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Your Eyes and Ears on the Organized Electric Markets

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RTO Markets at Crossroads, Hobbled FERC Ponders Options

By Rich Heidorn Jr.

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WASHINGTON — More than 50 stakeholders from PJM, NYISO and ISO-NE made their cases to FERC last week on how to resolve the increasing conflicts between state energy policies and wholesale markets.

Many of those who testified also had appeared at the commission's September 2013 technical conference, which was billed by then-Commissioner Tony Clark as a "check-up" on the capacity markets six years after the inception of PJM's Reliability Pricing Model. Participants at that time differed on the health of the markets and whether major changes were needed. (See Capacity Market Attracts Praise, Criticism at FERC and Old Issues, New Technologies in Capacity Debate.)

Last week, however, virtually everyone was calling for change — the disagreements being over how much, how fast, what kind and whether it should be directed by FERC or come from stakeholders.

The diagnosis: The patient is running a fever

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ISO-NE's Two-Tier Auction Proposal Gets FERC Airing

By Rich Heidorn Jr.

Tom Kaslow, NEPOOL

WASHINGTON — ISO-NE presented its proposal for a two-tiered capacity auction at last week's FERC technical conference, saying it would incorporate state-mandated renewable generation while preventing oversupply

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NYISO Sees Carbon Adder as Way to Link ZECs to Markets

By Michael Kuser and Rich Heidorn Jr.

WASHINGTON — If the economists who testified at FERC's technical conference last week agreed on nothing else, it is that a carbon adder is the simplest way for the power markets to value emission-free generation.

New York is going to try and translate the theory into practice as a way of addressing the impact of the state's zero-emission credits (ZECs) for its upstate nuclear plants, officials told FERC.

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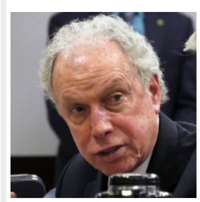
PJM Stakeholders Offer Vastly Different Takes on Markets' Viability

By Rory D. Sweeney



WASHINGTON — If anyone thought FERC dragging state and RTO stakeholders here for a technical conference might jolt everyone on the PJM playground into playing nice with each other, **Robert Erwin** of the Maryland Public Service Commission quickly disabused the standing-

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IN THIS WEEK'S ISSUE

Corrections

An article in the May 2 edition incorrectly described SPP's proposal for addressing cost shifts when new members join existing transmission pricing zones. SPP staff have offered a straw proposal that would allow applicant transmission owners to negotiate cost shifts with the other transmission owners and network customers in the affected zone, and that if no agreement is reached, SPP would file a cost-shift mitigation plan if the shift increased network customers' baseline costs under Schedule 9 of the Tariff by more than 2.5%. (See *No Consensus for SPP on Zonal Price Shifts*.)

The May 2 issue's Stakeholder Soapbox, "ESA Takes Action to Address Regulatory Dissonance," incorrectly listed the author as Matt "Brown." The author, the executive director of the Energy Storage Association, was Matt Roberts.

ISO-NE Two-Tier Auction Proposal Gets FERC Airing

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and addressing objections to a regional carbon tax.

The RTO released a 33-page description of the Competitive Auctions with Subsidized Policy Resources (CASPR) proposal a week before the conference.

The proposal, developed with Market Monitor David Patton, would provide financial incentives for existing, high-cost capacity resources to transfer their capacity obligations to subsidized new resources and permanently exit the capacity market through a two-stage, two-settlement process. The RTO said it could be in place for Forward Capacity Auction 13 in February 2019.

Although it is not the only short-term proposal being considered by policymakers in New England, it appears to be the clear front-runner. It survived the technical conference without coming under attack and is the "farthest along" among the stakeholder initiatives in the three Eastern grids, said acting FERC Chair Cheryl LaFleur at the close of the two-day conference (AD17-11).

Although the New England Power Pool has not taken a position on the proposal as a group, Participants Committee Chair Tom Kaslow in January presented a similar "paired retirement election" concept on behalf of his company, FirstLight Power Resources.

The proposal arose out of NEPOOL's Integrating Markets and Public Policy (IMAPP) initiative, launched last August in response to state officials' concerns that consumers could end up facing excessive costs for meeting state renewable procurement mandates and to generators' fears that out-of-market resources will suppress capacity prices.

The CASPR proposal was designed to address the concern that consumers would end up "paying twice" for capacity — once for resources that clear in the FCA, and a second time for subsidized state-mandated renewables that could be prevented from clearing by the minimum offer price rule.

Failing to coordinate ISO-NE's capacity market with state renewable procurements would lead to a "train wreck … [that] would probably be the end of the markets as we know them today," said Jeffrey W. Bentz, director of analysis for the New England States Committee on Electricity.

Drivers and Goals

New England states are set to procure more than 3,600 MW of nameplate renewable generation:

- Connecticut is negotiating out-of-market contracts for 375 MW of nameplate clean energy capacity.
- State regulators in Massachusetts, Connecticut and Rhode Island are considering out-of-market contracts for 460 MW of nameplate clean energy capacity resulting from their three-state solicitation.
- Massachusetts' 2016 energy bill required its utilities to purchase about 1,200 MW of new renewables, including onshore wind and hydropower and 1,600 MW of offshore wind. The state issued its first solicitation March 31; a second is expected by June 30.

'Cash for Clunkers'

ISO-NE said it developed its proposal with a goal of avoiding excessive capacity spending and cross-state cost shifts while continuing its Forward Capacity Market and minimizing the price-suppressive effect of out-of-market subsidies.

In the first stage, ISO-NE would clear the auction as it does today, applying the MOPR to new capacity offers to prevent price suppression. In the new second "substitution" auction, generators with retirement bids that cleared in the primary auction would transfer their obligations to subsidized new resources that did not clear because of the MOPR.

Because the substitution auction will not use the MOPR, it will clear at lower prices than the primary auction, enabling existing resources to buy out their obligations at a lower cost in return for retiring.

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ISO-NE Two-Tier Auction Proposal Gets FERC Airing

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The savings would in effect be a "severance payment" to the retiring resources, ISO-NE said. "The substitution auction might reasonably be viewed as an auction-based 'cash for clunkers' secondary market," the RTO said, referring to the Obama administration's 2009 program to encourage the retirement of older, gas-guzzling autos.

ISO-NE said it believes it can implement the proposal before March 2018, when the retirement window opens for FCA 13, which will acquire capacity for the delivery year beginning June 2022. "This timing is important given the anticipated schedule for substantial new state-sponsored resources to enter service in 2022," the RTO said.

Questions about CASPR

CASPR attracted little opposition at the technical conference.

New Hampshire Public Utilities Commissioner Robert Scott said pointedly in his written testimony that he was taking no position on the proposal. "What I want is not to pay for Massachusetts' and Connecticut's policies," he told FERC during live testimony.

CASPR was based on an idea submitted by NRG Energy last October, one of two two-tier proposals that consultant James Wilson evaluated for NESCOE. Wilson said that NRG's proposal was an improvement on one submitted by public power representatives that he concluded would result in excessive costs and distort the incentives to submit competitive offers.

Wilson said the NRG proposal addressed the problem with public power's handling of "tweener" resources — those that don't clear because their offer prices fall between stage 1 and 2 clearing prices. But he said that comes at a cost: The scaling of capacity awards means all resources, including competitive and self-supply resources, receive reduced awards. Because of the reduction, "resource owners that need a certain minimum revenue may be inclined to raise their offer prices to make up for the *pro rata* quantity reduction," Wilson said.

Other Proposals

NEPOOL says stakeholders have reviewed more than 17 proposals during the IMAPP sessions, many of them designed to "achieve" state policy in the wholesale market (long-term proposals), and "a few other" proposals such as CASPR to "accommodate" state-sponsored resources while addressing capacity market pricing concerns (near-term proposals).

Aside from the two-tier/paired retirement options, NEPOOL said the proposals fell into three categories:

- Carbon pricing in the energy market: A carbon adder would be included in energy offers and reflected in clearing prices. The adder would be collected from carbon emitters and redistributed to ratepayers.
- Carbon-Integrated Forward Capacity Market (FCM-C): A new zero-emission credit market would be integrated with the FCM to incorporate a forward signal for clean/renewable energy into the market.
- Forward Clean Energy Market (FCEM): A new forward market for commitments to deliver clean energy that would support new or existing clean energy resources.

No to Carbon Pricing

Although New York and the New England states have been participating in the Regional Greenhouse Gas Initiative cap-and-trade carbon market since 2009, the RGGI emissions limits would have to be substantially reduced to make the resources sought by the states economic in the RTO markets, Patton said.

"We do not believe it is likely that the states will rely on the RGGI market or a carbon tax to achieve their public-policy objectives, although this would likely be the most efficient and effective approach," Patton said.

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ISO-NE Two-Tier Auction Proposal Gets FERC Airing

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Other New England stakeholders agreed with Patton's prediction.

In an April 7 memo to NEPOOL, NESCOE outlined its opposition to "a FERC-jurisdictional tariff reflecting carbon pricing."

"These concerns include risks to states' ability to make their own determination regarding the implementation of their carbon-reduction laws. For example, as illustrated in recent years, a few market participants with an appetite and budget to litigate matters could seek to disrupt a design over which ISO-NE, NESCOE and NEPOOL find agreement. FERC could also seek to direct changes on its own initiative," Bentz said.

"Conceptually, assessing a price for each ton of carbon emitted by an electric generator, and crediting those revenues to load that would be paying higher energy prices, seems simple to understand," said **Brian Forshaw**, who appeared at the conference on behalf of public power agencies in Connecticut, New Hampshire and Vermont. "In a practical sense … there are substantial challenges associated with deciding on the initial carbon price and figuring out how to adjust the price over time to achieve desired carbon reduction levels, deciding who will get the rebates and in what form, and legal questions over whether the ISO has the authority to charge generators for carbon emissions."

CLIPR

Charles River Associates senior consultant **Robert Stoddard**, who testified on behalf of the Conservation Law Foundation, briefed the commission on his proposed Carbon-Linked Incentive for Policy Resources (CLIPR). Under CLIPR, load-serving entities would pay state "policy" resources an energy price premium that would fluctuate based on the "marginal carbon intensity" (MCI) of the dispatch, "a direct analog to the LMP but computed as lbs-CO_2/MWh instead of $/MWh."

Stoddard said the proposal would address most of the problems with the carbon adder, with the clearing price determined by the market, "simultaneously removing administrative discretion and assuring that the prices paid are supporting the particular policy resources demanded."

The incentive would likely be zero in hours with negative prices because the marginal resource is likely to be zero-emitting. CLIPR delivery rights could be traded bilaterally.

Bentz was intrigued by the idea and said he plans to discuss it in detail with Stoddard.

NextEra Energy and RENEW Northeast, a group of renewable energy companies and environmental interest groups, offered the proposal to create a FCEM.

RENEW Chair Seth Kaplan, EDP Renewables' senior manager for regional government affairs, outlined the group's proposal to FERC, in which he said the RTO, electric distribution companies and states would cooperatively manage resource procurements.

ISO-NE would study the network upgrades needed to connect renewable generation in the interconnection queue. When there is a competitive clean energy solicitation, EDCs and state regulators could consider competitive transmission solutions to address the network upgrades, agreeing to bear the cost under a public policy designation. The cost allocation would be identified by the opting-in EDCs and filed for FERC approval by the participating transmission owners as a participant-funded project.

In January, public power representatives presented a proposal to amend the FCM to ease bilateral contracting by LSEs with generation assets.

Next Steps

On April 7, NESCOE issued a memo saying that the states needed additional time to further study the long-term proposals presented to date.

NEPOOL said it will consider ISO-NE's near-term proposal at its regular meetings beginning with the June Markets Committee meeting. In addition, NEPOOL said it expects discussions to continue at events over the next two months:

- May 17: Next IMAPP meeting.
- June 4-7: New England Conference of Public Utilities Commissioners annual symposium.
- June 27-29: NEPOOL Participants Committee annual summer meeting.

NYISO Sees Carbon Adder as Way to Link ZECs to Markets

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On the first day of the two-day conference (AD17-11), state and NYISO officials asked FERC for time to develop their plan even as merchant generators called for immediate action to block the subsidies or respond to their effects on the wholesale markets.

The ZECs are part of New York's Clean Energy Standard, which mandates reducing greenhouse gas emissions by 40% by 2030, from a 1990 baseline, and by 80% by 2050. The CES also calls for renewables to meet 50% of the state's energy needs by 2030.

The subsidies will support Exelon's two-unit Nine Mile Point, and the single-unit R.E. Ginna and James A. FitzPatrick plants for more than 12 years at a cost estimated as high as $7.6 billion. (See *NY Legislators Frustrated by Lack of Answers at ZEC Hearing*.) At a legislative hearing into the ZEC program in Albany on May 1, however, New York Public Service Commission interim Chair Gregg Sayre said he expects the actual cost may be much less, perhaps as low as $2.86 billion.

NYISO CEO Brad Jones told FERC that while the ISO supports the ZEC program, it wants to find a way to incorporate the payments into the wholesale market.

The ISO has hired the Brattle Group to develop a plan that would incorporate the social cost of carbon into generation offers and reflect it in energy clearing prices. Generating units that emit carbon would incur a penalty based on their level of carbon emissions; the penalties collected by the ISO would be "returned to customers in some equitable manner."

PJM also is considering a similar mechanism, while New England has rejected it as impractical and overly expensive. (See related story, *ISO-NE Two-Tier Auction Proposal Gets FERC Airing*.)

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NYISO Sees Carbon Adder as Way to Link ZECs to Markets

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"If the commission requires states to forgo their sovereign power to make their own environmental policy as the price of admission to the federal wholesale markets, states may rethink their participation in these markets. The commission should avoid forcing states to make such a choice."

Exelon

Urgency vs. Patience

Jones said the project was in its "initial stages" and that implementation could take three years.

That is too long for other stakeholders.

"I was shocked to hear [Jones] say yesterday that he doesn't think the rates are just and reasonable but we have three years to work out a solution," said Abe Silverman, vice president and deputy general counsel for NRG Energy. "No, this is something that needs to happen almost immediately."

John Reese, senior vice president of Eastern Generation, said the issue is particularly acute in New York, which has a one-year forward capacity auction, unlike the three-year auctions in PJM and ISO-NE. Eastern Generation operates almost 5,000 MW of generation in NYISO and PJM, including 18% of New York City's capacity.

"I can't wait for seven years or eight years for this to work out," he said. "Regardless of which model we end up with, we need to be sending investment signals now!"

The Independent Power Producers of New York argued that the state's goals and its energy markets have reached a crossroads, saying that out-of-market solutions threaten the ability of the wholesale market to meet system needs at the least cost.

"Retail electricity customers are required to pay for renewable energy credits to support new large-scale renewable resources, as well as zero-emissions credits to support nuclear facilities which might otherwise retire from the market — both of which are out-of-market valuations for environmental attributes," IPPNY CEO Gavin J. Donohue said. "The implementation strategies used to meet those [CES] goals conflict with the competitive market principles that have produced unparalleled reliability and record-low electricity prices."

"I bet this is the only federal building in Washington, D.C., where there is a discussion of carbon pricing and deep decarbonization."

Susan Tierney, The Analysis Group

The NYISO discussion focused on several questions, some of which will also be central to challenges to the ZECs in court and before FERC: state vs. federal jurisdiction; the price suppressive impact of ZECs; and the efficacy of saving at-risk nuclear plants versus replacing them with renewables.

From left to right: NYISO CEO Brad Jones, IMM David Patton, Exelon's Kathleen Barron, National Grid's James Holodak Jr., the Sierra Club's Mark Kresowik and Eastern Generation's John Reese | *© RTO Insider*

Dynegy, Eastern Generation, NRG and the Electric Power Supply Association filed a federal court suit in October claiming the ZECs intrude on FERC's jurisdiction over interstate electricity transactions. The suit asks the court to find the ZECs invalid and order them withdrawn from the CES. (See *Federal Suit Challenges NY Nuclear Subsidies*.)

The same companies filed suit in February challenging Illinois' ZECs for Exelon's Quad Cities and Clinton nuclear plants and have also asked FERC to reject the subsidies (EL16-49). (See *IPPs File Challenge to Illinois Nuclear Subsidies*.)

Do ZECs Interfere with the Wholesale Markets?

