RTO Insider
Your Eyes and Ears on the Organized Electric Markets
CAISO ■ ERCOT ■ ISO-NE ■ MISO ■ NYISO ■ PJM ■ SPP

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PJM Roiled by Capacity Order, Stakeholder Unrest

FERC Orders PJM Capacity Market Revamp

By Rich Heidorn Jr.

Rising state subsidies for renewable and nuclear power require PJM to revamp its minimum offer price rule (MOPR) to address price suppression in its capacity market, FERC ruled Friday.

The commission ruled 3-2 that the rule, which now covers only new gas-fired units, must be expanded to all new and existing capacity receiving out-of-market payments, such as renewable energy credits and zero-emission credits for nuclear plants. Democrats Cheryl LaFleur and Richard Glick dissented, calling the ruling hasty and counterproductive.

The commission's ruling — a rejection of PJM's April "jump ball" capacity filing (ER18-1314) and a partial grant of a 2016 complaint led by Calpine (EL16-49) — initiated a Section 206 proceeding in a new docket (EL18-178).

The commission rejected both PJM's capacity repricing proposal and the Independent Market Monitor's MOPR-Ex

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- PJM Seeks to Suspend Task Force in 'Unprecedented' Move (p.23)
- Stakeholders Debate PJM Fuel Security Scope (p.27)

NJ BPU President Threatens to Exit PJM Amid States' Complaints

By Rory D. Sweeney

Joe Fiordaliso | *© RTO Insider*

HERSHEY, Pa. — New Jersey Board of Public Utilities President Joe Fiordaliso is so exasperated by PJM that he's considering pulling the state from the RTO. And New Jersey is not alone in its frustrations, regulators said at the Mid-Atlantic Conference of Regulatory

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Commenters Divided on DER Aggregation, State, LDC Roles

By RTO Insider Staff

Solar power and storage providers differed sharply with local distribution companies and state officials in comments filed this week in FERC's rulemaking on distributed energy resources.

More than 50 commenters submitted answers to questions FERC posed, differing on whether aggregation should be limited to single nodes and on the roles of RTOs, state regulators and LDCs (RM18-9, AD18-10).

The commission initiated the rulemaking in February, deciding to separate DER issues from its Order 841 on energy storage. The comments supplement testimony from a technical conference in April. (See *Gatekeeper or Facilitator? FERC Panels Debate EDCs' DER Role* and *RTOs, Regulators Set Course for DER Market Participation*.)

Below is a summary of the major issues and the range of recommendations FERC received, based on *RTO Insider*'s review of 40 comments.

How prescriptive should FERC be in its rulemaking?

Most RTOs and ISOs submitted comments, with PJM, NYISO and CAISO urging FERC to move forward while affording RTOs flexibility. "Distributed energy resources can, and do, participate in wholesale markets, and are contributing to grid reliability and resilience in new and important ways," CAISO said. "The commission should not foreclose options for these resources."

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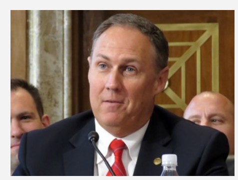

FERC Commissioner Robert Powelson is leaving the panel to head a trade group for private water companies. His departure could affect the commission's action on the resilience docket and gas pipeline issues. See page 31.

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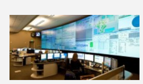
CAISO Regionalization Bill Edges Toward Senate Vote (p.6)



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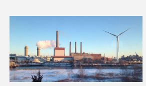

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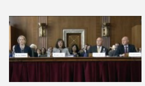

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Editor's Note: FERC issued three orders on July 2 that were issued too late to be included in this week's newsletter:

- An order instituting a Section 206 proceeding on cost responsibility assignments for 45 new transmission projects in PJM, including the first targeted market efficiency projects between PJM and MISO (ER18-614).
- An order granting a waiver request by PJM and Ohio Valley Electric Corp. to implement OVEC's integration into PJM (ER18-459-001).
- An order establishing hearing and settlement judge procedures on Pacific Gas and Electric's proposed revisions to Service Agreement No. 275 with the City and County of San Francisco (ER18-1482).

Check www.rtoinsider.com later today for our reports.

Correction

RTO Insider incorrectly reported last week that FERC was questioning the ownership of four Competitive Power Ventures generating plants and that they did not already have market-based rate authority (MBRA). FERC's ruling sought more information on only one of the plants, the Towantic Energy Center, which was granted MBRA in 2016. (See *FERC Seeks More Info on CPV Plant's Ownership*.)

STAKEHOLDER SOAPBOX

Rewiring Grid Modernization

Learning from Europe's and Australia's Policies to Incentivize Innovation

By Maggie Alexander

Maggie Alexander

In 2018, it is rare to find someone that has not had multiple generations of a smartphone, adopting newer technology as it improves — ultimately making users' lives easier and more efficient. However, in the world of rapidly modernizing infrastructure, the U.S. electric transmission system — part of the greatest engineering achievement of the 20th century — remains largely unchanged.

In Australia and the U.K., the story is somewhat different. Regulatory bodies in these countries recognize the radical evolution occurring in the energy industry — such as the growth of distributed generation, the proliferation of electric vehicles and the electrification of heat — is creating unprecedented uncertainty in a historically stable industry. Regulators want electricity providers to engage more effectively with their customers and other stakeholders to understand their needs and how they may change in the future. By instituting innovative incentives and frameworks, Australian and U.K. regulators are rewarding utilities that anticipate and respond to future uncertainty by leveraging innovative tools and business practices. These regulatory bodies have set up structures that encourage utilities to develop a more flexible and forward-looking approach.

In the U.K., for example, the RIIO framework — that is "Revenue = Incentives + Innovation + Output" — is the British energy regulator's (Ofgem) performance-based framework for setting price controls and ensuring consumers pay fair prices. The RIIO framework financially rewards companies that innovate and run their networks to better meet the needs of customers, specifically focusing on increasing transfer capacity in the most efficient way possible. Roughly speaking, Ofgem established a baseline ($/MW) that they anticipate network companies having to pay to increase transfer capacity across a specific boundary. However, if network companies develop a more efficient or lower-cost way to provide that same system improvement, half of the savings go to consumers and half of the savings go to the network shareholders. In this way, RIIO is encouraging network companies to think about their business differently than just making investments to add to the rate base.

RIIO allocates incentives based on a utility's ability to deliver specific, agreed-upon outputs in categories including safety, reliability, network availability, customer satisfaction, network connections and environmental. RIIO differs from past frameworks in that it establishes longer (eight-year) price controls and expands programs that encourage the growth of smart grids.

In Australia, the Network Capability Incentive Parameter Action Plan (NCIPAP) provides financial incentives to network businesses to improve usage of existing grid assets through low-cost projects. As a part of the plan, the Australian Energy Market Operator (AEMO) conducted independent analysis of network limitations, considering historical congestion, future network flows, and reliability and security implications — ultimately prioritizing the NCIPAP projects that would deliver the best value for money for customers.

Conversely, from a U.S. perspective, while a number of proven, advanced technologies exist that can help optimize the existing transmission grid, proliferation has not occurred as utilities are often reticent to adopt emerging technology. From a regulatory perspective, there is limited incentive to choose efficient, low-cost options instead of adding traditional large capital projects to the rate base. This ultimately contributes to the sluggish pace of innovation and propagation of new technology needed to modernize a 21st century grid.

According to the Working for Advanced Transmission Technologies (WATT) Coalition, many of the U.S.' existing regulatory structures are designed to directly or indirectly incentivize bigger capital investments and projects. This can result in disincentivizing investment in more relatively low-cost technologies that offer significant operational benefits and consumer savings; this is what both RIIO and NCIPAP are trying to address. WATT estimates that if advanced transmission technologies were adopted and deployed broadly, customers could see the cost of electricity reduced by as much as $2 billion per year.

The Energy Policy Act of 2005 has made strides toward policies to progress grid modernization, but it has not necessarily resulted in regulations that encourage the deployment of proven, newer technologies that would benefit grid operations and reduce costs. Instead, incentives are offered for advanced technology only if it is part of a grid expansion proposal and has demonstrated that there is some risk to its deployment. This is a challenge for utilities to embrace, as they will always prioritize reliability and safety over innovation.

Perhaps American policymakers would benefit from looking to our friends in Australia and Europe and how they have established frameworks that incentivize innovation in the electric utility space. Many hardware and software products exist today that can help improve existing transmission grid infrastructure, such as those that uncover and utilize hidden transmission capacity, reduce or reroute power flow on overburdened lines, and reconfigure existing grid elements to optimize various operational scenarios. When adopted and implemented, these technologies will result in consumer savings and improvements to reliability and resiliency — something regulators around the world continue to strive for.

Maggie Alexander is Director of the Western Region at Smart Wires, a modular, scalable, redeployable powerflow control technology company based in Northern California.

Transmission lines in Scotland | *SSEN*

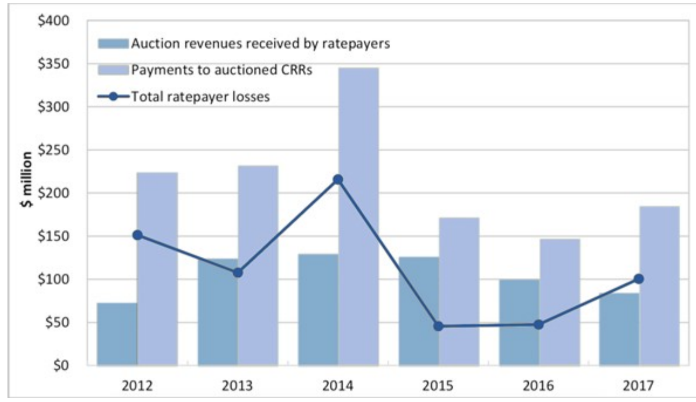
CAISO NEWS

FERC OKs Tighter Rules for CAISO CRR Auction

By Jason Fordney

In what spelled a victory for CAISO's Department of Market Monitoring, FERC on Friday approved a set of changes to the ISO's congestion revenue rights auction to address a market the Monitor and state regulators contend forces ratepayers to become unwitting partners in losing transactions.

The most significant — and controversial — change approved by FERC limits allowable source and sink pairs for CRR transactions to those that align with typical supply delivery paths. Transactions using non-delivery sources and sinks currently (such as between two generator locations) represent about 81% of the auction shortfall, the ISO noted in arguing for the change. FERC acknowledged that the elimination of some source-sink pairs from the auction process will limit market participants from using certain non-delivery paired CRRs as hedges.



Ratepayer auction revenues compared with congestion payments for auctioned CRRs | *CAISO Department of Market Monitoring*

Protesters failed to persuade the commission that the changes were discriminatory or violate open access by eliminating legitimate financial hedging opportunities. CAISO received pushback on the proposal during its development because it staunches a lucrative flow of profits to financial traders, but ISO said the current structure pays out about $100 million a year more in CRR revenues from the day-ahead market than bidders paid in the CRR auction.

Other parties offered alternative proposals to address the revenue shortfall, including changes to CRR modeling and different auction structures. But FERC said the question before it was whether CAISO's proposal is just and reasonable, not "more or less just and reasonable than protesters' proposed alternatives."

"We note that CAISO has an ongoing stakeholder process, which is the appropriate forum for market participants to discuss any further changes to CAISO's CRR auction process," FERC said (ER18-1344).

"We find that, on balance, the potential loss in market functionality is acceptable given the scope of the auction revenue shortfall CAISO is attempting to remedy," the commission said.

Another Tariff change will require the CRR process to use an annual transmission outage reporting requirement more closely aligned with day-ahead models, alleviating the auction shortfall and making expected payouts to CRR holders more predictable and less volatile. CAISO's analysis had found that a misalignment between transmission outage reporting data and the auction model was another key driver of the auction shortfall. Outages that impact congestion and capacity in the day-ahead process were not reflected in the CRR auction model, causing the system to be modeled with fewer constraints.

Under the changes approved by FERC, participating transmission owners must submit all known and planned maintenance outages affecting the CRR process for the following year by July 1, earlier than the current requirement of Oct. 15. While this change had support among several trading and energy companies, Pacific Gas and Electric and Southern California Edison said the reporting is too early and might reduce the flexibility of market participants to schedule outages. FERC said the new outage requirement will increase auction flexibility.

Among the protesters to the proposal as filed were the Western Power Trading Forum, Calpine, DC Energy and Vitol, who said CAISO's changes will restrict legitimate hedging activity. CAISO referred to the changes approved by FERC last week as "Track 1A," which the Board of Governors approved in March. (See *CAISO Moves Ahead With Market Changes*.)

More Changes Afoot

The CAISO board last month approved "Track 1B" changes to tackle who pays for revenue inadequacy, which now go to FERC for approval. (See *CAISO Board Approves More CRR Auction Changes*.) The 1B changes alter the current process in which all revenue inadequacy is allocated to measured demand, which includes electricity load and exports. That process does not consider the location of constraints on the system and creates an incentive to profit from differences between the CRR auction model and the day-ahead market model.

A second component of the 1B changes reduces the amount of system capacity released in the annual process from 75% to 65%, to provide greater assurance that CRRs obtained in the annual process will be feasible in the monthly process and reducing the amount of payment reductions resulting from revenue inadequacy charges.

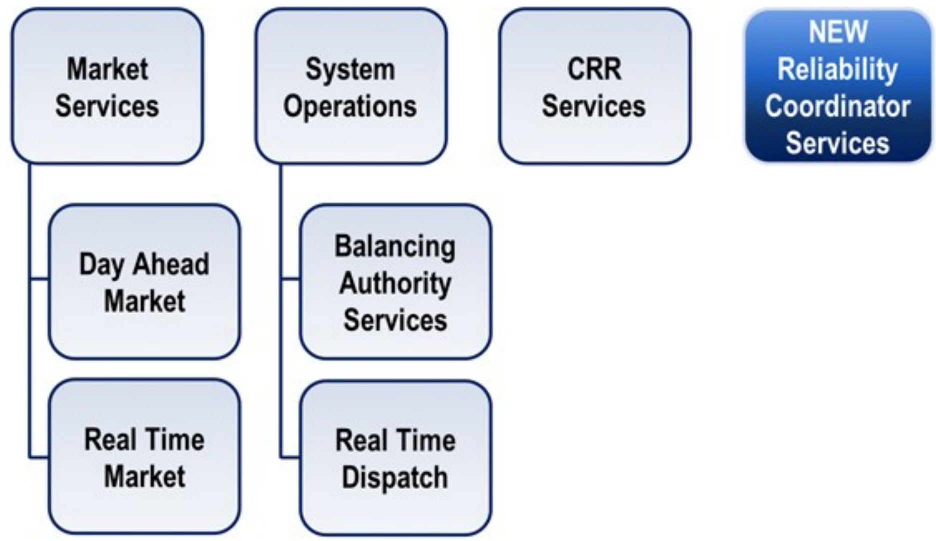
The changes approved by FERC last week will be in effect for the 2019 CRR auction, which begins this month. The Track 1B changes are targeted to improve efficiency of the monthly CRR auctions to be held in 2019.

CAISO unveiled its plan to overhaul CRR auction earlier this year in response to a long-running complaint by its Monitor, which argued that financial interests have saddled ratepayers with more than $500 million in excess CRR-related costs over the past five years. (See *CAISO Overhauling CRR Auctions*.)

CAISO NEWS

CAISO Puts $18.5 Million Price Tag on RC Services

By Robert Mullin



CAISO cost categories | *CAISO*

CAISO projects it will cost as much as $18.5 million to provide reliability coordinator (RC) services to areas outside its balancing authority, up from an estimate of $12.5 million in its original straw proposal.

The projected head count for the ISO's RC services also jumped from 31 to 36 full-time employees — and from 50 to 55 full-time equivalents, including contributions from staff in other ISO divisions. The RC program would represent its own cost category within the ISO, alongside system operations, market services and congestion revenue rights services, but some functions would overlap.

By comparison, Peak Reliability, the Western Interconnection's current RC, had a $45 million budget for 2018, which it said would fall to $31.2 million under a "transitional RC" plan, or $28.7 million if CAISO leaves the organization and all other funders remain. (See *Peak Details Vision for 'Transitional' RC*.)

CAISO attributed its increased estimates, in large part, to the high level of interest in its RC services. (See *Most of West Signs up for CAISO RC Services*.) The ISO plans to implement the RC program in its own balancing authority area in July 2019, followed by a rollout to other parts of the West starting two months later.

Under the $18.5 million scenario, 9% of CAISO's $205 million in annual costs would be attributable to RC services, although those costs would be fully offset by fees paid by RC customers. The ISO estimates that RC customers will be charged 3 to 4 cents/MWh.

"This is a [financial] model including a significant portion on the Western Interconnection," CAISO CFO Ryan Seghesio told stakeholders during a June 27 meeting to discuss the ISO's draft final RC proposal. Seghesio noted the ISO has received letters of intent from a large share of the BAAs in the interconnection, while also acknowledging the nonbinding nature of those documents — and that some of the BAs have also submitted LOIs to SPP.

"If everybody in the Western Interconnection were to sign up for the ISO, would $18.5 million cover it?" asked Jim Shetler, general manager of the Balancing Authority of Northern California.

"This is the model, yes," Seghesio said.

Getting the Rate Right

Deb Scott, senior attorney with Salt River Project, asked about the impact on the RC rate if CAISO attracts "less than a significant portion" of the interconnection to its RC services.

Seghesio explained that CAISO will file two different rate structures in its Tariff next year. The first will reflect the implementation of RC services for the existing CAISO footprint, which will not incur significant costs because the ISO already performs many of the reliability functions for its members.

But costs for the services will ramp up after the first non-CAISO members come on board, whether in September 2019 or later in the year, which will trigger use of the second higher-level cost structure for all RC customers, he said. The second structure will be scaled to align with the number of actual customers, so it may not hit the $18.5 million estimate.

Scott pressed for more details on how and when the RC rates would be set considering the uncertainty around the final customer base.

"FERC's going to approve the rate design," Seghesio said. "The actual rates won't be determined until we do the revenue requirement each year, so when we get to the end of 2018, we'll take the revenue requirement to the [CAISO Board of Governors] for approval, [and] that will kind of set this initial amount. By then we would have a better picture of what the service area will look like, and that will kind of set the rates."

Gary Tarplee, principal adviser with Southern California Edison, asked whether CAISO's 55-FTE estimate represents the top-end staffing requirement for an RC covering the full Western Interconnection, or if the number could exceed that.

"This is the full-cost model, whether it's a significant portion or everybody, this model will work. We're showing really what the highest cost would be," Seghesio said.

He later clarified that the full-cost model is driven more by geographical diversity of the customer base than by its size.

"If we get some members in the Southwest and members in the Northwest, we really get to that full-cost model, because that determines the number of desks we really

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CAISO NEWS

CAISO Regionalization Bill Edges Toward Senate Vote

By Robert Mullin

A bill that would allow CAISO's transformation into an RTO passed another key California State Senate committee on last week after supporters were grilled on how the legislation could compromise the state's control over its energy sector.

The Senate Judiciary Committee voted 4-1 to advance AB 813 to the Appropriations Committee, typically the final step ahead of a full floor vote. Committee Chair Hannah-Beth Jackson (D) cast the sole vote in opposition.

Chris Holden | *© RTO Insider*

Speaking to the committee, State Assemblyman Chris Holden (D), the bill's sponsor, touted the potential benefits of regionalizing the ISO, a three-year effort pushed by Gov. Jerry Brown that has failed to gain traction in the legislature out of concerns about yielding control over the state's grid and the loss of energy-related jobs.

"Expanding CAISO's participating transmission owners will allow electricity to be treated more efficiently across the West through CAISO's markets as more of [the West's] 37 balancing authorities join, and without layering of multiple transmission charges," Holden said. "This will facilitate transactions such as exporting unused renewable power, like solar, throughout the region and importing power in the evening to meet California's steep ramp as the sun goes down."

AB 813 passed the Assembly in June 2017 but failed to come up for a vote in the Senate and was carried over to the current session. The Senate's Energy, Utilities and Communications Committee approved the bill June 19 on a 6-1 vote. (See *Senate Committee Advances CAISO Regionalization Bill*.)

Loss of Oversight?

Testifying with Holden was Ralph Cavanagh, a senior attorney with the Natural Resource Defense Council's Climate and Clean Energy Program, who told the senators that California is already part of an integrated grid with its Western neighbors. The NRDC has been a strong proponent of regionalization.

