on."

"We haven't had any big ideas in the energy space, in energy policy, in over 25 years ... really going back to the 1980s when FERC and Congress started looking at competition on the natural gas side and unbundling supplies from the pipeline transportation business," Wuslich said. "It was crystalized in the Energy Policy Act of 1992 ... and everything we've been doing since then has been evolutions of that."

Former President Barack Obama pushed EPA's Clean Power Plan, which Trump made a campaign issue for its impact on the coal industry, Wuslich noted. Now that Trump has called for repeal of the CPP, which may take up to five years to achieve, "the question is, can the repeal of that rule really save the coal industry and resurrect coal-fired generation?"

Wuslich cited the obstacles facing coal: economics (that is, cheaper, more efficient natural gas); an aging coal fleet; unfavorable state policies; renewable portfolio standards in 29 states and D.C.; major corporations that are focusing on sustainability and clean energy; and the apathy of utility executives, who are not rushing out to build new coal plants.

He noted that a recent Energy Information Administration report said repeal of the CPP could boost the prospects for coal.

"But does this make sense? Does this reflect reality, given where we are in the marketplace?" Wuslich asked. "There's hardly a week goes by where you don't see another blurb in the trade press that so and so is going to shut down 500 MW of coal, or 300 or 1,500 or whatever. It's just a constant drip of these plants retiring, and that's because of the market."

Renewable Energy Conference

New York Banks Hungry for Renewable Energy Projects

By Michael Kuser

From left to right: Scott Medla, Denis O'Meara and Caroline Angoorly | *© RTO Insider*

POUGHKEEPSIE, N.Y. — Capital markets this year are more willing than ever to finance green energy projects, said a panel at the Renewable Energy Conference last week.

"None of the terms have changed; the deals haven't changed. What's changed is banks' appetite for renewables, and they're willing to price down and move in on these deals," said **Denis O'Meara**, managing director of energy and natural resources at BNP Paribas, who sat on a panel on renewable project financing.

The Business Council of New York State and the Hudson Renewable Energy Institute hosted the event at Marist College Wednesday.

"If you have a project and the project has merit, it's going to get financed," said panel moderator Scott Medla, managing partner at Ansonia Partners. "The institutional investors, the private equity guys, the banks — they have more money than they could possibly ever use to fund every project in America. The issue for them is finding the right project, the one that fits."

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Renewables Reshaping NY Grid, Policy

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system."

And Central Hudson is adapting the grid to DERs through enhanced intelligence of the distribution grid itself rather than smart meters.

"We have technology now that allows for bidirectional flow of power on the system," Haering said. "We built the grid for one-way power flows, so now with power coming the other way, we use bidirectional regulators and switch capacitators and substation path changers that have the capability to sense bidirectional flow and respond accordingly."

In the past two years, National Grid has interconnected more solar than gas-fired generation in New York, said Melanie Littlejohn, the utility's vice president of community and customer management for the state. That trend motivated National Grid to invest $100 million in Sunrun, the nation's largest residential solar company. Storage is a key part of Sunrun's portfolio, Littlejohn noted. (See NY Bill Sets Stage for Storage Targets.)

Littlejohn also pointed out that the North Country region has the most electric vehicles in Upstate New York, prompting the utility to install 68 charging stations in downtown Syracuse, in partnership with the federally supported Clean Cities coalition, which runs the utility's stations throughout the state.

Who Pays?

Asked how National Grid manages the effect of renewable energy programs on customer rates, Littlejohn said, "Very gently. ... More than 30% of our Upstate New York customer base lives at or below the poverty level."

Tina Palmero, deputy director of the state's Office of Clean Energy, said the New York State Energy and Research Development Agency is working to meet the governor's ambitious offshore wind target by 2030: "And of course we have to think of rate impacts as well."

One option for controlling costs could entail increased financial support for existing nonemitting resources. Regulators are looking at the operations of so-called Tier II generators, which consist mostly of small hydropower facilities, many of them family-run. "If it's cheaper to keep them open than seeing them cease operation and having to procure new renewables, the commission will look at that and consider whether or not they should get some additional subsidy," Palermo said.

Diane Burman of the New York Public Service Commission said that providing the best possible electric service to customers "is what it's all about."

Burman, who was recently confirmed for a second six-year term as commission, said she hopes to re-examine what the PSC can do in "giving the flexibility to others, so that we are not dictating the technology, maybe even the brand that should be used. That's not helpful."

Renewable Energy Conference

New York Banks Hungry for Renewable Energy Projects

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Fringe Support

Caroline Angoorly sat on the panel as COO of the New York Green Bank, a billion-dollar fund supported by ratepayers and part of the state's $5.3 billion Clean Energy Fund.

"The idea of New York Green Bank is to play in what we call that one standard deviation, on either side of where current energy project financing markets play," Angoorly said. "As these new energy models get new traction [and] become more ubiquitous, [we] provide liquidity when traditional sources of capital may not be ready."

Medla said that significant improvements in technology are helping drive banks' interest in financing green projects.

"We're seeing tremendous advances in creativity around transmission lines. We're seeing wonderful things happen in the area of storage," Medla said. "My view is that the lithium-ion batteries … are going to get surpassed pretty quickly with some of the creativity that I see out on the margin."

Wind and Solar Financing

Wind projects in New York are more difficult to finance than in other parts of the country, according to O'Meara. "The reason is wind regimes and terrain, so you have to be very specific and you have to have very good wind studies to be able to build a wind turbine or wind farm here. ... We'll go up to 15 years in financing, maybe even longer depending on the [power purchase agreement]. ... I'm telling you that because those are really pretty aggressive terms that we're seeing out there in the market right now."

Finance pricing now ranges between 1.35 and 1.75 percentage points more than the LIBOR, which O'Meara called attractive terms.

"The variable between the spreads really go to sponsor, technology, capital in, how much you've done — we're going to look at all that when we make that determination of [if] we go ahead and finance," O'Meara said.

BNP also does bond financing on wind, which tends to be a bit more lenient in its terms.

"You get a longer tenor [loan term] — sometimes less debt — but longer tenor, so you can put the deal to bed," O'Meara said. "Solar's more predictable: You know what it's going to be on each season, and it works out more easily for us to think through a solar financing. Banks will go pretty long on solar as well, construction plus 18 or 20 years."

Community Power

Angoorly cited the Green Bank's $600 million pipeline of coming projects, including storage and microgrids, the latter supported by "a lot of pent-up demand for community-aggregated generation."

O'Meara said he had similar experience with what is called community choice aggregation in California.

"In Marin County, they wanted to do this," he said. "It's a very good idea but really hard to bank at this point. … It's not standardized. Many times I would call it the commune of power, because these people are putting these deals together and I have no idea what they're saying. … I don't know where they wrote it — probably in a coffee house — but it did not make sense."

But fuzzy contracts haven't stopped projects from moving forward.

"In fact, they're getting the off-takers and the off-takers want to finance this," O'Meara said. "It's an evolving market. I guarantee you it will move into a more commercial purview shortly, but it's not there now."

CAISO NEWS

Better DER Approach Needed, Calif. Agencies Told

By Jason Fordney

The growth of distributed energy resources on the California grid will require new approaches and better coordination between system operators to avoid problems, state officials heard last week at a California Energy Commission workshop.

Representatives from utilities, DER companies and others advised members of the CEC and the California Public Utilities Commission on the various issues related to integration of new technology onto the electric grid.

The grid is becoming more decentralized, and the amount of DERs — including rooftop solar, energy storage and a host of other technologies — is expected to grow significantly in California in the next three to five years. Fleshing out communication methods between transmission operators, distribution utilities, DER providers and CAISO is one of the biggest tasks associated with incorporating the new systems.

DER companies are trying to open new markets at various points in the electricity delivery system, including selling to utilities and retail customers, as well as through development of market mechanisms at CAISO. The ISO wants to enable that process to help balance output from renewables, and next month will present its Board of Governors with a suite of related new rules stemming from its Energy Storage and Distributed Energy Resources (ESDER) Phase 2 initiative. (See *CAISO Finalizes Rules for DR, Distributed Generation*.)

Distribution system operators (DSOs) should be able to advise DER providers and communicate with them on grid integration and operational issues, Pacific Gas and Electric Director of Integrated Grid Planning Mark Esguerra said. CAISO should also provide day-ahead DER schedules to DSOs, as well as develop a *pro forma* DER integration agreement.

The ISO often dispatches DERs without knowing if they are feasible on the distribution system and when there is little visibility on their effect on load and the transmission-distribution interface, Esguerra said. DERs are different from demand response and energy efficiency resources because distributed energy is not an absence of load, but rather additional energy being put into the system that must be managed.

Tesla Business Development Manager Damon Franz said DERs can mitigate the effects of energy infrastructure on water and the environment. He also argued they provide a wide range of services, including backup power, lowering energy costs and managing the intermittency of renewables.

Franz highlighted the importance of data on what needs DERs can satisfy. He requested that permitting be made easier and said interconnection for energy storage "should be no more complicated than simply deploying a device."

But Jim Baak, program director at Vote Solar, noted that California utilities are being asked or required to forego capital investment in favor of DERs, which might not be in the interest of their shareholders. There should be a wider focus beyond policies and process changes, and state policy objectives should align with financial goals of stakeholders, he said. There are also concerns about overinvestment in DERs in the wrong locations.

"My concern is the vision is somewhat myopic," he said. "What we really hope to achieve with distributed resources is to achieve policy goals."

James Barner, resource planning engineer with the Los Angeles Department of Water and Power (LADWP), said that without an engaged interconnection process, DERs will affect reliability, including the problem of overgeneration at certain times. The utility plans to have 1,500 MW of distributed solar in the next 15 years, but DERs do create new problems on the system, he said, and rooftop and carport solar cannot be curtailed.

LADWP recognizes that DERs "add a lot of diversity to our renewables portfolio," he said. Renewables represented 21% of the utility's portfolio in 2016, but that is expected to grow to 65% by 2036. The utility plans to soon issue a Distributed Energy Resources Integration Study.

The CEC on June 14 issued a white paper on Coordination of Transmission and Distribution Operations in High Distributed Energy Resource Electric Grid that lays out the schedule and goals for integrating DERs. The agency said its next Strategic Transmission Investment Plan will include information and data on distributed generation.

CAISO NEWS

Storage Advocates Urge CAISO on DR Product

By Jason Fordney

Tesla and other energy storage companies have urged CAISO to accelerate development of a new demand response product that is based on excess generation, but the grid operator says it must first address many concerns before including the product in any proposal.

The electric automaker and other storage proponents last month submitted comments on a draft proposal of CAISO's Energy Storage and Distributed Energy (ESDER) Phase 2 initiative, which is unlikely to include establishment of a new proxy demand resource (PDR) that would consume load based on an ISO dispatch instruction, including providing regulation service.

CAISO wants to omit the load consumption product from the ESDER Phase 2 package to be presented to its Board of Governors for approval during its July meeting. (See *CAISO Proposes Rules for Distributed Resources, Storage; CAISO Finalizes Rules for DR, Distributed Generation*.) The ISO plans to defer the product until a third phase in order to better understand the limits of non-generator resources and other issues identified in its separate "multiple-use applications" initiative related to storage.

Increasing instances of generation oversupply and solar curtailments is creating urgency for a market mechanism that facilitates consumption of surplus power, and stakeholders have generally agreed that CAISO should not let jurisdictional rate issues interfere with development of the bidirectional PDR product capable of both consuming and producing energy.

"CAISO staff has indicated that owing to the retail billing implications of customer participation in a hypothetical load consumption product, such a product is too fraught to consider developing and implementing until such implications are addressed," Tesla said in its comments. The company "strongly disagrees with this perspective," provided that customers understand that their retail bills will be impacted by a decision to charge a storage device based on the billing determinants they are subject to pursuant to their retail tariff.

Tesla said that customers of the program

Tesla battery facility | *Tesla*

should be able to determine for themselves whether to provide load consumption based on the difference between retail rates and wholesale pricing. Customers would find value in offsetting their retail bills through negative wholesale prices while helping California mitigate oversupply, the company contended.

While storage advocates are urging CAISO to develop a bidirectional PDR product, "a broad cross-section of stakeholders" said it should "take more time to resolve issues, consider options and coordinate with" the California Public Utilities Commission, CAISO said.

Among these concerns are the effects on retail rates, customer interest, demand charges and technical implementation issues.

Pacific Gas and Electric's "excess supply pilot has delved into these issues and has reported that participants are concerned about rate impacts and ratcheting demand charges," CAISO said in its revised proposal.

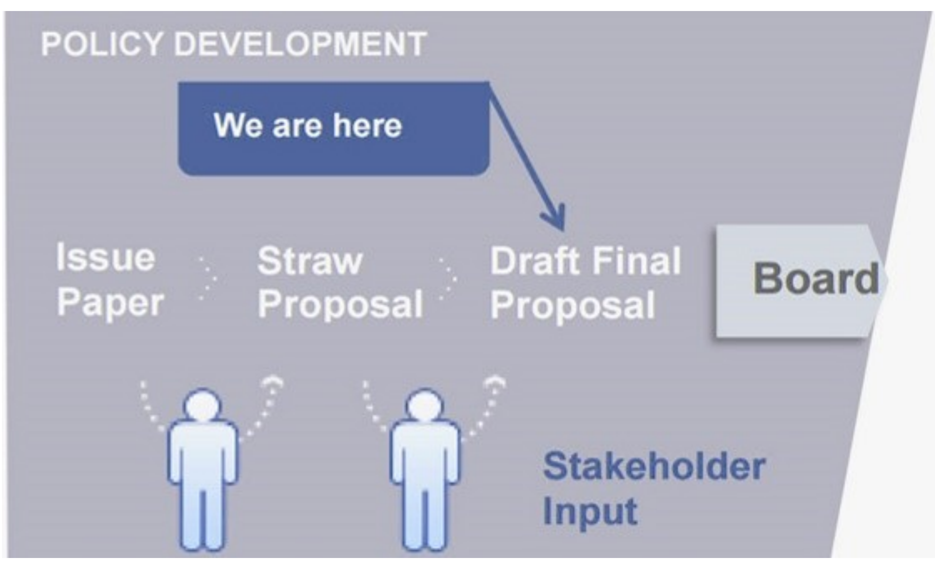
"Contrary to comments from the storage community, the CAISO does not view these barriers as jurisdictional in nature, but as real impediments to customer interest and robust customer participation in a bidirectional PDR product," the ISO said.

Energy storage companies said CAISO should also work on enabling behind-the-meter storage to participate in the wholesale market via the PDR product. There is unused potential in BTM energy storage because to do so currently requires participation as a non-generator resource, said Tesla, energy storage company Stem and EV charger manufacturer eMotorWerks.

There has also been discussion within the Load Consumption Working Group, which Tesla said CAISO staff "appears to defer to stakeholders to revive and manage." Storage companies want the ISO to take a leadership role in the working group.

The California Energy Storage Association (CESA), which represents more than 60 companies, said it "supports rapid action" on the group performing further work and having CAISO lead it, adding that the ISO should ensure ESDER promotes nondiscriminatory access to markets.