The Supreme Court has attempted to draw the lines between state and federal jurisdiction over the power industry in a series of rulings, most recently the January 2016 ruling in *EPSA v. FERC*, in which the court upheld FERC's jurisdiction over demand response, and the April 2016 order in *Hughes v. Talen*, which rejected Maryland's subsidy of a generator that could have undermined PJM's capacity auction.

New York regulators took pains to ensure the ZEC program complied with the court's advice in the latter case. "Nothing in this opinion should be read to foreclose Maryland and other states from encouraging production of new or clean generation through measures 'untethered to a generator's wholesale market participation,'" the court said.

Scott Weiner, deputy for markets and innovation at the New York State Department of Public Service, made an impassioned defense of the ZEC program, saying it was permitted by states' "settled jurisdiction over environmental policy, resource adequacy, fuel diversity and reliability."

"Rather than opening this discussion with

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NYISO Sees Carbon Adder as Way to Link ZECs to Markets

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the question of how state policies can be implemented through federally regulated wholesale markets, we should ask, 'should they?' An attempt to select resources through the federally regulated wholesale markets to achieve individual state policies may undermine, even if unintentionally, those very state programs," he said. "By incorporating state policy into the wholesale markets, the state would have to seek a tariff change to reform its own policy.

"This changing role of the state's utilities must be harmonized by federal and state regulators acting in respectful collaboration without one seeking to subsume the other."

Rather than attempting to "absorb" state policies into the federal wholesale markets, Weiner said, FERC should consider removing barriers to new entry by state-supported resources by eliminating buyer-side mitigation.

"It is essential to recognize that policies addressing legitimate state interests may have incidental impacts on wholesale market prices without raising the specter of price suppression or undermining markets."

NY, Exelon: ZECs not Intended to Suppress Prices

"New York, like other states, does not seek to suppress wholesale market prices. Ending application of this false assumption eliminates the need for market rules based on that presumption," Weiner said.

Exelon also insisted that ZECs are not vehicles for price suppression, comparing them to the renewable energy credits (RECs) issued in support of state renewable portfolio standards.

"Buyer-side mitigation rules are aimed at large buyers seeking to suppress market prices by introducing new, uneconomic supply. But environmental programs like ZEC programs do not fit that description," Exelon said. "First, in ZEC and REC programs, the state is purchasing a separate environmental attribute, so ZECs and RECs are not tied to energy or capacity sales."

Impact, not Intent, is What Matters

Others counter, however, that it is the impact of state policies on prices — not policymakers' intent — that is at issue.

David Patton, president of Potomac Economics, which provides market monitoring in NYISO and ISO-NE, said nuclear subsidies can be much more damaging to wholesale price formation than renewable subsidies because solar and land-based wind have low capacity values.

Former FERC Commissioner Tony Clark, now a senior adviser at Wilkinson Barker Knauer, said at a conference in March that while FERC hasn't seen harm to the markets from state REC programs, the scale of the nuclear generation covered by subsidies — 20% or more of the market in some regions — may make them more vulnerable. (See Ott Seeks 'Resilience'; Clark Handicaps ZECs.)

And even renewables are having a significant impact on prices, Lawrence Makovich, chief power strategist for IHS Markit, told FERC.

He presented analysis that he said demonstrated that wind output suppressed PJM prices by about 24% during the top net load hours in 2015, when peaking units were setting the price. Wind suppressed prices by 4% when net loads were average and by about 9% during minimum load, he said.

"On the cost side, compensating for the impact of wind … [caused] load-following generators to increase output ramping and starts and stops, causing less production efficiency and higher [operating and maintenance] costs," he said.

Is Preserving Nukes the Best Policy Choice?

Exelon says ZECs are justified because it would take too long and be too costly to replace the zero-emission capacity of at-risk nuclear plants versus renewables. "When a nuclear facility retires, it cannot feasibly be replaced by renewable generation in the time necessary to avoid a spike in emissions. Instead, it will be replaced predominantly by fossil fuel-fired plants emitting significant carbon and other air pollution," Exelon said.


NYISO CEO Brad Jones (left) and Market Monitor David Patton | © RTO Insider

The company cited Germany's retirement of its nuclear fleet following the 2011 Fukushima nuclear accident, which resulted in "a massive increase in emissions despite investing in new renewable generation to such a degree that its electricity rates are now among the world's highest."

Similarly, the closure of the San Onofre nuclear plant in early 2012 "resulted in an increase in emissions that more than offset all of California's investment to date in wind, solar and biomass generation," Exelon said.

New York concluded replacing its nuclear fleet would require that it triple its energy-efficiency targets or construct 9,000 MW of onshore wind or 22,000 MW of solar.

NRG's Silverman, however, said New York chose an expensive path.

"For $3.5 billion — or approximately half the price of the bailout in New York — the state could have purchased enough renewables to replace the output of all of its at-risk nuclear fleet with 100% new renewable power. Additionally, New York's Independent Market Monitor found that a new combined cycle on Long Island is a far cheaper means of reducing carbon in New York than the nuclear bailout."

Impact on LSEs

The impact of state mandates on load-serving entities was the key concern of **James Holodak Jr.**, vice president of regulatory strategy and integrated analytics for National Grid, which owns LSEs in New York

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"The lack of national carbon pricing is not likely to be solved by the commission. However, the obvious fact that the commission cannot do everything does not indicate that the commission cannot or should not do anything."

William Hogan, Harvard University

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and New England.

Holodak said National Grid's Niagara Mohawk Power subsidiary was forced to absorb $2 billion in stranded costs as a result of New York legislation that required utilities to buy electricity from independent power producers for at least 6 cents/kWh, a price higher than utilities' production cost.

Holodak said the law forced Niagara Mohawk to sign contracts for output in excess of its actual demand and helped increase the utility's rates by 25% between 1990 and 1995, causing many industrial and commercial customers to seek alternative suppliers or lower-cost locations.

Holodak said New England states with mandates should adopt a structure similar to that in New York in which each LSE is required to purchase the ZECs from the New York State Energy Research and Development Authority while recovering the costs from its customers. "In this instance, NYSERDA acts as the middleman, which advances the state's policy goals and presents less risk for utilities than under a mandatory contracting model between the generator and the utility," Holodak said.

"Certain owners of nuclear and other generators are abandoning any faith in the markets and seeking regulatory redress. Their business model is the higher of market or regulation, which is the worst of all worlds for customers."

John P. Hughes, ELCON CEO

He also made a case for allowing utilities to own renewables rather than being required to purchase them.

"Long-term bilateral [power purchase agreements] with developers equate to 'virtual ownership' with utilities and their customers absorbing project risks without the benefits of ownership," he said, acknowledging that support for utility ownership will depend on utilities' ability to "produce demonstrable customer savings."

"We further recognize that this position may seem inconsistent with our broader support for market-based solutions where circumstances permit. However, today's RTO/ISO markets do not adequately incentivize new entry from zero-emitting resources and it is not clear how or when they will evolve to do so."

California Here We Come?

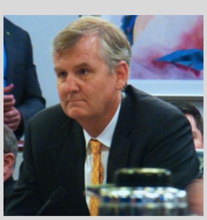
By Rich Heidorn Jr.

WASHINGTON — Last week's FERC technical conference focused on tensions between state clean energy policies and RTO/ISO markets in the East. Yet witness after witness cited California to make their points — often in a context unflattering to the Golden State.

Exelon cited the closing of the San Onofre nuclear plant — and the resulting increase in carbon emissions — to defend the subsidies of its nuclear plants in New York and Illinois.

Charles River Associates consultant Robert Stoddard said California's duck curve is the result of "a pricing failure."

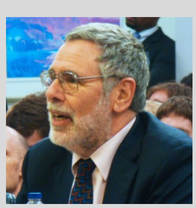
Cautionary Tale



Calpine CEO **Thad Hill** called California "a cautionary tale [of] high consumer costs and layered subsidies." (See related story, *RTO Markets at a Crossroads, Hobbled FERC Ponders Options.*)

"Out-of-market subsidies have been growing in the East. If not addressed, these subsidies will undermine the competitive wholesale markets, turning the Eastern markets into a command-and-control structure much like California is today — i.e., the states mandate when and where new generation will be built and the technology type that will be used for that generation," Hill said.

"In California, essentially all investment, including investment in new conventional generation, is supported by mandate-driven long-term contracting schemes. Because the policies that bring about this substantial investment are divorced from competitive wholesale markets, it has led to the paradox that while retail rates are rising rapidly to reflect the costs of mandates, wholesale prices are so low that the economic viability of the remaining generation that is dependent on competitive wholesale markets (generally existing conventional generation resources without long-term contracts, many of which are critical for reliability) is increasingly threatened. Addressing the revenue shortfall for existing units that are needed for reliability likely will entail additional out-of-market mechanisms."



Independent consultant **Roy Shanker** also called out California, saying the state Public Utilities Commission has "explicitly stated that while a transparent, open and competitive central capacity market might be more efficient in the long run, it preferred to maintain a less efficient bilateral capacity market structure because of short run cost savings."

"Similarly it expressed concerns that a centralized market under the CAISO might open the door to undesirable FERC jurisdiction and authority," he added.

Shanker cited California's increase in negative energy pricing, which nearly doubled to 1,000 hours in 2016 from 588 in 2015.

"In general the state subsidized or mandated units under long-term contracts participate as price takers in both energy and/or capacity markets, driving down prices, often below zero in the energy market," he said.

Innovation

Some witnesses, however, looked to California for innovation and leadership.

PJM officials said they are considering use of a "border adjustment" similar to that approved by FERC for CAISO to add carbon constraints for states that want to pursue climate goals.

And Harvard University's William Hogan said the success of CAISO's Western Energy Imbalance Market in reducing curtailments of solar and wind "is a case in point that reinforces the vibrancy and the importance of real-time markets organized around the principles of economic dispatch."

Uncertain Future for MOPR

By Rich Heidorn Jr.

WASHINGTON — The minimum offer price rule came up frequently at last week's FERC technical conference exploring tensions between state clean energy policies and RTO/ISO markets in the East, with some witnesses calling for its expansion and others seeking its relaxation or abolition.

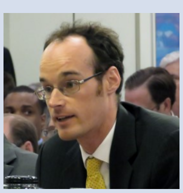
Robert Erwin, general counsel of the Maryland Public Service Commission, called on FERC to help states achieve their energy policy goals by simplifying the "unduly complex" capacity market rules and reducing "the chilling effects" of the MOPR on state innovation.

He was one of several MOPR critics who invoked the words of former FERC Chairman Norman Bay to buttress their case. (See Bay Blasts MOPR on Way Out the Door.)

MOPR 'Cudgel'

"State policy decisions over new generation — previously exempted under the [PJM Reliability Pricing Model] settlement — have become subject to the cudgel of the minimum offer price rule," Erwin complained. "We believe that the putative threat of state initiatives that the MOPR was devised to counter is overblown. Accordingly, the Maryland commission agrees with former Chairman Bay that the MOPR, as currently utilized, 'places [FERC] in constant tension with the states' and inhibits valuable state policies."

The Sierra Club also quoted Bay's comments in calling for "curtail[ing]" the use of the MOPR, citing his criticism that "'MOPR not only frustrates state policy initiatives, but also likely requires load to pay twice — once through the cost of enacting the state policy itself and then through the capacity market.'"



"We agree that it is essential to mitigate *actual* buyer-side market power, but encourage the commission to undertake a more careful examination of the evidence as to whether buyer-side market power is exercised in capacity or energy markets and develop appropriate screens to be applied whenever a mitigation mechanism is premised upon the existence of such power," said **Mark Kresowik**, deputy director of the eastern region of the Sierra Club's Beyond Coal Campaign. "As former Chairman Bay observed, 'the commission simply assumes [buyer-side market power] exists. The commission has not explored or tested these assumptions in its orders, and it does not know whether they are true.'"

ISO-NE Proposal Would Limit MOPR

FERC currently allows ISO-NE to exempt 200 MW of renewable generation from the MOPR annually. (See *FERC Affirms ISO-NE's MOPR Exemption for Renewables*.) At last week's conference, the RTO outlined a proposal to add a second capacity auction that would accommodate state-mandated renewable generation without using the MOPR. (See related story, *ISO-NE Two-Tier Auction Proposal Gets FERC Airing*.)

Angela M. O'Connor, chairman of the Massachusetts Department of Public Utilities, said that in addition to the short- and long-term policies being discussed by stakeholders in the New England Power Pool's Integrating Markets and Public Policy (IMAPP) initiative, "we hope to explore other potential solutions, including a further examination of the minimum offer price rule, which presents a significant challenge to the participation of state-supported resources in the Forward Capacity Market."

"Any IMAPP proposal that substantially increases the amount of clean energy resources entering the FCM will likely involve either the elimination of or modification of the minimum offer price rule," said New Hampshire Public Utilities Commissioner Robert Scott, who added that his state has not taken a position on any potential changes to the rule. "Such a change in market design should be accomplished in a thoughtful manner and certainly not without a full understanding of the likely long-term implications for electric rates."

Harvard University's William Hogan also quoted Bay in urging FERC to minimize the role of the capacity markets.

Harvard's William Hogan (left) and IHS Markit's Larry Makovich | *© RTO Insider*

"In his last comments about the minimum offer price rule, Commissioner Bay summarized: 'The premise of the MOPR appears to be based on an idealized vision of markets free from the influence of public policies. But such a world does not exist, and it is impossible to mitigate our way to its creation. The fact of the matter is that all energy resources receive federal subsidies, and some resources have received subsidies for decades.'

"The factual premise is well founded. They are myriad subsidies, many beyond the commission's jurisdiction," Hogan continued. "It is also true that the commission cannot, by itself, unwind all these subsidies to create the idealized vision of pure markets."

While the capacity markets exist, however, Hogan said FERC should "strengthen anti-manipulation efforts such as the MOPR."

"The avowed purpose of capacity markets is to correct for defects in energy pricing. If this is the case, the commission should have no obligation to accommodate subsidized resources that, in effect, make the problem worse. The commission can and should limit access and discriminate against those subsidized resources that are adding to the problem of inadequate pricing in energy markets."

PJM, Monitor Disagree

PJM Independent Market Monitor Joe Bowring and Dynegy CEO Robert Flexon both told FERC it should expand the rule to include existing generation as well as new resources. PJM officials also have called for such an expansion. (See PJM: MOPR Could be Improved, but not by BRA.)

Flexon said FERC should require "adequate minimum bids for all existing and new resources that receive revenue or revenue certainty (e.g. long-term multiyear contracts, ZEC payments) from sources other than the competitive marketplace. All resources, new and existing, should be required to bid at least the level they would have bid if they were being supported solely by the competitive market."

"The MOPR should be expanded to address subsidies for all existing and proposed units, and this should be done expeditiously," Bowring said. "An inclusive MOPR is the best means to defend the PJM markets from the threat posed by subsidies intended to forestall retirement of financially distressed assets. The role of subsidies to renewables should also be clearly defined and incorporated in this rule."

PJM Stakeholders Offer Vastly Different Takes on Markets' Viability

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room-only crowd of that notion.

"Maryland does not consider the PJM markets as the sole definer of resource adequacy and reliability. … We're not relying solely on Dr. Bowring and President Ott," he said, referring to Joe Bowring, PJM's Independent Market Monitor, and PJM CEO Andy Ott. "If the lights really do go out, Maryland ratepayers are not going to storm [PJM's offices in] Valley Forge with pitchforks and torches. They're going to come to the Maryland commission, and they're going to say, 'How did you let that happen?' And when we talk to that reporter from *The Baltimore Sun*, we don't want to be a position saying, 'Well, Dr. Bowring and President Ott told us it was all going to be fine.'"

Erwin suggested that the RTO might need to rethink its premise of being cost-based and resource-neutral. His perspective was contrasted by other state regulators on the panel, who offered a gradient of opinions on PJM's adequacy. Richard Mroz, the president of New Jersey's Board of Public Utilities, said state regulators need help keeping up with industry oversight, while Andrew Place, the vice chairman of Pennsylvania's Public Utility Commission, said he is "fuel-agnostic" and cautioned against increasing complexity and decreasing transparency and cost efficiency in the market.

Brien Sheahan, chairman of the Illinois Commerce Commission, defended the state's controversial decision in December to legislate zero-emission credits that ostensibly created subsidies for two Exelon-owned nuclear plants. While the RTO plays "an important role," and will continue to, he said "markets … exist to serve state purposes." States that have "legitimate environmental concerns" have the legal authority to require RTOs to "reflect those priorities," he said.