"We're involved in multistate grid planning now; we're just doing it very inefficiently and at an unnecessary cost," Cavanagh said.

He explained that while the bill would be authorizing the transition of CAISO's state-appointed Board of Governors to a fully independent board, it would not be establishing the terms under which regionalization would proceed.

That prompted Jackson to ask: "We would lose our oversight. Is that right?"

"You have the decision to make as whether to authorize a transition to a fully independent board, and then you can pull the utilities out, senator, if for some reason you're dissatisfied with the way the system operates," Cavanagh said.

"But there's a dispute as to whether we could pull them out or not," Jackson said, referring to lingering questions about the process for removing the state's utilities from the new RTO after they've joined.

Sen. Henry Stern (D) asked whether FERC would have to approve a utility's withdrawal from the RTO.

"It's an administrative sign-off," Holden said.

Sen. Joel Anderson (R) expressed confusion about how the RTO's board would be appointed and who would fill its seats.

"What the statute establishes is that a future board would be fully independent, would have no connection to any market participant," Cavanagh said. "It would not be a board of political appointees. It would be a board of diverse experts, which is how the other boards of the independent sys-

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CAISO Puts $18.5 Million Price Tag on RC Services

Continued from page 5

need," Seghesio said. He said a larger customer base will reduce the rate "because you're going to have more volume dividing into that $18.5 million."

Billing Details

CAISO says it would levy a minimum $5,000 annual charge for RC customers with zero to low megawatt-hour volumes because they still require a "constant, although minimal, amount of attention."

Seghesio also noted that, in response to stakeholder requests, the ISO is proposing to bill customers annually for services.

"The big push [among stakeholders] was not to go to a monthly process," he said.

In cases of non-payment, the ISO would notify the rest of its RC customers of a pending default (and a potential supplemental bill), and inform the Western Electricity Coordinating Council and NERC.

"We would retain the ability to suspend the customer's RC services, but we realize that would lead to reliability issues, so I think the plan is that we know we're going to have to continue to provide reliability services for that entity so it doesn't impact the overall reliability of the grid," Seghesio said. "But we would notify WECC that we are no longer the RC of record for that entity."

The ISO is proposing an 18-month initial commitment for new members to ensure recovery of integration costs, with a 12-month notice required for exiting after the initial period. The proposal calls for one annual onboarding and exit window each April.

CAISO plans to take its RC proposal to its board on July 25. It hopes to execute agreements with members by Nov. 15.

CAISO NEWS

CAISO Regionalization Bill Edges Toward Senate Vote

Continued from page 6

tem operators elsewhere in North America operate."

"But where would they come from? So, they just walk in and say, 'I'm on the board?'" Anderson asked.


Stacey Crowley | © RTO Insider

Stacey Crowley, CAISO vice president of regional and federal affairs, explained that the process for selecting the board would be determined through a "public stakeholder initiative." She noted the ISO had held workshops in 2015 and 2016 with the California Energy Commission that resulted in a proposal to create a nominating committee consisting of stakeholder representatives.

"This is not finalized, and we would go through a public process to determine that," Crowley said.

"So the answer's, 'We don't know yet,'" Jackson said.

Exporting Power, Jobs

Stern sought more information about the potential loss of California jobs if CAISO's expansion allowed out-of-state renewables to qualify as in-state — or Bucket 1 — resources under the state's renewable portfolio standard.

Holden acknowledged that the International Brotherhood of Electrical Workers has expressed concern about the impact of regionalization on the RPS buckets.

"We put in language to address the buckets, and in doing so, we lost a good deal of support for this bill from out-of-state wind and from others," Holden said. "To go as far as labor would like us to go would basically end the bill."

Representing the Coalition of California Utility Employees, Mark Joseph told the committee that the ISO's own study shows regionalization would result in the loss of 10,500 California solar construction jobs each year from 2020 to 2030.

"What the ISO has told us is that it will assume all renewable generation outside of the current footprint will be assumed to be delivered into California and therefore qualify as Bucket 1, up to the physical constraints of the transmission system, which they have told us is 12,000 MW," Joseph said. "So the next 12,000 MW of generation — you can kiss it goodbye."

Sen. John Moorlach (R) asked whether load in other states was paying for California's surplus solar energy, or whether the state's generators were being charged to send it elsewhere.

"Senator, you're identifying a problem with the current fragmentation, which is that sometimes we can't use all the renewable energy that we're producing in California and we can't push it out to the rest of the West," Cavanagh said. "It's worse than paying — we have to turn off solar plants at the height of the sunshine, and one of the reasons to do [regionalization] is we'll have access to a much bigger market. Having access to the market means more revenue for California."

"Are you sure these states will cooperate?" Moorlach asked.

"Senator, basically they're being offered a chance to reduce their costs," Cavanagh said. "Almost everyone cooperates in order to do that."

ERCOT NEWS

PUC Schedules Oct. Hearing for Rayburn Move to ERCOT

The Public Utility Commission of Texas last week set a hearing for Oct. 16-17 on Rayburn Country Electric Cooperative's proposed transfer of 96 MW of load and 130 miles of transmission lines from SPP to ERCOT (Docket 48400).

Parties to the contested case agreed to the schedule during a prehearing conference before the commissioners June 28.

Rayburn Country and NextEra Energy's Lone Star Transmission filed a request in May to move Rayburn's SPP load and related transmission assets into ERCOT and transfer an 11-mile, 138-kV line and associated facilities to Lone Star.

The contested case stems from an earlier docket (47342), in which Rayburn had proposed to transfer 190 MW of load from SPP into ERCOT. The two companies have proposed to use a transmission plan ERCOT put together as part of the earlier proceeding to integrate Rayburn's load.

ERCOT originally estimated the integration costs at $38 million, but a "modified alternative option" suggested by Oncor has lowered the cost to $31.7 million.

SPP also conducted a study of Rayburn's migration in coordination with ERCOT. The RTO's analysis indicated annual production cost savings of $14 million to $18 million in its footprint through 2025. SPP's Texas territory would save $15 million to $19 million over the same period. According to the study, SPP's transmission customers will see a total increase of $4.6 million in their annual transmission revenue requirements.

Both system operators are among the proceeding's intervenors.

The SPP load accounts for only 12% of Rayburn's demand, with the remainder in ERCOT. The co-op owns and operates 367 miles of transmission lines in Texas, 207 miles in ERCOT and 160 miles in SPP's East Texas footprint.

Lone Star is a transmission-only utility in ERCOT that owns and operates about 624 miles of 345-kV transmission facilities in Texas.

Walker Calls for Attention to Details During Summer

During the commissioners' open meeting, the PUC approved GIP III's acquisition of NRG Energy's Wildorado Wind Ranch, a 161-MW facility within SPP's footprint near Amarillo, Texas (Docket 48139).

The commissioners ruled the transaction would not exceed the Public Utility Regulatory Act's 20% limitation on combined ownership and control of installed generation capacity within a power region.

PUC Chair DeAnn Walker modified the order to use the facility's nameplate capacity in calculating the installed generation capacity's share. The applicants had proposed the capacity be calculated at 5% of nameplate, based on SPP's planning criteria, but Walker said "no data was provided in the record" to support their calculation.

The use of nameplate capacity increased GIP III and its affiliates' generation ownership within SPP to 4,814 MW, or 5.48%.

Walker called for a rulemaking to "clarify" how generating capacity is calculated in the future.

"The rules were originally adopted in 2000, and much has been learned since that time," she said in a memo.

— Tom Kleckner

Wildorado Wind Ranch

ERCOT Sets New June Demand Mark at 69 GW

The ERCOT system set a new record for June peak demand last week, reaching 69 GW on June 27 during the hour ending 5 p.m.

That shattered the previous record of 67.9 GW, which was set on June 1. The new record withstood strong challenges the following two days, with demand reaching 68.6 GW on June 28 and 68.4 GW on June 29.

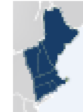
Demand broke the pre-2018 record of 67.6 GW during eight hourly intervals over the three-day span. Real-time average prices only broke triple digits once during that time, hitting $128.98/MWh in the interval ending at 1:30 p.m. on June 29.

Temperatures climbed into the 100s F in much of Texas last week, with heat indexes approaching 110.

ERCOT has projected a summer peak of 72.8 GW in August, which would break the 2016 record of 71.1 GW. It says it has 78.2 GW of capacity available, with a planning reserve margin of 11%. (See *ERCOT Gains Additional Capacity to Meet Summer Demand*.)

— Tom Kleckner

ISO-NE NEWS



FERC Denies ISO-NE Mystic Waiver, Orders Tariff Changes

By Michael Kuser

FERC on Monday denied ISO-NE's request for a Tariff waiver to keep Exelon's Mystic generating plant running, instead ordering the RTO to revise its rules to allow cost-of-service agreements for facilities needed to address fuel security issues (ER18-1509).

The commission's July 2 show cause order instituted a Section 206 proceeding (EL18-182), finding that ISO-NE's Tariff is not just and reasonable because the RTO lacks a way to address fuel security concerns that it said could result in reliability violations as soon as 2022. The Tariff currently allows cost-of-service agreements only to respond to local transmission security issues.

Mystic Generating Station

FERC ordered the RTO to submit interim Tariff revisions for a short-term, cost-of-service agreement for Mystic within 60 days, and permanent Tariff revisions to address future fuel security needs by July 1, 2019.

The commission also pushed back the deadline for Exelon to submit its retirement decision for Mystic Units 8 and 9 for Forward Capacity Auction 13 from July 6 to Jan. 4, 2019 — one month before the auction.

Commissioners Cheryl LaFleur and Neil Chatterjee wrote concurring opinions, while Commissioners Robert Powelson and Richard Glick dissented in part.

The RTO filed its waiver request on May 1, after Exelon said in March that it would retire the 2,274-MW plant when its capacity obligations expire on May 31, 2022.

Exelon later said it "may reconsider" the decision to retire Mystic if the markets could properly value the plant's contributions to reliability and regional fuel security. (See *Mystic Closure Notice Leaves Room for Reversal*.) On the same day it issued the retirement notice, the company also announced it would purchase the Everett Marine (Distrigas) Terminal from ENGIE North America "to ensure the continued reliable supply of fuel to Mystic Units 8 and 9 while they remain operating."

The commission agreed with the RTO that its January Operational Fuel-Security Analysis (OFSA) demonstrated that the loss of Mystic 8 and 9's 1,700 MW would lead to 87 hours of depletion of 10-minute operating reserves and 24 hours of load shedding during the winters of 2022/23 and 2023/24. (See *Report: Fuel Security Key Risk for New England Grid*.)

The commission rejected the contention of some intervenors that the RTO had failed to demonstrate a compelling need for out-of-market action. (See *Mystic Waiver Request Spurs Strong Opposition*.)

'Inappropriate Vehicle'

But the commission said that the waiver request was "an inappropriate vehicle" because it "effectively creates an entire process that is not in the ISO-NE Tariff" for cost-of-service agreements addressing fuel security. "Such new processes may not be effectuated by a waiver of the ISO-NE Tariff; they must be filed as proposed tariff provisions under [Federal Power Act] Section 205d," the commission said.

Powelson said he "strongly" supported denying the waiver request, "which, if granted, would have amounted to an end-run around" the RTO's stakeholder process.

"I cannot, however, support prematurely clearing a path towards out-of-market, cost-of-service payments to generators without having fully exhausting all other alternatives," Powelson said in his dissent. "Unfortunately, rather than working through the stakeholder process, ISO New England acceded to the demands of Exelon and chose to file a tariff waiver."

Powelson acknowledged that New England states have prevented investors from responding to market price signals by blocking new transmission and gas pipelines.

"While I agree that states have certainly interfered with market outcomes, by no means is this indicative of a market failure, nor does it justify a logical leap to the conclusion that out-of-market support to retain certain existing resources may be necessary," Powelson said.

Glick called the ruling a "rush to judgment," noting that the reliability concerns identified by ISO-NE are at least four years away.

"Instead of rushing to install new tariff provisions years before the fuel security concern may arise, the commission, ISO-NE and stakeholders should engage in a thorough process to evaluate potential fuel security problems and identify durable solutions rather than another series of Band-Aids," he said.

Glick said the commission "has not clearly defined the fuel security problem" it is trying to address, quoting from the majority's acknowledgement that that "fuel security analyses do not currently have an established methodological framework and that there are no industry standards or best practices for conducting such an analysis."

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FERC Denies ISO-NE Mystic Waiver, Orders Tariff Changes

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He said although the commission's order allows ISO-NE to argue that its existing Tariff is not unjust and unreasonable, "it is clearly a show cause order in name only."

"In so doing, the commission cuts off an opportunity for a real debate about what the ISO-NE analysis actually tells us about fuel security. We can expect that ISO-NE will submit Tariff revisions based on that same analysis, without any further discussion of how that analysis should be used or how it could be improved."

Glick said FERC and ISO-NE could find other solutions to their concerns, such as modifying the RTO's transmission planning process to incorporate fuel security or "reforms to improve the utilization of existing pipeline capacity, which could potentially include additional hourly nomination service to increase both the transparency of market demand and provide improved price discovery."

He said he agreed with Powelson that the order could undermine the RTO's capacity market and its Competitive Auctions with Sponsored Policy Resources construct, approved in March. "By requiring ISO-NE to develop generic tariff provisions for cost-of-service treatment for resources needed for fuel security, the order provides an incentive for resources to seek that treatment rather than retire once uneconomic," Glick wrote. "At a minimum, we should expect that retiring resources will use the prospect of a full cost-of-service arrangement as little more than leverage in order to extract a large ransom payment for exiting the market."

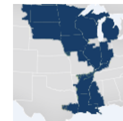
LaFleur: No Precedent

Chatterjee wrote a concurrence saying the RTO's predicament illustrates the need for the interim out-of-market measures he proposed when the commission rejected the Department of Energy's request for bailouts of coal and nuclear generators. The commission instead initiated its resilience docket (AD18-7).

"Had a majority of my colleagues supported that position, we could by now have measures in place to address near-term fuel security and resilience risks in ISO-NE and other RTOs/ISOs," Chatterjee said.

But LaFleur said that while she supported the waiver denial, "today's order does not lend credence to a generic or national resilience need, or an approach to address that need. Rather, today's order rightly responds to documented and specific regional challenges in New England, including its dependence on a unique generation facility that can be served only by imported LNG."

MISO NEWS



7 New Recommendations from MISO Monitor

By Amanda Durish Cook

MISO's markets performed competitively last year, but the RTO should implement several new recommendations to improve market functions, the Independent Market Monitor's 2017 State of the Market report concluded.

Monitor David Patton said energy prices averaged $29.46/MWh in 2017, an 11% increase over 2016 but in line with rising prices for natural gas and other fuels.

"The markets continued to perform competitively, although we have areas of concentration with local market power," Patton said during a June 26 conference call held by the Markets Committee of the MISO Board of Directors.

But market performance could be made more efficient, Patton said, offering seven new market recommendations in combination with past State of the Market suggestions.

Fast-track Ideas

Patton said two of his new recommendations could be fast-tracked and not require a slot on MISO's Market Roadmap process, which is traditionally reserved for more complex improvements.

The first: to improve market power mitigation rules. Patton said his proposed changes are "modest in scope and impact" but would help in the effectiveness of market power mitigation provisions.

"Every year, MISO makes a cleanup filing of [mitigation rules], and we collaborate with them on it," Patton explained. This year he has recommended that MISO adjust its impact test and sanction rules to include the impact of negative prices; make the price impact threshold for ancillary services better reflect prevailing clearing prices; and create a better generation shift factor cutoff on mitigation for broad constrained areas, a type of congested transmission area. Including negative prices in mitigation measures will allow the Monitor to "effectively mitigate conduct whose effect is to lower prices at locations and aggravate transmission constraints," Patton said.

Patton's second fast-track suggestion would remove transmission charges from coordinated transaction scheduling (CTS) transfers with PJM. MISO and PJM launched CTS last October to allow market participants to schedule economic transmission transactions based on forecasted energy prices. While CTS should have lowered the cost of serving load in both regions, it has not been used since mid-February because MISO has been applying transmission charges to the transactions both when they are offered and scheduled, Patton said.

"We had advised that the RTOs not apply transmission charges or allocate costs to these transactions because they do not cause any of these costs," said Patton, who estimates the charges average $6.24/MWh on MISO imports and $2.57/MWh on exports. He urged MISO to "unilaterally eliminate" all charges from CTS transactions.

"Although MISO should encourage PJM to do the same, there is no reason to wait for PJM to agree to eliminate its charges," Patton said. "We could change these relatively quickly. ... This is a very discreet change," he told MISO board members.

Quick Fix to Make-whole Payments

Patton said another "relatively simple" market change could help MISO distribute make-whole payments more accurately:

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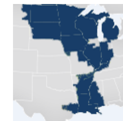

Pioneer Trail Wind Farm Rates Go to FERC Settlement Process

By Rory D. Sweeney

FERC last week ordered settlement procedures over Pioneer Trail Wind Farm's request to recover $826,926 annually to provide reactive supply and voltage control in MISO.

The commission said the amount requested by the 150-MW Illinois wind project could be unjust and unreasonable but allowed the rate schedule to go into effect July 1 subject to refund (ER18-1473).

"Pioneer Trail appears to have incorporated costs that may be unrelated to the provision of reactive service, including portions of 'Turbine Generator Erection,' 'Turbine Generator Options' and '[Supervisory Control and Data Acquisition System]' costs in its accessory electric equipment cost category," FERC explained.

Pioneer Trail, owned by E.ON Climate & Renewables North America, said it followed the reactive power rate methodology approved by FERC in 1999 for American Electric Power. The facility's generation interconnection agreement with Ameren Illinois stipulates that it must provide reactive service, but Pioneer Trail claims it has been providing reactive power support to MISO

Construction of Pioneer Trail | *White Construction*

without compensation since beginning commercial operation in 2012. It said it meets MISO testing requirements for voltage control capability because its turbines contain a power electronics system that regulates voltage and power in real time, allowing them to perform like a conventional synchronous generator.

"Pioneer Trail notes that there are differences in the types and quantities of equipment providing reactive power support between synchronous and non-synchronous generators, such as a wind turbine generator, but argues that, in both types of facilities, the costs of the generators/exciters, [generator step-up] transformers and accessory electric equipment can be separated from the remaining plant investment, and the portion of those costs attributable to the production of reactive power can be determined by applying an allocation factor," FERC said.

Pioneer Trail pointed out that FERC has accepted reactive service rate schedules "for several similar non-synchronous wind generation facilities," including three in the MISO footprint. The wind farm also acknowledged that its turbines will have a higher reactive power revenue requirement than traditional synchronous generators because there's more equipment involved.

Ameren challenged Pioneer Trail's revenue requirement filing, saying the calculation includes several errors and "over $19 million of indirect costs that are largely unexplained," including about $13 million of network upgrade costs that "are not properly included in the calculation of reactive power rates." Ameren also said Pioneer Trail's calculation does not use FERC's Uniform System of Accounts and contended the wind farm erred in only using 2017 operations and maintenance costs, instead of multiple years.

7 New Recommendations from MISO Monitor

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improve commitment classifications and create a process to correct classification errors.

The Monitor said his team has observed MISO operators misclassifying "a fair number" of resource commitments needed to manage transmission constraints as capacity commitments. The RTO assigns a classification code to any resource it commits to either satisfy capacity needs or manage transmission constraints, which determines whether the resource is eligible for make-whole payments through its revenue sufficiency guarantee (RSG), how the RSG payment will be allocated and whether the payment will be subject to mitigation. Patton said the misclassification of code assignments can have "significant" implications on RSG allocations and market mitigation.

"It is imperative that MISO have a robust process for reviewing and correcting commitment classifications as needed," Patton said. He added that he also understood some commitments can address multiple issues and constraints and called on MISO to create clearer procedures for determining a classification based on "cost-causation" principles.

Operator Accountability

Another recommendation would place more accountability on MISO operators in the control room by improving operator logging tools to better describe operator decisions and actions. Patton said operators often inconsistently log or describe manual adjustments, making them difficult to evaluate later.

Operators can make several system adjustments, including changes in generating units' operating status, real-time adjustments to forecasted load, manual redispatch of resources for system needs, alterations of real-time limits for transmission constraints, real-time adjustments to the transmission constraint demand curve and requests for market-to-market constraint tests and activations.