"CAISO should focus on how to ensure resources like PDRs can show up in CAISO markets to compete to provide services," CESA said.



Stakeholder process for ESDER 2 stakeholder initiative | *CAISO*

CAISO NEWS

California High Court Upholds Cap-and-Trade

By Jason Fordney

The California Supreme Court on Wednesday declined to review a challenge of the state's greenhouse gas cap-and-trade program, preserving the 2006 law that requires power plants and other polluters to reduce carbon emissions or purchase state-issued credits.

The court declined to review the California Chamber of Commerce's appeal of an April 6 decision by the Third District Court of Appeal favoring of the program.

While the business interests represented by the chamber did not oppose the California Global Warming Solutions Act of 2006, which set the emissions limits, they attacked the associated California Air Resources Board (CARB) regulations that created the cap-and-trade program allowing the sale of some greenhouse gas emissions allowances.

The legislation required covered entities such as power plants to reduce greenhouse gas emissions to 1990 levels by 2020 and designated CARB to monitor and regulate emissions sources.

Under the program, large emitters of greenhouse gases must purchase emissions credits at CARB's quarterly auctions to cover emissions not accounted for with free credits. The plaintiffs said the auction sales exceeded the State Legislature's delegation of authority to the board, and that the revenue generated amounts to a tax.

The appeals court in its earlier ruling said "the legislature gave broad discretion to the board to design a distribution system, and a system including the auction of some allowances did not exceed the scope of legislative delegation." The court said the legislature later ratified the system by specifying how to use the proceeds.

The appeals court also said the revenue is not a tax because it is a voluntary decision driven by business judgments regarding whether it is better to buy credits than reduce emissions, which, unlike a tax, has value.

"Reducing air emissions reduces pollution, and no entity has a right to pollute," the lower court said.

The chamber did not immediately respond to a request for comment on the high court's decision.

The Environmental Defense Fund and Natural Resources Defense Council intervened in the proceeding on behalf of CARB.

"This is the final step in this case to affirm California's innovative climate program, including its carbon auctions, which serves as a vital safeguard to ensure polluters are held accountable for their pollution," EDF senior attorney Erica Morehouse said in a statement.

Even with the court challenge behind it, cap-and-trade still faces an uncertain future. Gov. Jerry Brown is trying to extend the life of the program, which expires in 2020, through a ballot measure.

"With this Supreme Court victory, now it's up to us to take action extending California's cap-and-trade system on a more permanent basis," Brown said in a statement.

CARB is expected to auction about half of the program's total allowances by 2020. As of January 2015, about 500 million allowances had been given away and about 75 million were auctioned.

ERCOT NEWS

NextEra-Oncor Deal Meets Third Denial

By Tom Kleckner

Texas regulators last week again refused to revisit their decision to reject NextEra Energy's proposed acquisition of Oncor, the state's largest regulated utility.

The ruling by the Public Utility Commission of Texas came just two days after Florida-based NextEra filed a 57-page request for rehearing. Commissioners Ken Anderson and Brandy Marty Marquez responded to the motion during a June 29 open meeting.

"It is time to bring this chapter in the [Energy Future Holdings] bankruptcy to a close and consider other options more suitable to Oncor and its ratepayers, as well as ERCOT and its market participants," Anderson wrote in a memo.

The commission rejected NextEra's $18.7 bid for Oncor in April, finding it not to be in the public interest. (See *Texas Commission Denies NextEra's Bid for Oncor*.)

Anderson said he remained unpersuaded "by [NextEra's] regurgitation of essentially the same arguments" made in a previous rehearing request. He noted that "almost every intervenor" in the docket (No. 46238) supported the commission's original decision and urged the PUC to deny the request.

Marquez concurred with Anderson's memo during a discussion that lasted 30 seconds.

NextEra did not respond to a request for comment on its next steps following the decision. The company has for years eyed the purchase of Oncor, the lone successful business of bankrupt EFH. Proceeds from the sale would have been spread among EFH's creditors, who last year reached a settlement to end a bankruptcy first declared in 2014.

NextEra filed its latest request for a rehearing June 27, arguing that the PUC overstepped its authority, ignored evidence, misinterpreted Texas laws and used bad judgment when it shot down the acquisition.

The company contended that the PUC's opinion "constitutes arbitrary and capricious decision-making and an abuse of the commission's discretion." The commission's final order contained 14 errors of law, NextEra said, and it intends to "preserve the company's rights to judicial review."

"The commission must determine whether a proposal to 'change the ownership of the largest utility in Texas is in the public interest' or whether the public interest is better served by leaving the state's largest utility under the constraints of ownership by financial investors mired in bankruptcy," the company said in its petition.

The commission turned down NextEra's first request for a rehearing early last month. (See *Texas PUC Again Rejects NextEra's Oncor Bid*.)

The PUC continues to operate with two commissioners while it waits on a replacement for former Chair Donna Nelson, who left the commission in May. Texas Gov. Greg Abbott is not expected to name Nelson's successor until the end of the upcoming special legislative session, which begins July 18 and could last up to 30 days. (See *Texas PUC Chair Nelson Stepping Down*.)

June Sees 3 New Demand Highs

Sweltering temperatures led to three new ERCOT demand records in quick succession during June. The ISO has set eight highs for monthly demand during the last 12 months.

The Texas grid operator recorded consecutive peaks of 66.7 GW, 67.5 GW and 67.7 GW during the afternoon of June 23. The final number, and new record, came during the 4 p.m. hour, breaking the previous record of 66.5 GW set in June 2012.

ERCOT has projected a new all-time demand peak of nearly 73 GW this summer. The current record of 71.1 GW was set last August. (See *ERCOT Sees Enough Generation Through 2022, 73-GW Peak for Summer*.)

ERCOT operators monitor the grid. | *© RTO Insider*

TAC Approves Revision Requests in Email Vote

ERCOT stakeholders unanimously approved a pair of revision requests in an email vote last week, following the earlier cancellation of the monthly scheduled Technical Advisory Committee meeting.

Both changes were approved by 22-0 margins. The TAC has 30 voting members.

- NOGRR170: Revises the Nodal Operating Guide to be consistent with NPRR824 language related to NERC Reliability Standards EOP-011-1 (Emergency Operations) and BAL-001-2 (Real Power Balancing Control Performance).
- RRGRR014: Conforms the Resource Registration glossary to the as-built release, which captured baseline updates before the approvals of RRGRR006 and RRGRR007. Adds solar resource registration inputs omitted from the greybox tab for RRGRR009.

— Tom Kleckner

ISO-NE NEWS

NEPOOL Participants Committee Briefs

May Peak Load Sees Outages, Divergent Prices in New England

Summer heat hit New England early this year, with load peaking at 20,181 MW on May 18 as temperatures in Boston and Hartford topped out in the mid-90s, resulting in transmission and unit outages and reductions that led to operational constraints, congestion and divergent pricing.

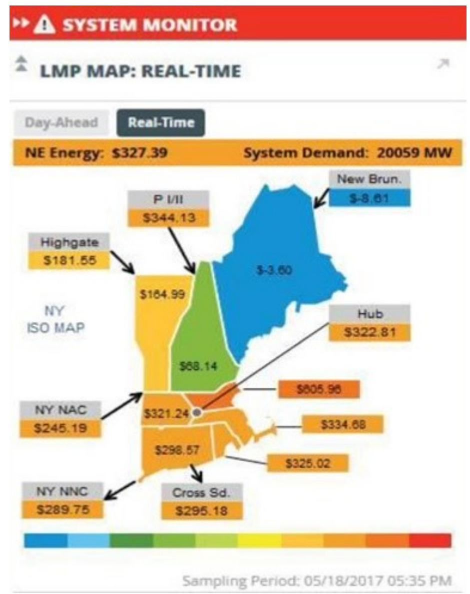
ISO-NE, which had 5,700 MW in planned outages, was hit with another 2,790 MW in forced outages at the peak hour ending at 6 p.m., COO Vamsi Chadalavada told the summer meeting of the New England Power Pool Participants Committee on Tuesday in his operations report for May.

Chadalavada said that the grid operator initiated an abnormal conditions alert (master/local control center procedure no. 2) at 9:30 a.m., which lasted until 10 p.m.

The Hydro-Quebec Phase II import limit dropped from 1,760 to 1,000 MW, while the NY-Northern Interface was nearly full at peak as total transfer capability dropped to 900 MW due to line outages. Northbound imports over the peak hours, coupled with constraints in Maine, resulted in congestion at the North-South Interface.

Fast-start generation was dispatched to meet the peak hour, pushing the average real-time price during the peak hour to \$389.17/MWh, almost four times the average day-ahead price of \$100/MWh. Real-time prices ranged from a high of \$758.88/MWh in the Northeastern Massachusetts and Boston pricing zone, to a low of -\$71.07/MWh for power from New Brunswick.

The energy market value in May was \$283 million, up \$3 million from April 2017 and up \$67 million from a year ago. May natural gas prices were 4.7% lower than April but still 44% higher from a year earlier. Average real-time LMPs were \$29.44/MWh in May, down 6.6% from April, but up 38% from a year earlier.



ISO-NE

Committee Approves Settlement Terms for PER Complaint

Meeting in executive session, the Participants Committee on June 27 approved settlement terms that address all issues set for hearing in a dispute over the peak energy rent mechanism in the Forward Capacity Market.

In January, FERC granted a complaint by the New England Power Generators Association (NEPGA) against ISO-NE, agreeing that a penalty imposed during a summer heat wave proved that the PER is unjust and unreasonable (EL16-120). The commission agreed with the generators that the PER adjustment should be raised but said the amount should be determined in an evidentiary proceeding if stakeholders could not reach a settlement. (See *ISO-NE Scarcity Rules Unfair to Generators, FERC Says*.)

The settlement term sheet was approved by a show of hands with one vote in opposition and several abstentions.

The motion authorized officers of the Participants Committee to approve the formal settlement offer on the condition that all six committee officers agree. If the officers do not agree unanimously, the committee would need to hold a special meeting on July 14, 2017.

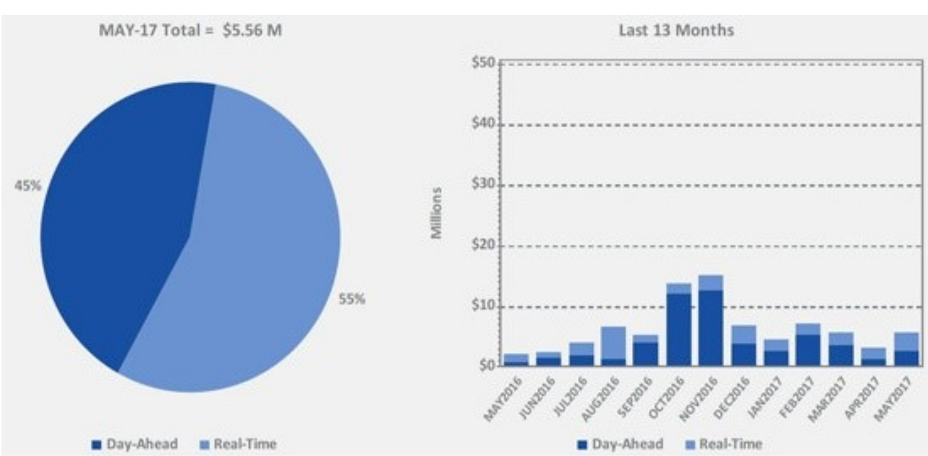
According to a memorandum from NEPOOL counsel David Doot, an agreement on Tariff language needs to wait until the commission rules on the issue of how to reflect capacity invoices issued after the refund effective date of Sept. 30, 2016. "Accordingly, the plan now is to finalize and file an offer of partial settlement without tariff language, and to approve changes to the tariff only if and after FERC rules on the proposed partial settlement and this unresolved, contested issue," the memorandum said.

Terms of the settlement were not publicly disclosed.

NEPOOL Approves Tariff Changes for DR Integration

The Participants Committee on June 28 approved four Tariff amendments related to the June 2018 full integration of demand response resources (DRRs) into the energy, reserves and capacity markets. The changes integrate DRRs into the base Price Responsive Demand market design, as well as into new market designs implemented since the last New England Tariff filing under FERC Order 745 on DR compensation.

— Michael Kuser

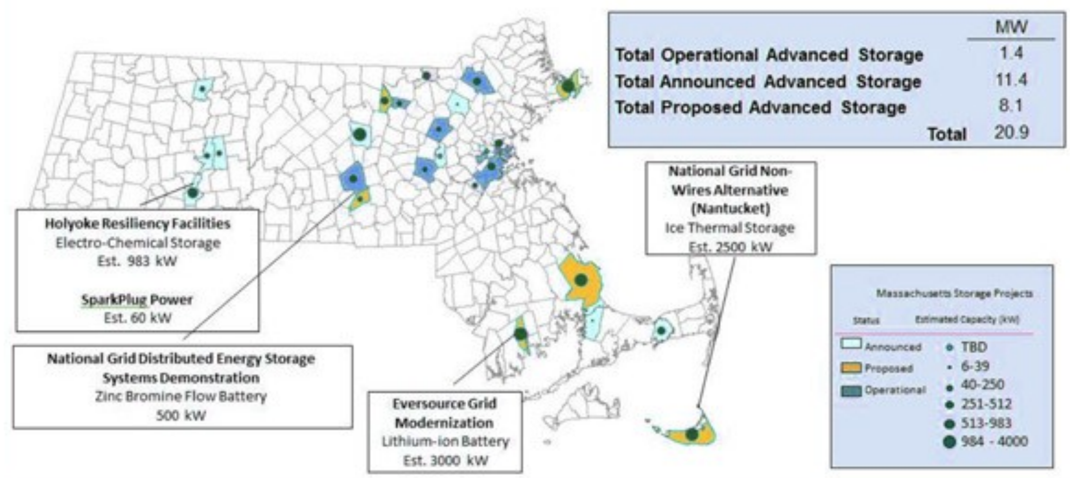


Day-ahead and real-time net commitment period compensation charges | *ISO-NE*

ISO-NE NEWS

Massachusetts Underwhelms with 200-MWh Storage Target

By Michael Kuser



Advanced storage in Massachusetts | *Massachusetts DOER*

Massachusetts officials said Friday the state's electric distribution utilities must procure a combined 200 MWh of energy storage by Jan. 1, 2020 — an unambitious goal to some observers.

Although the Department of Energy Resources' (DOER) announcement called the 200 MWh "an aspirational" target, some industry stakeholders expected more from Gov. Charlie Baker's Energy Storage Initiative. The department's State of Charge report, released in September, presented recommendations for generating 600 MW of advanced energy storage by 2025, saying it would capture $800 million in system benefits. (See *Mass. Considering Storage Mandate*.)

"Based on lessons learned from this initial target, DOER may determine whether to set additional procurement targets beyond Jan. 1, 2020," DOER Commissioner Judith Judson said in announcing the target. The state also agreed to spend $10 million on energy storage demonstration projects in addition to the $10 million that accompanied the ESI announcement in May 2015.

Judson said the state also had begun implementing other recommendations from the State of Charge report, allowing storage to be paired with the state's plans to procure 9.45 million MWh of clean energy and 1,600 MW of offshore wind.