Place called for a different approach. "I would much rather see an integrated carbon price that's fuel-agnostic, and I don't think it will cause reliability issues," he said.

PJM CEO Andy Ott (left) and IMM Joe Bowring | © *RTO Insider*

Paul Bailey, ACCCE, and Jennifer Chen, NRDC | © *RTO Insider*

Mroz reiterated his pride, as he often does, with New Jersey's generator diversity — the Garden State powers itself mostly with nuclear, gas, coal, solar and wind — but expressed a common concern about fuel security.

"What if there is impingement of resources?" he asked, noting that the removal of integrated resource plans has reduced states' ability to address such concerns.

The Subsidy Heard Round the World

The second PJM panel in the May 1 conference was made up of Bowring, Ott and representatives from generators, utilities, state consumer advocates and special-interest groups. (See Power Markets at Risk from State Actions, Speakers Tell FERC.)

Their comments often circled back to the ZECs approved in Illinois and the impacts they have on the market.

"The new war on coal is subsidies," Dynegy CEO Robert Flexon said. "Coal cannot compete with nuclear subsidies."

Jennifer Chen of the Natural Resources Defense Council said fossil fuels also receive subsidies. "Subsidies are everywhere, and they're hidden," she said.

Bowring said that only some nuclear and coal units in PJM are unable to run economically and reiterated Place's endorsement of in-market pricing signals over state actions that bypass the market. "Clearly a market-based price on carbon is better than a subsidy," he said.

Ott asked for FERC's help in fixing a "fundamental inconsistency" in PJM's energy market that creates negative prices by valuing some environmental externalities and not others. "We try to move 400 or 500 MW of wind, and we've got to send negative prices for a substantial number of hours," he said. "It's unsustainable and devalues assets that are inflexible and can't move."

However, **Mike Cocco** of Old Dominion Electric Cooperative saw "cheap gas" and high-efficiency gas-fired units as the main drivers of market stress rather than subsidies.

The Future of RPM

Throughout the day, acting FERC Chair Cheryl LaFleur and Commissioner Colette Honorable pressed speakers to explain what they thought needed to be done.

Asked about the future of PJM's capacity market, Erwin was frank in his advice. "We would not encourage either you or PJM to continue to tweak the [Reliability Pricing Model] or the [minimum offer price rule]. … Every single year, there have been proposals for changing RPM. We don't think that continuing to tweak that model is going to be very constructive.

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Pennsylvania PUC Vice Chair Andrew Place (right) and New Jersey BPU President Richard Mroz | © *RTO Insider*

"Subsidies are contagious. Competition in the markets could be replaced by competition to receive subsidies."

Joe Bowring, PJM Independent Market Monitor

RTO Markets at Crossroads, Hobbled FERC Ponders Options

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and will only get worse without treatment.

"The challenge before the commission, the states and all other stakeholders is no less than the question of whether the power industry will continue to use competitive markets as the basis for investment decision-making," **Peter Fuller**, vice president of market and regulatory affairs for NRG Energy, said in his written testimony.

"Is there a role for the markets? Absolutely," said Scott Weiner, deputy for markets and innovation at the New York State Department of Public Service. "The energy markets will always be there. The capacity market may not be."

FERC scheduled the conference out of concern that the RTO/ISO energy and capacity markets could lose relevance — or have their pricing signals undermined — because of state plans to procure out-of-market renewable power and prop up nuclear generators (AD17-11).

"There are three ways this could go," acting FERC Chair **Cheryl LaFleur** said at the opening of the two-day conference May 1. "A designed market solution, a litigated outcome or a planned change in the regulatory construct of how we handle resource adequacy. The fourth outcome — an unplanned change in the regulatory construct — or unplanned and piecemeal regulation, is one that I think we should avoid because I think it would be a bad outcome for customers and market participants in terms of cost, reliability and regulatory certainty."

"All options, in my mind, are on the table," added Commissioner Colette Honorable.

Factions

The witnesses fell into several camps. Public power representatives said they should be relieved of participation in the capacity markets, which they say are too expensive and inflexible. Unlike in 2013, they had lots of company in calling for change.

Independent power producers called for FERC to act decisively to protect markets from out-of-market contracts and subsidies.

The grid operators differed on their preferred role for FERC, with PJM and NYISO urging the commission to set deadlines and provide direction.

Officials from New England said they will continue to pursue their states' clean energy mandates with or without cooperation from the wholesale markets.

Carbon Adder

Economists have been telling FERC and others for years that the simplest way to reconcile the markets with environmental policies is to incorporate the cost of carbon into LMPs and generation dispatch. While New

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"Do you really want to get rid of all of the nukes because they're uneconomic? Is that really a good idea?" he asked.

"I'm saying no," Honorable responded.

"I'm saying no too," he said, adding that he is skeptical of letting all non-intermittent resources transition to gas.

"The markets don't value the externalities that the state values, particularly the environmental attributes, but also other valuable attributes of baseload nuclear," Sheahan said. "This was an urgent conversation three years ago. This is a crisis today."

Place preferred consistency. "I'm torn. I'd probably come down that I'd rather see tweaking of capacity markets than starting fresh, though it comes with a lot of baggage," he said.

He said the energy market, which dispatches generation in real time, is better for addressing issues such as the uneconomic nature of nuclear plants rather than trying to manipulate the capacity market to address it.

Collaborate, Don't Litigate

One thing seemingly every speaker agreed on was that — having been frustrated with the courts' narrow rulings on state-federal jurisdictional issues — collaboration to resolve the issues at the RTO would be more productive than litigating them. (See *Court's Reticence Frustrates Energy Bar*.) The commissioners agreed. "I appreciate the fact that you've thought about … how we can do so in a way that allows us all to keep our eyes on the prize and [reduce] additional years of waiting around for a solution," Honorable said.

Can a market with 13 states and D.C. find agreement?

"I do think that we can value these other attributes," Mroz said. "The question is whether we all agree about what those valuations are, or what the attributes are."

Plenty to Go Around

Honorable said the commission took away from the conference that it needs to become more active in coordinating the discussion, such as ordering a deadline for the RTO to determine what externalities it needs to address and how to incorporate them. She asked what the commission can do to further assist the process.

"We need to somehow discipline the output of generation in order to keep the supply/demand balance," Ott said. "The resources that are needed to serve load should participate in setting price. It's as simple as that."

Chen said part of the problem is an overabundance of gas-fired units able to drastically lower auction clearing prices because of cheap fuel.

Bowring challenged that argument, saying the additional supply allows for lower prices and energy benefits. His protest drew a laugh from the crowd and prompted Ott to exclaim, "It's a bargain!"

Erwin noted that PJM has a 22% reserve margin — well above its 15% requirement — "that potentially isn't used at all."

"Maryland does not see an adequacy problem in PJM," Erwin said, asking FERC to consider consumers who pay the bills. "There's only one source of revenue for all of this, and that's your neighbors and my neighbors."

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York and PJM are exploring ways to do so, New England policymakers said differences in state policy goals make it politically unpalatable despite its economic elegance.

Instead, ISO-NE has proposed a two-tiered capacity auction intended to incorporate state-mandated renewable generation while preventing oversupply. (See related articles, *ISO-NE Two-Tier Auction Proposal Gets FERC Airing, PJM Stakeholders Offer Different Takes on Markets' Viability* and *NYISO See Carbon Adder as Way to Link ZECs to Markets.*)

IPPs: FERC Should Act Decisively Against Subsidies

Independent power producers NRG, Calpine, Dynegy and Eastern Generation, and their trade group, the Electric Power Supply Association, called for FERC to act quickly and firmly.

"A policy approach that lets any given action prevail at all costs in the name of a 'state preference' regardless of the detrimental impact on federally regulated wholesale markets would be the exception that swallows the rule of law in the" Federal Power Act, EPSA CEO John Shelk said. "If the commission wishes to continue delivering the benefits of wholesale markets, it needs to direct steps be taken by the Eastern ISOs/RTOs by specific deadlines to ensure that wholesale markets are protected and not undermined."

FERC's "hands-off approach" to date "rightly allowed states to experiment on the edges of the wholesale market with a variety of new programs and to avoid over-burdening these fledgling initiatives with federal intervention," said Abe Silverman, vice president and deputy general counsel at NRG.

Now, however, the commission must develop "rule-of-reason" tests "to delineate how state programs are harmonized with competitive markets," he said. "Wherever the line is eventually drawn, there clearly must be a line if the Federal Power Act is to have meaning."

Calpine CEO Thad Hill also called for swift action.

"The legal process is lengthy, and it will take the courts considerable time to work through these issues. The commission should not wait for the courts to act, but instead the commission should be prepared to act quickly and decisively when viable proposals are brought before it," he said.

Renewable Developers also Favor FERC Action

Joining the IPPs in calling for action was **Seth Kaplan**, EDP Renewables' senior manager for regional government affairs, who cited the D.C. Circuit Court of Appeals' April ruling in *Emera Maine v. FERC.* That ruling upheld FERC's Order 1000 finding that FERC-regulated transmission planning must accommodate state public-policy requirements. (See *Court Rebuffs New England TOs, Upholds FERC ROFR Order*.)

"The *Emera* decision reaffirms once again that FERC and the entities it regulates have the ability — and I would argue obligation — to recognize state policies, like renewable portfolio standards and procurements, as cost drivers that must be recognized in the transmission planning and cost-allocation process," Kaplan said.

Aleksandar Mitreski, senior director of regulatory affairs for Brookfield Renewable, agreed, saying "the time is ripe for public-policy objectives to be incorporated into the wholesale markets."

Independent consultant Roy Shanker said FERC must take a leadership role because stakeholder negotiations will not prevent litigation. "The fundamental differences among parties ... make any cooperative solutions unlikely," he said. "In the presence of such fundamental differences, any path forward requires the commission to exercise its full authority over wholesale markets in order to find a resolution that does not cannibalize markets."

New England: Butt Out, FERC

State officials from New England were equally forceful in saying they don't want FERC interfering with ongoing stakeholder processes.

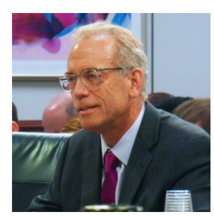
"Our work with the National Council [on Electricity Policy] supports the idea that states are well suited to collaboratively working out answers to the policy questions addressed by this technical conference," said Vermont Public Service Board Commissioner **Sarah Hofmann**, a member of the NCEP's executive committee.

"The New England states have shown the ability to work collaboratively to address climate change through [the Regional Greenhouse Gas Initiative], which is a program under state control," New Hampshire Public Utilities Commissioner Robert Scott said. "Addressing carbon emissions through a federally controlled tariff based on state policies raises significant concerns not only about the potential for unreasonable allocation of costs but also states' rights. If the federal government wishes to regulate carbon emissions in the wholesale electric sector, Congress should pass a law giving the appropriate agency such authority."

The Beginning of the End of RPM?

Public power representatives reiterated their longstanding complaints about mandatory capacity markets, saying they could provide resource adequacy more cheaply through bilateral contracting and self-supply.

Lisa McAlister, general counsel for regulatory affairs at American Municipal Power, said FERC should eliminate the mandatory participation requirement in PJM's capacity market. "RPM is a 'market' in name only, and, as time has gone on, fewer and fewer PJM market participants use that term to describe it," she said.



"With respect to meeting adequacy needs, the markets have been a success," said **Cliff Hamal**, managing director at Navigant Economics, who has consulted for AMP in PJM's new capacity initiative. (See *PJM Capacity Task Force Debates the Value of Price Transparency*.) "With respect to doing so at a reasonable cost to consumers and consistent with meeting other legitimate policy goals, I think we can do better."

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Hamal said the capacity market's cost of capital is increased by a "volatile, fickle and frail price mechanism that relies more on regulatory nurturing than the fundamentals of supply and demand."

While RTOs should continue to set capacity obligations for load-serving entities, Hamal said, the LSEs should be allowed to meet their obligations independently.

"I believe the most promising option would be to allow state policies to be implemented through a formal commitment to bilateral markets. States would withdraw from the RTO centralized auctions and meet their capacity objectives bilaterally," he said. "Energy markets will continue to function and capacity markets will return to providing the 'missing money' in the sense of a supplemental payment needed to ensure supply adequacy after consideration of all other revenue streams."

Deadlines for Stakeholder Processes

Silverman said the commission should "direct each of its ISO/RTO markets to set forth a comprehensive plan to integrate state goals into its wholesale market outcomes in a sustainable manner. Unless the commission mandates such a process — by a date certain — I fear that states will continue to pursue carbon mandates outside of the organized markets, and society will be deprived of the benefits of competitive markets."

PJM and NYISO officials said they would welcome FERC deadlines to pressure stakeholders to compromise on rules for incorporating state initiatives into the markets.

"We don't want to run a 50% market. … We want to be the market that all resources depend on … for entry decisions, and we will work with the state to achieve those goals," said Rana Mukerji, senior vice president of market structure for NYISO. "The stakeholder process … is long and contentious. Having deadlines works miracles."

"Yes, there are compromises that come out [of the stakeholder process]. Yes, they can lead to maybe suboptimal … approaches," said PJM Senior Vice President for Operations and Markets Stu Bresler. "But I can say without reservation [that] almost universally what comes out of a detailed stakeholder vetting of an issue is better than what went into it."

He added: "Deadlines and guidance from the commission are always helpful with respect to the efficiency of how that stakeholder process works."

ISO-NE and the New England Power Pool, however, urged FERC to give them breathing room. Matt White, chief economist for ISO-NE, said the RTO will file a proposal with FERC by late this year or early 2018.

"The house is not burning down so fast that we must make an exigent circumstances filing with you within a week," he said. "Coming up with something we can do and you will not be tweaking it again and again and again and again is probably worth six to nine months of our time.

"We have a very active stakeholder process that is deeply engaged on these issues," he continued. "A deadline would not be terribly helpful."

Not everyone saw the value of stakeholders' participation, however.

"FERC should immediately begin a formal inquiry to rationalize the capacity and energy market constructs with the long-term financial needs of different operational categories of electric generation," said John P. Hughes, CEO of the Electricity Consumers Resource Council, which represents large U.S. manufacturers. "We strongly oppose any attempt to solve this problem via negotiated settlements in ISO or RTO stakeholder processes."

Now What?

The "crossroads" for the markets, as multiple speakers called it, comes at a time when FERC has never been less prepared to act. With three empty seats, it has been without a quorum since February; Honorable announced last month that she won't seek a new term when hers expires in June.

So, as the participants wheeled their suitcases to cabs outside FERC headquarters at the end of the two-day hearing, the commission's policy direction could hardly be more uncertain.

With President Trump — who has moved to dismantle his predecessor's climate change policies — in a position to fill four of the five seats, at least some of the new members could be hostile to Northeast states' climate policies. At press time, there were numerous reports that Trump will nominate Pennsylvania regulator Robert Powelson and Neil Chatterjee, senior energy policy adviser to Senate Majority Leader Mitch McConnell (R-Ky.) to fill two Republican vacancies on FERC. Chatterjee was described in a Bloomberg profile as "the McConnell adviser determined to stop the Clean Power Plan." (See related story, *Trump Nominates Republicans Powelson, Chatterjee to FERC*, p. 31.)

Even if the commission did support an RTO-administered carbon adder, would it have the authority to do so?

Certainly someone will ask the courts that question.

"Sometimes there is a presumption that anything outside of the RTO markets is not a market, or perhaps disparaged as 'out-of-market' compensation. While from a legal and jurisdictional perspective these are bright lines, from an economic perspective, they are not. Customers pay all costs, suppliers consider all income and everyone responds to all incentives."

Cliff Hamal, Navigant

Related Dockets

FERC's agenda said the technical conference "may address matters at issue" in the following pending dockets:

ISO-NE

- ER13-2266, *et al.* (See *ISO-NE Ordered to Justify Cost of Winter Reliability Program*.)
- ER17-795 ISO-NE cost of new entry and offer review trigger price updates
- ER17-1031 Waiver granted to Emera Energy Services qualifying its Bayside Generating Station for Forward Capacity Auction.

NYISO

- ER16-1404 *Indep. Power Producers of N.Y. v. NYISO* re. buyer-side capacity market power mitigation
- EL16-92-001 (See *'Special Case' DR Exempted from MOPR in NYISO*.)
- ER17-386-002 (See *FERC OKs NYISO Demand Curve Reset*.)
- ER16-120 and EL15-37-002 (See *FERC Orders Further Changes to NYISO RMR Rules*.)