"Because these actions can have significant cost and market performance implications, we recommend that MISO upgrade its systems and procedures to allow these and other operator actions to be logged in a more complete and detailed manner," Paton said, adding that the RTO could include new logging tools in its effort to replace its market platform.

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7 New Recommendations from MISO Monitor

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Day-ahead Market Change

Patton also proposed MISO's platform replacement effort could provide the RTO the chance to evaluate the feasibility of solving the day-ahead market with 15-minute — rather than hourly — scheduling intervals. Patton said when MISO first created its markets, the day-ahead software wasn't sophisticated enough to be more time-specific.

"By producing hourly schedules based on 60 minutes of ramp capability and hourly load forecasts, the day-ahead schedules cannot track the expected changes in real-time system needs, particularly during ramping periods. It also regularly results in generator schedule changes from hour to hour that are not feasible, which results in substantial make-whole payments," he said.

But advances in technology might permit 15-minute day-ahead market schedules, which could improve market response times and reduce uplift costs.

Auction Improvements

Patton's two final recommendations involve MISO's annual Planning Resource Auction.

The first would require that installed capacity of planning resources be deliverable over the transmission network. While the Tariff already requires all resources to be deliverable to load to qualify as capacity resources, Patton says that, in one instance, MISO's deliverability requirements are too relaxed because resources with energy resource interconnection service (ERIS) must only secure firm transmission for its unforced capacity values, which tend to be about 5 to 10% less than their full installed capacity levels.

But Patton said resources with ERIS should be required to procure firm transmission service to the full level of their installed capacity.

"The requirements imposed by MISO on ERIS resources is not consistent with the intent of the Tariff. We recommend that MISO determine deliverability for all resources based on the entire [installed capacity] of applicable planning resources," Patton said.

Such a move will improve the accuracy of MISO's loss-of-load studies, as they are conducted with the assumption that resources will perform up to their installed capacity when available, he noted.

The Monitor also recommended MISO establish unique capacity credits in the PRA for emergency-only resources that better reflect their availability. While those resources can be compensated through the PRA, they are only required to deploy during emergencies when called on by MISO. If they "are not available to mitigate capacity shortages that usually occur early in the emergency events, then they are not providing the reliability value assumed in the planning studies and for which they are compensated," Patton said.

An increased volume of emergency-only resources cleared in this year's PRA. (See *MISO Clears at $10/MW-day in 2018/19 Capacity Auction*.) Patton pointed out that some of the resources have lead times up to 12 hours that "render them essentially unavailable in an emergency." He said emergency-only and load-modifying resources should only receive full PRA capacity credit if "they are expected to be reasonably available in an emergency" and can respond to a benchmark not yet established by MISO.

Patton pointed out that other generation is subject to capacity-selling requirements, including qualifications based on past forced outage performance, day-ahead must-offer rules and reduced capacity credits for intermittent resources. He recommended MISO quantify emergency-only capacity credits based on factors such as expected availability, historical performance and curtailment ability.

Last year, Patton raised nine new market recommendations with which MISO mostly agreed. A year later, none has been implemented, although MISO continues to discuss several with stakeholders. (See *MISO Board Hears State of the Market Recommendations* and *MISO in Harmony with IMM State of the Market Report*.)

Executive Director of Market Development Jeff Bladen said MISO will provide a formal response to this year's report within 120 days, per its Tariff.

Bladen reminded the board that MISO's ability to take on new market improvements will continue to be "constrained" by its technology capabilities as it replaces its outdated market system platform. (See "Limited Improvements for Old Platform," *MISO Platform Replacement Risks Delay, Budget Overrun*.)

NYISO NEWS

NYISO MC Supports AC Transmission Projects

By Michael Kuser

RENSSELAER, N.Y. — NYISO stakeholders last week again backed joint proposals by North America Transmission (NAT) and the New York Power Authority to build two 345-kV transmission projects that could cost $900 million to $1.1 billion.

The Management Committee voted to recommend that the Board of Directors approve the ISO's draft AC Transmission Public Policy Transmission Planning Report, as recommended by the Business Issues Committee the previous week. The board will consider the matter at its July 17 meeting. (See *NYISO BIC Backs AC Tx Projects; Losing Bidders Protest*.)

Dawei Fan, manager for public policy and interregional planning, said ISO staff analyzed seven proposals to address persistent transmission congestion at the Central East (Segment A) electrical interface, and six proposals for the Upstate New York/ Southeast New York (or Segment B) interface.

Advised by consultant Substation Engineering Co. (SECO), ISO staff recommended Project T027, a double-circuit 345-kV line from Edic to New Scotland for Segment A, and a standard 345-kV line from Knickerbocker to Pleasant Valley for Segment B Project T029.

Market Monitor Evaluation

Pallas LeeVanSchaick of Potomac Economics, the ISO's Market Monitoring Unit, said it found the recommended projects will be economic if the Clean Energy Standard is satisfied with high levels of intermittent renewable generation upstate.

However, benefits will be reduced if state policies shift more investment to offshore wind and energy storage in downstate areas, LeeVanSchaick said. Ultimately, the benefits of the recommended transmission projects are heavily dependent on the placement of new renewable generation and the locations of retiring generation.

While finding the ISO's methodologies reasonable, the MMU suggested several enhancements for NYISO to consider in future public policy transmission evaluations, including incorporating additional priced and unpriced benefits of new transmission projects into a single cost/benefit metric; estimating operations and maintenance costs of new and decommissioned facilities; estimating the cost savings from avoided refurbishment of older facilities; and developing Tariff provisions to allow developers to take on the risk of cost overruns.

The MMU also recommended that the ISO model entry and exit decisions for generators consistent with expected competitive market outcomes, and consider transmission outages and other unforeseen factors in estimating production cost savings. Finally, LeeVanSchaick suggested enhancements to natural gas and emission allowance price forecasts.

Zach Smith, ISO vice president for system and resource planning, said they liked the MMU's recommendations, not only in context of the public policy transmission needs process, but for the Congestion Assessment and Resource Integration Studies process as well.

Brian Duncan of NextEra Energy Transmission NY (NEETNY) repeated his presentation from the previous week's BIC, arguing that the ISO was picking winners for a $1 billion project "despite a virtual tie on project benefits" among competing projects, which included NEETNY's T022 in Segment B.

The MC also voted to recommend that the board approve Tariff revisions to provide extensions of historic fixed-price transmission congestion contracts, as was recommended by the BIC.

NYISO NEWS

Overheard at the New York Renewable Energy Conference

By Michael Kuser

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POUGHKEEPSIE, N.Y. — Artificial intelligence, transmission needs and markets versus mandates topped the discussion at the Renewable Energy Conference hosted by the Business Council of New York State, the Hudson Renewable Energy Institute and Marist College's School of Management.

AI will transform society and the energy sector, said **John E. Kelly III**, senior vice president for cognitive solutions and research at IBM.

"When I joined the company in 1980, my first job was to figure out how do we put 1,000 transistors on a tiny chip for our mainframes; today, we put 15 billion transistors on a chip the size of your fingernail," Kelly said.

He shared how the benefits of AI stem from the exponential curve in data growth. He described how IBM's Watson platform can absorb 30 years of data in a few minutes and then continue to "learn" as it interacts with people and individual case decisions, whether in health care or the energy industry.

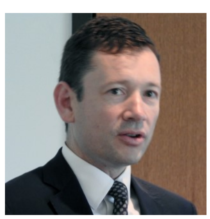
The world's fastest supercomputer requires 12 MW to mimic what the human brain performs on 20 W of electricity, Kelly said, but AI can spot what no human could. For example, when Australian energy giant Woodside adopted Watson, the computer determined that most hand injuries occurred around 11 a.m., so the company now sends text messages to rig workers at 10:45 a.m. to remind them to take a break or have a cup of coffee, reducing the accident rate.

"You are going to be disrupted and transformed by this technology," Kelly said. "We're finally going to be able to take advantage of the integration of renewable energy and traditional energy in ways that we couldn't before."

The industry spent many years talking about smart meters and gathering data, but not much was being done with the information, he said. AI can make sense of the high volumes of data produced by smart grids and distributed energy resource sensors, which can overwhelm the capabilities of human programmers.

"These machines will recognize patterns of disruption, predict capability for your equipment and your power lines, and I think ultimately it's going to lead to a seamless distribution and storage of energy among all sources, and there will be very few humans involved in that real-time optimization and predictive capability," Kelly said.

Promises, Promises



Darren Suarez, director of government affairs for the Business Council, asked whether the state will deliver on its energy policy promises, including 3 GW of solar by 2023; 1.5 GW of energy storage by 2025; and a 40% reduction in greenhouse gas emissions, 2.4 GW of offshore wind and 50% of electricity coming from renewable sources by 2030. (See *NY Releases 'Roadmap' for 1,500-MW Storage Goal*.)

The council emphasizes the importance of relying on markets rather than mandates to achieve the state's environmental goals, Suarez said.

The state's many programs, such as Reforming the Energy Vision, have been driven by the executive branch, led by Gov. Andrew Cuomo since 2013, rather than the legislature, which entails risks for longevity, Suarez said.

The state's environmental targets might "have no staying power" if another governor with contrary ideas comes to office, as has happened at the federal level with President Trump pulling out of the Paris Agreement on climate change, Suarez said.

Consolidated Edison's consultant IHS anticipates U.S. renewable volumes will double by 2040, driven by solar and land-based wind, said **Joseph P. Oates**, chairman of Con Ed's non-utility businesses.

Oates oversees 1,100 MW of renewable energy projects around the country, ranging from a 1-MW behind-the-meter solar project in Brooklyn to the 350-MW Copper Mountain 3 solar project near Las Vegas, which covers 8 square miles.

"If you were going to power New York City's load just with solar, you'd have to cover the five boroughs with panels," Oates said. Alternatively, relying solely on offshore wind would require more than 800

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Overheard at the New York Renewable Energy Conference

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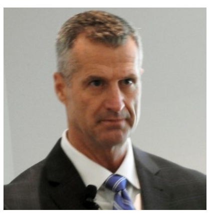
of the newest 12-MW turbines.

State and regional efforts to decarbonize the economy are driving renewable energy growth in the Northeast, but in New York, "you need to do some energy efficiency, and that's really a key strategy because it is the least expensive way to decarbonize," Oates said.

Transmission Key



"Today we're at a little over 1,700 MW of renewables in New York state," NYISO CEO **Brad Jones** said. "We need to get to 17,000 more by 2030. We think about 14,000 of that is going to be solar and wind upstate because land is cheaper — and available."

If that forecast is accurate, "we have got to make sure we have enough transmission available to move that energy downstate to our load centers; otherwise we won't get the benefits of it," Jones said, who noted the state is "making some good progress" on projects that improve transmission flows from the western to central part of the state. The ISO is also seeking board approval for another line that will approve transfer capability in the Lower Hudson Valley. (See NYISO MC Supports AC Transmission Projects.)

New York hasn't built much transmission since the 1980s, with 80% of the state's transmission assets built prior to 1980, he said.

"The system's quite old, so we need to develop the system in order to bring more renewables downstate," Jones said.

The 2,400 MW of offshore wind being planned in New York "comes in at a great location in the state, on the backside of our load, so it's a fantastic location, but we have to figure out how to bring that wind onshore, how to distribute it appropriately, so we don't have great impacts on the system," Jones said.

Market Tension

Kevin T. Knobloch, president of New York OceanGrid, owned by Anbaric Development Partners, made a case for planning "open access" offshore wind energy transmission before the first turbines go in the water.

Anbaric has filed HVDC interconnection requests for 800 MW into the Farragut substation in Brooklyn and for 800 MW into the Ruland Road substation on Long Island for its hoped-for offshore wind grid.

Knobloch, who served as chief of staff at the U.S. Department of Energy from 2013 to 2017 and is a former president of the Union of Concerned Scientists, said, "New York can and should design and build a planned open-access offshore wind transmission system in which generation and transmission are separately constructed and owned.

"There's a concern that if you follow our recommendation and plan it out from the start, that will slow down the process. We disagree and believe there's a missed opportunity if regulators ask the first offshore wind generation developers ... to also build transmission and run their own direct cables to shore," Knobloch said.

Long-term planning from the start not only minimizes environmental impacts of laying unnecessary cables but also sends a signal to investors that the state is serious about this new multibillion dollar industry, he said.

Order 888 in 1996 showed that "FERC, from a public policy perspective, has long had concerns about monopolistic disincentives that don't necessarily align with the public interest, or frankly, that of the grid operators," Knobloch said.

"It's no accident that Texas has the greatest amount of installed wind capacity in the country, and it has a lot to do with Competitive Renewable Energy Zones," Knobloch said. "They figured out pretty early on that we have a good sense of where our wind resources are. We have a pretty good sense of where we need to deliver that clean electricity to the demand zones — let's map it out, let's plan it ahead of time, and the wind generators get to plug into this backbone."

Dennis Phayre, business development director for EnterSolar, a commercial and industrial solar developer based in New York City, said, "Most of the generation that's going to need to get built in order to reach these goals is going to be utility-scale, and it's going to be upstate, so the need for transmission does not go away with renewables."

The intermittency of wind and solar has become much less unpredictable, with new tools like Watson allowing forecasts of output 24 — or even 48 — hours in advance with up to 97% accuracy, so the "problem" of intermittency has largely been solved, Phayre said.

"There's certainly some tension between transmission and renewables, but there's probably more complement than there is tension," Phayre said. "The question is, what complementary value does on-site generation provide at the right locations?"

"There's no doubt that transmission infrastructure is required, which is easier to say than do," said **Craig Orchant**, managing partner of investment banking firm Ansonia Partners. "The challenge is, you really can't invest money in power generation unless you know you can deliver it. Transmission is a huge requirement, and it's been to a large degree unanswered, not just in New York state, but across the region, throughout New England and a lot of other places throughout the U.S. Horror stories you read in PJM in terms of how they're trying to allocate transmission improvement charges to individual participants in the market is a good example."

On the plus side, energy projects "have a tremendous amount of capital looking to go to work in them," Orchant said. "The amount of money that has been raised, and the knowledge base of institutional capital

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to invest in this industry is really phenomenal. I've been doing this for 30 years … and there's never been so much money looking to go to work."

Cost Concerns

Couch White attorney **Michael Mager**, who represents a coalition of large industrial, commercial and institutional energy customers, said many of the state's programs and mandates require long-term commitments of customer money.

"For large-scale renewables, we're looking at 20-year contracts, for offshore wind we've been talking about 25-year contracts," Mager said. "The programs continue going to 2030, so we're potentially making commitments now to go to 2050 or 2055, so we are making decisions that our grandchildren will be paying for.

"This is not to knock any specific program," many of which have a lot of benefits, Mager said. "On an individual basis you could probably make a case for every single one of them, including what they may or may not cost, but no one is looking at the total costs.

"Even though we have more and more renewables, and we have a lot of nuclear, the marginal unit for the vast majority of hours is gas-fired, so right now we have low electricity prices primarily because we have low gas prices," he said. "When we have higher gas prices at some point in the future, then the impacts of all of these programs and long-term commitments layered on top of that, we are concerned it will not be a pretty picture," Mager said.

Mager was also concerned that every program relies on mandatory customer payments.

"When the Public Service Commission adopted the renewable portfolio standard in 2004, the order said, 'We believe an important part of the RPS program is to stimulate and complement voluntary, competitive renewable energy sales and purchases, or free markets, so that these competitive markets, not government mandates, sustain renewable activity after the RPS program ends,'" Mager said.

"The RPS program ended a while ago, and we have more mandates than ever before."

MACRUC

MACRUC Poses Choice: Markets or Preferred Resources?

By Rory D. Sweeney

| © RTO Insider

HERSHEY, Pa. — In the days just before FERC announced it was rejecting both of PJM's capacity proposals and suggesting its own, market participants and officials from states within the RTO's footprint were still vigorously debating the issues those filings were meant to resolve.

Several panels last week at the Mid-Atlantic Conference of Regulatory Utilities Commissioners' annual summer education session focused on related issues, including nuclear subsidies, the impact of state policy initiatives on power markets and how RTOs are faring 20 years into their existence.

The panel on nuclear subsidies became controversial when audience members took issue with the interests of the panelists. Moderated by Maryland Public Service Commissioner Anthony O'Donnell, the panel included Steve Aaron, representing a group called "Nuclear Powers Pennsylvania"; **Kathleen Barron**, Exelon's senior vice president of competitive market policy; and Anne George, ISO-NE vice president of external affairs and corporate communications. The panel generally supported states providing compensation for generation attributes that aren't valued in markets.

Direct Energy's Marji Philips pointed out from the audience that while nuclear units provide carbon-free generation, the nation hasn't solved the problem of what to do with nuclear waste.

Philips said her time at PECO Energy, now an Exelon subsidiary, taught her that nuclear plants have been a positive asset.

"Shareholders did very nicely for the cost recovery on these nuclear units a long time ago, as they should have. They were very efficient when gas was setting the margin," she said. "But the idea that customers are repaying for them again is absolutely true, and this is money that could go to other resources that could provide flexibility. ... Admittedly we're caught in a transition where we still need a lot of the conventional generation, but I just had to challenge the idea that funding nuclear is an absolute necessity."

O'Donnell, who created the panel, accepted the criticism and said he attempted to secure a panelist "from a utility that has a different view" but was unable to do so.

"I know that it has to be an important part of the discussion going forward," he said.

Todd Snitchler, director of the American Petroleum Institute's market development group and a former Ohio regulatory commissioner, said he offered to sit on the panel. He also contended it should have discussed the issue of states blocking pipeline construction that would deliver gas to other regions.

The comment was a reference to New York's longstanding objection to allowing a pipeline that could connect Marcellus region gas supplies to New England. Because of concerns about inadequate pipeline capacity, ISO-NE has asked FERC to approve a plan to prevent the retirement of Exelon's gas-fired Mystic plant, which is fueled by shipments of liquefied gas. Subsidy proponents have used the situation as evidence of the need for national fuel security subsidies. (See *FirstEnergy Calls out FERC 'Failure' to Act on Resilience*.)

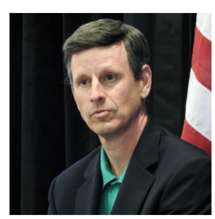
Snitchler also noted that the PJM fleet is more fuel-diverse now than ever before, and that there were no complaints about diversity when gas prices were higher.

"We're trying to design a market that values what that fuel security is, and then anybody that can bring that to the market will be able to participate," George said. "We're in this kind of transition that's evolving rapidly, and that's what's brought a lot of these issues to a head and everybody's struggling with what to do with it."

O'Donnell confirmed there is currently no initiative to bail out the only nuclear plant in Maryland, Exelon's Calvert Cliffs. But there is an ongoing legislative study on the state's renewable portfolio standard, which has sparked "some interest" in whether it is "inclusive enough" because it doesn't include nuclear. Connecticut is currently considering whether to include nuclear in a program that pays for output from renewable resources.

He noted that Calvert Cliffs remains "relatively healthy," so a discussion on state subsidies is "coming to Maryland but not here yet because of other pressing" needs.

Irreconcilable Differences?



In a later panel, former Pennsylvania Public Utility Commission Chairman **Glen Thomas** suggested that states concerned about markets crowding out preferred resources "have to think long and hard about whether [they] want to renew their vows to markets or get a divorce."

He referenced the nuclear panel, noting that more than 50% of New England's

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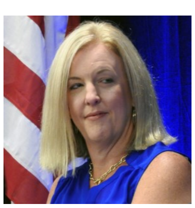
megawatts are subsidized, which has suppressed prices so much that generation needed for reliability is uneconomic.

"I worry that that could bleed into PJM if we're not very, very careful," he said. "There's ways to pursue state environmental policies that are consistent with the market, but many of the policies that are being set up right now are not consistent with the market. That's not only a problem in the states where they're happening; it's going to be a problem in the entire region if we're not prepared to address it."

Randy Elliott, regulatory counsel for the National Rural Electric Cooperative Association, said co-ops have a different opinion because they operate with a different business model.

"Our fallback position has been trying to secure the right to self-supply our own capacity … and have that count toward our capacity requirements," he said. "We're trying to get our different business model accommodated with the existing regulatory structure in the three eastern RTOs."