She also said the state was "incentivizing" storage through the Solar Massachusetts Renewable Target (SMART) program and that storage would be funded by alternative compliance payments under the ACES Grant Program, the Peak Demand Reduction Grant Program and the Community Clean Energy Resiliency Initiative, and that storage would be eligible for future Green Communities grants.

It also is considering allowing utilities to use energy-efficiency funds for storage that provides sustainable peak load reductions and expanding energy storage in the Alternative Energy Portfolio Standard.

"It's less of an aspirational target, something the state's going to strive for, and more a description of what the state is already doing," said Ted Ko, director of policy at Stem, a provider of commercial-scale energy storage. "It's entirely possible they would have met [the target] anyway. For example, Eversource [Energy] has already proposed over 180 MWh of storage projects in a recent rate case."

Ko said the SMART program, whose regulations were released last month, "by itself conceivably could come up with 100 MWh."

"Essentially, by setting a low, voluntary target number, you're not inspiring any new programs or new initiatives as outlined in the State of the Charge report," he added.

The announcement drew similar, if more temperate, comments from others, including Chris Rauscher, director of public policy at residential solar company Sunrun.

"The decision by DOER to set a soft energy storage target of 200 MWh is a moderate first step in providing long-term market surety," Rauscher said. "Growing the storage market in Massachusetts has the potential to support local job creation and lower costs for Massachusetts ratepayers, all while providing critical resiliency through backup power."

Rauscher said the company would work with legislators to expand storage's potential "by encouraging private investment in Massachusetts through programs like the Alternative Energy Portfolio Standard."

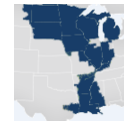
The Energy Storage Association noted that Massachusetts utilities previously proposed "specific, albeit voluntary, procurement targets of a combination of up to 200 MW/500 MWh of energy storage. Today's announcement is a more conservative step in that direction.

"Massachusetts is also competing for industry jobs with California, Oregon, New York and other states moving forward on their own storage procurement targets," ESA added.

Massachusetts becomes the second state in the U.S. to mandate storage. The California Public Utilities Commission in 2013 ordered the state's three large investor-owned utilities to add 1.3 GW of energy storage by 2020.

New York lawmakers last month passed a measure requiring the state's Public Service Commission to set targets to increase the adoption of energy storage in the state through 2030. If signed by Gov. Andrew Cuomo, the new law would require the commission to work with the New York State Energy and Research Development Agency and the Long Island Power Authority to set up a storage deployment program. (See *NY Bill Sets Stage for Storage Targets*.)

MISO NEWS



FERC: MISO Gas Data Sharing Plan Falls Short

By Amanda Durish Cook

A MISO plan to share generators' hourly gas-burn estimates with select natural gas pipeline operators will require more explanation before getting federal approval, FERC staff said Tuesday.

Agency staff issued the RTO a deficiency letter in response to a proposal to share nonpublic, day-ahead gas-usage profiles with pipeline companies — which currently include Northern Natural Gas, ANR Pipeline and DTE Energy — before this winter as part of a pilot program meant to improve gas reliability (ER17-1556). (See "3 Pipeline Companies to Receive Gas Profiles Before Winter," *MISO Reliability Subcommittee Briefs*.)

In filing the proposal, MISO stressed that it would share only aggregated data, while also contending that sharing nonpublic operational data was allowed under FERC Order 787. The RTO plans to execute nondisclosure agreements with relevant pipelines and utilities under the proposal.

But FERC staff were primarily concerned with a provision that would also allow MISO to share data with local distribution companies (LDCs) and intrastate pipelines in addition to interstate operators.

While the deficiency letter acknowledged that Order 787 recognized the "significant" role of LDCs and others in maintaining reliability of both interstate pipeline systems and electric transmission systems, it also noted the order "declined to provide blanket authorization for the disclosure of nonpublic, operational information" to LDCs, intrastate pipelines or gas gatherers, instead requiring a case-by-case approach. FERC staff determined that "MISO does not provide support for this aspect of its proposal" and gave the RTO 30 days to provide more supporting information to justify sharing nonpublic information with LDCs.

Agency staff also said that MISO's proposal failed to expressly prohibit the use of non-public, operational information "to the detriment of any natural gas and/or electric market," as an earlier, similar proposal from PJM promised. MISO's proposed nondisclosure agreement merely prohibits the "receiving entity from illegal and non-legitimate use of the nonpublic, operational information," FERC staff said, asking MISO to explain the omission.

Some MISO stakeholders earlier this year voiced opposition to the pilot program, saying it could affect reliability if participating gas operators make burn rate decisions relying solely on partial day-ahead data. (See *MISO Stakeholders Question Electric-Gas Info Sharing*.)

MISO NEWS

FERC Tentatively OKs New MISO-PJM Project Type

By Amanda Durish Cook

CARMEL, Ind. — FERC last Monday approved a proposal by PJM and MISO to create a new category of small interregional transmission projects while cautioning that the measure could see future revisions.

The proposal updates the PJM-MISO joint operating agreement with a targeted market efficiency project (TMEP) type, which applies to projects that reduce historical congestion along the RTOs' seams.

Still, in its June 26 delegate order, FERC staff said that preliminary analysis indicates the proposal has "not been shown to be just or reasonable" and left open to the possibility that it could be subject to refund after being implemented (ER17-721). Eligibility to use the project type began Wednesday.

The RTOs filed jointly last year to create TMEPs to encourage construction of cost-effective and congestion-relieving seams projects that might otherwise be overlooked because of their low cost and small size. Their proposal stipulates that TMEPs cost less than $20 million, be in service within three years of approval, and within four years of operation provide congestion relief equal to or greater than the cost of construction. Costs will be apportioned to MISO and PJM based on the percentage of congestion relief benefits accruing to each RTO.

The RTOs have so far identified $17.25 million worth of upgrades in five TMEP candidate projects, and expect those projects to deliver a 5.8:1 benefit-cost-ratio and realize $100 million in benefits within four years of going in service. (See *MISO-PJM TMEP Projects Drop to Five*.) Both RTOs hope to finish evaluation of TMEP candidates by September and seek respective board approvals by the end of the year.

Exelon, the Organization of MISO States, Northern Indiana Public Service Co., the Indiana Utility Regulatory Commission and ITC Mid Atlantic Development supported the proposal in comments to FERC. MISO South regulators protested the filing, claiming that the RTOs' benefits analysis fails to take congestion hedging revenues into consideration.

Speaking on behalf of the MISO Transmission Owners sector, Ameren Senior Director of Transmission Policy Dennis Kramer said that the factoring in of congestion hedging revenues would "complicate" the TMEP study process.

"Excluding the congestion hedge costs is consistent with the TMEP goal of straightforward, efficient metrics that can be easily

Continued on page 18

MISO, PJM Float Pseudo-Tie Coordination Plan

By Amanda Durish Cook

MISO and PJM could terminate or suspend pseudo-ties that no longer satisfy agreed-upon requirements under a joint proposal.

The RTOs' proposal also includes a provision that would make each of them the native reliability coordinator for units pseudo-tied into the other balancing authority area, "responsible for transmission-related congestion on the transmission system where the pseudo-tied units are physically connected."

The RTOs are adding coordinated pseudo-tie policies to their joint operating agreement. MISO last week released a first draft for stakeholder review.

The proposed rules also stipulate that pseudo-tied units must follow both PJM and MISO modeling procedures and obtain station service according to native balancing authority rules. They also make clear that pseudo-tied units committed as capacity resources in a delivery year cannot be directed to serve load in the native balancing authority when the attaining balancing authority requires the unit's output — unless they are needed to avoid exceeding NERC operating limits in the native balancing authority. The RTOs also agree that only pseudo-tied units — and not the RTOs — are responsible for compensating an attaining balancing authority for failure to deliver energy.

David Zwergel | © *RTO Insider*

"There were some common-sense coordination practices to add to the joint operating agreement," MISO Senior Director of Regional Operations David Zwergel said during a June 29 Reliability Subcommittee call. He said MISO and PJM staff collaborated to come up with the proposed rules.

Zwergel said the RTOs expect to file the agreement changes with FERC in late July and asked stakeholders to submit written comments on the draft language by July 13. PJM is also reviewing the language with its own stakeholders, he noted.

The joint effort stems from two FERC deficiency letters in response to the RTOs' separate attempts to implement more stringent rules in order to improve control over an increasing number of pseudo-ties between MISO and PJM. The letters asked both MISO and PJM to explain efforts they undertook to work with each other in developing the rules. (See *MISO, PJM to Try Again on FERC Pseudo-Tie Filings*.)

Both RTOs have said they plan to refile different versions of the stricter pseudo-tie rules. MISO initially said that adding standard pseudo-tie rules in the RTOs' joint operating agreement was unnecessary but changed course earlier this year. It also recently asked FERC to schedule a technical conference to clarify the rules governing the implementation and use of pseudo-ties. (See *MISO Asks FERC for Pseudo-Tie Technical Conference*.)

Continued on page 18

PJM NEWS

FERC Tentatively OKs New PJM-MISO Project Type

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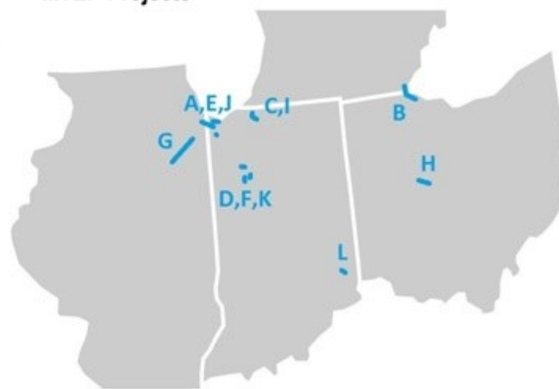
reproduced by stakeholders," Kramer said in comments submitted for a June 13 FERC workshop on the TMEP issue. "Adding congestion hedges … would fundamentally change the nature of the TMEPs by changing the study from a simple analysis of historical flowgate congestion to a multifaceted deconstruction of a series of complex financial hedging instruments which differ in each RTO. Such action would counteract the RTOs' ability to implement the quick-hit, high-value project types."

MTEP Projects

Letter	Flowgate
A	Burnham – Muster 345 kV
B	Bayshore – Monroe 345 kV
C	Michigan City – Bosserman 138 kV
D	Reynolds – Magnetation 138 kV
E	Roxana – Praxair 138 kV
F	Klondike – Purdue 138 kV
G	Braidwood – East Frankfort 345 kV
H	Marysville – Tangy 345 kV
I	Michigan City – Trail Creek 138 kV
J	Munster 345/138 kV
K	Tippecanoe – Lafayette South 138 kV
L	Batesville – Hubble 138 kV



Source: MISO, PJM

Regional Cost Allocation

FERC must still also act on separate proposals by MISO and PJM regarding how they plan to allocate their portion of TMEP costs regionally.

MISO plans to pursue a bifurcated cost allocation, using a local transmission pricing zone when the constraint exists on lines belonging to one or more MISO transmission owners. For constraints wholly within PJM, MISO is seeking a postage stamp allocation for the entire MISO Midwest region.

However, MISO missed its targeted April filing deadline to complete a regional cost allocation because it needed more time to develop the process with stakeholders. Spokesman Mark Adrian Brown said the RTO will submit an allocation proposal "as soon as possible."

PJM in April filed a regional cost allocation proposal that would assign TMEP costs to zones and merchant transmission facilities "that are shown to have experienced net positive congestion over the two historical years prior to the TMEP study period" (ER17-1406).

PJM, MISO Float Pseudo-Tie Coordination Plan

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During last week's call, Entergy's Jennifer Amerkhail asked why the RTOs also included rules governing "partial" pseudo-ties — an arrangement that accommodates generators that supply both RTOs.

Zwergel responded that earlier this year a MISO partial pseudo-tied resource failed to follow dispatch orders and overproduced on one side of the seam. The proposed rules expressly state that the portion of the generation dedicated to supplying the attaining balancing authority must follow its instructions, while the remaining generation must follow native balancing authority rules and dispatch.

Other stakeholders asked why the RTOs would include a requirement for 42-month written notice in advance of terminating a pseudo-tie.

Zwergel said the requirement is based on a six-month advance in addition to PJM's three-year forward capacity auction. While the notice is unnecessarily long for MISO, it is necessary to accommodate the RTOs' disparate capacity auction schedules, he said.

SPP NEWS

SPC: More Discussion Needed on Congestion Study

SPP stakeholders last week spent two hours discussing the need for a high-priority congestion study in the Texas Panhandle, only to determine that more discussion is needed.

The Strategic Planning Committee scheduled the two-hour conference call June 26 to review the study's scope and its scenarios. Despite stakeholder suggestions to relitigate the requirement for the study and consider alternative study methods, SPC Chair Mike Wise successfully kept the group on task.

"These other issues are part [of the discussion] but very tangential," said Wise, senior vice president of regulatory and market strategy for Golden Spread Electric Cooperative. "We can have a fuller discussion at the next SPC meeting."

The committee added time to its July 13 face-to-face meeting in Denver, following a two-day Markets and Operations Policy Committee meeting. Members plan to discuss a suggestion by American Electric Power's Richard Ross that the congestion study evaluate confirmed service and unfilled hedges.

SPP's Board of Directors directed staff in April to conduct the high-priority study after it canceled a 345-kV transmission project in the area. Chairman Jim Eckelberger agreed the study should take a systemwide look at congestion caused by the proliferation of wind farms. (See *SPP Board Cancels Panhandle Line, Seeks New Congestion Study*.)

"I'd rather take a little more extra time and do it right, rather than punch on," SPP Director Larry Altenbaumer said. "I appreciate the complexity of issues out there, but we have to decide how best to deal with the continued growth of wind in our footprint."

Staff is currently analyzing the saturation point for renewables sinking within SPP to determine at what point the additional generation would "no longer be economic," SPP Director of Engineering Antoine Lucas said.

"Until then, continue to expect additional requests and more renewables added to the system," he said. "Renewables are now replacing other renewables at similar price points."

"This wind is coming on," the Wind Coalition's Steve Gaw said. "It doesn't make sense to not consider its impact on the system. The potential benefits shouldn't be ignored."

The SPC did not come to an agreement on the study scenarios. Staff is recommending developing three scenarios from the five thresholds for interconnection costs of renewable energy, ranging up to $100,000/MW. SPP says the previous 7.6 GW of wind placed in service had an average cost of $32,500/MW. Connecting the total studied capacity of 43.3 GW would cost more than $1 million/MW to in part account for needed investment in new transmission infrastructure.

SPP Vice President of Engineering Lanny Nickell said staff is looking at known constraints, rather than future generation, to ease its workload. He said 5.5 GW of wind projects have interconnection agreements and are meeting their milestones.

During the weekend before the call, SPP members Empire District Electric, Kansas City Power & Light, Oklahoma Gas & Electric, Southwestern Public Service and Westar Energy submitted a letter to the SPC and the board's Members Committee, questioning the value of the study. Signatories said previous staff analysis of congestion in the area showed a benefit only when the models included "extraordinarily high levels of wind." They said SPP's next 10-year assessment of transmission needs would "provide a comprehensive solution for the region."