PJM

- EL16-49 (See *FERC Rescinds AEP, FirstEnergy Affiliate-Sales Waivers*.)
- ER15-623, EL15-29-006, and EL15-41-002 PJM Capacity Performance plan (See *Clean Energy Advocates Appeal FERC's Capacity Performance Rulings*.)
- ER14-1461, EL14-48, ER17-367 (See *PJM Monitor Asks FERC to Act on 'Paper Capacity'*.)

Public Interest Groups Cry Foul over Technical Conference, RTO Transparency

By Rich Heidorn Jr.

Three public interest groups say they were shut out of last week's FERC technical conference on tensions between state energy policies and wholesale markets (AD17-11) and called on the commission to improve the transparency of RTOs.

In a letter to the commission, Public Citizen, the Public Utility Law Project of New York and the Pennsylvania Utility Law Project complained that the technical conference did not include any public interest consumer advocates, although Public Citizen had submitted an application to speak.

Although the Consumer Advocates of PJM States testified on one PJM panel, "neither government nor public interest consumer advocates" were included on any of the ISO-NE or NYISO panels, the letter said. "FERC's failure to include any public interest consumer advocates decidedly leaves one of the most important stakeholders in the outcome with no voice," they wrote.

The groups also said they were concerned that the Trump administration will appoint new FERC commissioners who subscribe to a "new, radical administration baseload electricity policy" as articulated by Energy Secretary Rick Perry's memorandum announcing a study of policies affecting baseload power. (See related story, *Exelon Encouraged by Perry's Memo, Thinks ZECs Will Hold Up*, p.38.)

"While the Department of Energy actually lacks clear authority to implement the sweeping proposals suggested in the memo, FERC likely does have the power to do so," the groups said.

FERC has lacked a quorum since February. The five-member commission has three open seats, and Commissioner Colette Honorable announced last month she will not seek reappointment when her term expires in June.

The groups also called on FERC to improve RTO governance and transparency, criticizing FERC's December order dismissing Public Citizen's complaint that it was denied a right to fully participate in PJM. The order said that government consumer advocate offices, which have the right to vote, can represent Public Citizen's interests (ER17-249). "That is akin to the U.S. Environmental Protection Agency representing the views of the Sierra Club," they wrote.

"Although some describe the RTOs as 'quasi-public' institutions, given the power FERC has bestowed upon them, there is nothing public about them. All of the FERC-jurisdictional RTOs … are private, membership corporations. None are subject to federal or state transparency or other governance requirements imposed on government institutions, such as open meeting laws or federal/state freedom of information act statutes."

The groups said individuals that are not members of the New England Power Pool can only attend stakeholder meetings through a "sponsorship" from an existing member. "But even after being 'sponsored,' the decision to approve participation is made by the chair of the Participants Committee — a position currently held by a for-profit power company executive. Such a privatized model of controlling civil engagement is inappropriate."

The letter also renewed the March 2016 request by Public Citizen and more than two dozen environmental and public interest groups that FERC provide public funding for interventions before the agency, as it says is required by the 1978 Public Utility Regulatory Policies Act (RM16-9). (See *Citizens Groups Seek Public Funding for FERC Interventions*.)

CAISO NEWS

California Grid Emergency Comes Days After Reliability Warning

By Jason Fordney

CAISO last week experienced its first "Stage 1" grid emergency in nearly a decade, days after Southern California Gas warned that continued restrictions on its Aliso Canyon storage facility could deprive the region's natural gas-fired generators of enough fuel to avoid blackouts this summer and winter.

The ISO on May 3 issued an emergency notice from 7 to 9 p.m. after grid operators determined that they could not meet load and operating reserve requirements. At the time, load was 2,000 MW above forecast and nearly 800 MW of imports never materialized, compounded by the outage of a 330-MW gas-fired plant.

About 800 MW of demand response was "critical" in meeting grid needs, according to CAISO.

"It was unusual that the issues began developing around the peak, and demand wasn't ramping down much, but solar was ramping off faster than what the thermal units online at the time could keep up with in serving load," CAISO spokesperson Steven Greenlee told *RTO Insider*.

That forced the ISO to dip into reserves and slip below required reserve margins, prompting it to declare a Stage 1 emergency.

"This stage allows us to trigger the demand response interruptible programs, which are managed by the investor-owned utilities," Greenlee said.

It was the first such emergency notice issued since an extremely hot day in August 2007. In a Stage 3 emergency — the most serious — utilities are warned of load curtailments.

While the ISO has drawn no link between the emergency and ongoing constraints within the pipeline system that feeds Southern California's gas fired generation, the timing was uncanny. The event came less than a week after SoCalGas cautioned state and ISO officials that it might be unable to meet system needs during peak seasons for electricity demand. The gas utility contended that a recent state-directed reliability assessment of its network relied on overly rosy assumptions.

SoCalGas said a prohibition on gas withdrawals from its Aliso Canyon facility and limited injections there might prevent it from responding to gas supply and demand imbalances. The leak at the gas storage facility, discovered in October 2015 and plugged in February 2016, led to increased use of the La Goleta, Honor Rancho and Playa del Rey storage facilities, where reserves are now 40% lower than a year ago.

"The state was lucky this past year to have experienced a mild summer and winter," SoCalGas said in an April 28 letter to CAISO, the California Public Utilities Commission and the California Energy

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CAISO EIM Exports Rise with Spring, Report Shows

By Jason Fordney

Energy Imbalance Market (EIM) transfers out of CAISO were on the upswing in March, re-establishing a pattern first seen last spring as California's growing solar surpluses turned the state into a significant exporter of renewable energy.

Real-time transfers out of CAISO were 243,908 MWh during the month, up more than 60% compared with February and March of last year, according to the ISO's first-quarter EIM benefits report. Last year's totals do not include transfers into Arizona Public Service, which began participating in the EIM in October 2016.

Normally heavily dependent on imports, the ISO's balancing area first became a significant exporter of renewables through the EIM early last year. (See *CAISO EIM Boosts Market for Renewables in Q1*.)

The report also showed that the EIM last quarter saved its participants $31 million through more efficient generation dispatch and reduced greenhouse gas emission by 23,000 metric tons through avoided curtailments of renewables.

CAISO compares the cost savings of EIM dispatch to the same amount of real-time load imbalance in each balancing authority that would have occurred without transfers between them. The market optimizes generation both within and between regions in the 15-minute market and real-time dispatch.

"A significant contributor to EIM benefits is transfers across balancing areas, providing access to lower-cost supply, while factoring in the cost of compliance with greenhouse gas emissions regulations when energy is transferred into the ISO," CAISO said.

Benefits can either be cost savings, profit or a combination, and now reach electricity consumers in Arizona, California, Idaho, Nevada, Oregon, Utah, Washington and Wyoming.

The EIM also reduced curtailment of renewable energy resources by about 53,000 MWh. That was down from avoided curtailments of about 113,000 MWh in the same period a year ago, a development the ISO is still investigating but says could be attributed to improved hydroelectric conditions in the West and advancements in how EIM participants are deploying their resources. (See *Spring Oversupply Lifts CAISO Curtailments*.)

The market also reduced "flexibility ramping reserves" by almost 399 MW in the upward direction and 488 MW in the downward direction, CAISO said.

The EIM has been growing since its launch with PacifiCorp as its first participant in November 2014, followed by NV Energy, Puget Sound Energy and APS. This October, Portland General Electric is due to begin participating, with Idaho Power following in April 2018; Seattle City Light and Sacramento Municipal Utility District in April 2019; and Salt River Project in April 2020.

Total EIM cost savings are $174 million since the market was launched, according to the ISO. Savings grew from $8.1 million in January to $10.4 million in February and $12.6 million in March.

CAISO News

California Grid Emergency Comes Days After Reliability Warning

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Commission. "For the upcoming summer and winter seasons, Californians cannot rely on luck, and energy reliability should not depend upon mild weather conditions."

In response, the agencies have requested that SoCalGas present its findings at a May 22 workshop on summer reliability to be held in conjunction with the Los Angeles Department of Water and Power.

"The issues raised by SoCalGas are part of ongoing data requests the joint agencies have made of the utility," the agencies said in a joint statement. State officials "are working in close coordination to address the importance of natural gas and electricity reliability for Southern California as we look forward to the summer and next winter."

The National Oceanic and Atmospheric Administration says there is a 60 to 70% chance that temperatures will be above normal this summer.

SoCalGas also warned state agencies of safety concerns stemming from operating its pipeline system at maximum pressure. The availability of storage injection capacity reduces the risk of over-pressurization on natural gas lines.

"Operating close to a pipeline's maximum pressure is a pipeline safety and compliance concern," the company said.

The natural gas utility said that the state had assumed "perfect operating conditions and optimal market conditions" when asking it to do a recent reliability assessment. This could lead the agencies to be overly optimistic and put gas and electricity supply at risk.

The analysis assumed full utilization of gas receipt points, a theoretical maximum that is not reasonable for operational planning and is dependent on the behavior of suppliers, shippers and customers. An assumed 1.5 Bcfd withdrawal rate would require significantly higher inventory at Playa del Rey and is not possible if storage inventories are not replenished.

The assessment also assumed that Aliso Canyon would not be used this summer, but held in reserve, which the utility said is "not prudent." The facility's low inventory, new well configuration and prohibition on injection will likely reduce withdrawal capacity. The assessment also used daily average capacity that does not address hourly customer demand fluctuation, SoCalGas said.

The company also pointed out recent events that increased natural gas demand without warning. In July, high temperatures and humidity pushed up electricity demand and cloud cover limited solar generation, leading to natural gas demand 11 to 25% above plan. Storage withdrawals were needed to handle the variability. In August, a fire in the Cajon Pass affected transmission lines and caused a 25% spike in natural gas demand from generators over a five-day period.

Still, state officials still considered that Southern California's grid weathered last summer without any major incidents, attributing the success to measures taken after the 2013 shutdown of the San Onofre nuclear plant, deployment of new energy storage and increased use of automated DR. (See Sandoval: Nuke Shutdown, Auto-DR Aided Aliso Canyon Response.) CAISO also relied on temporary tariff provisions meant to improve schedule coordinating, which FERC last November extended by another year. (See FERC OKs One-Year Extension for CAISO's Aliso Canyon Gas Rules.)

The fact that one broken pipe at Aliso Canyon led to widespread reliability concerns over an extended time demonstrates the precarious balance between fuel supply and electricity scheduling, weather and unforeseen events with which grid operators must continually grapple.

CAISO NEWS

CAISO Proposes Rules for Distributed Resources, Storage

By Jason Fordney

Customer Segment	Weekday	Baselines Recommended	Adjustment Caps
Residential	Weekday	Control Group	+/- 40%
		4 day weather matching using maximum temperature	+/- 40%
		Highest 5/10 day matching	+/- 40%
	Weekend	Control Group	+/- 40%
		4 day weather matching using maximum temperature	+/- 40%
		Highest 3/5 weighted day matching	+/- 40%
Non-residential	Weekday	Control Group	+/- 40%
		4 day weather matching using maximum temperature	+/- 40%
		10/10 day matching	+/- 20%
	Weekend	Control Group	+/- 40%
		4 day weather matching using maximum temperature	+/- 40%
		4 eligible days immediately prior (4/4)	+/- 20%

Recommended baselines for CAISO performance evaluation methodologies | *CAISO*

CAISO is moving forward with an initiative meant to ease the integration of distributed resources into its markets.

The main goal of the program: to make it easier for grid-connected resources such as rooftop solar, energy storage, plug-in electric vehicles and demand response to participate in the ISO's market operations, creating more system flexibility and reducing carbon dioxide emissions.

"The number and diversity of these resources are growing and represent an increasingly important part of the resource mix," CAISO said in its revised proposal.

On May 4, CAISO provided an update on phase two of its Energy Storage and DER initiative, which will propose changes that are due to be reviewed by the Energy Imbalance Market (EIM) Governing Body on July 13 and submitted to the ISO's Board of Governors for approval during its July 26-27 meeting.

The proposals involve improving the accuracy of DR contributions through alternative energy usage baselines, distinguishing between charging energy and station power for storage resources, and developing a net benefits test for DR resources that participate in the EIM.

Expanded Baseline Options

According to CAISO, a majority of market participants support a set of baselines to assess the performance of proxy demand resources — DR aggregations of retail customers — that was developed by a stakeholder working group.

While the current "10-in-10" baseline methodology is considered accurate for many large commercial and industrial customers, stakeholders don't think it is appropriate for all customer types, prompting the working group to propose additional baselines. Using the 10-in-10 methodology, the ISO calculates a baseline by examining the 45 days prior to a trade date and finding 10 "like" days in which no DR was required. The ISO then uses hourly average meter data to create a baseline representing a typical load profile, and the resource is paid for reducing usage below the baseline.

Under the new proposal, baselines for residential resources would be based on a four-day weather match that estimates what electricity use would have been in absence of DR dispatch under similar weather and on similar days, and using a control group of similar users.

Commercial baselines would be based on the 10-in-10 method with a 20% adjustment cap, an average of the previous five days and a control group. Baselines are adjusted using actual load data in the hours preceding a DR event to better reflect variables that might not be present in the historical data.

"Stakeholders who supported the proposal stated that the use of additional baselines for residential and commercial customers would improve the accuracy and reduce bias when compared to the 10-in-10 baseline," CAISO said.

Joint Review of Station Power Rules

Another working group is developing new market rules for energy storage resources.

CAISO is working with the California Public Utilities Commission to distinguish between station power and wholesale charging energy with respect to energy storage devices. The regulator is seeking to redefine station power — electricity used by a generator itself — from a retail perspective, and the ISO said it is important that the rules do not conflict with each other.

The ISO is proposing to simplify its definition of station power as energy used to serve a resource's own load and settled under a retail tariff.

CAISO said it proposed the changes because it is concerned that storage resources will commingle their charging load and station power load and use wholesale, ISO-metered electricity to serve station power load. If this happens, either the local retail electricity provider is not getting paid for serving station power, or the storage resource is getting charged twice at both the wholesale and retail level for the power.

One option would be to require that wholesale load and retail load be metered separately, but the grid operator is examining whether there are other ways to solve the problem.

CAISO has also proposed revisions to the DR net benefits test that establishes the price threshold above which DR bids are measured. ISO staff and the internal Market Monitor agree that there is a gap in the test's formula.

The proposal would enable the DR benefits calculation to include natural gas price indices beyond California in order to accommodate EIM participants outside of the state, allowing them to participate as DR resources in the CAISO market.

CAISO NEWS

With Solar Eclipse Looming, CAISO Weighs its Options

By Robert Mullin

For nearly three hours this summer, a solar eclipse will blackout much of California's growing volume of solar generating resources, forcing the state's grid operator to cover the shortfall with a bevy of resources equipped to quickly react to dispatch instructions.

CAISO is already well into developing its response to the Aug. 21 event.

On that date, the California sun will be reach its dimmest point at 10:22 a.m., the eclipse's moment of maximum "obscuration." By that time, CAISO's "net load" — the portion of electricity demand not served by renewable resources — will have surged to about 6,000 MW more than what it would normally be on a sunny summer day.

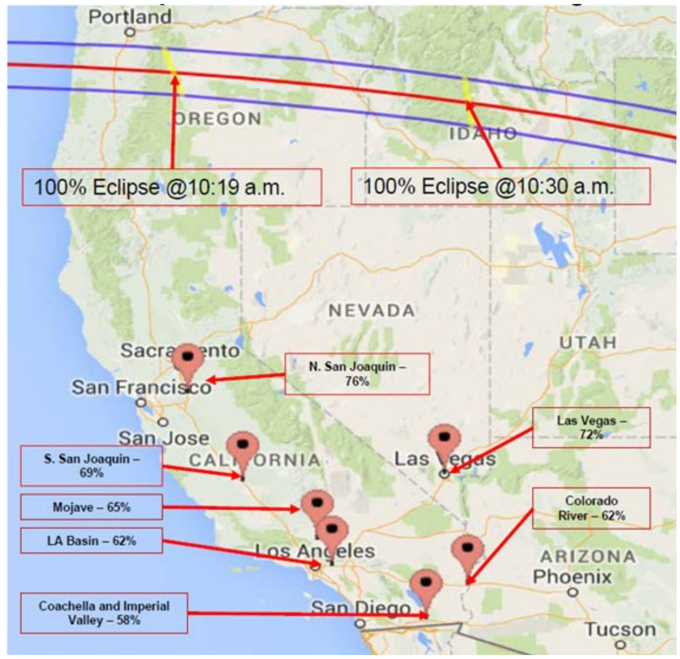
The primary reason: The temporary loss of 5,600 MW of energy from grid-connected solar that would typically be generating at that time under full-sun conditions.