"Any of these resources that may be receiving some sort of state subsidy, I'm not convinced that they automatically tank the capacity market," said **David Hunger**, vice president at Charles River Associates. "As long as these resources face the performance risk in Capacity Performance … and that risk isn't passed off to consumers, or passed off to someone else through some contract, for the life of me, I can't figure out why they have any incentive to offer other than their competitive offer, which is their opportunity cost."

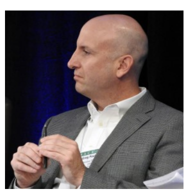


Abby Hopper, CEO of the Solar Energy Industries Association, struck a middle ground, advocating for respecting state decisions but driving those decisions to look forward to new technologies rather than figure out how to maintain old ones.

"I think state policy is critically important, and recognizing and respecting the role of states to make decisions about what kind of generation they want, how they want to support that and sort of what their priorities are is important, and the wholesale market should respect that," she said. "I think we are at a critical point in the history of the evolution of these markets. I do not have that same level of alarm. I do see an incredible amount of opportunity."

In the conference's opening panel, former FERC Commissioner **Phil Moeller**, now an executive vice president at the Edison Electric Institute, argued for dynamic rates that respond to changes in demand.

"You need those right price signals. I think it's the way to move the system in a way that helps people … I'm open to all kinds of creativity," he said, adding that pricing "has to be on the table" because of the "dynamic nature" of a system "driven by physics."



Greg Poulos, executive director of the Consumer Advocates of the PJM States, said costs are "always an issue" for consumers and that real-time rates are a concern because residential customers don't have the capability to follow price signals or impact prices through their actions. He shared the view that the discussion shouldn't be about "getting money to" existing resources to keep them operating.

"It should be focused on the consumers. Not just some consumers, but all consumers," he said.

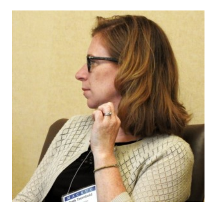
In the concluding commission roundtable, D.C. Public Service Commission Chair Betty Ann Kane said the biggest change in regulatory processes over the past 11 years is that "things don't lend themselves to that firmness that we used to have."

"There's more and more judgment that goes into [decisions] and there's more and more policy," she said. "You have these things — jobs, climate, policy — that's much harder to measure, and it's much harder to know if you're making a good decision."

Past and Future

In a panel on how RTOs have evolved over the past 20 years and where they're going, PJM's Darlene Phillips argued they are fulfilling their purpose.

"I think we got what was originally envisioned, which was reliability at lowest cost," she said.



Ohio Public Utilities Commissioner **Beth Trombold** said the ongoing resource switch from coal to gas and renewables is

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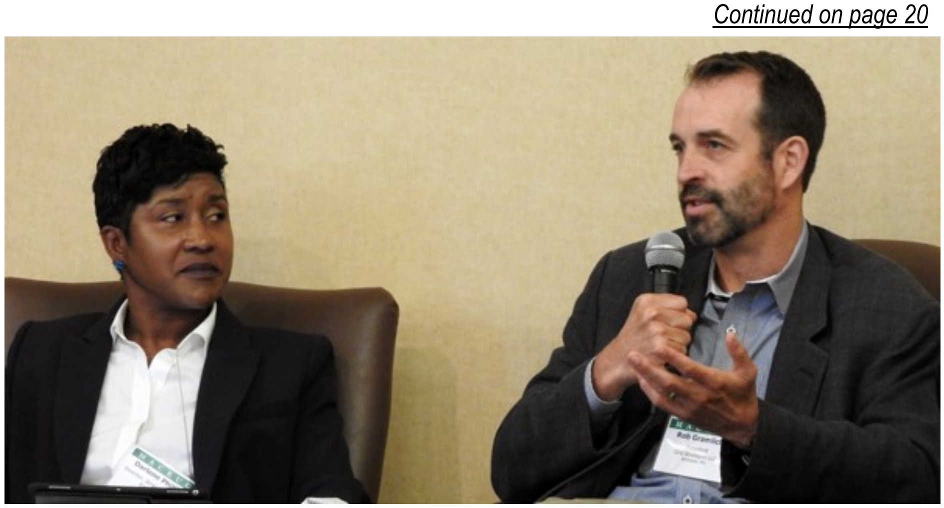

Darlene Phillips and Rob Gramlich | © *RTO Insider*

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having the biggest impact, but that "I think there's obviously political pressures. Each state has politics to navigate."

Phillips said states have "options" about procuring resources for their citizens and that providing capacity was not a "mandatory function" of RTOs.

"It was a service that was offered, and many states took advantage of it," she said, noting the RTO would be "OK" with states returning to a regulated industry or developing their own integrated resource plans.

Rob Gramlich, president of Grid Strategies, argued that RTOs should stick to their original goals of operating real-time grid dispatch for reliability and doing regional transmission planning.

"Stop trying to be regional energy policy makers," he said. "Consumers will do well under one scenario if [grid operators] stick to what they're supposed to do, and they'll probably do worse if they don't."

"It's our responsibility to make sure those energy markets are working as they're designed," Phillips said. "Politics is deep. Economics sometimes can take a backseat to the politics, both at the federal and the local" level. She said she would be "hard pressed" to think of who might have lost by being in an RTO.

"I think that everyone got a piece of this pie in some shape or form," she said.

Greg Carmean, executive director of the Organization of PJM States Inc., commented from the audience that load-serving entities were supposed to obtain adequate capacity for customers, while the Base Residual Auction was intended to be, as the name implies, residual, but that "mission creep" at PJM had expanded its role to be the main outlet.

Gramlich said the idea of LSEs being responsible for hedging — rather than relying on the regional capacity market — is effective, such as in ERCOT, where "it's their job [to hedge], and they know they'll pay $9,000 energy prices if they don't."

AARP's **Bill Malcolm** said in the next 20 years, "I think the whole country will be in an RTO," though he conceded that it's a "Hail Mary" in the Southeast.

Phillips said "a larger portion" of the country will be in an RTO and that "we'll be further along than we are today with seams and coordination."

Gramlich took it even further.

"I think every country is going to have large regional balancing markets," he said, adding that there will be more microgrids, but the "broad regional market will be best option" for those who can't afford their own microgrid.

NJ BPU President Threatens to Exit PJM Amid States' Complaints

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Utilities Commissioners annual meeting last week.

"I will not allow New Jersey to be the Cinderella of PJM," Fiordaliso said in an interview he sought out with *RTO Insider.* "It's not rocket science to make people feel a part of the process. I don't feel a part of the process. … Pick up the phone. … That's all we want."

Cinderella's story, of course, ended happily. Fiordaliso's mood last week was more like Patrick Swayze's declaration in "Dirty Dancing": "Nobody puts Baby in a corner."

Fiordaliso said he doesn't feel PJM is "serving New Jersey well" and that he's "been disturbed about it since I assumed the [BPU] presidency" in January. And while he proudly states that the Garden State is one of PJM's "founding fathers" — "the 'J' stands for New Jersey," he reminds — the tension could be the beginning of the breakup.

"I'm exploring it, let's put it that way," he said of whether he would push the state toward leaving the RTO.

> ***"I will not allow New Jersey to be the Cinderella of PJM."***
>
> **Joe Fiordaliso, New Jersey BPU**

"I have to work what's in the best interest of the ratepayers and the citizens of the state of New Jersey. If I don't feel that PJM is providing that, then I have to start looking at other options. … If PJM is not in my corner on that, then I guess we have nothing to talk about."

Other States

Although he declined to name anyone else, Fiordaliso indicated other PJM states may share his perspective. While commissioners in other states weren't as outspoken, several said they shared his frustrations.

"I think you would find a number of states that certainly would have the same concerns that he has," said Illinois Commerce Commissioner John Rosales, the president of the Organization of PJM States Inc. (OPSI). "I've made this clear to [PJM CEO] Andy [Ott] that the communication could be better."

"With regard to people being frustrated enough to consider other options, I will say it's been bandied about a bit," said a Maryland Public Service Commissioner who spoke on condition of anonymity. "I'm not sure Maryland is there quite yet, but if the states are pushed too far, I think more than a few states will come to similar conclusions. … There's a lot of frustration with an entity like the market operator trying to mitigate or overcome state policies. States are sovereign states, and they have every right to set their own policy. We don't obtain that right from the market operator. The states don't exist to serve the market; the market exists to serve the states."

W.Va., Pa. Staying Put

Regulators from West Virginia and Pennsyl-

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vania said they are not considering leaving the RTO.

West Virginia Public Service Commissioner Brooks McCabe said he has heard no discussions about his state considering leaving PJM. He advised states to "keep the powder dry; don't get into fights you don't need to get into."

The Pennsylvania Public Utility Commission said in a statement that it "values the role that PJM plays in the wholesale markets. Pennsylvania is not considering withdrawing from the RTO."

However, there are tensions in Pennsylvania as well.

The Pennsylvania legislature's Nuclear Energy Caucus said in a Feb. 9 letter that the lawmakers are "losing confidence in the ability of wholesale electric markets to … ensure stable prices for our citizens and a reliable and resilient electrical grid." (See *PJM Responds to Pa. Concerns About Baseload Plants*.)

PUC Vice Chairman Andrew Place told *RTO Insider* in May that he agreed with FERC Commissioner Robert Powelson, a former Pennsylvania regulator, that there is an "erosion of confidence" in RTO stakeholder processes. Place said "PJM is swimming and drowning in capacity" and that its capacity repricing proposal "only worsens that." (See *Powelson: 'Erosion of Confidence' in Stakeholder Process*.)

FERC on Friday rejected PJM's repricing proposal and instead ordered the RTO to expand its minimum offer price rule to include existing generation receiving state subsidies — including New Jersey's and Illinois' nuclear plants and generation supported by renewable portfolio standards. (See *FERC Orders PJM Capacity Market Revamp*.)

Commissioner Cheryl LaFleur, who dissented, said the ruling could force states into "reregulation."

"I am particularly troubled that, as a result of today's order, the commission will be hamstrung in its ability to openly and honestly engage with the states about whether this proposal will meet their needs, and how they might operate under this construct," she wrote.

PJM Responds

PJM spokeswoman Susan Buehler said in a statement that the RTO is a "customer service organization" and is "always striving to enhance our communications."

But because of the diversity of PJM — 13 states and D.C. — she said, "It is likely on any given matter one or more states may have a view opposite of PJM and possibly opposite other states. We attempt to find solutions that work for all interested stakeholders and members. PJM is independent of our members and stakeholders; we execute our mission of reliable operations, nondiscriminatory markets and long-term transmission planning."

'Very Disappointing'

Illinois' Rosales told *RTO Insider* in May he agreed with criticism that PJM has not been sufficiently responsive to the states, calling the RTO's capacity repricing filing "very disappointing."

John Rosales, at the 2017 OPSI annual meeting | © *RTO Insider*

Commonwealth Edison did not respond to a request for comment.

Rosales said he is not pushing for Illinois to withdraw from PJM but would not "hinder" it. Commonwealth Edison, a utility owned by Exelon, is the sole PJM member serving load in Illinois.

"We would not stand in their way if they decided they wanted to go to MISO," Rosales said, adding that the idea of Illinois creating its own single-state RTO has "never come up … in conversations with this commission."

Rosales said communication has improved since PJM's annual meeting in May. He said he had a one-on-one meeting with Ott there, and "it seems to be going a little better."

However, for the first five months of this year, "I can understand the states saying that we're really having bad communications," he said. The issue, he said, was that PJM often sends mid-level envoys to meetings who can only communicate messages, rather than decisionmakers who could answer for the RTO. That lack of direct engagement has improved, he said.

"It always seemed like they wanted to [improve], but let's see where they go from here," he added.

McCabe: Stay Engaged

West Virginia's McCabe said the states have issues "that we can effectively address" with PJM.

"Just because we have disagreements doesn't mean we have to get mad and leave the discussion. I am one for staying at the table. I'm very comfortable in a somewhat contentious environment as long as everyone is at the table and really trying hard to not just clarify their positioning properly but to understand the position of the opposing parties. We need to focus more on that," he said. "At some point, we'll have to make some of those tough decisions, but I think we have time."

Lack of Partnership

Fiordaliso said he believes he's getting "lip service" and "being patronized" by PJM. Specifically, he feels PJM failed to defend the state in a recent FERC fight with NYISO over transmission construction costs. (See *PSE&G on the Hook for Bergen-Linden Costs*.)

"We feel that PJM should be supporting New Jersey's position regarding another entity," he said. "They submitted a letter in support but never used the word 'support.' That's disturbing to me. … We would like more support. Shouldn't PJM be defending N.J.'s position? … I'm sure they listen, but I

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"We would not stand in [ComEd's] way if they decided they wanted to go to MISO."

John Rosales, Illinois Commerce Commission

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wonder how much they hear."

He recounted an April OPSI meeting in Jersey City that he said PJM decision-makers did not attend. "We're looking at [these] beautiful Lower Manhattan lights, and I jokingly say to my colleagues in OPSI, 'Look at those lights. New Jersey ratepayers are paying for them,'" he said. "I don't mind New Jersey paying for what it gets, but I'm not willing to pay for what New York gets."

Buehler said transmission cost allocation is beyond PJM's authority. "Understandably, there are many factors to consider and many equity implications related to FERC's goal in establishing cost allocation — ensuring that the beneficiaries of transmission reinforcement, either systemwide or specific, are assigned the cost obligation," she said.

Fiordaliso wants more individual and direct communication from PJM in ways that make states feel like "partners" in the market and said he doesn't feel RTO staff want to do that. He acknowledged that disagreements are inevitable but said, "Many times out of disagreement comes a better product."

"I would like to see them to say, 'You know what, New Jersey? Some of your ideas maybe are pretty good. Let's see what we can work out,'" he said. "I find us more in contention with PJM rather than in cooperation with PJM. And that disturbs me."

He said he purposefully declined PJM's invitation to a luncheon it was hosting at last week's MACRUC meeting because "I'm annoyed." He questioned why PJM staff did not inquire why he didn't attend. He conceded that they probably didn't get the message and don't have a "next step" planned.

PJM's size may play against it, as there are "diverse interests between the many states," he said, but added that staff have "an obligation, as we do, to try to get us all together."

"Might I be wrong? Maybe I am. But they have to show me I am wrong," he said. "My door is always open. My phone works. Call me. Come to my door. I'm willing to meet you more than halfway."

> **"Just because we have disagreements doesn't mean we have to get mad and leave the discussion."**
>
> **Brooks McCabe, West Virginia PSC**

PJM Seeks to Suspend Task Force in 'Unprecedented' Move

By Rory D. Sweeney

Thursday's Transmission Replacement Processes Senior Task Force meeting ended unexpectedly early. | © RTO Insider

VALLEY FORGE, Pa. — Facing what they called an "impasse" in stakeholder negotiations that began more than two years ago, PJM staff attempted to suspend the Transmission Replacement Processes Senior Task Force (TRPSTF) on Thursday, seeking to cease meetings until FERC responds to two compliance filings on the issue.

"It's clear that we made progress here … [but] it appears that we are effectively at an impasse," PJM attorney Chris O'Hara said in the early afternoon of what was scheduled as an all-day meeting, adding that it is "important that we get more guidance" from FERC. He confirmed the decision to suspend the task force was "informed by comments from [CEO] Andy" Ott.

Following stakeholder criticism, the group's chairman said Friday that at least the next meeting, on July 31, will go on as scheduled.

PJM and its transmission owners submitted the filings in March in response to a commission ruling that TOs weren't properly complying with their obligations under Order 890 to provide stakeholders with adequate information on "supplemental" projects — transmission expansions or enhancements not required for compliance with reliability, operational performance or economic criteria. (See Group Contests 'Supplementals' Ruling as PJM, TOs Advance.)

The ruling allowed for moving TOs' responsibilities from the Operating Agreement to a new Attachment M-3 in the Tariff, but PJM and the TOs requested additional detail on how and when projects would receive stakeholder consideration.

"We are resource-limited at PJM," O'Hara said, echoing comments Ott made at the Members Committee meeting on June 21, when the CEO took the unusual step of directly addressing members prior to a final vote on incorporating cost-containment measures into competitive bidding for transmission projects. Ott warned that implementing the measures would force staff to triage other revisions to the Regional Transmission Expansion Plan. (See Cost Containment Clears MC Vote Despite PJM Plea.)

"Stakeholders have indicated that their highest priority is that we focus on cost containment and [return on equity] capital structure commitments," O'Hara said. "We have to dedicate our resources to implementing the processes that are on the table."

Stakeholder Reaction

Many stakeholders were shaken by the announcement.

"I am baffled by the conclusions that a vote on anything at the [MC] indicates a stakeholder preference or prioritization. That is not what was in front of the membership. That is not what we were voting on," said Carl Johnson, who represents the PJM Public Power Coalition.

American Municipal Power's Steve Lieberman said the stakeholder process is designed for up-or-down votes on single issues, not votes that "enact a change in lieu of something else."

Adrien Ford of Old Dominion Electric Cooperative said she was "taken aback" by the decision being made "without input from stakeholders."

"It's just a little disappointing to me right now," added Ford, who joined ODEC a year ago after almost nine years with PJM. "This is unprecedented."

AMP's Ed Tatum said he was attempting to sort through his reactions to respond thoughtfully and "not in pure anger."

"I'm pretty pissed off about this … but I think you probably already know that. The whole idea that we just stop a process here without the senior committee looking at it — that's a bit tough. It goes against anything we've ever done in the stakeholder process," he said. "PJM is once again jumping into a situation and preventing the process from moving toward a natural conclusion. You have done the PJM stakeholder process a great disservice today."

The decision came unexpectedly in a meeting that started with reviewing proposals for the end-of-life supplemental project process. Supplemental projects are developed by incumbent TOs outside of PJM's scrutiny because they are not required to fulfill any reliability obligations from NERC, FERC or the RTO. They're paid for by the ratepayers in the TO's zone but included in the RTEP for planning purposes. AMP and other stakeholders have argued that TOs are increasingly finding ways to funnel projects into those categories to build them without competitive bidding. (See Report Decries Rising PJM Tx Costs;

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PJM Seeks to Suspend Task Force in 'Unprecedented' Move

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Seeks Project Transparency.)

AMP and ODEC had offered a "hybrid" proposal on how PJM and TOs should implement their compliance filings. They discussed where the proposal aligns with and differs from the plans already outlined by PJM and the TOs.

Chris O'Hara | © *RTO Insider*

O'Hara later attempted to end the discussion after TOs reiterated their refusal to negotiate anything beyond the filings. "I actually expected to spend hours with the comments and positions, and this was surprisingly short," he said.

Tatum noted that stakeholders could have bypassed the task force and taken their proposals directly to the MC and the Markets and Reliability Committee. "We chose not to do that because we respect the stakeholder process, and I wish PJM had the same amount of respect for it," he said.

Tatum was among the supporters of the cost-containment proposal, whose opponents have argued its sponsors violated the stakeholder process by bringing it directly to the MRC without any vetting through lower committees.

O'Hara later walked back his statement that the cost-containment vote at the MC indicated it was stakeholders' highest priority. But he pointed out there is just one month to get a TRPSTF solution approved and implemented before the next RTEP cycle.

"We can't build a consensus here. We need to focus on implementing what the commission ordered. We have resources; we just can't have them going in two different directions," he said.

'Much Ado About Nothing'

PJM's Ken Seiler, who chairs the Planning Committee, explained that staff are already dealing with implementing the cost-containment proposal and Attachment M-3, along with considering the grid resilience concerns, five separate planning models and "hundreds" of generation interconnection requests, all "without upsetting the apple cart."

"Your assessment that consensus isn't going to happen here is indeed correct, but we've known that for two years," Tatum said, adding that he takes issue with the reasoning for waiting until FERC responds. "The purpose of this effort is to give stakeholders an opportunity to say what they would want to see to understand TO end-of-life project decisions."

O'Hara said it might be "much ado about nothing," as PJM expects FERC to respond soon.

Ford asked that no meetings be canceled until the MRC, which created the task force, has a chance to consider the issue. Greg Poulos, executive director of Consumer Advocates of the PJM States, asked that PJM write out an explanation of its reasoning that he can share with his members.

When pressed by Tatum, PJM's Janelle Fabiano — an in-house expert on Manual 34, which spells out the stakeholder process — said she would "imagine there will be an announcement" at the MRC but wouldn't commit to anything without discussing the issue with other staff.

O'Hara said Thursday that the RTO must receive the commission's responses to the compliance filings at least five business days before the task force's next scheduled meeting, on July 31, to avoid cancellation.