"We are concerned that a special high-priority study will circumvent the generator interconnection and aggregate study processes that are used to identify cost-causers and the assignment of costs," the letter said.

Z2 Task Force Suggests its own Retirement

The Z2 Task Force will this month recommend to SPP leadership and stakeholders two alternatives for assigning financial credits and obligations for sponsored transmission upgrades under Attachment Z2 of the RTO's Tariff.

The group also agreed during its June 27 meeting in Dallas to let its charter expire at the end of July, unless otherwise directed by the board or MOPC.

The group has spent its last few meetings discussing the pros and cons of the two staff-suggested alternatives: granting Z2 credits only to upgrades that increase transfer capability and creating

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SPP NEWS

SPP, Peak Reliability Pitch RC Services for Mountain West

Continued from page 1

tially dates, if not marries, the wrong person," Chairman Jeff Ackermann said in wrapping up the information session. "Take that wherever you want to go, but ultimately, consenting adults do what consenting adults want to do."

"We may not want to pay for the wedding," Commissioner Frances Koncilja pointed out.

Mountain West — comprising eight investor-owned utilities, municipalities, generation and transmission cooperatives, federal power marketing administration projects, and their subsidiaries — announced in January that it was beginning discussions with SPP about potentially joining the RTO. The group expects to arrive at a decision by October.

However, Koncilja prodded a panel of Mountain West representatives as to when the commission would see financial numbers coming out of the negotiations with SPP.

"I share your sense of urgency," said Steve Beuning, director of market operations for Mountain West member Xcel Energy, offering no further response.

The Market Provides

Peak Reliability currently provides only RC services to Mountain West for about 5 cents an hour, CEO Marie Jordan said.

If SPP is to assume RC responsibilities for Mountain West, its members "would continue to pay what they pay Peak now," according to SPP COO Carl Monroe.

"What they save is anything they would have to do if we were not the RC," Monroe said, reminding the commission that SPP would also likely be running the balancing authority and the markets, besides other functions. "I know when we have to provide the functions we provide, we can do it more cost-effectively and more reliably than if we [were just the RC]."

Monroe said SPP's "first line of defense" against reliability concerns is to let the market take action by resolving binding constraints through economic dispatch, which uses the lowest-cost generation facilities to meet consumer demand while recognizing any operational limits.

"The market itself provides you that mechanism. The market, for us, is a tool to maintain enhanced reliability," he said.

Beuning pointed out that economic dispatch is "the missing piece in our tool kit." The Western Electricity Coordinating Council, which has served as the Western Intercon-

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credit payment obligations under a Tariff schedule. (See *SPP Members Send Z2 Alternatives to MOPC*.)

Task force Chair Denise Buffington, corporate counsel at KCP&L, said she was disappointed the group was "unable to accomplish more."

"It seems impossible to get folks to pull away from current parochial impacts to focus on the underlying policy decision: Do we want to socialize or subsidize these types of projects, or provide a market mechanism?" Buffington said. "There is no sense beating a dead horse. There is no support for it at this time."

MMU: Wind Generation up, Coal Production down

SPP wind generation continues to increase at the expense of coal, the RTO's Market Monitoring Unit said.

Wind accounted for 28% of all energy produced in SPP's market this spring, up from 22% in 2016 and 15% in 2015. Coal's share of output has meanwhile dropped to 40%, down from 57% just two years ago.

SPP recorded a North American RTO-high for wind penetration on March 19, when wind accounted for 54.2% of the market's energy production.

The MMU's State of the Market report, covering the months of March, April and May, also revealed that rising gas prices have led to a corresponding increase in LMPs.

Gas prices at the Panhandle hub have averaged \$2.70/MMBtu this spring, compared to \$1.68/MMBtu last year. At the same time, average real-time LMPs increased from \$17.07/MWh to \$23.48/MWh, while day-ahead prices rose from \$17.37/MWh to \$23.47/MWh.

— Tom Kleckner

SPP NEWS

SPP, Peak Reliability Pitch RC Services for Mountain West

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nection's Regional Entity since 2007, has yet to implement economic dispatch. Peak was spun off as an independent RC from the WECC in 2014.

Economic dispatch "is the one thing that comes along with being a market operator," Beuning said. "It's my belief and opinion that at this point, we could obtain an integrated service at a lower cost for our customers, instead of paying for RC services or paying the Peak."

"It would be a lost opportunity cost for us to not bundle those services together," said Denton McGregor, reliability center manager for Mountain West member Black Hills Power.

Interested parties gather in Colorado PUC's hearing room. | © *RTO Insider*

Status Quo — or No

Jordan

Jordan touted Peak's experience as Mountain West's incumbent RC and the knowledge it has gained providing the same service for the Western Interconnection. She said Peak continuing as the region's single RC would address reliability concerns caused by the continued addition of renewable and intermittent resources, and it would provide a "single, unbiased" entity focused exclusively on reliability coordination.

"A single RC has been a very important piece of the vision for reliability in the West," Jordan said. "The biggest concern is how the interconnection continues to bring on [renewables]. I also don't want to underestimate how knowledge grows … we're mature in our tools, we're mature in our sophistication and we have learned. Based on feedback I get from our funding members, our model is becoming so much more reliable for them, from the time we started … to where we are today. It's been tremendous growth."

A nonprofit organization like SPP, Peak is responsible for an area of 1.6 million square miles that includes all or parts of 14 western states, Canada's British Columbia and the northern portion of Baja California, Mexico. It oversees more than 110,000 miles of transmission lines, with centers in Vancouver, Wash., and Loveland, Colo.

For his part, Monroe played up SPP's experience as both an RC and a market operator, underscoring the understanding the RTO gained integrating RC services in the Western Interconnection with the 2015 addition of the Integrated System. (See *Integrated System to Join SPP Market Oct. 1*.)

"Reliability for us is job [No.] 1," he said. "When we've added things, we've done so in a manner that protects reliability or enhances reliability. Part of the benefits Mountain West is looking to get are those benefits at a cheaper cost to the consumers themselves. Everything we do is designed to enhance reliability at a cheaper cost."

WECC CEO Jim Robb said costs would likely increase for Mountain West members should SPP become their RC.

"The cost of providing RC services isn't particularly scalable," he said. "I can't see Peak's cost structure changed, but it seems to me the pressures in aggregate go up. How they are allocated among customers remains to be seen."

And that's an issue for the Colorado PUC.

"We're concerned about how these costs roll out and which ones end up back here in this room at some point in the future," Ackermann said.

Monroe said SPP would incur additional costs should it separate the RC function from the market and balancing authority functions. He said there is a benefit to having multiple RCs in an interconnection, as evidenced by the 13 RCs in the Eastern Interconnection.

"We think [multiple RCs] reduces risk because now you have two different organizations and two different systems looking over that whole area," he said. "In the East, we reduce the risk because we have people helping us do that. We've never been in an environment where we weren't coordinating with other parties."

Negative Consequences

Losing Mountain West would cost Peak — which has operated with a $44.6 million budget for each of the last two years — about 10% of its load.

"It's negative to the interconnection, [and] it's negative to area reliability — and not just for the Mountain West," Jordan told *RTO Insider*. "We've taken full responsibility to keep this grid functioning reliably, and that's a consensus shared by our members."

The PUC has tentatively scheduled a third information session on Mountain West's proposal to join SPP. The Aug. 24 session will focus on governance issues.

SPP will be holding its leadership meetings at the Colorado Convention Center and a nearby hotel in Denver next month. As he did during the PUC's first information session in March, Monroe invited those in the room to attend the meetings and see how the RTO governs itself. He said SPP set aside 190 seats for the July 11-12 Markets and Operations Policy Committee meeting, with 170 attendees having already registered.

FERC NEWS

Public Power Skeptical of ISO-NE Two-Tier Capacity Auction

By Michael Kuser and Rich Heidorn Jr.

New England's public power utilities aren't convinced that ISO-NE's proposed two-tiered capacity auction is the best way to incorporate state clean energy procurements into the wholesale markets.

At FERC's May 1-2 technical conference on state policies and wholesale markets, ISO-NE presented its Competitive Auctions with Subsidized Policy Resources (CASPR) proposal, which it said would incorporate state-mandated renewable generation while preventing oversupply and addressing objections to a regional carbon tax. (See *ISO-NE Two-Tier Auction Proposal Gets FERC Airing*.)

In post-conference comments filed with the commission, several major New England stakeholders indicated they were willing to consider the RTO's plan.

The Massachusetts Department of Public Utilities said it "generally agrees" with the four objectives of the ISO-NE proposal: "(1) competitive capacity pricing; (2) accommodating the entry of state policy resources into the [Forward Capacity Market] over time; (3) avoiding cost shifts; and (4) a sustainable, market-based approach."

The New England States Committee on Electricity (NESCOE) said it will provide analysis later this year "on a variety of mechanisms through which states could execute policy objectives," including Path 4 long-term "achieve" proposals and near-term Path 2 "accommodate" proposals such as CASPR. "NESCOE will continue to work with ISO-NE, market participants and others to explore potential solutions that could improve upon the status quo," NESCOE told FERC.

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FERC's Five Paths
Following FERC's two-day technical conference on tensions between wholesale electric markets and state energy policy initiatives in early May, the commission invited comments on five potential paths forward (AD17-11).
1. Limited/No Minimum Offer Price Rule (MOPR): Would either not apply the MOPR to state-supported resources, or limit application only where federal law pre-empts the state action providing that support.
2. Accommodation of State Actions: Allow state-supported resources to participate in wholesale markets and potentially obtain capacity supply obligations, subject to adjustments to prevent price suppression. (e.g., two-tier auctions)
3. Status Quo: Rely on existing MOPR provisions; continue case-by-case litigation over state policies.
4. Pricing State Policy Choices: State policies would value attributes (e.g., resilience) or externalities (e.g., carbon emissions) subject to state policies. (e.g., carbon-price adder).
5. Expanded Minimum Offer Price Rule: Minimize the impact of state-supported resources on wholesale market prices by applying the MOPR to both new and existing capacity resources that receive state support.

NYISO Sees 'Productive Dialogue' on Carbon Adder

By Michael Kuser and Rich Heidorn Jr.

Efforts to incorporate New York's aggressive climate change policies into NYISO markets are focused on the introduction of a carbon price adder.

The ISO told FERC it has "engaged in a productive dialogue" with state regulators since the May 1-2 technical conference on state policies and wholesale markets.

NYISO is working with The Brattle Group, stakeholders and regulators to determine the feasibility of "Path 4" market design changes in response to the state's Clean Energy Standard (CES) and its zero-emission credits for Exelon's Nine Mile Point, R.E. Ginna and James A. FitzPatrick nuclear plants. The CES mandates reducing

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Doubts About Balancing Markets, State Policies in Diverse PJM

By Rich Heidorn Jr.

When PJM officials sought to prevent a repeat of the generation outages that nearly forced rolling blackouts in the winter of 2014, they quickly realized no solution was likely to clear a two-thirds sector-weighted vote — required to file proposals under Section 205 of the Federal Power Act.

As a result, the PJM Board of Managers filed its Capacity Performance rules unilaterally under FPA Section 206 after only a limited stakeholder review.

Winning approval of the RTO's five sectors is difficult enough. Now, as PJM attempts to ensure the zero-emission credits approved for nuclear plants in Illinois — and similar measures under discussion in Ohio, New Jersey and Pennsylvania — don't suppress prices, the needle may be even tougher to thread.

The RTO's footprint includes D.C. and parts of 13 states — states with disparate energy and environmental policies, including both restructured and vertically integrated constructs. Maryland and Delaware are members of the Regional Greenhouse Gas Initiative (RGGI), a market-based program to reduce emissions.

In contrast, PJM members and coal producers West Virginia and Kentucky don't even have renewable portfolio standards. (New Jersey appears likely to rejoin RGGI after Gov. Chris Christie, who pulled his state from the compact in 2011, leaves office in January. Both the Democrat and Republican candidates running to replace Christie have promised to rejoin.)

The differences in stakeholder views were displayed at FERC's May 1-2 technical conference on state policies and wholesale markets, and they were also evident in post-conference comments filed at the end of June. (See *PJM Stakeholders Offer Different Takes on Markets' Viability*.)

The commission asked commenters to weigh in on five potential "paths" of action (see table above).

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FERC NEWS

Public Power Skeptical of ISO-NE Two-Tier Capacity Auction

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However, the RTO's plan got a wary response from the Eastern New England Consumer-Owned Systems (ENECOS). "The history of New England's Forward Capacity Market (FCM) has not been a happy one from the perspective of small, vertically integrated utilities," the group wrote. "To suggest — as some have in the technical conference — that the answer to the 'threat' posed by the prospect of large-scale entry of variable-energy, renewable resources into the current centralized auction construct is to create yet another centralized auction construct [invites] extreme skepticism."

The group said any solution "should be coupled with restoration of the right of self-supply for load-serving entities as a means of satisfying their share of regional capacity obligations."

ENECOS said both Paths 1 and 3 are "preferable to the more structurally profound proposals — such as carbon 'adders,' or creation of yet another centralized capacity auction construct for 'clean' energy."

The Northeast Public Power Association (NEPPA) also had doubts, saying "the capacity market construct is ill-equipped to achieve the policy outcomes FERC, states and consumers desire."

"When ISO-New England announced the settlement creating the FCM, NEPPA members worked to ensure not-for-profit load-serving entities (LSEs) retained the right to use their own existing resources to meet their capacity obligations," NEPPA said. "That negotiated benefit was lost when FERC approved the minimum offer price rule (MOPR), which suddenly made the FCM a mandatory construct. ISO-New England is now effectively the single buyer and single seller of wholesale electricity in the region."

NEPPA also criticized the MOPR as a "flawed construct." It attached to its comments a concurring opinion by former FERC Chair Norman Bay, a parting shot before his resignation in February in which he called MOPR "unsound in principle and unworkable in practice." (See Bay Blasts MOPR on Way Out the Door.)

The MOPR would be applied only in the first of the auctions under CASPR. In the first stage, ISO-NE would clear the auction as it does today, applying the MOPR to new capacity offers to prevent price suppression. In the new second "substitution" auction, generators with retirement bids that cleared in the primary auction would transfer their obligations to subsidized new resources that did not clear because of the MOPR. Because the substitution auction will not use the MOPR, it will clear at lower prices than the primary auction, enabling existing resources to buy out their obligations at a lower cost in return for retiring, the RTO says.

CASPR arose out of the New England Power Pool's Integrating Markets and Public Policy (IMAPP) initiative — a response to state officials' concerns that consumers could face excessive costs if state renewable procurements were not incorporated into the capacity market and generators' fears that out-of-market resources will suppress capacity prices. New England states are set to procure more than 3,600 MW of nameplate renewable generation.

Another proposal that arose from IMAPP is the Carbon-Linked Incentive for Policy Resources (CLIPR), proposed by Brookfield Renewable, the Conservation Law Foundation and NextEra Energy.