An accompanying drop-off in output from behind-the-meter solar will add to the impact, bumping up net load by about 8%.

Solar declines are forecast to be uneven throughout the state, with obscuration rates ranging from 76% in the northern San Joaquin Valley to 58% near the border with Mexico.

"We're going to start losing solar during the morning ramp," Amber Motley, CAISO manager of short-term forecasting, said during a May 1 meeting of CAISO's Board of Governors, where she described the ISO's ongoing preparations. (See *CAISO Planners Looking Ahead to Summer 2017 Solar Eclipse*.)

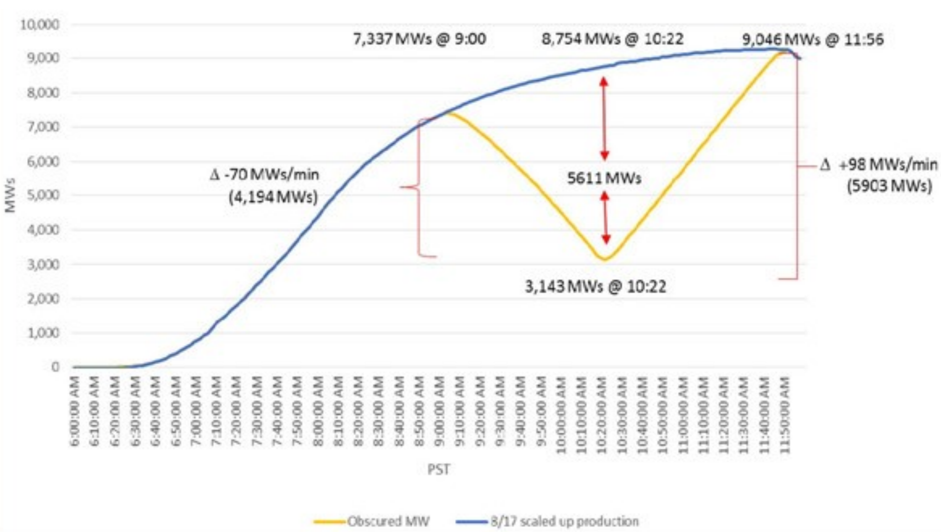
Motley called the timing of the eclipse "a little bit of a blessing" compared with the situation faced by European system operators in 2015, when a similar event there coincided with the sharper evening ramp.



Solar eclipse's effect on CAISO balancing area | *CAISO*

Still, the ISO expects to lose about 70 MW of solar output per minute from the start of this summer's eclipse to its fullest point, accelerating the morning ramp to two to three times its normal rate.

Mark Rothleder, CAISO vice president for market quality and renewable integration, pointed to another notable detail: Aug. 21 falls on a Monday.



Anticipated grid-connected solar production during eclipse | *CAISO*

"It's not unusual on a Monday during summer, especially if you have several hot days leading up to that Monday, that you could have a high load and potentially a peak condition for the year," Rothleder said.

But Motley counted other blessings, including the fact that populous areas of California are subject to "marine layers" — low-altitude cloud cover — during August mornings.

And then there's heavy snowpack that is feeding the state's hydroelectric system to the point of oversupply this spring. (See *Spring Oversupply Lifts CAISO Curtailments*.)

"We know we have a lot of hydropower this year. It's a blessing," Motley said, referring to the ramping capability of those resources. "That's something we expect will still be available in August."

To help manage the ramp, CAISO will increase its coordination with hydroelectric producers to ensure that they're prepared to bid into the wholesale market that day. The ISO also plans to increase regulation reserves by about one-third — 350 to 400 MW, a number that staff will revisit after performing market simulations. Those simu-

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CAISO NEWS

CAISO Board OKs Black Start, TAC Area, EIM Charter Measures

By Robert Mullin

CAISO's Board of Governors last week approved Tariff measures that will enable the ISO to procure additional black start resources in the San Francisco Bay Area and create a new transmission access charge (TAC) zone in Southern California to accommodate a transmission owner that doesn't intend to become a participating member.

Another amendment passed by the board clarifies the role of the Energy Imbalance Market (EIM) Governing Body in making changes to the market's charter.

Black Start

The ISO launched the accelerated black start procurement initiative in January after identifying the need for additional emergency resources in the transmission-constrained Bay Area within Pacific Gas and Electric's service territory. (See *CAISO Kicks Off Effort to Procure Black Start Resources*.)

The ISO's plan entails significant involvement of the affected transmission owner — in this case PG&E — in drawing up technical specifications and vetting proposals from resources bidding into the solicitation. The ISO would have authority to accept or reject PG&E's recommended resources.

Responding to stakeholder feedback, ISO staff settled on a cost-of-service approach to compensating selected resources, rather than providing a capacity-type payment sufficient to support the operation of an otherwise unprofitable generator.

Those aspects of the plan prompted concerns from at least one market participant, who otherwise expressed support for the proposal.

Andy Brown, an attorney representing Diamond Generating, said that California's power market functions under a "hybrid" structure in which utility-owned generation benefits from a "life-of-asset" arrangement with a guaranteed revenue requirement, while independent power producers depend on power purchase agreements with relatively "truncated" terms. That would put IPPs at a disadvantage in bidding on a black start contract that only covers the cost of that service, he said.

"Our concern is that when it comes down to the evaluation period [for a black start resource], the commercial review is going to create a sort of unnecessary competitive advantage to [utility-owned generation] as opposed to those generators that might be under PPA terms, particularly if" the PPA is close to its expiration date, Brown said.

Scott Vaughan, a CAISO lead engineer, explained that ISO stakeholders generally agreed that a bidding resource's existing PPA term should factor into the evaluation because upgrading a plant to black start capability would require capital expenditures to be recovered from ratepayers through reliability provisions in PG&E's tariff.

Brown also sought assurances about the impartiality of an evaluation process that would heavily evolve PG&E — a potentially competing supplier — in the selection process.

Keith Casey, CAISO vice president of market and infrastructure development, said that as the transmission owner, PG&E has a "Tariff-defined" role in providing black start services and must be part of the technical review of the effectiveness of proposed resources.

"There are steps that the company takes to wall off that function from other commercial functions within the company, and we'll rely on that to ensure the integrity of the process," Casey said.

"These studies involve sensitive and confidential NERC critical infrastructure," said Eric Eisenman, director of ISO and FERC policy at PG&E. "It's appropriate that only PG&E's transmission operations as the transmission owner and the ISO as the transmission operator jointly conduct this effort."

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With Solar Eclipse Looming, CAISO Weighs its Options

Continued from page 18

lations will also provide insight into whether the ISO needs to make any adjustments to how its flexible ramp product performs during the eclipse period.

CAISO will also "coordinate very heavily" with natural gas suppliers to ensure that gas-fired generators procure an adequate supply of fuel.

Another potential option: the manual curtailment of renewables ahead of the eclipse.

"I think that the market simulation will really show us how the market can handle this particular set of movements throughout the day, but [curtailment] was something that was utilized in Europe," Motley said.

With solar output expected to increase at a rate of 90 MW/minute coming out the eclipse, the ISO is considering placing a constraint on that upward ramp, which will necessitate a corresponding downward ramp for dispatchable resources.

"That 90-MW return is quite steep," Motely said.

The ISO will depend on the Western Energy Imbalance Market (EIM) for additional measures. With other EIM areas experiencing the eclipse at different times, the market's software "will be able to optimize EIM transfer capability and use that as a feature as we go through the eclipse," Motley said.

Grid-connected solar output will decline by 866 MW in other EIM balancing areas during the eclipse. Nearly all the reductions will be concentrated in Arizona and Nevada.

CAISO staff plan to present stakeholders with their preparations for the eclipse during a Market Performance and Planning Forum on July18 — about one month before the event.

"We look forward to being informed about this," said ISO board member Angelina Galiteva. "This is interesting — and it's going to be a test case for what's to come in the future on a much more regular basis."

CAISO NEWS

CAISO Board OKs Black Start, TAC Area, EIM Charter Measures

Continued from page 19

'One-off' TAC

The CAISO measure creating a TAC area for the Metropolitan Water District of California (MWD) met with little stakeholder concern and no objections as it sailed through the initiative process. (See *CAISO to Create New TAC Area for Water District*.)

Southern California Edison has been operating MWD's transmission under a decades-long interchange agreement that provided the ISO with effective control of the agency's transmission assets. However, the utility declined to renew the contract when it expires Sept. 30.

Under what CAISO has called a "one-off" proposal, the ISO will assume operation of MWD's 230-kV network, while the district will retain its transmission operating rights. In justifying the unorthodox arrangement, ISO management has explained that the water agency possesses sufficient generation and transmission to serve its own load and does not at all lean on the grid operator.

The need to create a separate area stems from a technicality in which ISO uses TAC areas as a billing determinant to allocate costs for resource adequacy requirements among load-serving entities.

"This will allow MWD to stay within the ISO balancing authority area, which is good for us," said Deb Le Vine, CAISO director of infrastructure contracts and management.

Among the benefits for CAISO: It will maintain its current level of access to key electricity delivery points along the California-Nevada border, including Mead. The ISO will also retain use of MWD's excess transfer capacity, which includes 70 MW out of Hoover Dam.

MWD, which delivers water to 26 member agencies serving 19 million consumers in six counties, owns about 300 miles of transmission that deliver power to five pumping plants moving water from the Colorado River Aqueduct and State Water Project into Southern California.

'Lessons Learned'

In approving a measure to define the EIM Governing Body's role in making changes to the market's governing charter, the ISO board formalized what has already become standard practice based on the body's "advisory" function set out in a guidance document approved late last year. (See *EIM Leaders OK Governance 'Guidance' Proposal*.)

The measure came at the request of body Chair Kristine Schmidt, who earlier this year asked CAISO management to clarify her group's responsibility over the charter, which previously stipulated only that any "substantive changes" to the charter be approved by the board. (See *EIM Changes Would Give Governing Body More Power*.)

"Now that we have some experience and understanding under our belt, we'd like to propose some clarification," Schmidt told the board, noting that the need for clarity was "just one of those lessons learned."

Substantive modifications to the charter will now be presented to the Governing Body for its advisory input before being submitted to the ISO board — similar to the procedure for ISO market rule changes that also affect the EIM.

"I've read a couple articles where it said that the EIM Governing Body is looking to expand its authority — and it is not," Schmidt told the board.

The measure does make explicit the Governing Body's power to initiate changes to sections of the charter dealing with the EIM's Body of State Regulators and Regional Issues Forum.

ERCOT NEWS

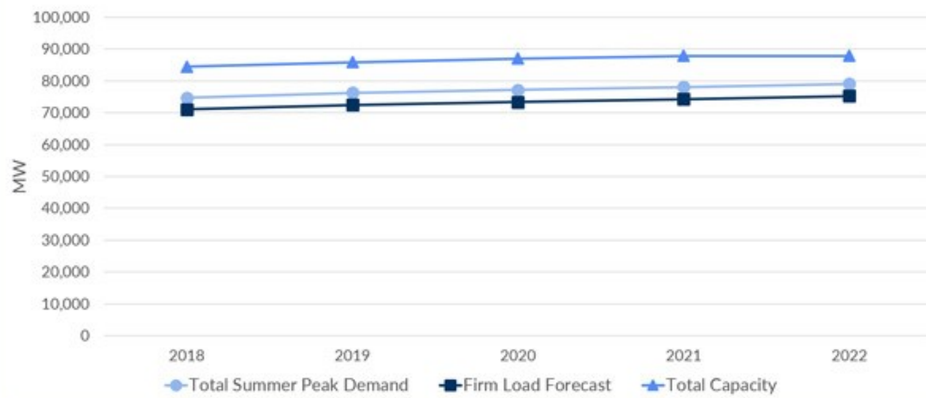
ERCOT Sees Sufficient Generation Through 2022, 73-GW Peak for Summer

By Tom Kleckner

ERCOT said last week it has sufficient capacity to meet demand for the next five years, including a forecast record peak this summer.

The Texas grid operator released its final seasonal assessment of resource adequacy (SARA) report for the summer months (June-September), projecting a peak demand of nearly 73 GW. That would break its current demand record of 71.1 GW, set last August; the ISO's peak demand exceeded 70 GW nine times in 2016.

ERCOT also released its latest capacity, demand and reserves (CDR) report, which shows capacity increasing from almost 84.4 GW in 2018 to 87.9 GW through 2022. That is more than enough energy to meet summer load projections that climb from 71 GW in 2018 to 75.2 GW in 2022.



Summer loads and resources | *ERCOT*

Summer 2017

ERCOT anticipates almost 82 GW of capacity this summer, including nearly 2,500 MW of planned natural gas-fired generation and about 800 MW of wind and grid-scale solar additions.

"We should have adequate resources under extremely high-load or low-wind generation conditions," ERCOT's manager of resource adequacy Pete Warnken said during a conference call May 2. He cautioned that there is "a small risk" of conservation or other measures if an "unlikely combination of adverse system conditions occurs."

The ISO expects "near normal summer conditions" based on the last 14 years, with the "strong potential" for more 100-degree days than the previous two summers.

The ISO's preliminary SARA report for October and November also foresees enough capacity to meet demand, forecast at about 56 GW. The final fall report will be released in September.

ERCOT will likely be without the services South Texas Electric Cooperative's three gas-fired units southwest of San Antonio, with a combined capacity of 61 MW. The co-op filed a suspension-of-operations notice with the ISO, saying it plans to decommission and retire the units in August.

Planning Reserve Margin Above 16%

The CDR report indicates ERCOT's planning reserve margins will be above 16% for the next five years, with the margin exceeding 18% in four of those years, according to the report. The 2018 summer planning reserve margin of 18.9% is slightly lower than the December CDR report, following adjustments made for planned generation additions.

Warren Lasher, the ISO's senior director of system planning, said ERCOT has received more than 75 generator interconnection requests each of the last two years, though not all projects will get built. The ISO's target planning reserve margin is 13.75%.

More than 10 GW of planned resources, with anticipated summer peak capacity of almost 5,500 MW, are expected to be in commercial operation by summer 2018, including nearly 1,800 MW of new wind and grid-scale solar generation resources (summer capacity 437 MW) added since the December CDR.

Texas PUC Agrees to Take up SPP, SPS Request on ROFR

By Tom Kleckner

The Public Utility Commission of Texas last week agreed to take up SPP and Southwestern Public Service's joint request to determine whether Texas law includes a right of first refusal that overrides FERC Order 1000.

SPP and SPS filed a petition in February asking the commission to consider whether the RTO can designate entities other than the incumbent utility to construct and own regionally funded transmission facilities in Texas outside the ERCOT service area. (See *SPS, SPP Ask Texas to Rule on Transmission Competition*.)

The commissioners briefly debated sending the matter to the State Office of Administrative Hearings, which manages contested cases and conducts hearings for other state agencies, before agreeing to hear the case instead.

"I think this issue is squarely in front of the commission," PUC Chair Donna Nelson said. "I think the commission needs to weigh in on this issue, and I think this is the appropriate venue to decide that."

Commissioner Ken Anderson agreed, saying the docket (46901) is "going to be a pure question of law."

Anderson also proposed suspending the procedural schedule and setting a revised timetable for filing briefs and replies. Staff is also preparing a preliminary order.

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MISO-SPP Briefs

IPSAC Approves Interregional Project

SPP stakeholders last week unanimously approved what could be the first MISO-SPP interregional transmission project, but hurdles still remain.

The Interregional Planning Stakeholder Advisory Committee's May 3 endorsement of the 115-kV project in South Dakota matches a thumbs-up from MISO's Planning Advisory Committee. (See *MISO Stakeholders Give Go-Ahead on SD Interregional Project*.) That leaves only approval from the SPP-MISO Joint Planning Committee — composed of representatives from the two RTOs — followed by an IPSAC review of a final report before the project can enter the regional review process.