But PJM's Fran Barrett, who chairs the TRPSTF, sent an email to stakeholders on Friday confirming a discussion at the MRC on July 26 and clarifying the TRPSTF will still hold its July 31 meeting. Barrett was unable to attend Thursday's meeting.

"At that meeting, we will further discuss my recommendation as conveyed by Chris O'Hara yesterday that we seek guidance from the MRC whether to suspend TRPSTF meetings pending FERC action on the submitted compliance filings, complaints and request for rehearing," he wrote. "In addition, we will discuss whether there is a workstream that we could focus productively upon that is distinct from the pending TO, PJM and transmission customer filings associated with Docket [EL16-71] and the Attachment M-3, such as end-of-life criteria for baseline upgrades."

FERC Orders PJM Capacity Market Revamp

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proposal, saying neither was just and reasonable. It agreed with Calpine that the existing MOPR was also unjust and unreasonable but declined to adopt the company's proposed remedy.

Instead it consolidated the two cases into the new docket for a "paper hearing" on an alternative approach in which PJM would expand the MOPR to all subsidized resources with "few to no exemptions." FERC also recommended creating a mechanism similar to the fixed resource requirement (FRR) allowing states to pull subsidized resources — and associated loads — from the capacity auction.

Comments on the commission's proposal are due in 60 days, with reply comments 30 days after that. The commission said it hoped to issue a final ruling by Jan. 4, 2019, in time for the 2019 Base Residual Auction.

PJM spokesman Jeff Shields released a statement saying the RTO "is pleased that the commission is taking action to address the price-suppressive impacts of resources that receive out-of-market payments."

"The order appears to be a positive step to change competitive electric market design while recognizing the important role states play in influencing the resource mix through retail energy policies," it continued. "We will begin work immediately to develop the kind of bifurcated capacity construct envisioned by the commission

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PJM NEWS

FERC Orders PJM Capacity Market Revamp

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and actively engage stakeholders, including the states, within the timetable laid out by the commission. We seek to ensure markets continue to deliver reliability at the lowest cost, drive investment without imposing risk on consumers, align generator performance with grid operations, support economic development and encourage technology innovation."

The commission said PJM's capacity market has become "untenably threatened" by out-of-market payments resulting from state initiatives.

"What started as limited support primarily for relatively small renewable resources has evolved into support for thousands of megawatts of resources ranging from small solar and wind facilities to large nuclear plants," the commission said. "As the auction price is suppressed [by subsidized resources], more generation resources lose needed revenues, increasing pressure on states to provide out-of-market support to yet more generation resources that states prefer, for policy reasons, to enter the market or remain in operation. With each such subsidy, the market becomes less grounded in fundamental principles of supply and demand."

All PJM states excluding West Virginia, Kentucky and Tennessee have renewable mandates or goals.

According to an analysis by Anthony Giacomoni, PJM senior market strategist for emerging markets, the percentage of the RTO's load subject to renewable portfolio standards has risen to 8% from 2.15% in 2009. Giacomoni said the percentage will reach almost 13.5% in 2033, with New Jersey, Maryland, Delaware and Illinois hitting 25% and D.C. rising to 50%.

PJM's Board of Managers submitted the "jump-ball" filing after stakeholders lobbied against capacity repricing, under which the RTO would have accepted bids from subsidized resources in its capacity auctions but then isolate them during a second stage and reset the price without them. Stakeholders were more supportive of the Monitor's MOPR-Ex proposal, which would have extended the MOPR to all units indefinitely, with carve-outs for states' renewable portfolios and public power self-supply. (See PJM Capacity Proposals to Duel at FERC.)

Capacity Repricing

The commission said the capacity repricing plan would disconnect the determination of price and quantity in the BRA, undermining its price signals.

"Though the second stage price may not be suppressed by uncompetitive offers from resources receiving out-of-market support, the higher price — created by repricing — would signal that the market would buy capacity from higher-cost resources than actually clear the market and receive capacity commitments," FERC said. "This would make it more difficult for investors to gauge whether new entry is needed, or at what price that new entry will clear. … Market participants would see the final, second-stage clearing price but would have limited information on which resources received commitments and the first-stage price."

The commission said the plan would result in a "windfall" to subsidized resources, which "would not only receive the same clearing price as competitive resources, but would then further benefit from the higher price set in stage two of the auction."

"PJM's proposal therefore will increase prices for load … [and create] an unjust and unreasonable cost shift to loads who should not be required to underwrite, through capacity payments, the generation preferences that other regulatory jurisdictions have elected to impose on their own constituents."

The commission rejected PJM's contention that its approach was similar to ISO-NE's Competitive Auctions with Sponsored Policy Resources, a two-stage capacity auction to accommodate state renewable energy procurements, which FERC approved in March. (See Split FERC Approves ISO-NE CASPR Plan.) "CASPR does not allow [subsidized] resources unfettered access to the market, [and] it retains and strengthens ISO-NE's MOPR for all new resources by phasing out the renewable technology resource exemption," FERC said.

The commission also found that PJM failed to support its proposed materiality threshold for initiating repricing, which it set as either 5,000 MW of unforced capacity across the region or 3.5% of the reliability requirement for any locational deliverability area.

MOPR-Ex

The Monitor's MOPR-Ex proposal would have extended MOPR to all fuel types while exempting self-supply, public power and electric cooperative resources — which the RTO said were unlikely to suppress prices — along with RPS resources.

The commission said PJM failed to justify the RPS exemption.

PJM said the 5,000 MW of renewables needed to meet RPS requirements in 2018 will grow to 8,000 MW by 2025. The RTO also said the Illinois and New Jersey ZEC programs could subsidize 4,760 MW of nuclear generation and that New Jersey

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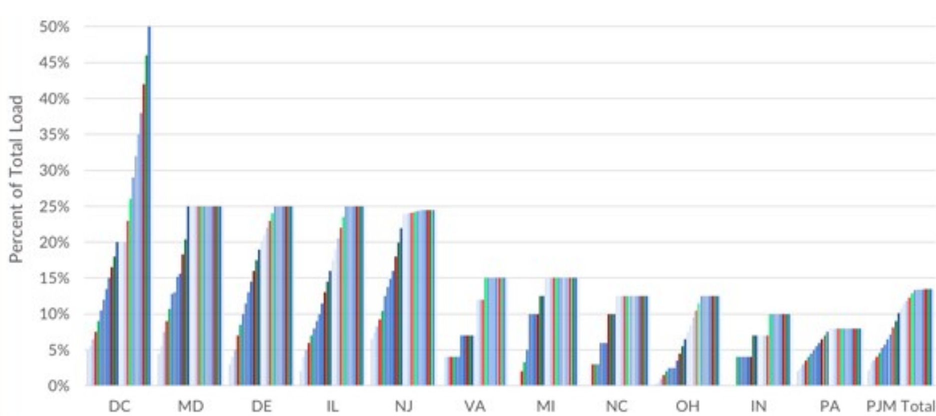

State renewable portfolio standards and impact on PJM (2009-2033) | PJM

PJM NEWS

FERC Orders PJM Capacity Market Revamp

Continued from page 25

and Maryland have authorized a total of 1,350 MW of offshore wind procurements.

"PJM has not shown that the exempted resources have a different impact on its capacity market than those which are not exempted. Moreover, PJM's assertion that the RPS exemption was based on deference to public policies favoring renewable generation resources is inconsistent with the well-established desire of some states in PJM to support other resources, such as nuclear plants," FERC said. "In addition … it is unclear why state programs limited to offshore wind should not be eligible for the RPS exemption given that such resources would likely have a market impact similar to other exempted state-sponsored renewable resources."

The commission acknowledged that it has approved MOPR exemptions for renewables in NYISO and ISO-NE but said those grid operators minimized price suppression by capping the amount of generation eligible for their set-asides.

Calpine Complaint

The commission agreed with a 2016 complaint by Calpine and 10 other generating companies, which alleged PJM's MOPR was unjust and unreasonable because it failed to address price suppression by existing subsidized resources. (See *Generators to FERC: Expand MOPR for Subsidized FE, AEP Plants*.)

The company filed the complaint in response to ratepayer-funded subsidies then under consideration in Ohio. Although the Ohio subsidies were later withdrawn, Calpine amended its complaint in response to Illinois' ZECs program.

"The increase in programs providing out-of-market support, such as ZEC programs, has changed the circumstances in PJM, such that it is no longer possible to distinguish the treatment of new and existing resources in the context of PJM's MOPR," FERC said.

But the commission rejected Calpine's proposal that it immediately extend the MOPR to additional resources and direct PJM to conduct a stakeholder process to develop a long-term solution.

Addressing Double Payments

Although it has previously approved ways for customers to avoid paying twice for capacity because of state policy decisions, the commission cited appellate court rulings that it is not required to do so. "Nonetheless, we do not take this concern — or the states' right to pursue valid policy goals — lightly," FERC said.

As a result, it proposed a resource-specific "FRR Alternative" option allowing the removal of subsidized resources from the capacity market along with a commensurate amount of load.

FERC said its approach will improve transparency.

"Though the capacity market side of the bifurcated capacity construct will be relatively smaller, the expanded PJM MOPR will ensure that all resources participating in the capacity market, whether or not these resources receive out-of-market support, offer competitively. Further, the bifurcated capacity construct should make more transparent which capacity costs are the result of competition in the capacity market and which capacity costs are being incurred as a result of state policy decisions. Finally, depending on how load is selected for the new resource-specific FRR Alternative, this capacity construct should help confine the cost of a particular state policy decision to consumers within the state that made that policy decision, whereas the status quo requires consumers in some PJM states to subsidize the policy decisions of other PJM states."

Dissents

The majority opinion quoted LaFleur's earlier warning of "'unplanned reregulation,' one subsidy and mandate at a time."

But LaFleur dissented from the ruling, calling the rejection of PJM's current rules "a troubling act of regulatory hubris that could ultimately hasten, rather than halt, the reregulation of the PJM market."

LaFleur said 90 days was insufficient time to determine "the most sweeping changes" to PJM's capacity construct since its inception 12 years ago. She said she would have rejected capacity repricing while calling for further development of MOPR-Ex.

The FRR Alternative "presents resource owners and states with choices that could be difficult to make in advance of the May 2019 BRA, particularly given that some of the state programs are statutory in nature and could require legislative action to reform," LaFleur wrote. "I do not share the majority's confidence that this proposal is the obvious solution to the challenge before us, in no small part because it is not clear to me how this construct will actually work."

In a separate dissent, Glick said the commission rejected PJM's current Tariff based on "theory alone." The RTO's capacity surplus suggests prices are too high, not too low, he said.

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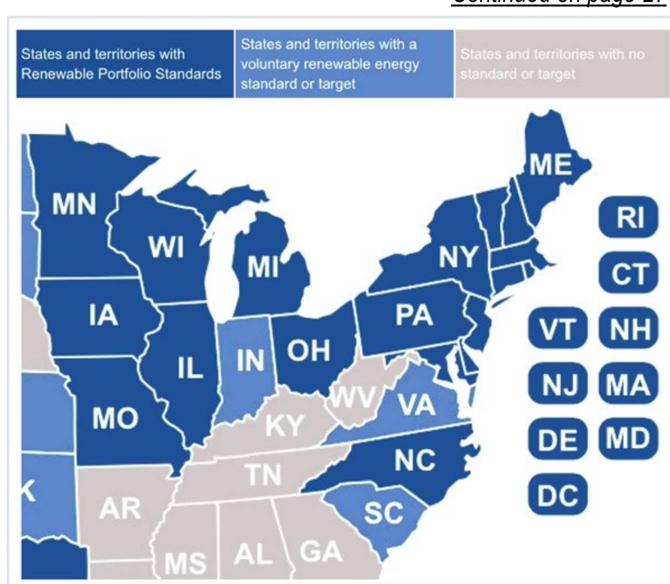


Ten of 13 PJM states and D.C. have renewable portfolio standards or goals. | *NCSL*

PJM NEWS

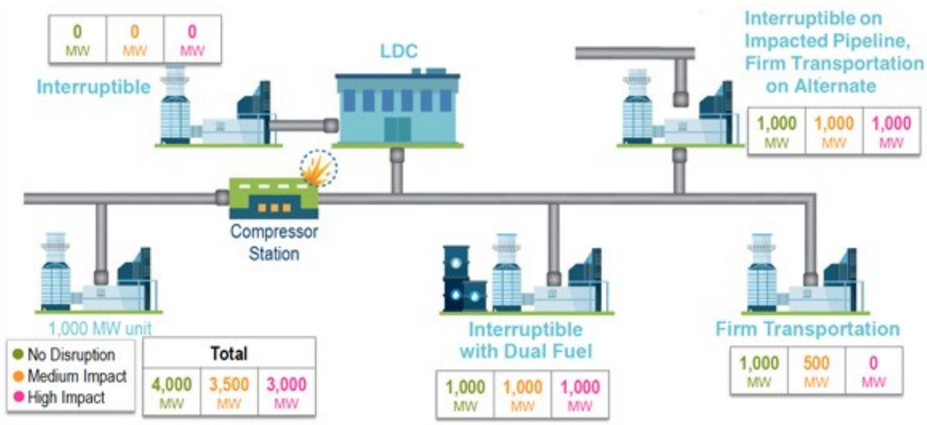
Stakeholders Debate PJM Fuel Security Scope

By Rich Heidorn Jr.

One thing is certain about the fuel security study PJM has begun: Many will be upset with the results no matter how it turns out.

In fact, just about everyone seemed unhappy with the scope and assumptions PJM officials outlined Thursday during a special Markets and Reliability Committee conference call.

Exelon's Sharon Midgley urged PJM officials to broaden its proposed scope, while Calpine's David "Scarp" Scarpignato lobbied for a narrower focus. James Wilson, a consultant for state consumer advocates, expressed concern that RTO officials were already moving on to potential "solutions" before understanding the problem.



PJM's extreme winter scenario will be based on the three cold spells in the past 45 years that each lasted for 14 days. | *PJM*

The range of comments echoed the larger resilience debate sparked by the Trump administration's bid to provide subsidies to struggling coal and nuclear plants.

The RTO said the goal of the study is identifying locations with fuel delivery risks, evaluating how resources can reduce them and determining the need for additional mitigation efforts.

PJM Vice President of Operations Mike Bryson and other RTO officials told stakeholders the study is a continuation of resilience efforts since the 2014 polar vortex, which led to tougher nonperformance penalties under Capacity Performance.

Comments

Several stakeholders filed written com-

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FERC Orders PJM Capacity Market Revamp

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He called the commission's solution "arbitrary and capricious," reciting a list of federal and state policies that subsidize or reduce the costs of nuclear power and fossil fuels.

"The commission's real aim is to support certain resources that do not benefit from state efforts to address environmental externalities," he wrote. "Doing so puts the commission on the wrong side of history in the fight against climate change."

Commissioner Robert Powelson, who sided with Chairman Kevin McIntyre and Commissioner Neil Chatterjee in the majority, wrote a concurrence defending the ruling as long overdue.

"The issue of out-of-market support for preferred resources is not a new one. In 2013, the commission opened a proceeding to discuss the interplay between state public policy decisions and wholesale markets. In May 2017, the commission continued that effort by holding a two-day technical conference to further explore the issues. After years of open dialogue unconstrained by *ex parte* restrictions, the commission failed to provide guidance on one of the most pressing issues facing wholesale electricity markets," he said. "Failure to take decisive action would be a disservice to PJM, its stakeholders and ultimately consumers."

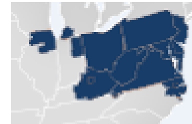
Next Steps

The commission acknowledged many details remain to be determined, inviting comment on issues including:

- The scope of out-of-market support to be mitigated by the expanded MOPR, and how resources become eligible for the FRR Alternative.
- How to identify the load removed from the capacity auction.
- What MOPR exemptions should be permitted. "For example, should an exemption be included for self-supplied resources used to meet loads of public power entities? Alternatively, should those resources have the option to use the resource-specific FRR Alternative? What, if any, exceptions should be added to the MOPR for existing resources in the capacity auction?"
- The length of time resources choosing the FRR Alternative must remain outside the capacity market and the mechanism by which they can return.
- How the FRR Alternative would accommodate required reserves and whether any changes to the demand curve are necessary.
- Whether federal sources of out-of-market support should be addressed by the commission and how the capacity market changes will interact with PJM's fuel security initiative.

The commission acknowledged the magnitude of the changes it proposed and said PJM may request a waiver to delay the 2019 BRA, as it did in 2015 during development of Capacity Performance.

PJM NEWS



Stakeholders Debate PJM Fuel Security Scope

Continued from page 27

ments in response to PJM's April 30 scoping paper. (See *PJM Seeks to Have Market Value Fuel Security*.)

Under the revised plan described by officials last week, PJM will use a base load scenario with a 50/50 peak for winter 2023/24 (134,435 MW). The extreme winter case will be based on the three cold spells in the past 45 years that each lasted for 14 days (1989, 1994 and 2017/18).

It will look at two "credible" pipeline disruption scenarios: a "medium impact" disruption that cuts downstream capacity by 50% and a "high impact" event eliminating downstream flows.

During last week's two-hour meeting, Exelon, the nation's largest nuclear operator, and Calpine, the largest natural gas generator, took opposing views of the appropriate scope.

Exelon's Midgley said PJM's analysis should look at the entire winter period rather than just a two-week cold spell. For example, she said, if oil inventory is depleted during a cold snap, the system may have difficulty meeting load later in the season. "We don't want to cast the net too narrow … as we're trying to think about the realm of possibilities," she said.

Calpine's Scarp responded that PJM should avoid overly extreme scenarios. "If you want to get really extreme, you can say it's really cold out, a meteor strikes and there's a tsunami that hits all at once," he said. "At some point you've got to draw a line. [Consumers are] only willing to pay so much for this."

Midgley said exclusively focusing on extreme weather would be too narrow. "Cyber and physical attacks can create fuel disruptions far more catastrophic than those caused by the recent bomb cyclone," she said.

9/11 Invoked

In its written comments last month, Exelon invoked the terrorist attacks of Sept. 11, 2001, to make a similar point. "Constraining the study assumptions to the severity and duration of recent historical weather events is the equivalent of what the government and the airline industry did on Sept. 10, 2001, and fails to reflect all realistic potential scenarios that PJM could face," it said.

It also said PJM should analyze "simultaneous weather and man-made infrastructure/cyber events," suggesting that terrorists might wait for a lengthy cold spell to launch an attack. "The highest stress resilience scenarios arise when extreme weather co-occurs with an infrastructure disruption. Therefore, any baseline scenario should jointly consider the extreme weather scenario as occurring simultaneous with a high-impact, 90-day infrastructure disruption scenario."

And it asked the RTO to evaluate "a realistic but extreme" scenario "that disrupts 80% of the natural gas pipeline infrastructure across the entire PJM region for six months," representing "the severe threat that a major state adversary might pose."

An Exelon spokesman said later that PJM's proposed scope "gravely underestimates the resilience risks facing" the region.

"At a minimum, PJM needs to look at a case where all financially stressed nuclear units will retire to better understand and potentially mitigate resilience risks," he said.

Premise Questioned

In their joint written comments, the Sierra Club and four other environmental organizations questioned the focus on fuel, noting that most outages result from transmission and distribution problems, not generation.

"The grid is changing faster than anyone anticipated, and the consequences of inaction are permanent, particularly when it comes to nuclear resource retirements."

Exelon

The environmental groups also challenged PJM's proposed base capacity portfolio, which assumes an installed reserve margin of 16.6% — the minimum requirement in the RTO's 2017 Reserve Requirement Study — rather than the 23.9% margin that resulted from the 2017 Base Residual Auction or the 22% margin from the 2018 BRA.

PJM also proposed a "stressed portfolio" that would have included additional coal and nuclear retirements beyond the base case and a "high-stressed" portfolio with still more coal and nuclear retirements that are replaced with natural gas.

Casey Roberts, senior attorney in the Sierra Club's Environmental Law Program, said she was relieved that PJM has eliminated, for now, the "high stress" portfolio scenario "that had no basis in fact."