The "CLIPR Coalition" said long-term Path 4 proposals are preferable to interim Path 2 plans. It asked FERC to issue a policy statement directing the RTOs to submit "achieve" solutions to the commission in the near term and requiring them to file quarterly reports on their progress.

Under the CLIPR proposal, LSEs would pay state "policy" resources an energy price premium that would fluctuate based on the "marginal carbon intensity" of the dispatch, "a direct analog to the LMP but computed as lbs-CO_2/MWh instead of \$/MWh."

Urgency

The New England stakeholders also disagreed over how quickly the region must act and how involved FERC should be in the process.

State officials generally downplayed the urgency. NESCOE said "the overall level of state-sponsored clean energy procurements that have taken place or are expected in the

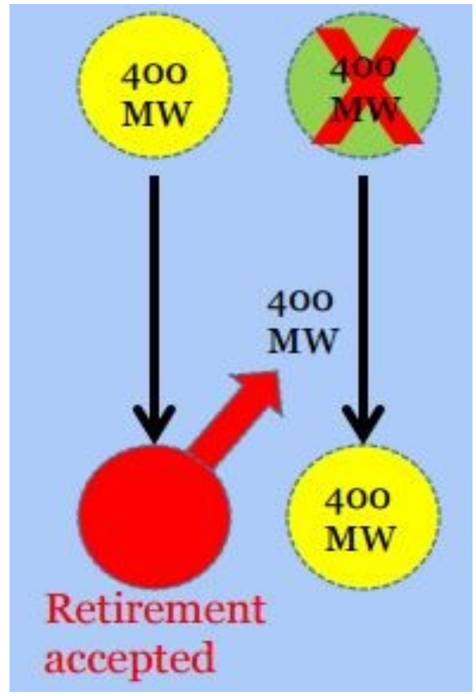

Diagram of a "perfect paired" retirement election. | *First Light Power Resources*

near-term comprises a small percentage of installed resources on the system." It also defended state sovereignty and urged the commission not to take "prescriptive action."

The Massachusetts DPU noted that the states' procurement of clean energy resources "will extend over many years."

"There is no evidence to suggest the current market construct is causing any decrease in merchant investment," said a joint filing by the Connecticut Department of Energy and Environmental Protection, Public Utilities Regulatory Authority and Office of Consumer Counsel. "On the contrary, New England has attracted a large amount of new investment over the last several years, including renewable generation."

The New England Power Generators Association (NEPGA) sees it differently. "NEPGA believes that the wave of out-of-market resources beginning to crest in New England threatens the very viability of a competitive wholesale electricity market," it said. "The need is urgent, with a necessary direct and swift response from FERC and the wholesale markets."

FERC NEWS

Doubts About Balancing Markets, State Policies in Diverse PJM

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In their remarks, PJM officials told FERC they are pursuing three initiatives:

- Allowing states to voluntarily join a system incorporating carbon pricing with existing market structures. This approach, which would require a "critical mass" of states to agree on a "common template," is in the "beginning stage," CEO Andy Ott told the commission.
- A two-phase capacity auction that would allow subsidized resources to be counted as available reserves without influencing the clearing price.
- Changes to energy market rules to improve price formation, which PJM says could reduce the need for out-of-market actions by states. It would expand on the issues identified in FERC's Notice of Proposed Rulemaking on the pricing of fast-start resources (RM17-3). (See *FERC: Let Fast-Start Resources Set Prices*.)

The RTO had outlined the proposals in a series of white papers, the last of which were released earlier last month. (See *PJM Making Moves to Preserve Market Integrity*.)

PJM said the Path 2 "accommodate" route "is most in need of the earliest feasible commission guidance and ensuing market rule adjustments," citing concern that price suppression from ZECs and other state generation subsidies could be "exported" from those states to other regions.

Supporters of Path 2 include FirstEnergy and Eastern Kentucky Power Cooperative, which filed jointly, and Public Service Enterprise Group, which is seeking financial support for its Salem and Hope Creek nuclear plants in New Jersey.

PSEG said it will not keep its nuclear plants in service if they are not "economically viable." Company executives told analysts on an earnings call in April that the units will be cash-flow positive at least through 2019 but that the plants' finances could worsen by 2020. FirstEnergy, which has been trying for years to win subsidies from Ohio for its merchant fossil fleet, has recently sought aid for its Davis-Besse nuclear plant.

PJM's Independent Market Monitor, which opposed the Illinois ZECs, said "it would be a mistake for ISO/RTOs to explicitly accommodate state-level subsidies" in their capacity market designs.

Davis-Besse nuclear plant | *FirstEnergy*

The Monitor criticized the focus on so-called "baseload" resources. "The concept of baseload resources is backward rather than forward looking. Baseload units are units that run for most hours of the year. But the term baseload is now frequently used to mean units that used to run a lot of hours based on old economics, that no longer run a lot of hours based on current economics, and that are seeking subsidies to make up the difference in revenues."

It opposed Paths 1-3, calling for a combination of Paths 4 and 5.

Direct Energy also weighed in on the baseload issue.

"The commission must ensure that to the extent there is an alleged need to retain baseload units for fuel diversity — which … may inevitably lead back to integrated resource planning — there is demonstrable and verifiable proof that without this retention, the electric infrastructure is in jeopardy from a security perspective," it said. "Consumers paid far more than they should have in the days when utilities and regulators chose winners and losers through [the] integrated resource planning period. The commission cannot allow the cost efficiency and choices afforded to consumers through competition to be eviscerated without good reason."

Andrew Place, vice chairman of the Pennsylvania Public Utility Commission, endorsed Path 4 as the "most prudent approach." The PUC, however, declined to take a position, citing uncertainty over how legislators in Pennsylvania, Ohio and New Jersey will respond to potential nuclear closures.

The Maryland Public Service Commission also withheld judgment on PJM's proposed two-stage capacity auction, saying "the scope and scale of the proposal are uncertain."

In a joint filing, American Electric Power and Dayton Power and Light expressed doubts about the ability to value and integrate state policies into markets. "While a New York carbon policy might be reflected in a carbon adder integrated into the NYISO's market design, where there is only one state policy to address, such integration would be much more challenging in PJM, where the geographic and political diversity of the covered states would make policy consensus difficult to achieve."

The companies also said PJM's proposed two-stage auction could introduce "perverse incentives," encouraging deregulated units to offer into the first-round auction at zero in order to clear the auction and qualify for the likely higher prices in the second round.

Public power commenters pushed back hard on PJM's plans.

Old Dominion Electric Cooperative said the PJM proposal is not just and reasonable and called on FERC to avoid the "volatility of reactionary rule changes."

The American Public Power Association said "PJM's approach would by its design over-procure capacity resources, further increasing costs to consumers."

American Municipal Power said FERC should order a five-year transition from the current PJM capacity model to one in which only 20% of capacity is procured through the auction with the remaining 80% procured through bilateral contracts.

Duquesne Light took the opposite position, saying it opposes the expansion of bilateral contracting.

It also said the current 90-day notice for generation retirements should be increased to 210 days. "The current 90-day advance notice of retirement of a unit is inadequate to allow PJM, the market and market participants to study and implement contingency plans to account and properly plan for the loss of generation," the company said. "Generation deactivations can create local reliability problems whereby the totality of

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Doubts About Balancing Markets, State Policies in Diverse PJM

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impacts cannot be identified within the current 90-day time frame nor can potential solutions be constructed within that 90-day window."

The PJM Industrial Customer Coalition said the RTO's "Capacity Market Repricing Proposal" whitepaper is "worthy of" further discussion but said it is strongly opposed to state mechanisms to price environmental attributes.

AEP and Dayton said FERC should consider the impact of state policies on transmission planning, not just capacity and energy markets.

"State-subsidized renewable generation investments may only be feasible in specific locations that require additional transmission to assure delivery. Market efficiency transmission projects are based on price signals in the energy and capacity markets," the companies said. "Artificially low price signals, for instance, may cause significant delays in the planning and construction of transmission projects that could provide more cost-effective solutions to addressing generation retirements."

They also commented favorably on the idea of creating a separate capacity tranche for resources based on their "resilience," such as on-site fuel supplies, ramping capabilities and ancillary reliability services.

Urgency

There was no consensus on how quickly PJM should act. The RTO asked FERC to set a Dec. 1 deadline on RTOs/ISOs to file rule changes. (See *PJM Stakeholders Offer Different Takes on Markets' Viability*.)

The Monitor agreed: "It is urgent that the identified issues be addressed.

"But it is not so urgent as to prevent a rational, forward looking and collaborative approach to addressing the issues that are faced by all," it said. It noted that three-quarters of nuclear plants covered 100% of their going-forward costs in 2016.

The PJM ICC said there was "no need for rush to judgment."

The New Jersey Board of Public Utilities said wholesale markets are limiting the diversity of its energy portfolio because they "may not adequately value all attributes."

New Jersey, which gets about 45% of its power from nuclear units, will likely see that fall in 2019 — when Exelon's Oyster Creek plant is slated for retirement — even if PSEG keeps its plants running.

The Chicago-based Environmental Law and Policy Center said it has "yet to see evidence that near-term action is needed." It called for extending the deadline on the RTO's Capacity Construct/Public Policy Senior Task Force, which was created in January 2016. Its charter calls for it to complete its work by the end of the year.

"We are concerned about undue discrimination between resources, unreasonable costs imposed on consumers and interference with states' environmental policies in order to address a 'problem' — low prices — that does not appear to actually be a problem," the group said in a filing it made on behalf of the Natural Resources Defense Council's Sustainable FERC Project. "These concerns are exacerbated by not allowing sufficient time and stakeholder process to carry out the work of the CCPPSTF or evaluate proposals addressing similar issues put forth outside of the CCPPSTF. There is no urgency to justify rushing the process, particularly where accelerating the process means key questions are going unanswered and result in poorly considered proposals."

We Read 79 FERC Comments so You Don't Have to

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May's tech conference at FERC | © RTO Insider

"As was evident after the conference," observed Duke Energy, "there is no consensus on a path forward and what a particular path entails." (See *RTO Markets at Crossroads, Hobbled FERC Ponders Options*.)

Paths 2 and 4 appeared to be the most popular, although there were supporters and detractors for all of the proposals.

The range of challenges to the capacity market constructs in PJM, ISO-NE and NYISO — the Eastern markets that were the focus of the technical conference — raises the prospect that FERC could relax the markets' participation requirements. Public power advocates, who have been seeking relief for years, peppered their comments with repeated demands to let them acquire capacity via bilateral contracts, with capacity auctions playing a much smaller, "residual" role.

Path 1: Limited or no MOPR

FERC Description: "An approach that would either not apply the minimum offer price rule to state-supported resources, or limit application of the minimum offer price rule to only state-supported resources where federal law pre-empts the state action providing that support."

Background: If FERC were to abandon the MOPR altogether, it would likely invite court challenges alleging it was allowing states to usurp its authority under the Federal Power Act. Thus any relaxation of

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NYISO Sees 'Productive Dialogue' on Carbon Adder

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greenhouse gas emissions by 40% by 2030, from a 1990 baseline, and by 80% by 2050. It also calls for renewables to meet 50% of the state's energy needs by 2030. (See NYISO Sees Carbon Adder as Way to Link ZECs to Markets; Carbon Adder to Test FERC's Independence, IPPNY Panelists Say.)

About 80 parties filed post-conference comments. Among those who expressed support for a Path 4 approach, in addition to the ISO and the Public Service Commission, are New York City, the New York Power Authority and the Independent Power Producers of New York (IPPNY).

The city said Paths 2 and 4 provide the "best opportunities to correct current market constraints" on renewable resources and new technologies procured under public policy goals.

The single-state ISO can "craft a wholesale market structure that wholly integrates the state's renewable energy objectives and provides renewable generation with better access to the marketplace," the city said. "Market entry and exit should take into account whether the public good is being served, and whether principles related to resiliency and the improvement of air quality and public health are being advanced or hindered."

NYPA expressed interest in exploring Paths 1, 2 and 4, and called for the elimination or a scaling back of the minimum offer price rule (MOPR). "The commission should accept state actions which do not interfere with FERC's responsibilities," it said.

But a group of about 60 large industrial, commercial and institutional energy consumers in New York who filed as "Multiple Intervenors" said it is not convinced of the wisdom of the Path 4 approach. The group said a status quo Path 3, while "not optimal … may be the most realistic among the choices identified" by FERC.

While the New York Public Service Commission said its work with NYISO to incorporate carbon into the wholesale markets "might be viewed as an endorsement of Path 4," it said Path 2 "illustrates the limitations of the five paths."

"While Path 2 may appear to represent a 'compromise' position, it hampers the ability of states to carry out legitimate public policies. Further, Path 2's explicit goal to 'maintain certain wholesale market prices,' rather than the original, narrower purpose of mitigating for market power, shows how far afield MOPRs have strayed," the commission said. "It asserts the right 'to maintain certain wholesale market prices consistent with the market results that would have been produced had those resources not been state-supported.' No true market operates in this manner."

The ISO told FERC it has "engaged in a productive dialogue" with the state Department of Public Service, which includes the PSC, since the May conference and expects to release Brattle's preliminary findings "in the near future."

The report can't come too soon for IPPNY, which said that FERC should require the ISO to file its carbon adder proposal and the Brattle analysis of it as soon as it regains its quorum.

"If the NYISO decides not to file such a proposal, the commission should require the NYISO to explain the basis for its decision," IPPNY said. "In addition, if the commission decides that capacity markets should be modified to accommodate state public policies, it should direct the NYISO to adopt a forward capacity auction similar to the markets in PJM and ISO-NE."

Noble Environmental Power, which claims to be the largest wind generator in New York, said its six projects totaling 612 MW will stop receiving state renewable incentives within the next two years. "As more new wind facilities enter the already bottled market in Upstate New York with discriminatory out-of-market incentives to meet state policy goals, energy prices will be substantially reduced — with a significant likelihood that the projects' output will be curtailed under market dispatch rules." It called for a Path 4 solution, saying FERC should order the ISO to integrate emissions-free electricity as an attribute in its markets to ensure "a level playing field" for renewables and nuclear generators.

Urgency

IPPNY, Eastern Generation, New York City and the Multiple Intervenors said the need for action is urgent. "Conflicts between state public policies and federally regulated wholesale electricity markets almost certainly will continue to get worse, thereby harming customers and other market participants irreparably," the large customer group said.

The PSC agreed "the need to address these issues is urgent."

But it added, "proper time must be given to explore possible solutions. … This is not the time to rush into a quick fix without thought of the impacts on the market and legitimate public policy goals."

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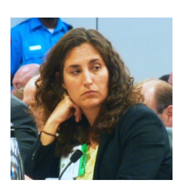
MOPR is likely to be constrained by the Supreme Court's 2016 rulings in *Hughes v. Talen* and *Electric Power Supply Association v. FERC*. (See Court's Reticence Frustrates Energy Bar.)

Supporters

Load-serving entities are the biggest fans of this approach, which also is supported by the Nuclear Energy Institute (NEI) and some commenters in the renewables camp.

The National Rural Electric Cooperative Association (NRECA), American Municipal Power and Old Dominion Electric Cooperative support Path 1 or 2 or a combination of the two.