The $5.2 million project would relieve congestion on a tie line shared by the Western Area Power Administration in SPP's footprint and Xcel Energy in MISO. The project loops a Split Rock-Lawrence 115-kV circuit into Sioux Falls to relieve congestion on the Lawrence-Sioux Falls 115-kV line.

The project was the only one of seven proposals to survive a coordinated system plan study conducted by the RTOs last year. Some of the projects failed to pass muster because of a $5 million threshold for interregional projects, a metric both RTOs are open to changing. (See *1 Project Recommended for MISO-SPP Coordinated Plan*.)

Much of the cost (81.48%) for the South Dakota line shifted to MISO with the recent approval of projects in its generator interconnection queue. The project has a 20-year benefit-to-cost ratio of 4.42.

Adam Bell, SPP's interregional coordinator, told the IPSAC that the project's cost estimate is study-level, and that a few specific outstanding details could change the final figure.

Several stakeholders raised concerns that the economic project may not address reliability issues, but Bell assured them the regional review would be "very much stakeholder-driven."

"We used the most up-to-date power-flow models we had," Bell said. "We ran it in every season and year and didn't detect any reliability concerns."

Bell also expects the final regional review to be ready for board-level action in October.

MISO, SPP Agree to M2M Improvements

SPP and MISO have reached an agreement on improvements to the market-to-market coordination process across their seam, David Kelley, SPP's director of interregional relations, told the Seams Steering Committee last week.

Pending executive signoff, a memorandum of understanding will document the agreement, which Kelley stressed is not a "wholesale redesign."

The RTOs' M2M process is modeled after a similar process between MISO and PJM, and is designed to economically relieve congestion and align border prices. Under the current model, which began in March 2015, MISO has paid almost $20 million to SPP for creating congestion on the other side of the seam.

"Almost immediately, we noticed there were some issues we needed to deal with," Kelley said. "Price convergence should be a result of effective market-to-market. You do market-to-market because the other market potentially has generation it can dispatch at a lower cost than the monitoring market."

The MOU will target "ineffective real-time congestion management" on some of the 135 permanent M2M flowgates between the two RTOs, errors in settlement data calculations and difficulties in finding a common interpretation of certain sections of the interregional coordination process of the RTOs' joint operating agreement.

SPP and MISO staff have developed an alternate M2M procedure in which the monitoring RTO relies on "market flow control" (redispatching generation within its footprint to a targeted level of market flow) rather than "total flow control" redispatching generation within its footprint to maintain total flow on the flowgate) to help address volatility and "power swings" on certain flowgates. The process is limited to instances where M2M "does not resolve, or even aggravates, reliability concerns."

Kelley said the monitoring RTO's control of a flowgate's total flow works best when it has the predominant flow.

Continued on page 30

FERC Greenlights MISO Cost Allocation for SPP Settlement

FERC has approved MISO's uncontested settlement for allocating costs among its members for the use of SPP's grid.

The settlement covers the costs for transmission flows between MISO Midwest and MISO South in excess of 1,000 MW. It is based on an agreement the RTOs struck in early 2016.

The May 2 letter order accepts MISO's proposal to allocate costs using a declining percentage through a load ratio calculation and an increasing amount through a flow-based benefits methodology (ER14-1736). (See "Cost Allocation Set in MISO-SPP Settlement," *MISO Market Subcommittee Briefs*.) The allocation will be used from Feb. 1, 2016, to Jan. 31, 2021:

- Feb. 1, 2016 to Jan. 31, 2017: 45% load-based / 55% flow-based;
- Feb. 1, 2017 to Jan. 31, 2018: 40% load-based / 60% flow-based;
- Feb. 1, 2018 to Jan. 31, 2019: 27.5% load-based / 72.5% flow-based;
- Feb. 1, 2019 to Jan. 31, 2020: 17.5% load-based / 82.5% flow-based; and
- Feb. 1, 2020 to Jan. 31, 2021: 10% load-based / 90% flow-based.

While waiting on the order, MISO collected payments to SPP using a market ratio share method, and that status quo will stay in place for the funds collected from Jan. 29, 2014, to Jan. 31, 2016. MISO pays SPP $1.3 million per month, subject to true-up. Staff say MISO will begin resettling amounts collected after Jan. 31, 2016, once the allocation method was approved.

MISO filed the settlement package on Aug. 31, and a FERC administrative law judge certified it in October.

— Amanda Durish Cook

PJM NEWS

Operating Committee Briefs

BAAL Improves, but Remains Short of Target

VALLEY FORGE, Pa. — Even as PJM moves into a heavy outage season, its balancing authority area control error limit (BAAL) remains lower than usual, PJM's Ken Seiler said at last week's Operating Committee meeting.

PJM's excursion minutes dropped to 177 in April, from 257 in March and 224 in April 2016. PJM posted a 99.6% BAAL score for April, improving 0.1 percentage point from a year ago and 0.2 percentage points from March. (See "Inconsistent Weather Contributes to Operational Inaccuracies," *PJM Operating Committee Briefs*.)

Seiler said generators beyond PJM's control but that tied into the RTO's grid are still overgenerating, which is unbalancing the system. The excursions are mostly happening in "the valley period" between 1 and 3:30 a.m., he said, during light-load conditions when generation is mostly baseload units and wind turbines. He said PJM is working with neighboring grid operators to identify the causes of the issues, beyond large temperature swings.


Seiler

"Our actual numbers are very good, actually," Seiler said. "But when we look outside, we're starting to see some excursions outside that are starting to have more of an impact on us."

With new transient-shortage pricing set to go into effect on May 11, PJM's Chris Pilong said system operators are being trained in how to best maintain lowest-cost generation, but that operations will largely remain the same.

"It's an awareness issue," Pilong said. "We need operators to understand these changes, which they do. They're prepared for them."

Calpine's David "Scarp" Scarpignato, who raised the issue, said he agrees with the way PJM is handling the transition.

PJM Considering Compensation in Frequency Response Study

Stakeholders endorsed by acclimation PJM's plan to address FERC's recent Notice of Proposed Rulemaking on frequency response. PJM's problem statement and issue charge suggest that the RTO might consider compensating units for maintaining primary frequency response, even though the NOPR is silent on the topic. (See "Stakeholders Push Back on Paying for Frequency Response," *PJM Markets and Reliability and Members Committees Briefs*.)

John Farber of the Delaware Public Service Commission acknowledged it might be "reaching for belt and suspenders," but he requested that the compensation issue be separated into another phase of the study from the main discussion.

This was received coolly by both stakeholders and PJM staff. "I think separating it too much may complicate the solution space that we come up with," PJM Vice President of Operations Mike Bryson said. "I think separating it too much may predetermine the solution probably more than we're willing to."

— Rory D. Sweeney

MIC Briefs

Energy Efficiency Proposal Sparks Debate over State Jurisdiction, Stakeholder Identification

PJM's proposed problem statement and issue charge on whether states can control energy-efficiency participation in the capacity market drew heated debate on two issues — one expected and the other not — at last week's Market Implementation Committee meeting.

Because of the ongoing debate, a vote on endorsing the proposal was delayed until next month with one objection and one abstention.

The proposal was developed in response to a current proceeding before the Kentucky Public Service Commission on energy-efficiency requirements, said Denise Foster, PJM's vice president of state and member services. PJM's rules on load-modifying resources offering into the market, such as demand response, don't address whether energy efficiency should be treated the same as DR, so the RTO is considering how and whether to add it.


Foster

However, PJM is specifically limiting the scope to avoid discussing whether state jurisdiction factors into the discussion, despite stakeholder suggestions to include it. The issue charge would establish requirements for energy efficiency entering the market, rules around those requirements and how to handle energy-efficiency resources that have already cleared past capacity auctions.

Tom Rutigliano, representing Electric Market Connection, expressed concern that the proposal would ostensibly grant state regulators new power to restrict energy efficiency participation in wholesale markets. He pointed to the Supreme Court case *EPSA v. FERC* as confirming that FERC has jurisdiction over retail customer participation in wholesale markets. "We appreciate that Kentucky may have claims, but we feel at this point, it's not really appropriate to put PJM and its stakeholders in the position of deciding if those jurisdictional claims are correct or not," he said. "This is really not at this point a stakeholder issue."

His concerns were echoed by Rick Drom, an attorney with Eckert Seamans Cherin & Mellott, who offered a presentation titled "A Flawed Solution Seeking a Problem." He said any discussion on PJM deferring to state regulatory authorities is premature and that the proposal risks balkanization of the energy market.

Drom's arguments, however, were overshadowed by his unwillingness to name whom he represented at the meeting. He said his client, whom he said is one of the largest energy efficiency providers in the PJM footprint and operates in Kentucky, fears reprisal from opponents. Drom said he met with senior PJM staff to explain the

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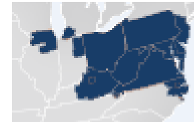
PJM News



PC/TEAC Briefs

Following PSE&G Complaint, PJM to Discuss Updated CETL Requirements

VALLEY FORGE, Pa. — PJM will discuss its updated capacity emergency transfer limits at next month's meetings of the Market Implementation and Planning committees, staff said at last week's PC meeting. The announcement came just days after Jorge Cardenas, vice president of asset management and centralized services for Public Service Electric and Gas, sent a letter to PJM's Board of Managers voicing concern about the CETL values calculated for PJM's eastern region.

Cardenas said the values were overstated, exposing PSE&G customers "to the risk of failing to meet the applicable generation adequacy standard under which PJM plans its system." CETL values represent the amount of power that can be reliably imported to a locational deliverability area to meet its loss-of-load-expectation threshold. They also impact the Base Residual Auction, which begins tomorrow, so the RTO published the updated values on April 13.

PJM's Mark Sims said the RTO has received substantial feedback on the CETL calculation methodology since the original numbers were posted in February, so the discussions will explain the RTO's assumptions and how to "memorialize" them for future use.

Steve Herling, PJM vice president of planning, noted that some stakeholders have suggested using "slightly different" CETL values in the BRA versus the Regional Transmission Expansion Plan, which is why the RTO plans to discuss it at both the MIC and PC next month. He said he "expects" PSE&G's concerns will be covered during the discussion.

John Farber of the Delaware Public Service Commission noted that PSE&G's letter is substantially redacted and hard to understand.

"I think the philosophical elements need to be discussed regardless," Herling said. "Some of the details that were redacted I don't know will be necessary to everyone's understanding of the issues."

PSE&G's letter suggests that PJM made "invalid assumptions regarding the operation of the controllable lines between PJM and NYISO," specifically the phase angle regulators on the J/K lines at the Waldwick substation and the 5018 line at Ramapo. PSE&G said PJM's assumption is "unreasonable" because it would prevent fulfillment of the RTO's supply obligation to Rockland Electric on the 5018 line, which is part of PJM's joint operating agreement with NYISO, and because the PARs must be changed individually. Since it would require adjusting PARs on the Waldwick, Ramapo, Goethals and Farragut lines, it couldn't happen fast enough to address emergency situations, PSE&G said.

The letter also points out that the values assume NYISO will be able to produce certain results on its system, but that assumption might be unwarranted because the ISO will likely also be experiencing any weather-related emergencies that cause PJM to implement emergency actions.

Competitive Planning Process Manual Won't Address Cost Containment

For PJM to codify its competitive planning processes in time for an upcoming RTEP window, as it hopes to accomplish with its proposed Manual 14F, the RTO won't have

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MIC Briefs

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situation, and they agreed to let him speak without naming his client.

Bruce Campbell of CPower noted that Eastern Kentucky Power Cooperative is seeking a declaration from the Kentucky PSC that the utility has the authority to "terminate electric service to any energy-efficient resource provider who violates Kentucky law, a commission order, rule or regulation or commission-approved tariff." Drom acknowledged that was part of his client's desire to keep its name hidden.

When Drom refused to identify whom he represented, Calpine's David "Scarp" Scarpignato requested a point of order, citing Manual 34 rules that require speakers to identify whom they represent. Other stakeholders supported the request, noting that it would create a bad precedent.

Drom

Chantal Hendrzak, the chair of the MIC, called a short recess for Drom to explain the situation to Scarp. Scarp maintained his request, which led Hendrzak to acknowledge that PJM would take greater care considering similar requests in the future.

DR Open Registration Under Consideration

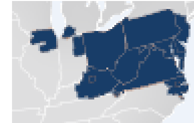
PJM is considering changes to when DR can be registered. Currently, all registration must be completed prior to the beginning of the delivery year, so new customers who wish to enter after June 1 are barred from participating and those who leave can't find new customers to take over their responsibility.

The RTO is offering three options. The first would move the deadline to Dec. 1. The second would have no registration deadline. The third would also have no deadline but would require registered DR to test prior to the delivery year and new registrations to test on the first active day. All three would allow for the daily deficiency penalty to change daily, and the test commitment would change from the daily average during summer period to daily average for delivery year. The third solution, proposed by the Independent Market Monitor, would instead use the peak commitment day for the delivery year.

Stakeholders who don't handle DR asked if there was a strong preference among stakeholders who do regarding which option they supported. Bruce Campbell of CPower said he generally supported the second option. A stakeholder poll produced identical support of 51% for the first and second options and minimal support for the third one. However, there was greater support (69%) for the status quo.

— Rory D. Sweeney

PJM News



PC/TEAC Briefs

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time to address cost-containment provisions that stakeholders have repeatedly brought up. (See PJM Making Cost Consciousness a Focus for RTEP Redesign.)

"The discussion of cost capping is not going to be completed before we are asking for this endorsement of the manual," Herling said. "Obviously, this is going to take a little bit longer. We have engaged two different consultants to help us, and we expect that there will be a lot of input from stakeholders, so for now, the coverage of the cost containment in the manual is going to be somewhat high-level. … We'll amend the manuals as necessary, but we think it's important to have the rest of the structure of the manuals and the process documented."

Herling said PJM is "hoping" to have a two-month RTEP window running in the June-July timeframe.

PJM is holding an initial special session of the PC on cost capping and containment on May 24. It's likely to cover education on types of cost containment that have been used in the industry, along with some financial analysis on how they could potentially be compared, PJM's Sue Glatz said. Further meetings will be scheduled after that, she said.

The results of those discussions will have to be added into the manual later as amendments. PJM's Mike Herman brought the manual for a first read last week and will be seeking endorsements at the PC and the Markets and Reliability Committee next month.

DEDS Task Force Ends at PC

Along with Manual 14F, PJM also hopes to secure approval for three designated entity design standard (DEDS) documents in time for the RTEP window. That process will likely be easier because, as Herman explained, the standards only require PC endorsement to become effective.

That unusual situation created concern for American Municipal Power representatives, who have previously questioned why PJM won't require endorsement at the MRC.

Farber expressed concern about a designated entity agreement he had found filed at FERC that included a 3% rate escalation, which he felt went beyond the standards the Designated Entity Design Standards Task Force was developed to create.

"The designated entity agreement contains all terms and conditions, the requirements and obligations of a party who has been designed to construct a project, not just design standards," Herling explained. "It's far more reaching than that."

The escalation was not *pro forma* and was unique to that specific project, PJM staff confirmed. The financial agreements were included, Herling said, as protection of the agreement.

"Our feeling was that those terms needed to be memorialized somewhere so that they would be to some degree at least enforceable," he said. "People are bidding on a project with some form of cost containment. Obviously, we hope that they will then stand by that and we figured by putting it in an agreement that gets filed at FERC that there would be some teeth in it."

Related to that topic are updates to Manual 14C that PJM is also presenting for endorsement, which focus coordination among entities constructing interconnection facilities. The negotiations could be long and laborious, but it could always be worse: AMP's Ed Tatum asked what happens when the stakeholders can't agree.

"We beat them with a stick," Herling responded.

"But after that, Steve?" Tatum continued.

"We keep beating them with a stick."

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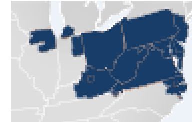
PJM News



PC/TEAC Briefs

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"What are the next steps?"

"It's a bigger stick," Herling said. "We're confident of our ability to find a solution."

Glatz reassured stakeholders that such measures are a last resort. "We have a long track record of coordinating with entities on both the transmission and on the generation interconnection side, and to my knowledge, we haven't actually had to beat anybody with a stick yet."

Tatum thanked them for the explanation and told Glatz he would relay a story about stick beating to her at another time.

"We appreciate you holding that one for later," Herling said.