"However, PJM couldn't give a clear answer as to whether fuel-free resources (renewable energy and demand-side) would qualify as fuel-secure," she said in an email

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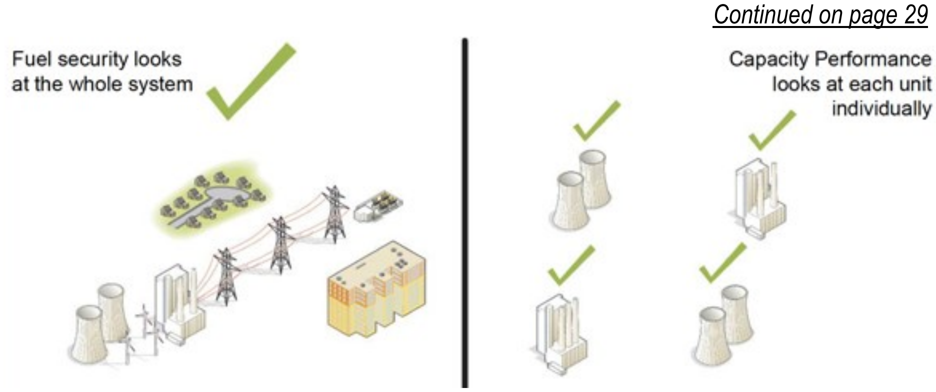

PJM says its fuel security analysis — which will look at the threat of extended outages throughout its system — is different from Capacity Performance, which seeks to ensure individual resources' ability to meet their obligations during peak hours. | *PJM*

Stakeholders Debate PJM Fuel Security Scope

Continued from page 28

after the meeting. "They also don't seem to be taking stakeholder input seriously, as demonstrated by their lack of plans to respond to specific comments, and failure to reach out to groups with expertise on demand response and [energy efficiency resources] that participate in wholesale markets."

The environmentalists and Advanced Energy Economy said that while PJM promised a "fuel-neutral" analysis, its proposal favors solid and liquid fuels and ignores the resilience contributions of renewables and demand-side resources.

Use of Confidential Intelligence

Roberts and consultant Rob Gramlich of Grid Strategies also questioned PJM's plans to incorporate in the analysis confidential information from the Department of Energy on cyber and physical threats to fuel delivery infrastructure.

"The suggestion that DOE's natural gas disruption scenarios will not be reviewable by stakeholders or even all of the PJM staff involved is also highly concerning, particularly if those disruption scenarios will be the basis for profound changes to [the capacity market] with enormous impacts on consumers," Roberts said.

"There is a 'credible' scenario and then a DOE scenario," said Gramlich, who coauthored a study asserting that resilience is more a function of transmission and distribution than generation. (See *Report: Customer Needs Should Lead Resilience Effort*.)

"I don't think DOE should get to plug in assumptions if other interested parties don't — certainly not ones the consumers who might be forced to pay more don't get to see," he said.

> ***"If you want to get really extreme, you can say it's really cold out, a meteor strikes and there's a tsunami that hits all at once. At some point you've got to draw a line."***
>
> **David "Scarp" Scarpignato, Calpine**

Consultant James Wilson said that although PJM's approach to the analysis is appropriate, "they seem fixated on a particular approach to addressing the problem that may be costly and inefficient."

In later comments to Bryson, Wilson questioned PJM's statement in a FAQ document that the study will identify "the adequate level of required fuel security."

"The study cannot do this," Wilson said. "Only policymakers can make this call."

Wilson said fuel security risks can be broken into three groups: plant outages, weather-related load levels and others "for which there is substantial historical data"; a second group regarding whether plants have firm gas transportation or oil backup, which he said "are uncertain but … are rather easily influenced by incentives"; and a third group that includes pipeline failures and cyber or terrorist attacks.

"There is no history upon which to base any assigned probability" to the third category, Wilson said.

Thus, he told Bryson, PJM should focus on evaluating scenarios and potential resilience metrics, "and not try to quantify unconditional risk (you can't), or identify a 'required level' of something, or otherwise get too far ahead in selecting a particular extreme scenario for planning purposes."

Exelon Seeks Distance from Coal

Like Exelon, FirstEnergy Solutions also argued in its written comments that PJM should consider more extreme scenarios, including a "pipeline failure impact on a large number of plants."

"Any criteria to assess fuel security that are broad enough such that resources of all technologies and fuels can qualify as being 'fuel secure' will likely result in a system less secure than the status quo with natural gas as an even more dominant fuel source," said FES, whose coal and nuclear plants could benefit from fuel security payments.

Exelon, however, called for a broader resilience focus that does not lump coal and nuclear together, saying fossil fuels "stand to exacerbate the severe weather events that are interrupting electric service to customers in the first place."

"If PJM plans to meet its fuel security challenges by retaining resources that burn coal or by incentivizing the addition of oil storage, it will be contributing to the very problem it is trying to solve," Exelon said. "Planning a generation system that is resilient must include planning for a system that is both able to withstand interruptions and also does not contribute to interruptions by exacerbating climate change."

Next Steps

PJM officials said they hope to complete Phase I of the study — the identification of potential system vulnerabilities and development of criteria to address them — by late July or early August. They will provide an update on their progress at a special MRC meeting July 26.

The completion of the initial analysis will lead to Phase II, a stakeholder process expected to run through October to develop methodology to incorporate vulnerabilities into PJM's markets "if needed."

In Phase III, the RTO said it will seek to address specific security concerns identified by federal and state agencies. Officials said any proposed capacity market changes would need to be filed with FERC by January to be in effect for the 2019 BRA.

> **"The more extreme of a scenario that PJM chooses to model, the greater the impact to consumers."**
>
> **Sierra Club, Sustainable FERC Project, Natural Resources Defense Council, Environmental Defense Fund and Earthjustice**

SPP NEWS

SPP RE Ends Compliance Monitoring, Enforcement Activities

By Tom Kleckner

The SPP Regional Entity (RE) ceased all compliance monitoring and enforcement activities at the close of business Friday, ending 11 years in an official reliability oversight role that drew concern from FERC and NERC.

The entity shut down its database at 5 p.m. CT. RE President Ron Ciesiel last week said data and files have been transferred to the registered entities' new REs and would be available to those entities at their new locations yesterday morning.

"Overall, I couldn't be happier with the transition," Ciesiel said during the RE Board of Trustees' final conference call Thursday. "I hope people on the other end are as pleased as I am with how this has moved on."

SPP announced last July that it was dissolving the RE, citing a mismatch between its and SPP's footprints. However, NERC and FERC have also expressed reservations about the RTO's involvement in RE activities. (See *SPP to Dissolve Regional Entity*.)

The RE was responsible for auditing and enforcing reliability rules in three balancing authorities (SPP, Southwestern Power Administration and parts of MISO). Most of its 122 registered entities have been reassigned to the Midwest Reliability Organization, with the remainder joining the SERC Reliability Corp.

NERC's board of directors and FERC both approved the SPP RE's dissolution earlier this year. (See *FERC Approves Dissolution of SPP RE*.) FERC issued an order that terminates an amended and revised delegation agreement between NERC and SPP, effective Aug. 31, and revises the delegated agreements among NERC, MRO and SERC to reflect their new geographic footprints.

NERC will assume the compliance monitoring and enforcement of the RTO for two years following the delegated agreement's termination date, after which it will determine a successor.

Ciesiel and a transition staff of three other employees will remain at SPP's headquarters in Little Rock, Ark., until Aug. 31 to close out any remaining issues.

FERC Sets Westar Loss Factors for Settlement

By Tom Kleckner

FERC last week ordered settlement judge procedures over Westar Energy's tariff revisions updating its transmission and distribution loss factors (ER18-1418).

"We find that Westar's proposed tariff revisions raise issues of material fact that cannot be resolved based on the record before us," the commission said. "Our preliminary analysis indicates that Westar's proposed tariff revisions have not been shown to be just and reasonable."

Kansas City-based Westar is seeking to raise its loss factors from 3.07% to 3.47%, based on a study it performed using data and load-flow models from 2016 supplied by SPP. The current figure is a result of a 2013 settlement that locked it in for five years, with an updated study to be filed every succeeding five-year period.

Westar noted that the 2016 data reflect system losses lower than those recorded in 2014-2015 and 2017. It contended that customers would benefit from "locking in" lower loss factors for the next five years, given the settlement's moratorium provision.

Kansas Electric Power Cooperative and the Kansas Power Pool protested, arguing that the increase and the underlying study were highly complex, "with numerous assumptions that must be understood and vetted." They said the loss factors were inconsistent with known changes on Westar's transmission system, pointing out the utility had spent more than $900 million in improvements between 2011 and 2016 that should "portend a decrease in transmission losses … not an increase."

The two parties further alleged Westar's study "inappropriately" excluded certain elements that would have lowered the estimated losses for 2016. They said that the utility had not demonstrated the reasonableness of including generator step-up losses in its calculation, nor its use of a top-down method for estimating certain losses while using a bottom-up method for others.

Westar responded that its previous study indicated losses of 3.65%, and that the current 3.07% mark was set by the 2013 settlement, noting that its loss factors do not include losses from generator step-up transformers. The utility contended that its treatment of state estimator losses is proper and that its study normalizes for conditions experienced on its transmission system.

The Nemaha-Marshall Electric Cooperative Association also intervened, saying it was concerned that Westar was incorrectly using annual peak load in applying the loss factors for the association's wholesale distribution service charges, possibly leading to over-recovering facility service charges and associated losses.

In its reply, Westar countered that it uses the peak load for each facility in its losses calculation and the wholesale customer's coincident peak when determining its share of the facility.

FERC & FEDERAL NEWS

Powelson Leaving FERC to Head Water Lobby

By Tom Kleckner and Rich Heidorn Jr.

Robert Powelson at the Senate Energy and Natural Resources Committee last month | *© RTO Insider*

FERC Commissioner Robert Powelson will leave the commission after only a year in the post to lead a lobby representing the nation's private water companies.

Powelson tweeted "with mixed emotions" the surprise announcement on Thursday, linking to a statement posted on FERC's website.

"It has been an honor to serve this great country," he said. "My family and I are deeply appreciative of this opportunity. FERC is a world class organization. Thanks to you, fellow FERCians!"

Powelson said he will leave the commission in mid-August to become president and CEO of the National Association of Water Companies. His departure could impact how the commission acts on several major initiatives, including the resilience docket FERC opened in January.

A former Pennsylvania Public Utility Commissioner, Powelson has been an unabashed supporter of natural gas and expressed skepticism over the Department of Energy's effort to prop up struggling coal and nuclear plants.

"Why should we go out there and pick winners and losers in a market?" he said during a conference in March. "To do what? Hurt the other, more efficient units in the market or send bad market signals?" (See *Powelson Tells New England to Learn from Pennsylvania*.)

A Republican, Powelson was sworn in on Aug. 10, 2017, to a term that was to run through June 2020. His position on the five-person commission will be filled by another Republican, maintaining the GOP's 3-2 edge.

"I'll miss [Powelson]'s trenchant takedowns of the coal and nuclear bailout plans and can only hope he's replaced by someone with as much vigor, expertise and sophistication," tweeted University of Richmond law professor Joel B. Eisen.

Until a fifth commissioner is appointed, Democratic Commissioners Cheryl LaFleur and Richard Glick will have increased leverage. The two have dissented repeatedly on gas pipeline certificate orders, calling on the commission to consider the projects' impacts on greenhouse gas emissions. (See *Dem Dissents Show FERC Divide on Carbon*.)

"This arrangement appears most likely to complicate — but not necessarily halt — the FERC's approvals of natural gas pipelines and potentially other issues," ClearView Energy Partners wrote in a note to clients Thursday night. "If Powelson's seat remains vacant for an extended period of time, the absence of a third Republican vote could delay potential changes to the commission's 1999 Certificate Policy Statement, which governs natural gas pipeline approvals pursuant to Section 7 of the Natural Gas Act. It is possible that further action on the commission's ongoing resiliency docket could be delayed if the commission hits a 2-2 impasse."

The New England Power Generators Association, which represents competitive generators, called Powelson's departure "a major loss for FERC and all who participate in the dynamic energy markets. Commissioner Powelson has been a true leader on competitive electricity issues for years."

But environmentalists and anti-fracking activists expressed no regrets over his departure.

"As a FERC commissioner, Robert Powelson was part of the FERC rubber stamp for pipelines," said Maya van Rossum, leader of the Delaware Riverkeeper Network. "Powelson was not only a stalwart supporter of pipelines, but he was an outspoken critic of any members of the public who opposed pipelines, likening them to jihadists."

"Powelson's abrupt resignation doesn't change the fact that FERC itself needs a massive change," Mary Anne Hitt, senior director of the Sierra Club's Beyond Coal campaign, said in a statement. "The next commissioner must be a strong advocate for considering climate change in FERC's decision-making process, curtailing the dangerous overbuilding of fracked gas pipelines, and stand firmly against reckless coal and nuclear plant bailouts the Trump administration and grid operators are proposing."

In his new post, Powelson will be running a trade group representing private water utilities serving almost 73 million people, almost one quarter of the nation. While with the Pennsylvania PUC, he chaired the National Association of Regulatory Utility Commissioners' Water Committee for three years.

"Rob brings to the association tremendous experience at both the state and federal level," Aqua America CEO Christopher Franklin, president of the NAWC Board of Directors, said in a statement. "He is taking the helm of the NAWC at an important time in the water industry. His unique skills and relationships will help to highlight the capabilities of NAWC member companies in solving some of the challenges facing many mid- and small-sized municipal water and wastewater utilities. Rob also has firsthand experience in working with utilities and regulators to encourage the investment in infrastructure that is critical in keeping our nation's viable."

FERC & FEDERAL NEWS

DOE Renewable Nominee Sidesteps Controversy

By Rich Heidorn Jr.

President Trump's nominee to head the Department of Energy's Energy Efficiency and Renewable Energy (EERE) program sidestepped controversy in his confirmation hearing last week but was unable to answer several senators' questions about key legislation and programs.

Daniel Simmons

Assistant Secretary nominee Daniel Simmons, who has been running EERE on an acting basis for the last year, told the Senate Energy and Natural Resources Committee that his work at the department is much different than his previous roles at the Institute for Energy Research and American Energy Alliance — groups backed by the conservative Koch brothers that have supported fossil fuel use and called for Congress to "eliminate" EERE. Simmons also previously worked at the American Legislative Exchange Council, which also backed fossil fuels.

In his opening statement, Simmons said his parents' decision to build "a passive solar double envelope home" sparked his lifelong interest in EE and renewables. "Since [joining DOE], I have approached this job with an open mind and an eagerness to learn and have focused on following congressional direction while advancing the administration's priorities," he said.

Later, Simmons discussed meeting with solar and wind industry representatives in his new role, acknowledging that "we've had policy differences in the past."

Ranking member Maria Cantwell (D-Wash.) asked Simmons whether he would aid her in convincing the House of Representatives to back Senate legislation increasing EE standards for buildings and appliances. (See *House, Senate Conferees Begin Work to Narrow Differences on Energy Bill*.)

"I'm not familiar enough with that disagreement to really comment on it; I'm sorry," Simmons responded.

"Okayyy…" Cantwell said incredulously. "This will be a key part of your job, so maybe before we vote on you, you could take a look at that."

Cantwell also complained that DOE had repeatedly missed deadlines for completing EE regulations. "We had seen a slow walking by some on this, and I'm telling you it's wrongheaded," she continued. "Our nation ['s manufacturing] is going to be … very, very competitive on an international basis if we can drive down electricity costs. So, that should be our mantra, and I hope that you will lead that charge."

"I will … I will not slow walk any of those regulations," Simmons promised.

In response to a question from Sen. Tina Smith (D-Minn.), Simmons also distanced himself from his comments during a 2013 podcast in which he argued that "wind and solar is more expensive and will increase the price of electricity."

He noted that solar PV costs have dropped sharply in the last five years. "That's one of the things that [has] changed since I made that statement," he said.

But Simmons stumbled again under questioning from Sen. Rob Portman (R-Ohio), who with Sen. Jeanne Shaheen (D-N.H.) has led the — mostly unsuccessful — effort to win Congressional approval for tougher EE standards.

Portman asked Simmons his opinion of DOE's "Tenant Star" program, the result of narrower EE legislation approved in 2015.

"The Tenant Star program, I'm not familiar enough with that to comment on it. But I will look into it," Simmons said.

The senator asked whether there was more DOE should be doing on EE without the larger EE bill. "I'm not familiar enough with the legislation to add on to it," Simmons responded.

Simmons was the only one of four DOE nominees testifying June 26 to receive pointed questions from the senators. Also testifying were Teri L. Donaldson, nominee to be the department's inspector general; Christopher Fall, named as director of the Office of Science; and Karen S. Evans, who would become assistant secretary overseeing DOE's new Office of Cybersecurity, Energy Security and Emergency Response.

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MISO and ISO-NE, however, urged caution.

MISO said FERC should postpone issuing a final rule on DER market integration, calling it "premature." The RTO said its footprint does not have a high volume of DER installation and said it's not predicting significant penetration levels, or a need for DER aggregation, anytime soon.

Part of MISO's concern is that its aging market system platform cannot handle the added intricacy. (See "Limited Improvements for Old Platform," *MISO Platform Replacement Risks Delay, Budget Overrun*.)

"Commission directives requiring major additions to MISO's existing market platform would yield almost no benefits given the lack of capability of MISO's legacy technology system and low regional DER penetration. Prescriptive action would incur very high costs associated with retrofitting MISO's soon to be retired platform … likely delaying the transition to a far more capable system," the RTO said.

ISO-NE also pleaded for flexibility, saying its current market rules and the new approach to integrating storage under Order 841 indicate no need for a DER participation model in New England. "The DER participation model envisioned in the DER [Notice of Proposed Rulemaking] would be costly and disruptive, and would produce no additional value for New England," the RTO said.

The Advanced Energy Management Alliance called on FERC to create a

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Day 2 of FERC's April technical conference on DER | © RTO Insider

"participation model" with a checklist for RTOs to demonstrate compliance with minimum requirements, like the one it included in Order 841 on energy storage. (See FERC Rules to Boost Storage Role in Markets.) It said the model should cover issues including market access, measurement and verification, and coordination with LDCs.

The Edison Electric Institute said FERC should "carefully consider the far-reaching impacts" of allowing DER aggregations to participate in the wholesale markets and defer to the grid operators and states on details.

"The proposal has significant implications for the reliability of the distribution system and additional time is needed to install infrastructure and to develop coordination agreements to ensure that the reliability of the distribution system and the [bulk power system] is maintained," EEI said.

Public interest groups, including the Environmental Defense Fund, Sustainable FERC Project and Union of Concerned Scientists, said it would be premature for FERC to mandate best practices for transmission-distribution coordination. But it said the commission should finalize the DER aggregator participation model it proposed in November 2016. (See FERC Rule Would Boost Energy Storage, DER.)

"Relying on ISO/RTO stakeholder processes alone to eliminate barriers to market participation by non-incumbent storage and DER participation without commission involvement (as EEI suggested) would not likely yield results consistent with efficient functioning of the market or a fair outcome for these resources," the groups said. "As noted by many commenters, the ISO/RTO stakeholder processes generally favor incumbent stakeholder members and underrepresent emerging technologies and the public interest.

"There is no need to further delay finalizing the proposed rule. Understanding that there might be legitimate reasons for RERRAs [relevant electric retail regulatory authorities] to delay implementation of the rule in their own regions, that may be done by granting a longer implementation timeline for that RERRA or a limited waiver," the groups said.

The American Public Power Association said FERC must distinguish between "undue barriers to DER participation in wholesale markets and factors that, although they might have the effect of limiting DER participation in those markets, are grounded in legitimate operational, reliability and regulatory considerations."

The Electric Power Supply Association said "any initiatives or rules to facilitate participation of [DER] must first and foremost be designed to serve reliability and efficiency objectives, not simply to facilitate DERs business model objectives."

Should FERC permit aggregation of DER beyond a single node?

AEMA and the Solar Energy Industries Association said the commission should allow multi-nodal aggregation. "Aggregation at a node is not aggregation," said AEMA, calling for aggregation across an area as "geographically broad as technically feasible."

SEIA said it supports the commission's proposed 100-kW minimum size requirement. "Even with [a] 100-kW minimum size requirement, however, there is no guarantee that each of the many thousands of nodes across the RTO/ISOs would be of a sufficient size to sustain aggregations and to foster market competition among multiple aggregators. Aggregators should have the ability to compete across a load zone, and allowing multi-node aggregation should reduce the price of delivered power by reducing congestion and alleviating system constraints."