Lisa McAlister, AMP

The American Public Power Association

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(APPA) called for "a greatly limited MOPR that provides full exemptions for self-supply and state-sponsored resources, or the ability to remove such resources from the capacity market clearing process altogether."

The Transmission Access Policy Study Group (TAPS), which represents transmission-dependent utilities in 35 states, considers it "potentially viable."

NEI, the Sierra Club and the Natural Resources Defense Council's Sustainable FERC Project all expressed support, with NRDC calling it the solution "most likely to support proper price formation."

Opposed

Groups representing consumers led the opposition, with the Electricity Consumers Resource Council (ELCON) rejecting it as "too extreme."


ELCON CEO John Hughes

A group of 60 large industrial, commercial and institutional energy consumers in New York who filed as "Multiple Intervenors" also opposed it, saying "it presumes that state public policies that unduly impact or interfere with competitive wholesale electricity markets must be accommodated in most circumstances, and that the preferred 'solution' in cases where federal law pre-empts state action is the application of a minimum offer price rule."

"While MOPRs may be appropriate in certain circumstances, Multiple Intervenors disagrees that they represent the only — or even the best — response to all state public policies that trespass into the commission's jurisdiction," the group said.

NRG Energy also opposed Path 1, saying it would exacerbate price suppression in wholesale markets by allowing subsidized resources to enter the markets at prices below actual cost. It has proposed a "Forward Clean Attribute Market" in the New England Power Pool's Integrating Markets and Public Policy (IMAPP) initiative.

NRG, Dynegy, Eastern Generation and the Electric Power Supply Association (EPSA) filed a federal court suit in October claiming the New York ZECs intrude on FERC's jurisdiction over interstate electricity transactions. The same companies filed suit in February challenging Illinois' ZECs for Exelon's Quad Cities and Clinton nuclear plants and have also asked FERC to reject the subsidies.

Path 2: Accommodation of State Actions

FERC Description: "An approach that would accommodate state policies that provide out-of-market support with the operation of the wholesale markets by allowing state-supported resources to participate in those markets and, when relevant, obtain capacity supply obligations, subject to adjustments necessary to maintain certain wholesale market prices consistent with the market results that would have been produced had those resources not been state-supported."

Background: Proposals for two-tiered capacity auctions that would clear subsidized resources separately fall into this path.

Supporters

LSEs are the biggest supporters, with the NRECA, AMP, ODEC and Eastern Massachusetts Consumer-Owned Systems backing the concept. The American Forest and Paper Association also favored a Path 2 solution, saying "each of the other four pathways are likely to prove impractical and more expensive for consumers."

APPA said it supports efforts to accommodate state actions, "assuming such accommodation also covers resources procured by public power and cooperative utilities. Such an accommodation should be designed broadly so that there is no determination by the RTO of what constitutes 'legitimate' state policies."

The New England States Committee on Electricity (NESCOE) noted that NEPOOL's IMAPP initiative "has focused on developing approaches that align with Paths 2 and 4." At the conference, ISO-NE presented its proposal for a two-tiered auction that it said would incorporate state-mandated renewable generation while preventing oversupply and addressing objections to a regional carbon tax. (See *ISO-NE Two-Tier Auction Proposal Gets FERC Airing*.)

The Advanced Energy Management Alliance (AEMA) said FERC should direct ISO-NE, NYISO and PJM to file Path 2-type changes in capacity market rules to support "the rights of states to control their own energy policy and to procure carbon-free resources that wholesale markets can integrate cost-effectively" while ensuring they do not distort wholesale prices.

New York City said Paths 2 and 4 provide the "best opportunities to correct current market constraints" on renewable re-


Audience at May's FERC tech conference | © *RTO Insider*

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sources and new technologies procured under public policy goals.

"The appropriate future is clearly a combination of Paths 2, 4 and 5," NRG said, adding that they are consistent with a "pro-markets approach [that] appears to have wide support from across the stakeholder community."

Independent power producers Calpine and Dynegy also expressed support for Path 2, with Calpine calling it a "mid-term solution." Dynegy says Path 2 "is the next step: a robust stakeholder process to fully develop and refine the proposed solutions that have recently been presented by the ISOs/RTOs (ISO-NE's Competitive Auctions with Subsidized Policy Resources ('CASPR') proposal and PJM's capacity market repricing proposal)."

Brookfield Renewable, the Conservation Law Foundation and NextEra Energy, which are promoting their Carbon-Linked Incentive to Policy Resources (CLIPR) proposal as a long-term Path 4 solution, say Path 2 may be needed in the interim.

"Feasible Path 4 solutions — like the CLIPR proposal — must be identified simultaneously with the formulation of any interim short-term proposal, as doing so will avoid the risk that the interim Path 2 solution outlives its useful life to the detriment of the market and more robust and comprehensive long-term solutions," the "CLIPR Coalition" said.

Avangrid said a combination of Paths 2 and 3 is best for multistate regions, "while Path 4 is better suited to single-state wholesale markets."

Opposed

ELCON and New York's Multiple Intervenors opposed, with ELCON rejecting it as a "kluge."

PJM's Independent Market Monitor, which opposed all but Paths 4 and 5, said "it would be a mistake for ISO/RTOs to explicitly accommodate state-level subsidies" in their capacity market design.

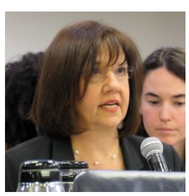
The American Wind Energy Association said any Path 2 solution should be "technology-neutral." It questioned "the feasibility of any Path 2 solution that proposes to differentiate … 'subsidized' resources from 'unsubsidized' resources and calculate the competitive offer price of the 'subsidized' resources."

> ***"The lack of support for the status quo has persisted throughout the history of the capacity markets and must be recognized in determining future paths."***
>
> **APPA**

The New York Public Service Commission, which is backing a plan to integrate carbon pricing into the NYISO market, said Path 2 "illustrates the limitations of the five paths."

Path 3: Status Quo

FERC Description: "An approach that would rely on existing tariff provisions applying the minimum offer price rule to some state-supported resources, and continuing case-by-case litigation over the specific line to be drawn between categories of state actions that may, or may not, result in a state-supported resource being subject to the minimum offer price rule."


LaFleur

Background: At the hearing, acting FERC Chair Cheryl LaFleur urged stakeholders to avoid "unplanned and piecemeal regulation," saying "it would be a bad outcome for customers and market participants in terms of cost, reliability and regulatory certainty."

Supporters

Few commenters embraced the status quo, although ELCON called it the only path that is "tenable." Duke endorsed it, saying that stakeholder discussions occurring in the RTOs/ISOs "should run their course" and that it is not necessary for the commission to take "prescriptive" action. "Threshold legal issues are pending before the courts, and the resolution of these issues should be allowed to play out before any further action is taken at the federal level," ELCON said.

The large New York customers group said that while it is "not optimal," it "may be the most realistic among the choices identified" by FERC.

AWEA said it would support Path 3 only if FERC continues to exempt renewable resources from the MOPR.

Opposed

TAPS called it "unsustainable and unworkable," and NRECA and APPA also opposed, with the latter saying, "No participants expressed support for this option at the technical conference.

"The lack of support for the status quo has persisted throughout the history of the capacity markets and must be recognized in determining future paths," APPA said.

NRDC said Paths 3 and 5, "as well as some approaches to implementing Path 2," would violate the Federal Power Act by improperly discriminating between resources. "The act of defining what is or is not a 'subsidy' will inevitably entail arbitrary and discriminatory line-drawing efforts, as has become increasingly clear through FERC's decisions regarding the application of the MOPR to resources supported by state policies," it said.

Dynegy said Path 3 is "unsustainable."

"Dynegy has already been negatively impacted by the ZEC subsidy programs and will continue to be negatively impacted absent relief from the courts or commission action. In a 'status quo' scenario, Dynegy will be unable to proceed with capital improvements [and] hiring, and will need to evaluate shutdowns of generating plants that are more cost efficient than the subsidized nuclear units."

Path 4: Pricing State Policy Choices

FERC Description: "An approach in which state policies, to the extent possible, would value the attributes (e.g., resilience) or ex-

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ternalities (e.g., carbon emissions) that states are targeting in a manner that can be readily integrated into the wholesale markets in a resource-neutral way. For those state policies that cannot be readily valued and integrated into the wholesale markets, Path 4 would also require consideration of what, if anything, the commission should do to address the market impacts of these state policies. For instance, other approaches for these state policies may include accommodation, application of the minimum offer price rule or an exemption from the minimum offer price rule."

Background: A carbon price adder is one potential Path 4 solution, but it has been rejected by the New England states.

Supporters

The NYPSC said its work with NYISO to incorporate carbon into the wholesale electricity markets "might be viewed as an endorsement of Path 4."

Path 4 also won support from Dominion Energy, Calpine, Dynegy, Exelon, NEI, Vitol and the Solar Energy Industries Association (SEIA).

EPSA CEO John Shelk

EPSA gave Path 4 conditional support. "The challenge will be to define those resource attributes (e.g., flexibility) or externalities (e.g., carbon emissions) that should be integrated into the wholesale market, and then to develop a mechanism to value those qualities in a resource-neutral manner," EPSA said, adding that it "is confident that, if these objectives can be identified, the ISOs/RTOs and market stakeholders can establish workable and efficient means to integrate these objectives into competitive market structures."

APPA also gave a qualified endorsement, saying it could result in "an efficient means of achieving environmental or other policy goals if it were limited to a single price adjustment, such as a carbon tax or adder."

The group said it would only support this "achieve" approach "if it were done along with and not as a replacement to an accommodation of state policies or a move to a voluntary residual capacity market."

AWEA said Path 4 is its first choice and would allow the markets to "better value the benefits and externalities of renewable energy that are not being currently captured."

It also expressed concern that the five paths could tread on state sovereignty, asking FERC to consider carbon pricing. "Since there is currently no real conflict between state-supported renewable energy resources and wholesale markets, nor has there been one over the decades for which these policies have been in place, there is no basis for the commission to suddenly upset this balance by infringing upon state sovereignty and undoing the intent of state laws that seek to promote renewable energy."

The Brookfield "CLPR Coalition" said Path 4 is preferable to Path 2. It asked FERC to issue a policy statement directing the RTOs to submit "achieve" solutions to the commission in the near term and requiring them to file quarterly reports on their progress.

Opposed

Opponents include the Natural Gas Supply Association, NRECA, TAPS and the large New York customers, the last of which said they were skeptical that it could be implemented effectively and benefit customers.

ELCON said the proposal would be the "most prone to abuse" of the alternatives. "It would fail in real-world conditions because some states would not respect market-based solutions. They would concoct attributes that are not realistically fungible or tradable for the purpose of selectively internalizing externalities or for socializing the costs of command-and-control mandates."

AEMA said FERC should allow RTOs and stakeholders to develop solutions but not force them to file proposals. "Pricing state policy into energy and ancillary markets, through mechanisms such as carbon adders, raises several controversial issues. Capacity market solutions are not plagued with such controversial questions, and if the commission were to direct ISOs to pursue both capacity and energy market solutions simultaneously, it would slow the progress of the capacity market solution," AEMA wrote.

> ***"Pricing state policy into energy and ancillary markets ... raises several controversial issues."***
>
> **AEMA**

Economist James F. Wilson said the commission should set a long-term goal "of seeing more revenues from the energy and ancillary services markets, and eventually phasing out the capacity constructs, or converting them to voluntary mechanisms, recognizing the changing nature of 'resource adequacy.'"

"The energy and ancillary services markets hold the potential to efficiently guide the changing resource mix over time, including incorporating public policy objectives such as decarbonization that presently are not reflected in the markets; the capacity constructs cannot do this," Wilson continued. "Reducing the role of the capacity constructs will require resisting the frequent pressures to change them in ways that raise capacity prices and/or lead to clearing substantial excess capacity."

Cliff Hamal, managing director of Navigant Economics, said "the most fundamental assumption" underlying capacity markets — setting capacity prices based on the cost of building new gas-fired generation — may no longer be valid. "What if policy options, such as those that promote low-carbon resources and demand reductions, have eliminated the need for regular additions of gas-fired generation? A case could be made that we have already reached that point, or might do so in the near future. If so, the fundamental basis for setting capacity prices through the net-[cost of new entry]-based demand curve auction is no longer valid."

Path 5: Expanded MOPR

FERC Description: "An approach that would minimize the impact of state-supported resources on wholesale market prices by

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expanding the existing scope of the minimum offer price rule to apply to both new and existing capacity resources that participate in the capacity market and receive state support."

Background: The MOPR came up frequently at the technical conference with some witnesses calling for its expansion and others seeking its relaxation or abolition. (See Uncertain Future for MOPR.)

Supporters

EPSA and EPSA members Dynegy and Calpine would like to see this path pursued immediately, while the NGSA says it is fine as a short-term fix but not as a long-term solution. Calpine also sees it as a "near-term" fix.

Competitive Power Ventures called for expansion of the MOPR to reserve price signals, the implementation of a "universal" carbon price into the energy markets and RTO dispatch decisions, and improvements to price formation.

Opposed

NRDC, which said it would not be just and reasonable, was joined in opposition by Hydro-Quebec, the New York Power Authority, NEI, Dominion, FirstEnergy, East Kentucky Power Authority, the New York Multiple Intervenors, the PJM Industrial Customer Coalition, ELCON, TAPS, NRECA and APPA.

APPA called it "the worst possible outcome," which would result in "an overly administered noncompetitive market that would frustrate resource development pursuant to policy decisions."

"This would greatly benefit the pure merchant facilities, leading to a significant decline in resource diversity, a higher cost of capital and a lack of any type of planning or optimization of resources. Because the states will likely continue to seek to procure or retain resources based on policy preferences, an expanded MOPR also increases the risk of overbuilding and double-payment for capacity."

The Multiple Intervenors was also opposed, saying that MOPRs "have the effect of sheltering incumbent generation owners from competition and impeding market entry."

AWEA said it could open "the door to widespread mitigation of legitimate state policies and, in turn, uncertainty for renewable energy investors."

"If the commission approves a MOPR based on factors other than limiting the application of the MOPR to only state-supported resources where federal law pre-empts the state action, then it becomes difficult to draw a clear boundary limiting commission interventions," AWEA said. "As this path has no discernable limit to what types of public policies would be exposed to a MOPR, it could lead to an environment where legitimate state renewable energy policies could be impeded by the risk of being mitigated."

In a joint filing, AWEA, Advanced Energy Economy, Alliance for Clean Energy New York, American Council on Renewable Energy, Mid-Atlantic Renewable Energy Coalition, RENEW Northeast and Wind on the Wires also opposed expanding the MOPR.

"All energy resources benefit from subsidies and/or favorable policies and, therefore, a singular focus on incentives for certain resources such as renewables, would be discriminatory," they said. "Contrary to the claims of some of the panelists at the technical conference, Northeast power systems are performing better as a result of the availability and integration of renewable energy into the resource mix. Negative pricing is rare and, more importantly, not responsible for negative economic impacts on other generation sources. Gas prices, not renewables, are the primary factor reducing revenues for nuclear, coal and other supply sources."