ISO-NE out of this 'World,' According to PJM Reserve Requirement Study

PJM has released for approval its assumptions for its 2017 reserve requirement study, and one thing PJM staff wanted to make clear is that ISO-NE has been completely removed from its calculations of the "World," which consists of the four external systems with direct ties to PJM: NYISO, MISO, Tennessee Valley Authority and SERC Reliability's VACAR region in Virginia and the Carolinas.

"Last year … we had New England inside of the World," PJM's Patricio Rocha-Garrido said. "Later on, when we ran load model selection analysis, we realized that if we keep New England in the World, then PJM and the World would be peaking on the same week, which was not consistent with what we were seeing from the historical perspective. Based on this, we introduced a change to the World load model, which switched the peaking week of the World load model."

"I hope *RTO Insider* reports that PJM kicked ISO New England out of the World," said Carl Johnson, who represents the PJM Industrial Customer Coalition.

Johnson then asked for PJM to perform a sensitivity study on what the results would be if it continued to use the commercial probability in its study. PJM doesn't plan to adjust the megawatt rating of future generation by the commercial probability, as it has done in the past.

The assumptions will also correct what PJM sees as incorrect accounting in the past of behind-the-meter generation. No longer can BTM owners choose to be capacity resources. PJM's Tom Falin said BTM will be reflected based on how it has impacted the metered load history over the past eight or nine years. That will be specified later this summer when the PC is asked to endorse a historical time period, he said.

"This language is just catching up to our current practice," Falin said. "I would say the original language was wrong."

Ramapo PAR Cost Allocation Forging New Territory

PJM's current cost allocation construct is not applicable to the replacement of the Ramapo PARs because PJM's JOA with NYISO points to the Northeast Protocol for most planning issues, and the protocol is an agreement that includes ISO-NE, PJM's Chuck Liebold told the Transmission Expansion Advisory Committee last week. (See *NYISO, PJM Discuss PARs' Benefits, Cost Allocation*.)

PJM is considering broadening the planning included in the JOA to include transmission facilities eligible for interregional and regional cost allocation. The current process uses an avoided-cost method, but PJM could use a solution-based distribution factor. Several other options are under consideration as well.

— Rory D. Sweeney

SPP NEWS

DC Circuit Questions LS Power Standing in SPP ROFR Case

By Michael Brooks

WASHINGTON — D.C. Circuit Court of Appeals appeared sympathetic to FERC's request to dismiss a challenge to its ruling on SPP's Order 1000 rules, questioning the standing of the plaintiffs.

The court heard oral arguments Friday in a dispute over provisions in SPP's Tariff that recognize state and local right-of-first-refusal laws (15-1157).

LSP Transmission, a subsidiary of independent transmission developer LS Power, sued FERC in June 2015 over three Order 1000 compliance filings submitted by SPP (ER13-366). LSP argued that the commission's acceptance of the state ROFR provisions illegally excludes certain projects from the competitive process that SPP established in response to Order 1000.

Lack of Standing?

While LSP attorney Michael Engleman of Squire Patton Boggs and FERC attorney Holly Cafer were given the chance to argue the merits of LSP's complaints, much of the hour-plus hearing was taken up by Judges David Tatel and Nina Pillard's questions over FERC's argument that the company lacked standing in the case. (Judge Robert Wilkins, who was not present in the courtroom because of a death in his family, listened in by phone.)

Tatel and Pillard seemed sympathetic to FERC's argument that, because LSP had not suffered direct harm as a result of the commission's orders on the compliance filings, it lacked standing to challenge them. Before Engleman could get into the details of his argument during his opening remarks, Tatel interrupted him, asking him to address the standing argument.

Tatel said FERC's orders may be illegal, but they have to cause injury in order for LSP to have standing. He repeatedly asked what sort of relief the court could provide to LSP. Pillard said that LSP might not like the regulatory regime set up under Order 1000, but that that was a separate argument.

Engleman argued that LSP is harmed because it is excluded from bidding on certain competitive projects that SPP determines are subject to an incumbent developer's ROFR under state and local laws. He said the court could provide relief by remanding the orders on compliance back to FERC for review or vacating the commission's acceptance of the provisions in the RTO's Tariff.

Engleman admitted, however, that LSP had not been denied being selected for a project under SPP's competitive process. Cafer agreed with the judges when they asked her if LSP would have standing had it been denied a project, as it then would have suffered direct injury. But she also said the company wouldn't be harmed if SPP determined that a project would not be competitively bid because of a local ROFR law.

"This court has held, in circumstances also involving compliance with a commission rulemaking that reformed transmission planning processes, that the petitioner must 'have an active application for a transmission project' to demonstrate an injury-in-fact for the purpose of constitutional standing," Cafer said in a brief to the court. "LS Power has not made this showing."

Engleman also stopped short of arguing that state ROFR laws are unconstitutional under the dormant Commerce Clause, something that former Chairman Norman Bay alluded to in a concurrence with the commission's acceptance of SPP's second compliance filing.

"State laws that discriminate against interstate commerce — that protect or favor in-state enterprise at the expense of out-of-state competition — may run afoul of the dormant Commerce Clause," Bay said. "The commission's order today does not determine the constitutionality of any particular state right-of-first-refusal law. That determination, if it is made, lies with a different forum, whether state or federal court."

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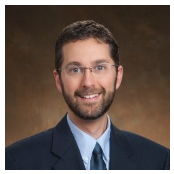
SPP NEWS

SPP Names CAISO's Collins to Lead MMU

By Tom Kleckner

LITTLE ROCK, Ark. — SPP announced last week it has named CAISO's Keith Collins as the new executive director of its Market Monitoring Unit, effective June 1.


Collins

Collins was CAISO's manager of monitoring and reporting and had been with the organization since May 2010. He will replace MMU Director Alan McQueen, who announced his plans to retire last year. McQueen will remain on staff to help Collins through a transition period.

In a statement, Collins said he was excited to work with SPP and its members "on the changing dynamics in the SPP markets. I believe my experiences will bring a unique perspective to these challenges," Collins said in a statement.

When reached by *RTO Insider*, he declined further comment.

Collins will be leading a unit that was recently the subject of a 17-month audit by FERC over concerns the monitors lacked sufficient independence and separation from SPP management and staff. Oversight Chairman Joshua W. Martin III told SPP's Board of Directors last week that the MMU is on track to complete the changes recommended by FERC's audit. (See "MMU Nears Compliance with FERC Audit," *SPP Board of Directors/Members Committee Briefs*.)

In December 2015, SPP fired two monitors who then went public with their concerns about the MMU's lack of independence from the RTO. (See *SPP Squelching MMU Independence, Former Monitors Say*.)

At CAISO, Collins was responsible for identifying behavioral and market-design issues. He led market analysis of energy and ancillary services markets, congestion revenue rights and virtual bids, and led investigations into inappropriate market participant behavior.

Collins came to CAISO from FERC, where he served in the commission's Office of Enforcement and oversaw its Electric Analysis Branch from 2004 to 2010. Prior to that, he was with LECG, an international economics consulting firm that focused on energy economics.

Collins holds a master's degree in public policy from George Mason University and a bachelor's degree in economics and government from Bowdoin College.

The Oversight Committee, which oversees the MMU, voted to select Collins as executive director in April following a nationwide search. SPP said the search firm recommended Collins based on his experience and deep knowledge of wholesale energy markets.

"We had an exceptional pool of candidates, and we're fortunate to welcome Mr. Collins to this role," Martin said in a statement. "He will be a great fit at SPP. He has big shoes to fill but has the experience and expertise to do so successfully."

Martin also thanked McQueen for delaying his retirement "until we found the appropriate

DC Circuit Questions LS Power Standing in SPP ROFR Case

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State vs. Federal

The judges were skeptical that they could vacate FERC's acceptance of SPP's Tariff provisions. They seemed sympathetic to Cafer's argument that "Order 1000 wasn't as expansive as LS Power hoped it would be."

Engleman, in fact, had argued on behalf of FERC before the court in March 2014, with LS Power supporting Order 1000's elimination of federal ROFR policies. (See *Appellate Court Skeptical of Order 1000 Challengers*.)

A three-judge panel including Pillard upheld the order, including against challengers who said that it did not mandate that load-serving entities' input on transmission projects be heeded — an argument to which Pillard had seemed sympathetic.

Cafer said Order 1000 only eliminated federal ROFRs and does not pre-empt state law. Here, however, there seemed to be some skepticism from the judges, especially Pillard, who said if the order did pre-empt state law, it would be redressable by the court.

While federal law pre-empts state law when the two conflict under the Constitution's Supremacy Clause, there are limited circumstances when rulemaking by federal agencies can do so.

Pillard asked Cafer if Order 1000 "effectively" pre-empts state laws — even if FERC didn't intend to — by making the competitive process, with its regional cost sharing, the only choice for utilities. She wondered under what circumstances an incumbent developer would choose recovery through ratepayers over cost allocation to the beneficiaries of the project.

Cafer responded that state laws vary. Some states simply allow a ROFR to projects within a utility's service area; others confine it to existing rights of way.

Engleman, however, argued that FERC has been inconsistent over whether RTOs can exclude projects subject to state ROFRs from the competitive process. He pointed out that FERC had denied SPP's first compliance filing in 2013 but later reversed its position — without Commissioner John Norris — in October 2014 with SPP's second filing. Norris had dissented in a similar, earlier order regarding PJM, saying the commission's recognition of state ROFRs undercut Order 1000's purpose. (See *Order 1000 Reversal: Reality Check or Surrender to Incumbents*.)

If the D.C. Circuit rules in favor of FERC, it is unclear whether LSP would appeal to the Supreme Court: The company lost a similar case regarding state ROFR provisions in MISO's Tariff before the 7th U.S. Circuit Court of Appeals — a case the Supreme Court declined to hear on appeal in March. (See *Supreme Court Refuses to Hear ROFR Challenge*.)

The Supreme Court, however, would be much more likely to hear an appeal if the D.C. Circuit ruled in LSP's favor.

SPP NEWS

Texas PUC Agrees to Take up SPP, SPS Request on ROFR

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"I think the various proposed list of issues for the parties were a bit broad in some areas," Anderson said. "I think the parties would benefit from us not only laying out exactly what the issue is before us but laying out the issues we're not going to decide — one of which is rights under Order 1000 at FERC."

SPS contends that the state's Public Utility Regulatory Act (PURA) allows it, as the incumbent utility operating outside ERCOT, the ROFR to build in the service area prescribed by the PUC. That would prevent a potential competitive project under Order 1000.

From left to right: Commissioners Ken Anderson, Donna Nelson and Brandy Marty Marquez. | © *RTO Insider*

The project in question, the 345-kV Potter-Tolk transmission line in the Texas Panhandle, was pulled from SPP's 10-year planning assessment last month. SPP's Board of Directors has directed staff to conduct a congestion study in the area, due by April 2018. (See *SPP Board Cancels Panhandle Line, Seeks New Congestion Study*.)

PUC staff said the project's deferral meant the joint petition was "no longer ripe for consideration" and recommended dismissing a declaratory order.

SPP and SPS responded with another joint filing May 2, saying the RTO's decision to pull the Potter-Tolk project "has not rendered this action moot."

"Parties still need guidance on an important issue of Texas utility law, and dismissal of this docket would simply transfer the responsibility for providing that guidance from the commission to a federal district court," SPP and SPS said. The commission was more experienced in "construing and implementing" PURA than a court, they said.

SPS filed a lawsuit in a state district court in January, seeking approval to build the project and an injunction prohibiting SPP from issuing a notification-to-construct. The two parties agreed to suspend the proceeding to give the PUC an opportunity to decide how to interpret PURA.

PUC Approves CCN for Entergy Line

The PUC awarded a certificate of convenience and necessity to Entergy Texas (ETI) for a 23-mile, 230-kV transmission line near Beaumont, Texas. ETI was last month able to reach an unopposed agreement with all parties for the project, which is expected to cost $66.8 million (46248).

"This is an example of a transmission line, the process being done very well," Anderson said, noting "what amounts to unanimous agreement from all the landowners."

The commissioners also extended their time before ruling on a rehearing request from Southern Cross Transmission in its effort to build an HVDC transmission line capable of carrying more than 2 GW of electricity from Texas to Southeast markets (Docket 45624).

All three commissioners were unpersuaded by Southern Cross' arguments, but Anderson said he was leaning to grant its rehearing request. He said he plans to file a memo in the docket to "strengthen the order."

A Teary Farewell to Nelson

The meeting was Nelson's last after almost 21 years with the PUC, after announcing in April that she would be stepping aside. Nelson has been on the commission since 2008 and was named chairman in 2011. (See *Texas PUC Chair Nelson Stepping Down*.)

Nelson received several rounds of applause from the room, and she choked up when trying to thank those around her.

"Seriously, I'm just sick. That's why I'm so teary. It's not because I'm sad," she said.

Nelson thanked her fellow commissioners, the PUC staff, the legal counsel that "practices in front of us" and the court reporters in what has become her home away from home.

"The PUC is really my family," she said. "I'm not sure where my future will take me other than a long vacation for several months."

Nelson's official portrait | *Texas PUC*

Ironically, the meeting was Nelson's first since her official portrait was mounted in the hearing room.

Nelson's last day on the PUC will be May 15. Texas Gov. Greg Abbott will nominate her successor, but he has given no indication of a timetable. The state legislature is in its last month, which could be delaying any announcement.

Commissioner Brandy Marty Marquez will fill in for Nelson on SPP's Regional State Committee and any other interactions with the RTO.

SPP NEWS

SPP-MISO Briefs

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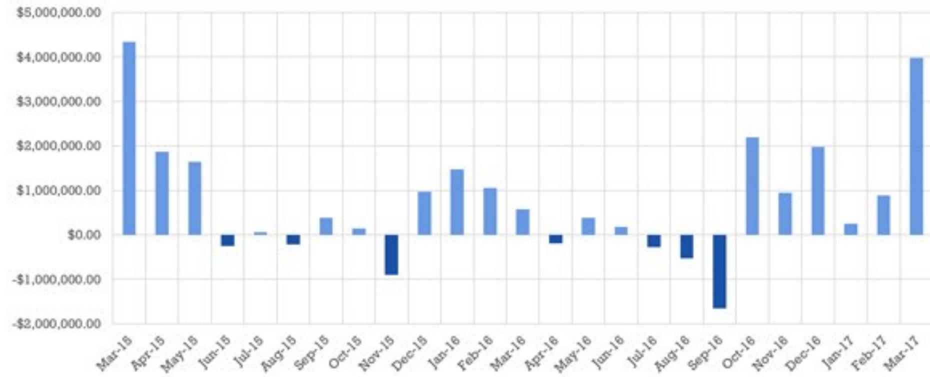
"There are situations where we experience power swings, where a renewable wind resources swings flow on a flowgate back and forth," he said. "One way SPP has found [to mitigate power swings] is market flow control."

Other improvements in the MOU include forming a technical committee to address issues as they arise and following a standardized process for future resettlement requests.



M2M settlements since go-live. Positive values are payments to SPP from MISO; negative values are from SPP to MISO. | *SPP*

SPP, MISO Studying Overlapping Charges on the Seam

SPP and MISO are currently studying a year's worth of data to analyze overlapping charges along their seam. The result, covering the period between the March 2015 open of M2M through February 2016, will be presented at a May 31 JOA meeting.

"The research could help with market-to-market," SPP's Gerardo Ugalde said. "We're doing extensive analysis to ensure the interface picked is the most accurate representation of imports in and out of SPP."

Ugalde told the seams committee that each market should charge for congestion based on the redispatch of their respective generation resources. When a host market dispatches a resource, that resource should get either a charge or a credit based on the flowgate it is affecting.

When the host market pseudo-ties out a resource, the host market will charge or credit for the congestion from the source to the interface, covering any congestion charges to export the power out of the market. The attaining balancing authority will dispatch the resource, and the resource will get either a charge or a credit based on the flowgate it is affecting.

Ugalde said MISO and PJM have proposed a solution in which the attaining market refunds the marginal congestion component (MCC) between the interface and the resource. Under that plan, the host charges the transmission customer from the resource to the host border, the attaining market charges the MCC from the resource to the attaining market load, and the attaining market then rebates the MCC from the resource to the host border.

"If you have a resource, the interface is the border," Ugalde explained. "If you go resource-to-border, and border-to-load, you've minimized the amount of overlap."