Limiting aggregations to a single node would hurt the economics of DERs and their value to system operators, "restricting their ability to deploy these resources economically and in response to reliability needs," said Advanced Energy Economy, which represents more than 100 companies and organizations in energy efficiency, demand response, natural gas, renewables and storage.

PJM said multi-nodal aggregation would be challenging but that its experience modeling DR across multiple nodes shows it can be done. "PJM does not anticipate any significant modifications to modeling and dispatch software, communications platforms or automation tools to implement multi-node DER aggregations," the RTO told the commission.

But opponents, including Calpine and EPSA, cited the technical conference comments of PJM Independent Market Monitor Joe Bowring and NYISO Manager of Market Design Michael DeSocio, who expressed concern at the technical conference over aggregation over multiple nodes.

"DER aggregation across multiple nodes is inconsistent with the design of the organized wholesale markets, will distort market outcomes and reduce efficiency, and should therefore not be mandated," Calpine said.

"If the precedent is established now that DER, alone among generation resources, does not need to be nodal, it will be difficult or impossible to reverse that precedent as DER grows based on that approach," the

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Monitor said in its filing. "The fact that aggregation may provide some short-term business benefits to the providers of DER is not relevant to defining the correct market design to facilitate the long-term, effective participation by DER."

The Monitor said DERs can be priced and dispatched at individual nodes and still be aggregated across multiple nodes for settlement purposes.

How much control should local distribution utilities have over DER?

EEI said electric distribution companies "must have transparency and ultimate control over the resources connected to the distribution system" and that regulators must address cost allocation issues associated with distribution system investments needed to facilitate DERs.

"Generally, DER aggregations will increase, not decrease, volatility on the distribution system given its radial design, and because there may be significant changes in power flows that will have to be mitigated to ensure that load can be served under all circumstances," EEI said.

The Transmission Access Policy Study Group, which represents transmission-dependent utilities, said "DER aggregations can adversely affect distribution systems." FERC should "defer decisions to those with the best understanding of the relevant distribution systems, including an 'opt-in/opt-out' mechanism modeled on Order No. 719-A or, at minimum, an express opt-in requirement for small distribution utilities."

The National Rural Electric Cooperative Association said FERC's proposal to allow third-party DER aggregators to participate directly in RTO markets will present bigger challenges for its members than the deployment of DERs on cooperatives' systems, requiring them to invest in new equipment and software.

"Third-party DER aggregators participating in the RTO/ISO markets will have incentives to operate the DER in response to wholesale market signals, which can pose operational, reliability and safety issues for local distribution cooperatives," NRECA said.

NRECA also said third-party aggregators may engage in "cherry picking," potentially preventing cooperatives from using their own or their members' DER, which "may be a significant part of many cooperatives' integrated resource portfolios. If those DER resources are available to third-party aggregators, this could severely undermine the cooperative's ability to manage cost and risks for its consumer-members."

"These factors were an integral part of the commission's decision to permit RERRAs to decide whether to allow aggregators to bypass utility demand response programs and bid retail demand response directly into the wholesale markets in Order No. 719," NRECA said.

Several commenters said they opposed giving LDCs veto power.

AEE said it supports reasonable mechanisms to ensure LDCs, aggregators and RTOs have sufficient operational coordination and situational awareness. "However, distribution utilities should not be given discretion to reject DER registrations in an aggregation for reasons beyond operational coordination and reliability," the group said. "Allowing distribution utilities a broad veto, even in instances when a DER has an interconnection agreement in place, will restrict DER participation in wholesale markets, erode competition and potentially result in undue discrimination. The interconnection process determines what a DER needs to do to operate in a safe and reliable manner."

EPSA said FERC should ensure LDCs don't use their knowledge of their systems and needs for a competitive advantage in developing DERs. "If utilities are allowed to exploit their asymmetric access to information to the detriment of their competitors, even for the short term to speed the deployment of DERs, it will serve to chill merchant investment in this space, which may ultimately slow DERs deployment."

SEIA also raised market power concerns. "Facing true competition from DERs, certain distribution utilities may have incentives to engage in conduct ... to protect their current market positions," it said.

Should state and local regulators have opt-out rights over DER?

AEMA and the Energy Storage Association said states should not be able to prevent consumers from participating in wholesale markets.

Instead, AEMA said FERC should clarify that states have the right to implement retail tariffs that prohibit participants from direct participation in wholesale markets. "In that instance, customers would choose whether they preferred to participate in a retail tariff or ... via an aggregator in the wholesale market. The retail tariff could facilitate wholesale services and enable states to preserve their jurisdiction over retail customers, programs, and activities without impinging on customers' ability to access wholesale markets," AEMA said, citing Indiana and Michigan Power's DR service rider.

But NRECA said FERC should defer to RERRAs' timetables for implementation because the industry "is not uniformly ready for third-party DER aggregations."

The National Association of Regulatory Utility Commissioners said it opposed a limited opt-out provision that would allow states to require DERs to choose participation in either the wholesale markets or retail programs, but not both.

"The limited opt-out provision provides no additional benefits or options to state commissions," NARUC said. "States already have the authority to prevent an asset from participating in a retail compensation program [under the Federal Power Act]. ... No FERC FPA-based regulation can require states to allow aggregated DER assets to participate in both RTO/ISO markets and retail compensation programs."

Xcel Energy asked FERC to suspend the rulemaking pending further technology improvements, saying technology does not exist "to effectively and fairly integrate DERs" into wholesale markets. "In the meantime, states and other stakeholders can serve as the laboratory for policy initiatives in this arena as they move forward with incremental and evolutionary programs involving DER integration."

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How should concern over double payments be addressed?

AEE said "there is little to no risk that customers will 'pay twice' for the same service."

The commission's proposed blanket prohibition on wholesale market participation by aggregated DERs that participate in retail programs would "arbitrarily exclude many, if not most, existing DERs from the wholesale market, and limit the benefits that the wholesale grid can capture from these resources," AEE said.

"Dual participation does not equal double compensation," ESA said.

"Rather than limiting an entire function of DER assets by forcing the asset to participate exclusively in one market, ESA suggests that states examine specific services on a case-by-case basis, with sufficient evidence to demonstrate a justification for the exclusion, to limit a specific combination of two services by the same DER asset."

ESA cited resources participating in both NYISO and Consolidated Edison's DR program. "These assets are providing value for both the retail and wholesale markets and should be compensated accordingly — they provide demand savings for consumers and export power onto the grid for system support."

Calpine said the commission must prevent DERs that receive out-of-market compensation from skewing RTO markets and price formation. "In particular, DERs that are compensated for participating in retail programs will not have to submit offers in the RTO/ISO markets that reflect their actual costs, and would therefore have a competitive advantage over resources that do rely on RTO/ISO market revenues," it said. "Put simply, DERs should have to choose whether they want to participate in the retail market or an RTO/ISO market, and stick with that decision for a defined period (e.g., for five years, similar to the fixed resource requirement process in PJM)."

Vehicle and battery manufacturer Tesla said RTOs should require proof before allowing restrictions. "RTOs/ISOs should be required to articulate a specific scenario in which a resource would receive more than one revenue stream for only one distinct value."

SEIA said the most effective solution "is to ensure that wholesale and retail services are clearly defined. Whether two markets compensate the 'same service' or 'distinct values' is a question that should be addressed on a fact-specific basis."

Tom Kleckner, Michael Kuser, Amanda Durish Cook, Michael Brooks and Rich Heidorn Jr. contributed to this report.

Groups Sue ICC, Chairman over NextGrid Study Process

By Amanda Durish Cook

The Illinois Commerce Commission has agreed to open the remaining meetings for its NextGrid study process to the public just days after two group accused its chairman of keeping the public in the dark on the study and violating the state's open meetings laws.

Consumer advocate Illinois PIRG Education Fund and Chicago-based energy storage and wind energy company GlidePath Development filed suit in Cook County Circuit Court on June 25 against the ICC and Chairman Brien Sheahan, alleging that the commission is largely conducting its NextGrid study without public involvement (2018-CH-07943).

The two organizations allege that since launching the NextGrid study, the ICC and Sheahan have committed dozens of breaches of the state's Open Meetings Act, including failing to post meeting notices and agendas in advance; repeatedly denying the public the opportunity to attend meetings; "actively" excluding certain individuals from attending meetings; failing to keep reliable meeting records; excluding input from working group members in meeting records; and issuing draft reports containing content that had not been discussed in meetings.

The ICC confirmed on Friday that it will open all remaining NextGrid working group meetings to the public, hours after meeting with the plaintiffs in court and working out an agreement order.

A handwritten agreement between the parties says that if the ICC wants to continue its status quo of closed meetings, it must postpone all NextGrid meetings, but if meetings proceed, they should be in full compliance with the Open Meetings Act. The ICC also agreed to provide plaintiffs with advance notice of all meetings and specific steps it will take to comply with the Open Meetings Act. The agreement also notes the ICC must still answer the plaintiffs' complaint by July 20.

ICC Senior Public Information Officer Victoria Crawford said the ICC was "pleased that progress on this important study to explore the electric grid of the future will continue."

"The ICC and the NextGrid facilitators and leaders remain committed, as always, to an open and transparent process," Crawford said.

"The Illinois Commerce Commission agreed today to a court order requiring the NextGrid process to abide by the Open Meetings Act while the lawsuit proceeds. Despite an ICC spokesperson's claims that the lawsuit was 'frivolous,' attorneys for the commission agreed to plaintiff demands to open the process and fully comply with the Open Meetings Act," Illinois PIRG and GlidePath said in a joint statement on Friday.

The Leland Building, headquarters of the Illinois Commerce Commission | *ICC*

'Behind Closed Doors'

In their complaint, Illinois PIRG and GlidePath asked the court to altogether restart the NextGrid study process in compliance with the Open Meetings Act, claiming that the study "contains recommendations that could impact competition while increasing utility control of electric generation."

"NextGrid, as an arm of the ICC, is a public body and subject to the terms of the Open Meetings Act. NextGrid also qualifies as an advisory body of the state or a commission of the state and is subject to the terms and requirements of the Open Meetings Act," the lawsuit contends.

The 18-month NextGrid study seeks to help Illinois prepare for the long-term needs of its utilities, grid and markets in light of new technology and an evolving resource mix. The study involves seven working groups created by the ICC, each tasked with writing one chapter of the report. The University of Illinois' Electrical and Computing Engineering Department will edit and assemble chapters to form a final report that will likely contain recommendations for improving the state's energy industry.

The working groups focus on separate issues, such as ratemaking, new technology, markets, metering, reliability and resilience, customer participation and environmental policy. The ICC selected working group chairs and group members. The groups have been holding closed meetings since early December.

The lawsuit claims that the ICC has so far held about 22 private meetings concerning NextGrid. In one instance in late January, a lawyer seeking to dial into a working group meeting was disconnected three times, even over the objection of a working group member, the plaintiffs contend.

The suit also alleges that the work of Next Grid lead facilitators Peter Sauer and George Gross, both professors at the University of Illinois Urbana-Champaign, is being paid for by Commonwealth Edison and Ameren. The resolution creating NextGrid acknowledges that "Illinois electric utilities will provide funding to support the work of the facilitator."

Illinois PIRG and GlidePath also note ComEd and Ameren maintain representatives on every working group, the membership of which has not been made public.

In a letter describing NextGrid, Sheahan said that because the effort was established by a commission resolution and is not a docketed proceeding, it will not produce a commission order at its completion.

"The purpose of the final report is to provide a comprehensive view of our current grid, and to provide a menu to policymakers, regulators, consumer advocates [and] the public about the tools, technologies and policies that could lead to the grid of the future," Sheahan wrote.

"The report will not in every instance determine a 'best path forward.' We want the report to be an honest assessment of where there is agreement on policies and where there is dissention." He added that the final report will document areas of consensus and discord alike.

Sheahan also said the decision to cap the number of members in the working groups was made to "control the number of participants and encourage frank, open dialogue and a participatory environment."

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GCPA's Foreman to Retire as Executive Director

By Tom Kleckner

Tom Foreman, executive director of the Gulf Coast Power Association, announced his retirement from the organization Friday, effective in December.

Tom Foreman at the GCPA MISO South Conference in New Orleans on Feb. 8 | *© RTO Insider*

Just the third executive director in GCPA's 35 years, Foreman has helped guide the organization as it has expanded its regional presence and developed a program geared toward women. The organization has added events in recent years in Louisiana, Arkansas and Mexico, and held its fourth emPOWERing Women's leadership conference in January.

"With six grandkids scattered across the U.S., it is time to prioritize life," Foreman told *RTO Insider*. "I need the time to enjoy them, and they me, while we can. Definitely a hard decision, but I know it is the right one."

In announcing a series of breakfast seminars in Mexico City, Foreman pointed out last year that the organization is focused on the Gulf Coast.

"The last I checked," Foreman said, "Mexico is on the Gulf too."

Robert Downing, a Greenberg Traurig attorney deeply involved in the Mexican market, cited GCPA's seminars and conferences south of the border as having "encouraged the exchange of knowledge and business contacts between Mexico and Texas."

"Tom took the initiative to establish strong relationships with power industry professionals involved in Mexico's historic energy reform," he said. "These efforts formed the basis for continuing dialogue between industry experts from both the U.S. and Mexico."

Foreman has been active in the GCPA since its founding in 1983. He joined the organization's board of directors in 1996, becoming president in 2011 and then being named the executive director in 2013.

"The GCPA board and Advisory Board are deeply grateful to Tom for his exceptional leadership and management, demonstrated by the organization's accomplishments during his tenure," Clark Hill Strasburger's Mark Walker, board president, wrote in an email to the membership.

Katie Coleman, a partner with Thompson & Knight and the board's treasurer, said Foreman's announcement was not "entirely unexpected." Upon taking the leadership position, he told the board he planned to work for five to seven years.

"Tom is going to be hard to replace," Coleman said. "As a former board member, he has been key in maintaining institutional knowledge. His skill in keeping everyone organized and on schedule has been important to GCPA's growth."

The organization has added 13 corporate members during Foreman's tenure, increasing that number to 132. GCPA claims more than 300 individual members.

"He embodies the core principles of GCPA with his passion to promote healthy and sustainable competitive markets by providing GCPA members with top quality programs, events and business development opportunities," Walker said. "He has also built a solid professional team at GCPA that shares his enthusiasm and is key to its many successes."

Walker credited Foreman for the GCPA's recent growth, citing a doubling of annual scholarships provided to college and trade school students seeking careers in the industry and the development of the GCPA emPOWERing Foundation, which supports women, students, young professionals and leaders in the industry.

Foreman has helped organize and host as many as six major annual conferences and dozens of smaller events that provide education and network opportunities to 4,200 attendees each year, Walker said.

A Houston native, Foreman holds a master's in engineering and a bachelor's in electrical engineering from the University of Texas at Austin. He has worked for Gulf States Utilities, the Lower Colorado River Authority (LCRA) and as a consultant to rural electric cooperatives and municipalities. He retired from LCRA in 2012.

Groups Sue ICC, Chairman over NextGrid Study Process

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Illinois PIRG and GlidePath disagree with Sheahan's characterization.

"The electric grid of the future should empower consumers to have maximum competition and choice, but that won't happen in a closed process dominated by the utility of the past," Illinois PIRG Education Fund Director Abe Scarr said in a press release. "NextGrid must be developed with maximum transparency and in full compliance with the Open Meetings Act."

"We can't create good policy behind closed doors. Experience shows that excluding consumer watchdogs and market participants will hurt ratepayers," GlidePath CEO Dan Foley said.

The two organizations say the nonpublic NextGrid process has already resulted in a draft report from the technology working group that includes a section on smart cities that had not been discussed in the meetings. They also argue the study could form the basis for major Illinois energy legislation that will affect ratepayers.

"It is important to note that the ICC has gone out of its way to ensure an open and transparent process. NextGrid is a collaborative study that relies on the input of technical experts, stakeholders and the general public," Crawford said in an email to *RTO Insider*. "A diverse group of more than 230 individuals representing various sectors of the energy industry, consumer advocates, environmental groups, academia, business and community leaders are active participants in the NextGrid study."

The commission also said it "actively" seeks involvement through mass emails, press releases and NextGrid public comment sessions after preliminary drafts of findings or report chapters are written.

The ICC keeps records of NextGrid working groups' agendas, meeting summaries and presentations online. It also maintains separate email addresses for each working group to receive comments on the publicly available information.

"Interested parties are and have been encouraged to submit written input," the ICC said.

COMPANY BRIEFS

ACCCE Elevates COO To President and CEO


Bloodworth

The American Coalition for Clean Coal Electricity said June 29 its board of directors has named Michelle Bloodworth to be its president and CEO. She had been ACCCE's chief operating officer for the past year and a half.

Prior to joining ACCCE, Bloodworth served as MISO's executive director of external affairs; America's Natural Gas Alliance's vice president of business development and state affairs; and Energen/Alabama Gas' vice president of marketing, sales and communications. She began her career as a power plant engineer.

Report: Replacing Coal Fleet Could Save PacifiCorp Billions

PacifiCorp could save $2.8 billion over the remaining life of its 24 coal-fired power plants by replacing their power with wind energy, according to a report released June 27 by the Sierra Club.

The report, conducted by consulting firm Energy Strategies, found PacifiCorp could save $680 million by replacing the plants' output with power purchased through energy markets, and $700 million by replacing it with solar energy.

A spokesman for PacifiCorp's Rocky Mountain Power subsidiary said the company hadn't analyzed the study, but "generally, these kinds of studies are quite limited in scope and do not adequately consider reliability to customers and the cost of providing electric service for them in changing market conditions."

More: *Sierra Club*; *Casper Star-Tribune*

Avangrid Developing $2.5B Plan To Lessen Severe Storms' Impact

Avangrid said June 28 that its networks division is developing a $2.5 billion plan to address the impact of severe storms on the infrastructure of its Connecticut, Maine and New York utilities.

The company would spend the money over 10 years to both harden its infrastructure and install technology that adds visibility and flexibility to its utilities' grids.

The money includes $500 million that Avangrid's Rochester Gas & Electric and New York State Electric and Gas are proposing to spend on advanced metering infrastructure.

More: *Mainebiz*

SC Legislature Overrides Veto of SCE&G Rate Cut Bill


V.C. Summer nuclear plant

The South Carolina legislature on June 28 overrode a veto by Gov. Henry McMaster of a bill temporarily cutting South Carolina Electric & Gas' electricity rates by 15%.

The governor vetoed the bill because 18% of SCE&G bills goes to cover costs the utility incurred from the failed attempt by it and state-owned Santee Cooper to expand the V.C. Summer nuclear power plant and he wanted that portion of the bills completely wiped out.

The bill could prompt a lawsuit by SCE&G, which has said it thinks it's unconstitutional. It also could prompt Dominion Energy to withdraw its offer to buy SCANA, which is SCE&G's parent. SCANA cut its quarterly dividend 80% to 12.37 cents/share as a result of the bill becoming law.

More: *The State*; *The State*

APS to Issue RFP for Storage for Solar Plants

Arizona Public Service said June 28 it will issue a request for proposals to equip its existing solar plants with 6 MW of battery storage in what would be one of the largest battery storage projects in the country.

The company said the RFP is an important part of its plan to add up to 500 MW of energy storage over the next 15 years.

More: *Arizona Public Service*

GCL Completes Construction of 50-MW Oregon Solar Project

GCL New Energy said June 29 it has completed construction on Phase I of its 50-MW GCL Oregon solar project, which consists of four single sub-projects in Adams and Elbe Solar Centers in Jefferson County.

The sub-projects are operating commercially, producing power for local utilities, GCL said.

The company said it expects to place an additional sub-project into commercial operation this month and another one in November.

More: *GCL New Energy*

Vineyard Wind Likely Using Closed Coal Plant as Staging Site

Vineyard Wind likely will use a closed coal-fired power plant in Somerset, Mass., as a staging site for some parts of the construction of its offshore wind turbines, said Erich Stephens, the company's chief development officer.

Stephens said the owners of the plant, which is located on Brayton Point, already are removing generation equipment from its main building to make way for wind components and planning to accommodate cranes for lifting turbines.

Vineyard Wind already has committed to using New Bedford, Mass., as the main construction port for the offshore wind far it plans to build about 14 miles south of Martha's Vineyard, Mass.

More: *SouthCoastToday*

Sempra Board Approves Plan To Sell US Renewable Assets

Sempra Energy's board of directors on June 25 approved its plan to sell all its U.S. wind and solar generation assets and two natural gas storage assets.