Wilson also opposed Path 5. "The markets are not nearly as fragile, and the impacts of public policy resources not nearly as substantial, as some stakeholders suggest," he said.

> ***"It would be a major shift in the regulatory paradigm for the federal electricity market regulator to go beyond intervening to remedy market power and manipulation and enter the realm of mitigating public policy."***
>
> **Rob Gramlich, Grid Strategies**

Rob Gramlich of Grid Strategies said FERC should continue to treat public policies as "exogenous, as a factor that may affect market participants' behavior and willingness to pay or accept money for a transaction, but not something for the commission to mitigate or undo. One can disagree with some of the laws state and federal legislatures pass, and FERC can offer its input into legislative processes, but it would be a major shift in the regulatory paradigm for the federal electricity market regulator to go beyond intervening to remedy market power and manipulation and enter the realm of mitigating public policy.

"A wide range of state and federal policies have affected quantities and prices in power markets since the inception of U.S. electricity markets," Gramlich continued. "For example, there might not be any nuclear generation in operation were it not for the Price-Anderson Act limiting liability for unit owners. We might not have as much natural gas generation if intangible drilling costs were not allowed to be deductible as a current business expense under federal tax law."

Urgency

There was wide disparity on the urgency of the issues, with those most affected — merchant generators — calling for swift action. (See Power Markets at Risk from State Actions, Speakers Tell FERC.)

Yes

NEI and IPPs — though on opposite sides of the nuclear subsidy debate — agreed on the need for a speedy resolution. NEI said RTO markets are not just and reasonable if they don't provide sufficient revenues to retain nuclear generation threatened by low-cost natural gas.

EPSA said immediate action is needed to "insulate" wholesale markets "from current distortive state actions while all stakeholders collaborate on identifying market structures that help address defined public policy

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goals." Also calling for urgency were Calpine, Eastern Generation, the Independent Power Producers of New York, the New England Power Generators Association, LS Power and NRG, which said that competitive markets are "under siege."

NRG said FERC should actively participate in suits challenging the ZECs and act on pending complaints before the commission on the subject of the MOPR.

The R Street Institute, a free-market think tank, said FERC should have "an extremely high sense of urgency."


Barron

Dynegy also called for swift action, criticizing Exelon Senior Vice President of Competitive Market Policy Kathleen Barron, who told FERC on May 1 that "we have some time to talk about where we go."

No

Exelon responded that FERC should implement energy market fixes to eliminate the need for ZECs before considering any of the paths identified.

The PJM ICC said there was "no need for rush to judgment" and ELCON said the "problem at hand is too important to be rushed."

NRDC said there is no evidence of a "crisis," pointing out that reserve margins in PJM, ISO-NE and NYISO are all currently higher than their targets.

The Union of Concerned Scientists said the "proposed solutions are premature due to lack of [a] coherent argument" for action. "The calls for urgent action by stakeholders have presumed that there is clarity regarding the nature and size of the alleged problem with the capacity markets," it said. "As far as the renewable portfolio standards, there is neither urgency, nor a clear statement sorting the issue."

Procedural Steps

NRECA and Exelon said FERC should convene technical conferences in each region and require the grid operators to file progress reports on their stakeholder processes.

ELCON said any action should be a common solution across all RTOs to avoid exacerbating seams issues. Xcel Energy — which doesn't operate in the three Eastern RTOs — said FERC should reiterate that the docket is limited to RTO/ISO markets, urging it to "do no harm" to unbundled states.

EPSA said energy price formation should be a priority, calling for completion of Notices of Proposed Rulemaking on the pricing of fast-start resources (RM17-3) and addressing uplift allocation and transparency (RM17-2). (See *FERC: Let Fast-Start Resources Set Prices*; *FERC Seeks More Transparency, Cost Causation on Uplift*.)

The R Street Institute called for FERC to issue a new NOPR setting a "bright line" on state policies that would be subject to the MOPR or legal challenges. "This would offer a more proactive approach than retroactive litigation, deter egregious interventions and perhaps disarm state-federal tensions."

Public Citizen said the paths outlined by FERC are too narrow to solve the problems and that competitive markets may not always be the best solution. It said the commission should start by conducting an evidentiary hearing on whether RTO markets are resulting in just and reasonable outcomes. It also called for governance changes to allow non-governmental organizations voting rights in the RTO/ISO stakeholder process.

Trump Taps Senate Aide, Former Lobbyist for FERC

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ruary 2016. Prior to that, he was a lobbyist at Avangrid Renewables, PPM Energy and PacifiCorp. Glick also served under the Clinton administration as an adviser to Energy Secretary Bill Richardson. He earned his bachelor's from George Washington University and his J.D. from Georgetown University.

Glick's term would end in 2022. The announcement came two days before Honorable's term at the commission ends, leaving acting Chair Cheryl LaFleur, a Democrat, as the only commissioner. (See *FERC's Colette Honorable Says Goodbye*.)

Pennsylvania Public Utility Commissioner Robert Powelson and Neil Chatterjee, energy adviser to Senate Majority Leader Mitch McConnell (R-Ky.), have already advanced out of committee and are awaiting confirmation votes by the full Senate.

Powelson and Chatterjee, both Republicans, would restore the commission's quorum, but it is unknown when McConnell intends to schedule the votes: The Senate has been consumed by Republicans' efforts to replace Obamacare, and reports say that Democrats have refused to consent to votes on other items while debate on the bill is ongoing.

The confirmation of the three nominees would leave only the seat vacated in February by former Chair Norman Bay, a term that would end next year.

Numerous reports have identified Kevin McIntyre, co-head of the energy practice at law firm Jones Day, as the third Republican nominee and likely chairman, but he has not been formally named.

Glick's nomination may be an effort to appease Democrats and enable simultaneous votes on all three nominees. If that's the case, FERC will have to wait on a White House notorious for its slowness in officially submitting nominations and for Glick to go through the committee process.

Honorable's "departure again underscores the urgent need to re-establish a quorum at FERC," Committee Chair Lisa Murkowski (R-Alaska) said yesterday. "Getting the agency back to the normal course of business remains a top priority for me. I will continue to push for a confirmation vote for Neil Chatterjee and Robert Powelson. … I hope my colleagues among the Senate minority will join us in enabling a quick vote for Mr. Chatterjee and Mr. Powelson."

Trump Promises to Make US Energy Dominate

By Michael Brooks

From left to right: Interior Secretary Ryan Zinke, Vice President Mike Pence, President Donald Trump, Energy Secretary Rick Perry and EPA Administrator Scott Pruitt.

President Trump announced six "initiatives" in a speech at Energy Department headquarters Thursday, saying they would create "American energy dominance" in the world.

The announcements were part of the White House's Energy Week, an effort to highlight the administration's energy policies.

Some of the announcements were merely approvals by the departments of Energy, Interior and State. Flanked by Vice President Mike Pence, Energy Secretary Rick Perry, Interior Secretary Ryan Zinke and EPA Administrator Scott Pruitt, Trump announced:

- A review of U.S. policies on nuclear energy resources;
- The Treasury Department would work to address barriers on financing foreign coal plants;
- A Presidential Permit for a petroleum pipeline crossing Mexico;
- Sempra Energy had agreed to negotiate a deal to export LNG to South Korea;
- Approval of two long-term applications by the Energy Department to export LNG from the Lake Charles, La., facility; and
- A new offshore oil and gas leasing program.

Trump did not go into specifics about the announcements. They made up a brief segment of a speech punctuated by praise for his administration's elimination of "job-killing" regulations, celebration of the withdrawal from the Paris Agreement on climate change and jabs at CNN for recent resignations over a retracted story about alleged ties between a Trump ally and a Russian investment fund.

Like his speech announcing the withdrawal from Paris, Trump's remarks had nationalistic overtones, arguing that the U.S. has been taken advantage of by other countries that "used energy as an economic weapon." The president did briefly mention that America's "clean, beautiful coal" was in high demand from countries such as Ukraine. And he said the pipeline to Mexico would go "right under" his proposed border wall.

Nuclear Energy Institute CEO Maria Korsnick, who attended the speech, thanked the president for the study on the challenges facing the nuclear energy industry.

"If the president wishes for our nation to achieve nuclear energy dominance both at home and abroad, he'll do it by preserving the existing nuclear fleet, paving the way for the deployment of advanced nuclear designs and stimulating exports abroad," she said in a statement.

Tom Kiernan, CEO of the American Wind Energy Association, issued a statement Thursday expressing support for Trump's "strategic vision to seek American energy dominance."

"The administration's all-of-the-above energy strategy, including resources like wind, can work to make America safer and more self-reliant while growing the economy," Kiernan said.

Sierra Club Executive Director Michael Brune said Trump's "Energy Week" showed "just how weak he is on energy solutions. Trump's rhetoric on energy falls short of the reality in which he's canceling life-saving public health standards that protect clean air and water just to boost the profits of fossil fuel executives. Trump isn't leading America, he's trying to drive us backwards and he will not succeed.

"Trump's head is stuck so far into the sand that it's no wonder the only thing he can speak of is fossil fuels — he can't see that solar and wind energy are creating more jobs and powering homes and businesses across the country. If he truly cared about energy dominance, Trump would be investing in growing the booming clean energy economy rather than trying to turn back the clock for dirty fuels."

ITC 'Tour' Features Call for Increased Tx Investment

By Amanda Durish Cook


ITC control room | *ITC*

ITC Holdings on Tuesday offered a rare look into its Michigan control room as part of a company update that included an appeal for increased investment in transmission.


Blair

During the online "virtual tour" and accompanying web seminar, CEO Linda Blair called for a sense of "urgency" for the industry to develop new electric infrastructure.

"Now is a critical time to support investment for the years ahead," Blair said, adding that "no meaningful interregional planning process" exists to address extra demands being placed on the grid, particularly from the growth of wind generation.

"We have to have a requirement that transmission lines have a way to come to fruition. ... I think it requires action from FERC," she said.

ITC was acquired by Canadian utility Fortis last October. Immediately following the $11.3 billion sale, Blair took over as president and CEO of the Michigan-based company.

Blair said ITC has not changed its company vision since the acquisition. "We're a transmission-only company. We breathe, sleep and eat transmission. That's what we do, and we do it well," she said.

"A strong grid promotes economic development," Chief Operating Officer Jon Jipping added.


Jipping

Jipping said ITC is awaiting approval by the U.S. Army Corps of Engineers on the Lake Erie Connector project, a 1,000-MW, bidirectional, underwater HVDC transmission line that will ship electricity between Ontario's Independent Electricity System Operator and PJM territory in Erie, Pa. He expects the company to wrap up the permitting process for the $1 billion project in late summer.

ITC executives also touted the reliability of the current ITC system that spans Michigan, Iowa, Minnesota, Illinois, Missouri and Oklahoma.

Vice President of Operations Brian Slocum said ITC's system remained operational during Michigan's historic March 8 wind storm and weather-related outages that affected more than 1 million people.


Slocum

"Over the years, we've seen less unplanned outages on this wall," Slocum said from a virtual ITC control room. But more needs to be done to improve the country's transmission grid, which was not designed to handle so many renewable sources of generation, he said.

"Fortunately, there's a dialogue underway" on infrastructure improvements in this country, Slocum added.

Access Northeast Put on Hold by Utilities

Eversource Energy and National Grid notified FERC on Thursday that they are suspending the permitting process for the $3 billion Access Northeast natural gas pipeline expansion project in New England until they can find a way to finance it. The two utilities made the filing (PF16-1) together with pipeline operator Enbridge, according to a report in the *Boston Globe*.

The story quoted Brian McKerlie, a vice president at Enbridge, as saying that after the companies persuade state legislators to allow a special tariff for electric ratepayers to fund the project, "we'll be able to re-engage the FERC filing process and be back on track."

The companies' action was not unexpected.

Last August, Eversource and National Grid withdrew requests to bill customers of their four electric distribution companies for natural gas capacity from the proposed pipeline expansion after the Massachusetts Supreme Judicial Court vacated an order by the state regulators approving pipeline capacity contracts. (See *Eversource, National Grid Withdraw Requests to Bill for Pipeline*.)

The increasing reliance on natural gas to generate electricity in New England has led to reliability concerns, while the source of much of the gas, fracking in Pennsylvania, has led to environmental protests over new pipelines or plans to expand existing ones.

On Tuesday, Massachusetts gubernatorial candidate Setti Warren (D) visited a gas compressor station in Weymouth that serves the Algonquin and would serve its expanded version. Warren, mayor of Newton, criticized the pipeline expansion as a "mistake for Massachusetts" and said Gov. Charlie Baker (R) should oppose it.

— Michael Kuser

COMPANY BRIEFS

PSO Seeks $156M Rate Increase 7 Months After Last Rate Case

Seven months after regulators finalized Public Service Company of Oklahoma's last rate case, the utility has filed for a $156 million rate increase.

PSO said it needs the 11% increase to cover more than $625 million in new electrical infrastructure and other equipment since its last rate case. The investment includes projects related to environmental compliance and the rollout of 533,000 smart meters.

In November, the Corporation Commission approved a $19 million rate increase, a steep cut from the $133 million PSO requested.

More: *NewsOK*

La. Regulators OK Construction of 994-MW Entergy Plant

Entergy Louisiana has received approval from state regulators to construct a 994-MW combined cycle plant in Westlake.

The Lake Charles Power Station, which is scheduled to be in service by June 2020, will cost approximately $872 million to build. The plant is projected to save ratepayers between $1.3 billion and $2 billion over its anticipated 30-year life.

Entergy expects to issue full notice to proceed to construction by Aug. 1.

More: *Entergy*

ESA Shakes up Leadership Team, Hires 1st CEO

The Energy Storage Association has hired Kelly Speakes-Backman as its first CEO as part of an effort to strengthen its executive leadership.

Speakes-Backman comes to the association from the Alliance to Save Energy, where she directed policy work. She previously served as a Maryland Public Service Commissioner and as director of clean energy for the Maryland Energy Administration.

ESA also promoted Executive Director Matt Roberts to vice president for external affairs and hired Nitzan Goldberger, director of policy and business development at Borrego Solar Systems, as state policy director.

More: *Greentech Media*

Report: EVs Expected to Overtake Energy Storage Market by 2018

The demand for energy storage for renewable energy integration and plug-in electric vehicles could surpass the market for energy storage in consumer electronics by 2018, according to a new report by Lux Research.

According to the report, "Quantifying Growth Opportunities in the $105 Billion Energy Storage Market," the total energy storage market will surpass $100 billion by 2025, with about a $69 billion value for the transportation sector. Stationary storage is forecasted at $19 billion and is predicted to be the fastest-growing sector to demand high volumes of energy storage.

By 2025, stationary energy storage will add up to 34 GWh of demand, according to the report.

More: *Energy Storage News*

Mississippi Power Halting Efforts to Complete Coal at Kemper

Mississippi Power said Wednesday it is halting its efforts to complete the lignite coal technology at its Kemper plant, which will continue to operate as a natural gas facility.

The decision comes after Mississippi regulators unanimously voted to instruct their lawyers to prepare a proposal by July 6 that would revise the plant's operating license, remove responsibility from ratepayers for the plant's lignite coal technology and related assets, and involve no increase for ratepayers.

The Southern Co. subsidiary said it could lose another $3.4 billion from the $7.5 billion plant if it can't reach a settlement with regulators. Shareholders have already lost $3.1 billion.

More: *The Associated Press*

Del. Court Rules Against Westinghouse in $2B Dispute

The Delaware Supreme Court struck down a $2 billion claim by Westinghouse Electric on Tuesday relating to a 2015 deal in which it purchased nuclear construction business Chicago Bridge & Iron.

The Toshiba subsidiary paid nothing upfront but agreed to accept liabilities relating to the two nuclear plant projects the companies were building in Georgia and South Carolina.

Westinghouse sought a $2 billion post-closing adjustment, claiming the firm's historical accounting was not compliant with generally accepted accounting principles.

More: *Reuters*

UPS Plans to Deliver More Green Vehicles by 2025

United Parcel Service said Tuesday it plans to add more vehicles that run on nonconventional power — including electric, hybrid electric, hydraulic hybrid, compressed natural gas, LNG and propane — to its fleet by 2025.

By 2020 the company expects about 25% of its vehicles purchased annually will be powered by alternative fuels or advanced technology, up from 16% in 2016.

The company also plans to obtain 40% of its ground fuel from sources other than conventional gasoline and diesel by 2025, compared with 19.6% in 2016.

More: *Reuters*

GTM Research Clarifies Report on Suniva's Trade Case

GTM Research issued a clarification after Suniva demanded it retract and amend parts of its report released last Monday suggesting the U.S. solar market could contract by up to 66% if its trade complaint alleging unfair international competition is brought to a successful conclusion.

Suniva said GTM based its analysis on an incorrect assumption that it and its co-petitioner SolarWorld want a $1.18/W floor price for modules. The floor price listed in the complaint of 78 cents/W is the proper number and includes a 40-cent/W cell tariff that GTM added on, Suniva said.

GTM's MJ Shiao, head of Americas research and one of the authors of the report, said GTM modeled it both ways because the complaint's wording was ambiguous, according to lawyers it consulted. The clarification indicates the 78-cent/W minimum price modeled scenario best represents Suniva's intended requested remedy.

More: *pv magazine*

FEDERAL BRIEFS

House Panel Votes to Move Forward on Yucca Mountain Project

The House Energy and Commerce Committee voted 49-4 Wednesday to advance a bill that would set a time limit for the Nuclear Regulatory Commission to approve the stalled Yucca Mountain nuclear waste repository in Nevada.

The bill also allows the Department of Energy to approve a privately operated interim nuclear waste storage site while Yucca's licensing process is completed.

Bipartisan amendments to the bill removed previous provisions overriding Nevada's authority to dictate water rights and air pollution permitting for the project

More: *The Hill*

House Energy Bill Negates Some of Trump's Budget Cuts

House appropriators introduced a spending bill Wednesday that would give the Department of Energy $37.56 billion in 2018 — a $209 million cut from fiscal 2017 spending, but $3.65 billion above President Trump's proposed budget.

Under the bill, renewable energy research would be cut by $986 million over current levels, but that is $468 million less than the cuts sought by Trump. Fossil fuel research offices would receive $635 million, which is a $33 million cut compared with the $388 million cut Trump requested.

Nuclear energy would receive nearly $1 billion for research and development and other programs, which is almost $300 million more than Trump requested.

More: *The Hill*; *Washington Examiner*

Study: Airborne Particles Decrease Solar Energy Output

Air pollution and the accumulation of particles on solar cells are decreasing energy output by more than 25% in some regions of the world, according to a group of researchers.

The study's lead author, Michael Bergin, a Duke University professor of civil and environmental engineering, measured the reduction in solar energy collected by solar panels at the Indian Institute of Technology-Gandhinagar as they became dirtier over time. The data showed a 50% increase in efficiency each time the panels were cleaned after being untouched for several weeks.

The study found that dry regions such as Northern India, the Arabian Peninsula and Eastern China face a 17 to 25% loss of energy production when panels are cleaned monthly. When cleanings are done every two months, the loss of energy production climbs to 25 to 35%.

More: *AZoCleantech*

Senate Confirms Kristine Svinicki to New Term as NRC Chair


Svinicki

The Senate voted 88-9 last Monday to confirm Kristine Svinicki to a new five-year term as chairwoman of the Nuclear Regulatory Commission.

Svinicki's term was scheduled to end at the end of this month, and the Senate fast-tracked her confirmation. She has served on the commission since 2008.

President Trump also has nominated David Wright, a former chairman of the South Carolina Public Service Commission, and Annie Caputo, a senior adviser to Sen. John Barrasso (R-Wyo.). Both are awaiting action before the Environment and Public Works Committee.

More: *The Hill*

Mayors Step Up to Address Climate Change Notwithstanding Trump

The U.S. Conference of Mayors passed a series of resolutions last Monday signaling the nation's cities are looking to address climate change regardless of President Trump's policies.

The measures, passed during the group's annual meeting, include resolutions urging Trump and Congress to support the Paris Agreement and the Clean Power Plan; calling for quick electrification of the transportation sector; asking for a comprehensive risk management program addressing flood risk from sea-level rise; supporting government investment in wind energy; and asking Congress to reauthorize and fully fund the Energy Efficiency and Conservation Block Grant Program.

Michael Bloomberg, former New York City mayor, announced at the conference that his philanthropy will provide $200 million in grants over the next three years to support city initiatives on major policy changes, including climate change.

More: *InsideClimate News*

Report: Renewables Lead Nuclear in Generation

Renewable energy sources are now providing a greater share of electrical generation in the U.S. than nuclear power, according to a new analysis from nonprofit SUN DAY Campaign.

During January through April, renewables provided 20.2% of U.S. net electrical generation compared with 20.75% for nuclear power. But in March and April, renewables surpassed nuclear power for the first time: 21.6% vs. 20.34% in March, and 22.98% vs. 19.19% in April.

SUN DAY expects renewables to continue to gain market share. It said electrical output by renewables during the first third of 2017 compared with the same period in 2016 increased by 12.1%, while nuclear output dropped by 2.9%.

More: *Solar Industry*

STATE BRIEFS

ARIZONA

Navajo Nation Approves $350M Lease for Navajo Generating Station

The Navajo Nation Council last Monday approved a new $350 million lease that allows the Navajo Generating Station to remain open through 2019.

Salt River Project, Arizona Public Service, Tucson Electric Power and NV Energy previously said it is more economical to buy power from natural gas plants than from the coal plant and that they would close the facility if the tribe did not approve a new lease by July 1. The U.S. Bureau of Reclamation, which owns a share of the plant, has been working with tribal officials and Peabody Energy to try keep it open beyond 2019 with new owners.

More: *The Arizona Republic*

KANSAS

Regulators Consider Westar's Request for Solar Surcharge

State regulators are considering a proposal by Westar Energy to impose a demand charge of $10/kW in the summer and $3/kW in the winter on customers with solar panels in addition to the standard fixed fee of $14.50/month.

In filings with the state Corporation Commission, Westar said 26% of its expenses vary with the level of demand on its system, while 91% of bill revenues vary with customers' power usage. As a result, payments from solar customers fall much more than the costs they impose on the system, Westar said, which leads to subsidization by other customers.

Solar proponents question the impact to date given that Westar's customers with distributed generation account for about one-tenth of 1% of all its customers.

More: *Midwest Energy News*

MAINE

Veto-Proof Bill Reducing Net Metering Credits Heads to Governor

Two-thirds of lawmakers in both the Senate and House of Representatives on Wednesday approved a bill that decreases net metering credits starting in 2018 while directing regulators to come up with a report regarding how to transition away from net metering before 2019.

The bill will reduce net metering credits to 90% of what utilities charge starting in 2018, and then to 80% in 2019. It also increases the number of customers who can take a shared interest in a generation facility from 10 to 100.

Last year, Gov. Paul LePage vetoed a bill that would end net metering. The level of support for the present bill would allow lawmakers to override a veto.

More: *Main Public*

MICHIGAN

Report Says Line 5 Pipeline Could Operate Indefinitely


Schuette

Attorney General Bill Schuette called for a timetable Thursday to shut down Enbridge Energy's Line 5 dual pipelines under the Straits of Mackinac as multiple government bodies released a report saying the 64-year-old Line 5 could operate indefinitely.

The Line 5 alternative assessment, conducted by Dynamic Risk Assessment Systems, was released by Schuette's office, the Department of Environmental Quality, Department of Natural Resources and Agency for Energy. The firm concluded corrosion does not pose a significant threat of causing a rupture if "Enbridge maintains its current integrity management practices." The firm also determined several alternatives to the existing pipeline were feasible but did not recommend a course of action.

Schuette has proposed creating a pipeline authority that would work toward decommissioning Line 5 and provide recommendations to federal regulators.

More: *The Detroit News*

OHIO

Court Rules Duke Can Keep $55.5M From Customers for Cleanups

In a decision with implications for utility customers across the state, the state Supreme Court ruled Thursday that Duke Energy can keep $55.5 million it is charging ratepayers to clean up two long-closed manufactured-gas plants in the Cincinnati area.

The two defunct plants date back to the 1800s. Others existed across the state, with many owned by companies that ceased operations or that were acquired.

The Office of the Ohio Consumers' Counsel, which appealed the case, said it sets a bad precedent for a utility company to be able to charge for maintenance or cleanup of sites that do not provide anything of value to current customers.

More: *The Columbus Dispatch*

VERMONT

Board Reviewing 'Alternative Regulation'

The Public Service Board is ordering a review of the state's utility regulation system, including "alternative regulation," which Green Mountain Power and Vermont Gas Systems have used for nearly a decade.

Alternative regulation allows for negotiation of a rate deal with the Department of Public Service, which is responsible for representing residents' interests. The deal then goes to the PSB for approval. The board said it is conducting the review because regulators never reviewed how effective the practice is at holding utilities accountable and ensuring utility services are delivered in a high-quality, cost-effective manner.

Both utilites are currently in the process of setting next year's rates through traditional regulation. Green Mountain Power voluntarily switched after a Vermont Public Radio investigation found it was using the alternative regulation system to make customers pay millions of dollars a year to reimburse it for system improvements that weren't properly documented. Last year, regulators had to relax consumer protection rules for Vermont Gas because its recordkeeping was so poor that strict enforcement would have caused "significant financial hardship."

More: *Vermont Public Radio*

Continued on page 37

'Hot Mic' Reveals Montana Move Against Solar QFs

By Amanda Durish Cook

A Montana utility commissioner was caught on a hot microphone last week appearing to confirm what renewable energy advocates say they already suspected: that state regulators knowingly put rules in place that will suppress development of small solar projects by altering the contract terms available to generators under the Public Utility Regulatory Policies Act.

During a break in a June 22 meeting of the Montana Public Service Commission, a microphone — inadvertently left on — picked up Commissioner Bob Lake speaking privately about a recent decision to reduce the standard contract length and rate available to qualifying facilities up to 3 MW under PURPA.

Enacted by Congress in 1978 to encourage diversification of energy supplies, PURPA requires utilities to pay QFs the cost a utility would incur for supplying the power itself or by obtaining supplies from another source. The law leaves it to each state's utility commission to formulate those rates and set contract terms, depending on project size.

QF Death by Attrition

Lake's comments were captured in a video posted by the *Billings Gazette*, which shows him and PSC rate analyst Neil Templeton discussing the commission's move to cut QF rates by about 40% and reduce contract terms from 25 years to five years with the option to negotiate rates for an additional five years. NorthWestern Energy last year complained that QF rates were 35% above its "avoided costs" and asked that they be reduced (Docket No. D2016.5.39).

"It's essentially a five-year rate, so … it's going to probably kill QF development entirely," Templeton said in the footage.

"Well, actually, a 10-year [contract length] might do it if the price doesn't," Lake replied. "And honestly at this low price, I can't imagine anyone going to get into it. So, it becomes a totally moot point because just dropping the rate that much probably took care of the whole thing."

"We're live," Lake worries later in the video. An unidentified staffer in the room assures him that microphones are turned off.

The incident follows FERC's January decision to decline enforcing PURPA against the PSC. Solar advocacy group Vote Solar had complained that the state regulators violated the law when it allowed NorthWestern to suspend its tariff for solar QFs pending a rate review (EL16-117). (See *FERC Won't Act on Montana Regulators in PURPA Dispute*.)

No Surprise for Solar Supporters

Jenny Harbine, an attorney with Earthjustice representing Vote Solar, was unsurprised by the content of the recorded conversation but surprised that the comments were captured.

"It's remarkable that the concession was caught on tape, but as a general proposition, it's well understood by the rest of the world," Harbine told *RTO Insider*. "You can't finance an energy project with a five-year contract any more than I can finance my home with a five-year mortgage. Commissioner Lake and the commission staff confirmed on the open mic that they understand that solar development [under the new five-year contract] is not feasible.

"When state commissions set unreasonably short contract lengths, development of those projects fall off a cliff. There's evidence of that," Harbine added. "What the commissioner conceded is that he understood a shorter contract length would close the door on those projects."

Another notable point about the commission's decision, according to Harbine: While NorthWestern had asked the commission to reduce the amount paid to QFs under PURPA, the utility did not ask for a shorter contract length.

"The commission took that upon themselves," Harbine said, adding that developers should be "hopping mad."

Harbine said that she plans to file a motion to get the PSC to reconsider and will file another FERC complaint if the commission refuses.

PSC's Defense

PSC Communication Director Chris Puyear said the decision to reduce the QF contract length and rate boils down to price fairness for ratepayers.

"It's not the role of the commission to pick winners and losers in the energy landscape," Puyear said in an email. "Federal law says ratepayers shouldn't have to overpay for electricity produced by independent generators, but that's exactly what was happening in Montana."

Customers were "forced to pay nearly double the market price of electricity for power produced by independent solar facilities" under Montana's previous QF rate, he added.

"The commission's action brings rates for independent power in line with what customers would otherwise pay for power produced by the utility, while ensuring that long-term, fixed price contracts do not shift undue risk to the ratepayer," Puyear said.

"In making its determination on avoided cost and contract length, the commission relied heavily on record evidence, especially the testimony of the state ratepayer advocate, the Montana Consumer Counsel."

STATE BRIEFS

Continued from page 36

VIRGINIA

Marine Commission Approves Tx Project Across James River

The state's Marine Resources Commission voted unanimously Tuesday to authorize Dominion Energy to install up to 17 towers, some as high as 295 feet, across the James River to bear a 4-mile portion of a proposed 500-kv transmission line. The approval came over more than 1,000 letters and emails protesting the project as well as objections from conservation and historic groups.

Dominion maintains the portion of the project in the Historic Jamestown area is necessary to meet power demands as it retires two coal-fired units at the Yorktown Power Station. Included in the project's total $270 million price tag is $90 million for landscape and viewshed enhancements, shoreline protection and water-quality improvements in the area.

The line was previously approved by the State Corporation Commission and the U.S. Army Corps of Engineers, which issued Dominion a provisional permit contingent on approvals from the marine commission and the state Department of Environmental Quality.

More: *Richmond Times-Dispatch*

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