The company said the sales represent the first phase of a portfolio optimization initiative designed to sharpen its strategic focus and create value for its shareholders.

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COMPANY BRIEFS

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Sempra's announcement comes less than a month after activist investors Elliott Management and Bluescape Resources said they had acquired a 4.9% stake in the company and called it "deeply undervalued" because of a "focus on sheer size."

More: *Sempra Energy; Times of San Diego*

Pioneer, NIPSCO Complete $347M Greentown-Reynolds Project

| Pioneer Transmission

Pioneer Transmission and Northern Indiana Public Service Co. said June 26 they have completed the $347 million Greentown-Reynolds project, which consists of a 70-mile transmission line connecting the Greentown Station near Kokomo, Ind., to the Reynolds Station in Reynolds, Ind., and upgrades to the Reynolds Station.

The project is one of 17 multi-value projects identified by MISO.

The Greentown-Reynolds line is the first phase of a 290-mile connection that Pioneer plans to build between Duke Energy's Greentown Station and American Electric Power's Rockport Station east of Evansville, Ind. Pioneer is a joint venture between Duke and AEP.

More: *American Electric Power*

AEP Gets Tax Exemption For New Data Center

The Ohio Tax Credit Authority on June 25 approved a 100%, 15-year sales tax exemption for AEP Service as an incentive for the American Electric Power subsidiary to build a 22,000-square-foot data center in Groveport.

The data center will cost $130.4 million to build and create 17 jobs and $2.2 million in new payroll, according to information from the state of Ohio.

The new data center will help AEP manage its power infrastructure and provide disaster recovery services for its operations center and main data center in New Albany. AEP will develop a fiber-optic network to connect the two data centers.

More: *Columbus Business First*

Williams Asks FERC to Extend Constitution Pipeline Deadline

Williams Cos. on June 25 asked FERC to extend the time they have to complete the Constitution natural gas pipeline until December 2020.

Williams said it needs the extension because environmental regulators in New York denied the water permit application by its Constitution Pipeline subsidiary.

FERC upheld the denial in January and Constitution asked FERC to reconsider the ruling in February. (See *Constitution Asks FERC to Rehear New York Permit Denial*.)

More: *Reuters*

Kinder Morgan to Build Natural Gas Pipeline from Permian Basin

Kinder Morgan said June 25 it and at least one partner plan to build a $2 billion pipeline to transport natural gas from the Permian Basin in West Texas to hubs in Houston, Corpus Christi and Mexico.

The company is a 50-50 partner on the proposed 430-mile Permian Highway Pipeline with EagleClaw Midstream, which is backed by Blackstone Group. Apache Corp., which is helping to develop the pipeline, has the option to buy a third of it.

More: *Houston Chronicle*

Dynegy Plant Reducing Reactive Power Charges

FERC on June 25 approved an uncontested settlement reducing the annual reactive revenue requirement for Dynegy's Lee County Generating Station by $280,000 (18.6%) to $1.22 million.

The settlement resolves all issues FERC set for hearing in Docket EL17-91 regarding the reactive supply and voltage control service rates for the 692-MW natural gas-fired generator in Dixon, Ill. FERC set the hearing after observing that test data appeared to show degradation of the MVAR output of Lee's eight generator units. (See *Waiver Request Lands Lee Plant a FERC Inquiry*.)

The reduced rate is effective as of Oct. 11, 2017.

More: *ER18-280-002*

LG Electronics to Open Solar Module Plant in Huntsville, Ala.

LG Electronics said June 27 it plans to spend $28 million to create a solar module assembly plant at its 48-acre campus in Huntsville, Ala.

The company said the plant will have two production lines and employ 160, bringing total employment at the campus to more than 400.

LG said it expects the plant to produce more than 1 million solar panels a year, starting early next year.

More: *LG Electronics*

SCE Applies to Spend $760M Installing EV Charging Ports

Southern California Edison said June 26 it has filed a plan with the California Public Utilities Commission to spend $760 million installing 48,000 electric vehicle charging ports over four years.

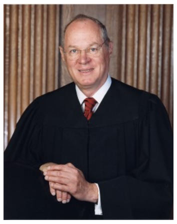
The plan calls for SCE to extend and expand Charge Ready, a pilot program it launched two years ago, under which it has installed 1,000 charging stations. SCE expects to have installed 1,250 charging stations at more than 60 locations by the time the program's pilot phase concludes this year.

"Achieving California's ambitious goals for reducing air pollution and harmful green-house gas emissions will require 7 million electric cars on California highways by 2030," said Caroline Choi, SCE senior vice president for regulatory affairs. "Taking Charge Ready to the next level will allow SCE to develop charging infrastructure needed to support a big portion of those cars."

More: *Edison International*

FEDERAL BRIEFS

Kennedy Retirement Raises Climate Stakes


Kennedy

Supreme Court Justice Anthony Kennedy's retirement announcement last week sparked concern that his replacement could be less of a moderating voice on climate and environmental policy.

Long seen as the court's swing vote, Kennedy joined the court's four liberal justices in the 2007 ruling that EPA had the authority to regulate greenhouse gases under the Clean Air Act.

Although the court has upheld the 2007 ruling twice since, and Chief Justice John Roberts has called it an established precedent, some observers say the court could take a narrower view of the CAA in the future with a more conservative replacement. That could play out in any challenges to the Trump administration's efforts to undo the Obama administration's Clean Power Plan.

More: *The New York Times*; *The Washington Post*; *Vox*; *Axios*

Perry: Cost Estimate Coming On Coal, Nuke Bailout

Energy Secretary Rick Perry said June 28 that the Department of Energy is working on a cost estimate for its proposed bailout of struggling coal and nuclear plants.

"We don't have a dollar estimate at this point in time," Perry said in response to a question at the World Gas Conference in D.C. "A piece of work is being done hopefully in the not-too-distant future."

But Perry said the cost is secondary to the importance of coal and nuclear generation to national security. "You cannot put a dollar figure on the cost to keep America free, to keep the lights on," he said.

During a panel discussion at the conference, Perry blasted New York for preventing natural gas pipelines from running through the state.

"The citizens of New York are paying more for energy," Perry said. "Their health and well-being is being put in jeopardy. If a polar vortex comes into the northeast part of the country, or a cyberattack, and people literally have to start making decisions on how to keep their family warm or keep the lights on, at that time, the leadership of that state will have a real reckoning. I wouldn't want to be the governor of that state facing that situation."

More: *Washington Examiner*; *Washington Examiner*

Rhodium Group Says US Will Miss Paris Emission Targets

Rhodium Group said June 28 that under current policy, U.S. emissions in 2025 will be down 12 to 20% from 2005 levels, well below the 26 to 28% reduction pledged by the country in the Paris Agreement on climate change.

In its 2018 "Taking Stock" report, the firm said the wide range is because of uncertainty surrounding the fate of federal climate policies, the amount of pollution that will be offset by sequestration from U.S. forests and the long-term viability of current low-carbon energy trends.

Cheap natural gas and renewables continue to displace coal in power generation, but after 2025 they will push a larger share of zero-emitting nuclear plants into retirement, leading to a rebound in power sector emissions, Rhodium said.

More: *Rhodium Group*

Natural Gas Backers Say US Should Speed Pipeline Development

The U.S. should help the natural gas industry push back against efforts by environmental groups to block new pipelines by adopting regulations or laws that favor infrastructure, supporters of the industry said at the World Gas Conference, which was held from June 25 through June 29 in D.C.

"I'm seeing more already-approved pipeline projects that are under construction get held up by a judge in lawsuits, and this has to be addressed either by FERC or with legislation," said Stanley Chapman, executive vice president and president of U.S. natural gas pipelines at TransCanada.

FERC in April opened a comment period on potential changes to its policy statement on the permitting of natural gas pipelines, acknowledging that it may have to reconsider how it balances project benefits against adverse consequences in light of the shale gas revolution, global warming concerns and other changes since it last considered the issue in 1999. (See *FERC Outlines Gas Pipeline Rule Review*.)

More: *Reuters*

NRC Selects Inspectors At Three Power Plants

The Nuclear Regulatory Commission has selected Tom Stephen to be the senior resident inspector and Nick Hobbs to be one of the resident inspectors at the Tennessee Valley Authority's Browns Ferry nuclear power plant near Athens, Ala.

The commission also said it selected Adam Ruh to be one of the resident inspectors at Duke Energy's Oconee nuclear power plant near Seneca, S.C.; and Natasha Childs to be a resident inspector at TVA's Sequoyah nuclear power plant near Soddy-Daisy, Tenn.

More: *NRC*; *NRC*; *NRC*

Conservative Group Opposing Carbon Tax Plan

The American Energy Alliance is trying to rally other conservative groups in opposition to the Americans for Carbon Dividends' push for a carbon tax.

The group is seeking signatures for a letter urging House Speaker Paul Ryan and House Majority Leader Kevin McCarthy to hold a vote on Majority Whip Steve Scalise's resolution putting lawmakers on the record as opposing a carbon tax.

Americans for Carbon Dividends has former Senate Majority Leader Trent Lott (R-Miss.) and former Sen. John Breaux (D-La.) as co-chairs of its advisory board. The proposal it is backing was offered last year by Republican party elders James A. Baker III and George P. Schultz. (See *Lott, Breaux Join Push for Baker-Schultz CO2 Dividend Plan*.)

More: *Axios*

US Drops 2 Places in Energy Efficiency Rankings

The U.S. fell from eighth place in 2016 to 10th place last year in a ranking of countries by energy efficiency released June 26 by the American Council for an Energy-Efficient Economy.

The U.S. got 55 points out of a possible

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FEDERAL BRIEFS

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100 in "The 2018 International Energy Efficiency Scorecard," down from 61 in the previous year's publication. The average score was 51. Germany and Italy had the top scores with 75.5 points, followed by France (73.5), the U.K. (73) and Japan (67).

"This trend is likely to persist if the current administration continues to dismantle key regulations," said Shruti Vaidyanathan, ACEEE's senior adviser for research.

More: ACEEE

Senate Approves $43.8B For Energy, Water Programs

The Senate voted 86-5 on June 25 to approve a $145 billion spending bill that includes $43.8 billion for energy and water programs, over $7 billion more than President Trump requested.

The bill maintains or slightly increases funds for programs offered through the Department of Energy's Office of Energy Efficiency and Renewable Energy and the Energy Information Administration. It also provides record appropriations of $375 million for DOE's Advanced Research Projects Agency-Energy and $6.65 billion for its Office of Science, and includes $1.2 billion for nuclear energy research and development.

The House of Representatives is working to reconcile the Senate's version of the bill with its own.

More: Greentech Media

Sara Patrick Named Midwest Reliability Organization CEO


Patrick

The Midwest Reliability Organization Board of Directors said June 27 it has appointed Sara Patrick to be MRO's president and CEO, effective immediately.

Patrick has been MRO's interim president and CEO since Feb. 26. She joined the organization in August 2008 as director of regulatory affairs and enforcement and was promoted shortly thereafter to vice president of enforcement and regulatory affairs, and then to vice president compliance monitoring and regulatory affairs.

Prior to joining MRO, Patrick was the director of government affairs for Explore Information Services, which provides services to the property and casualty insurance industry. She also served as assistant attorney general in Arizona under the administrations of Govs. Janet Napolitano and Grant Woods.

More: Midwest Reliability Organization

BLM Approves 80-MW Solar Farm in Wyoming

The Bureau of Land Management determined June 26 that the 80-MW Sweetwater Solar Energy Project, which is to be built on BLM land in western Wyoming, will cause no environmental harm.

The project is being built by Sweetwater Solar, a subsidiary of 174 Power Global, which is a subsidiary of Hanwha Group.

PacifiCorp's Rocky Mountain Power subsidiary has agreed to buy power from the project. A Rocky Mountain Power spokesman said his company has been told that the project will be online by the end of the year.

More: The Olympian

STATE BRIEFS

CALIFORNIA

PG&E Seeks Approval Of Storage Projects

Pacific Gas and Electric on June 29 asked the Public Utilities Commission to approve four lithium-ion battery energy storage projects totaling 567 MW, including a 300-MW project that its developer, Vistra Energy, said would be the largest of its kind in the world.

PG&E would own one of the projects, a 182.5-MW battery that Tesla would build in the utility's Moss Landing substation. PG&E said the system would address local capacity requirements and provide energy and ancillary services in CAISO's markets. The developers of the other three projects would own them.

Vistra's battery would be located at PG&E's Moss Landing Power Plant. The other two projects would be a 10-MW aggregation of behind-the-meter batteries located at customer sites and interconnected to local substations, and a standalone, 75-MW transmission-connected battery near Morgan Hill.

More: Pacific Gas and Electric; Vistra Energy

PUC ALJ Approves San Onofre Closing Cost Settlement

Public Utilities Commission Administrative Law Judge Darcie Houck on June 25 approved a proposed settlement that reduces by $775 million the amount of the cost of closing the San Onofre nuclear power plant that Southern California Edison and San Diego Gas & Electric can pass on to their customers. Prior to the settlement, the utilities had been seeking to recover $3.3 billion of the $4.7 billion they estimate they will spend on closing the plant.

The plant, which is located between San Diego and Los Angeles, was shut down in January 2012 after a small radiation leak resulted in the discovery of extensive damage to hundreds of tubes inside its nearly new generators.

The commission is expected to consider the settlement later this year.

More: CBS; Los Angeles Times

DELAWARE

PSC Staff, Public Advocate Reach Settlement to Cut Delmarva's Rates

Public Service Commission staff and the Division of the Public Advocate on June 27 executed a settlement that, if approved by the commission, would reduce Delmarva Power's rates by $6.85 million a year.

Delmarva initially had sought to pass $31 million in distribution costs on to its customers. But earlier this year, the PSC approved a petition from the Public Advocate requesting a rate reduction for the utility

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STATE BRIEFS

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for savings it realized from the federal Tax Cuts and Jobs Act.

If approved, the settlement would decrease the amount typical Delmarva customers annually pay for electricity by more than $15, or 1.4%. The increase initially sought by Delmarva would have boosted the amount typical Delmarva customers annually pay for electricity by $65, or 4.7%.

More: *Public Service Commission*

IDAHO

Flowers Leaving Idaho Falls Power for Tacoma Public Utilities

Jackie Flowers is resigning as general manager of Idaho Falls Power, effective July 20. She had managed Idaho Falls' municipal power company for 20 years.


Flowers

Flowers has been selected to be the director of Tacoma Public Utilities. She will begin leading the municipal utility of Tacoma, Wash., in August.

More: *Post Register*

IOWA

IPL Replacing Beyond Solar Proposal with Community Solar

Interstate Power and Light dropped its June 2017 request for a premium-pricing option called Beyond Solar in a filing with the Utilities Board on June 28.

Under Beyond Solar, IPL would have provided customers with renewable power from an existing solar array in Dubuque and through a power purchase agreement it already has with a wind farm in the state. Instead, the Alliant Energy subsidiary plans to develop a community solar project, for which it recently issued a request for proposals.

"They are looking at a potentially new solar resource based on customers subscribing, where there is actual economic benefit to the customers," said Josh Mandelbaum, an attorney for the Environmental Law & Policy Center in Des Moines, who was critical of Beyond Solar.

More: *Midwest Energy News*

MICHIGAN

Monitor Township Board Passes Wind Turbine Moratorium

The Monitor Township Board of Trustees on June 25 unanimously passed a moratorium on wind turbine construction so the planning commission can take more time to review the township's wind ordinance.

The board made the move after about 400 people showed up at its meeting to voice their opposition to wind turbines. DTE Energy wants to build a wind farm in the township.

More: *MLive*

MISSISSIPPI

PSC Approves Entergy Rate Reduction

Entergy Mississippi said June 27 that the Public Service Commission has approved a plan for it to pass more than $300 million of its savings under the Tax Cut and Jobs Act on to its customers.

Entergy said the plan will reduce the monthly bills of its typical residential customers using 1,000 MW from $114.01 to $101.37 from July through September, and to $109. 24 from October through February 2019. The company said $7.59 of the reduction stems from the new law, and the remaining $5.05 is from a PSC fuel order last January that was designed to reduce bills during the summer months.

More: *Entergy Mississippi*

MISSOURI

PSC Approves Ameren Renewable Program for Large Customers

Ameren Missouri said June 27 that the Public Service Commission has approved its Renewable Choice Program, which gives it a new way to offer up to 100% renewable power to large commercial and industrial customers.

Ameren said the action by the PSC enables it to buy up to 200 additional MW of new renewable energy generation after securing commitments from its customers to buy renewable power. The company said the action also allows it to buy an additional 200 MW of new renewable energy generation through power supply agreements to serve its customers.

More: *Ameren Missouri*

NEVADA

PUC Approves Settlement on NV Energy Clean Energy Investments

The Public Utilities Commission voted unanimously on June 27 to approve a settlement between NV Energy, commission staff and others that will allow the company to make more than $5 million in clean energy investments.

Under the settlement, NVE will invest $5 million in electric vehicle charging infrastructure and make investments in a new energy storage incentive program and updates to existing solar incentives programs.

More: *KNPR*

Regulators Add Renewables To Permitted Old Mine Uses

The Environmental Commission voted June 27 to add "renewable energy development and storage" to the list of acceptable post-production uses for closed mines.

The addition was proposed by the Nature Conservancy and the Nevada Mining Association as a way of steering potential solar projects onto land already disturbed by industrial use.

More: *Las Vegas Review-Journal*

NEW HAMPSHIRE

Sununu Signs Bill Extending Biomass Plant Subsidy

Gov. Chris Sununu on June 27 signed a bill extending the subsidy for the Burgess BioPower biomass plant in Berlin by three years.

A 2011 agreement requires Eversource Energy to pay above-market prices for power from the plant, but that has a $100 million cap, which could be hit sooner than was anticipated when the agreement was signed. Under the bill, the subsidies will

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continue three years after the cap is reached.

More: NHPR

NEW YORK

NYSERDA Awards Contracts For RetrofitNY Program

The New York State Energy Research and Development Authority said June 27 it has awarded six $75,000 design contracts to solution provider teams under RetrofitNY's High-Performance Retrofit Solutions pilot program.

The contracts are the first in a two-step competitive application process led by NYSERDA. RetrofitNY is a 10-year, $30 million program meant to make a substantial portion of the state's affordable housing units net-zero, or close to net-zero, energy structures.

More: NYSERDA

OKLAHOMA

ALJ Recommends PSO Return $428M in Tax Savings to Customers

Corporation Commission Administrative Law Judge Mary Candler on June 27 recommended that Public Service Company of Oklahoma return to its customers $428 million in income that it accumulated thanks to the Tax Cut and Jobs Act.

Attorney General Mike Hunter, who in December initiated cases to get regulated utilities to pass their savings from the act back to their customers, praised Candler's recommendation.

Hunter's staff estimate that the recommendation, if approved, would return approximately $23.85 to an average residential PSO customer over the rest of 2018.

More: The Oklahoman; Attorney General Mike Hunter

PENNSYLVANIA

PUC to Begin Implementing Bill Allowing Alternative Ratemaking

The Public Utility Commission said June 29 it will begin implementing a bill signed June 28 by Gov. Tom Wolf that provides for alternative ratemaking for natural gas distribution, electric distribution and water/wastewater companies.

Under the bill, public utilities may ask the PUC to consider giving them decoupled rates, in which the amount of power, gas or water they sell is decoupled from the revenue they collect to recover the fixed costs of serving customers; performance-based rates; formula-based rates; multiyear rate plans; or combinations of any of those alternatives.

Keystone Energy Efficiency Alliance Policy Director Julian Boggs called the bill a win for energy efficiency, but consumer groups, such as AARP, which came out against it, are afraid it will shift risk from utilities' shareholders to their ratepayers.

More: Public Utility Commission; Northeast Energy News

VIRGINIA

Mountain Valley Pipeline Suspends Work in SWVA

Mountain Valley Pipeline said June 29 that it is suspending work on its natural gas pipeline in southwest Virginia.

The company made the announcement after consulting with the Department of Environmental Quality, which has received dozens of complaints about erosion and sediment-laden water flowing from the pipeline construction sites because of heavy rain.

"There is no specific timeline for the suspension; however, as soon as upgrades are completed and approved by DEQ, construction can resume," DEQ spokesman Greg Bilyeu wrote in an emailed response to questions.

More: The Roanoke Times