March's M2M Bill: $3.98 Million for MISO

SPP recorded its second highest month of M2M payments from MISO, collecting $3.98 million for congested flowgates between the two RTOs in March. The month accounts for slightly more than 20% of the $19.3 million MISO has paid SPP since the two began the M2M process in March 2015.

Most of the March payment ($3.2 million) came from a congested SPP flowgate in southeastern Kansas, caused by high winds and several line outages in the area, including a 345-kV line from Neosho County, Kan., into Oklahoma. The permanent flowgate was binding for 365 hours, representing almost half the 741 hours for all binding temporary and permanent flowgates between the two RTOs.

SPP Director Wins Illinois Volunteerism Award

SPP Director Larry Altenbaumer was honored recently with a Governor's Volunteer Service Award for his community efforts in his hometown of Decatur, Ill. The ceremony took place April 25 at Illinois' Old State Capitol with Gov. Bruce Rauner.

Altenbaumer was honored for his leadership of Grow Decatur, a collaborative growth and development effort transforming the city through improved economic and quality of life. Through the initiative, the community identified 10 areas as imperative to the city's resurgence and has since formed community teams to address the issues.

"I accept this award on behalf of the dozens of other Decatur community volunteers who I have had the privilege of working with over these past several years on the Grow Decatur initiative," he said.

Altenbaumer is vice chair of SPP's Board of Directors, on which he has served since 2005, and chairs the Finance Committee. He retired in 2004 as president of Illinois Power.

— Tom Kleckner

FERC NEWS

Trump Nominates Republicans Powelson, Chatterjee to FERC

By Rich Heidorn Jr.

Acting FERC Chair Cheryl LaFleur (left) and NARUC President Rob Powelson at NARUC's 2017 Winter Meetings. | © *RTO Insider*

President Trump reportedly has nominated Pennsylvania regulator Robert Powelson and Neil Chatterjee, senior energy policy adviser to Senate Majority Leader Mitch McConnell (R-Ky.), to fill two Republican vacancies on FERC.

Powelson and Chatterjee, who will seek terms expiring in 2020 and 2021, respectively, would restore the commission's quorum, which was lost in February with the resignation of former Chairman Norman Bay.

Powelson, a member of the Pennsylvania Public Utility Commission, is the current president of the National Association of Regulatory Utility Commissioners — a familiar stepping stone for FERC commissioners. Both Commissioner Colette Honorable and former Commissioner Tony Clark served one-year terms as NARUC presidents before their appointments.

Honorable announced last month that she will not seek a new term when hers expires in June, meaning Trump will be able to nominate two additional commissioners to join acting Chair Cheryl LaFleur.

Multiple outlets reported the nominations late Monday night. The White House has not officially announced the nominations as of press time. Numerous reports have also identified Kevin McIntyre, co-head of the energy practice at law firm Jones Day, as the third nominee and likely chairman.

Powelson

A fixture at NARUC meetings, Powelson is a big, back-slapping man known for his sense of humor. An avid Philadelphia sports fan, he is certain to engage in good-natured trash-talking with LaFleur, who occasionally wears Boston team jerseys to commission meetings.

He was nominated to the Pennsylvania PUC in 2008 and served as chairman between 2011 and 2015. His current term expires in 2019.

Powelson was elected NARUC president last November after serving as president of the Mid-Atlantic Conference of Regulatory Utilities Commissioners in 2014-15. (See "Powelson Replaces Kavulla as President," *Overheard at NARUC Annual Meeting 2016*.)

He is on the Board of Trustees of Drexel University and previously served as the president of the Chester County Chamber of Business & Industry, in suburban Philadelphia. He joined the Chester County chamber after serving as director of government relations for the neighboring Delaware County Chamber of Commerce and a stint as staff assistant to former Rep. Curt Weldon (R-Pa.).

He became the subject of some controversy in March when he told an industry conference that opponents of pipeline projects are engaged in a "jihad."

He later apologized. "I used the word 'jihad' while characterizing the actions of individuals who have engaged in threatening or disruptive behavior: interrupting public meetings, preventing officials from speaking, harassing federal and state regulators along with their families, and otherwise attempting to halt the public discussion about important infrastructure projects," Powelson wrote in a statement, as reported by State Impact. "In retrospect, that was an inappropriate choice of words."

In 2014, Powelson resigned from the Greater Philadelphia Energy Action Team — a group dedicated to expanding the energy industry in southeastern Pennsylvania — after critics said it put him in a conflict of interest.

He has a bachelor's in political science and government from St. Joseph's University and a Master of Governmental Administration in public finance from the University of Pennsylvania.

Chatterjee

Chatterjee, a former lobbyist for the National Rural Electric Cooperative Association, became McConnell's energy adviser in 2011 after working for two years as a staff aide for the coal state senator.

A November 2015 interview with Bloomberg Government identified Chatterjee as "the McConnell adviser determined to stop the Clean Power Plan."

"Leader McConnell promised to do everything he could to fight for the people of Kentucky, who were concerned about the impact the Clean Power Plan would have on their jobs, bills and way of life," Chatterjee, who said he drives a hybrid car, told Bloomberg. "He is going to continue that fight. It is an honor and a privilege for me to staff him."

Chatterjee told Bloomberg his mentors include C. Boyden Gray, who as counsel to President George H. W. Bush was involved in drafting the 1990 Clean Air Act amendments, the Energy Policy Act of 1992 and a cap-and-trade system for acid rain emissions.

Chatterjee graduated from St. Lawrence University and received a law degree from the University of Cincinnati College of Law. Before joining McConnell's office, he

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FERC NEWS

Trump Nominates Republicans Powelson, Chatterjee to FERC

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worked for the House Republican Policy Conference, former Rep. Deborah Pryce (R-Ohio) and the House Ways and Means Committee.

Reaction

The appointments were warmly received by several industry stakeholders.

"Given the complexity and importance of the issues before the commission, President Trump made phenomenal picks in Commissioner Powelson and Neil Chatterjee," said Christopher Guith, senior vice president at the U.S. Chamber of Commerce's Institute for 21st Century Energy. "From strained competitive markets to crucial energy infrastructure, FERC faces many challenges, and these nominees will help move America toward a more secure energy future."

Attorney Scott Segal, director of the Electric Reliability Coordinating Council, said "it is essential for FERC to regain its quorum, particularly in light of the president's twin objectives in building infrastructure and stimulating gas production and use."

"Neil Chatterjee … has had a front row seat to the development of major energy policy for years. He's smart and keeps an open mind and a friendly attitude even when matters can be contentious," Segal said. "Rob Powelson is a seasoned state regulator from a state that has seen major responsible energy developments like the Marcellus Shale upon which the rest of the nation has relied. His experience as a leader in NARUC has given him a national regulatory vantage point that will be useful in transitioning to the FERC. All in all, two good picks — and just in time."

The American Gas Association called for prompt confirmation. "Having a quorum will allow FERC to continue its important work for the natural gas industry — including timely decisions on pending and future interstate natural gas infrastructure project certificates," CEO Dave McCurdy said.

A coalition of pipeline opponents called for the Senate to reject the nominees.

"While biased FERC commissioners with industry ties is nothing new, Donald Trump's picks, if confirmed by the Senate, would take us to a whole new and dangerous level of conflict and bias. Congress needs to be holding hearings into the abuses of power and law by FERC before they even consider confirming new commissioners, let alone ones who are so blatantly biased and obvious shills for the industry," said Maya van Rossum, the Delaware Riverkeeper.

Tyson Slocum, director of Public Citizen's Energy Program, called for an in-depth review of the nominees.

"FERC may be a little-understood agency, but it is now perhaps the most important federal entity for domestic climate change initiatives, interstate fossil fuel infrastructure siting, and strengthening consumer protection by ensuring that all rates be just and reasonable," he said. "Despite industry pleas to quickly return the commission to quorum, the Senate must accordingly not sacrifice deliberation and diligence for expediency."

Senate Energy Panel Weighs Efforts to Defend Against EMPs

By Wayne Barber

WASHINGTON — Senate witnesses agreed Thursday that the threat posed by electromagnetic pulse attacks is a major concern but differed on the adequacy of public and private efforts to protect the electric grid.

The Senate Energy and Natural Resources Committee heard testimony from six witnesses on EMPs, policy options for protecting energy infrastructure and improving capabilities for restoring the system after an attack.

Chair Lisa Murkowski (R-Alaska) said there is heightened concern over the threat of EMPs — blasts of electromagnetic energy from a nuclear weapon that can disrupt or destroy microprocessors and other electronic devices — because of the potential spread of nuclear weapons to nations such as North Korea and the ubiquity of electronics.

"This has magnified the impact, as compared to the potential impact in the 1960s, that an EMP burst could now have on the electric grid, the technologies that rely on electronics and our daily lives," she said.

The broad discussion also veered into risks associated with cyberattacks as well as naturally occurring geomagnetic disturbances (GMDs).

Bleak Picture

The bleakest pictures were painted by former House Speaker Newt Gingrich and Ambassador Henry F. Cooper, a Ph.D. engineer and former director of the Defense Department's Strategic Defense Initiative.

Cooper said that most federal and state efforts to safeguard the electric system against low-probability, high-risk attacks have been "grossly inadequate." He said the U.S. government has not devoted enough attention to EMP attacks that are "known to be included in the doctrine and planning of Russia, China, North Korea and Iran."

Because no defense is perfect, Cooper said more effort should be made to "harden" critical infrastructure against "the full complement of threats."

Gingrich said that while North America has done an excellent job of developing an efficient electric grid, this efficiency makes it inherently "fragile."

A widespread grid failure that lasts a long time could be more damaging than the terror attacks of Sept. 11, 2001, Gingrich said. The former congressman, who wrote about the threat in a 2011 book, "To Save America," alluded to the possibility of hospitals having patients die for lack of clean water and other services.

"Here we are gambling with our civilization," Gingrich said. He also cited NASA research that he said suggests Earth could be overdue for a major solar storm that could disrupt much of the grid.

Government is on the Case

While the domestic electric grid is a "complex ecosystem" where disruptions can cascade, much work has been done to safeguard the power system, said Caitlin Durkovich of strategic consulting and advisory firm Toffler Associates.

"There is no doubt we live in a dangerous world," said Durkovich, the Department of Homeland Security's assistant secretary for infrastructure protection under President Barack Obama. "The bottom line is the risk to digital and physical infrastructure has grown and our critical infrastructure is more vulnerable than it was a few decades ago," Durkovich said.

"I want to be clear: We have not ignored the threat of an EMP," Durkovich told the committee.

Sen. Jim Risch (R-Idaho) also defended the government's efforts to protect the grid. "These issues have not been ignored by the United States," Risch said.

But many of the defense efforts are not something that can be discussed in public sessions, Risch said. At the same time, "there is not enough money in the world to protect us 100%," he added.

FERC, EPRI Recap Ongoing Efforts

Acting FERC Chair Cheryl LaFleur offered a rundown of FERC's and NERC's efforts to protect against grid disruptions.

The subject of EMP and GMD events have been the topic of "significant scientific research and debate, as well as broad discussion among regulators, elected officials, industry and other stakeholders," LaFleur said.

In 2014, FERC directed NERC to develop a reliability standard that addresses physical security threats. (See *FERC Nixes Gov't Veto Power from NERC Physical Security Standard*.) Last September, FERC approved a NERC

Chair Lisa Murkowski talks with former House Speaker Newt Gingrich. | © *RTO Insider*

reliability standard requiring grid operators to assess and protect against the threat of geomagnetic disturbances. (See *FERC Approves GMD Reliability Standard*.)

"As noted above, the GMD and physical security standards help provide protection against particular aspects of the EMP threat," LaFleur said. "However, FERC has not directed NERC to develop a standard specifically targeting EMP. To be clear, I believe this is the result of reasoned consideration of the issue."

Robin Manning, the Electric Power Research Institute's vice president for transmission and distribution, briefed the Senate panel on his organization's research on GMDs, EMPs and "high-altitude EMP" (HEMP) events.

"EPRI has been researching GMD for many years, with significant applications now implemented across the electric industry," Manning said. "Implications and solutions for EMP and HEMP are less understood. Much of the available information is not specifically applied to electric utilities, making it very difficult for utilities and regulators to understand effective options for protecting energy infrastructure," Manning said.

Lincoln Electric System CEO Kevin Wailes, co-chair of the Electricity Subsector Coordinating Council, testified on behalf of the American Public Power Association.

Wailes said he is skeptical of suggestions in some quarters that the power sector "fully gold plate" the entire grid so it could "theoretically, at least partially survive a high altitude nuclear event." There is no consensus on what measures should be taken or how effective or costly they might prove, Wailes said.

Watts Bar 2 Off Until Summer; Concerns over Safety Culture Persist at TVA Plant

By Wayne Barber

Watts Bar nuclear plant | *TVA*

The Tennessee Valley Authority's Watts Bar 2 nuclear unit, which went offline in March because of an equipment problem, is expected to remain down until sometime this summer, according to CEO Bill Johnson.

The 1,100-MW reactor, the nation's newest, had begun operation in October 2016. It has been out of service since March 23 following a structural failure in the unit's condenser, a three-story-high heat exchanger.

Because of the tight space inside the condenser, "the logistics of doing this work are quite tricky," Johnson said during a May 2 conference call on the federally owned utility's financial results. He said he could not be more specific about the return-to-service date.

Unit 2 was more than half complete when construction on both units was stopped in the 1980s in part because of a projected decrease in power demand. Unit 1 was completed in the 1990s, but TVA didn't revive plans for finishing Unit 2 until about a decade ago.

In response to a question, Johnson said that TVA has been working for more than a year to address concerns raised by the Nuclear Regulatory Commission and the corporation's inspector general about the safety culture at Watts Bar. The commission cited a "chilled work environment" in a March 2016 report.

Inspector General Richard Moore said last month that he remained unconvinced that "TVA corrective actions will bring about sustainable change." Three-quarters of workers in a survey conducted last year for Moore's office expressed reservations about raising safety concerns because of fear of retaliation from plant managers. Johnson says TVA has taken more than 100 corrective steps, many since the survey was done.

Awaiting Board Members

TVA is waiting for the Trump administration to make more nominations to the authority's board of directors, Johnson noted during the conference call. The board has nine seats, but only six are filled, and two members will see their terms expire later this month. Johnson said it is possible that the two current directors could remain on board until the end of the congressional session or until successors are put in place. TVA would continue to operate without a board quorum, although it couldn't undertake new projects, he said.

Clean Line Project

When asked by a reporter, Johnson declined to go into detail on TVA's view of purchasing wind energy from Clean Line Energy Partners' Plains & Eastern Clean Line project.

Johnson said that both Clean Line and in-house projects must "meet the same test" on whether a project can provide the lowest-cost price for TVA customers. "There are a lot of moving parts to it" beyond the price that Clean Line has quoted, Johnson said. Although TVA is seeing a decline in power demand, it is continuing to study the Clean Line proposal, he said.

On another matter, Johnson said that the Tennessee Valley region has experienced drought-like conditions in recent months. The situation has depressed hydroelectric output at a time when natural gas prices have been increasing, he said.

TVA reported net income of $313 million for the first half of fiscal year 2017, $32 million more than for the same period last year. (TVA operates on a federal fiscal year.) Sales in the second quarter of fiscal year 2017 were down by about 7% compared to the same period in 2016, driven mainly by milder winter weather.

Johnson said that TVA's workforce has shrunk from roughly 13,000 employees two years ago to about 10,500 now. In addition to normal attrition, TVA has also used some buyout packages to trim payroll.

Q1 Earnings Roundup

OGE Anticipates Legislative Review of Oklahoma Regulators

CenterPoint Weighing Enable Midstream Options

By Tom Kleckner

OGE Energy hopes that a proposed legislative review of the Oklahoma Corporation Commission will relieve some of the company's frustration regarding the regulator.

The state Senate in April unanimously approved a bill to create an executive-level task force to examine the OCC's structure, mission, budget and staffing. OGE has complained recently about commission delays in approving rate cases, forcing the state's utilities to implement interim rates that often have to be refunded following final regulatory approval.

The legislation still faces a final vote in the House of Representatives before it can be sent to Gov. Mary Fallin for her signature.

OGE is "fully supportive" of the bill, CEO Sean Trauschke told financial analysts during a May 4 first-quarter earnings call.

"It is not intended to undermine the OCC, but it's a legislative effort to make it work better," he said. "I am confident Oklahoma's regulations will improve, but it won't happen overnight."

Trauschke said this would be the first full review of the OCC since its creation in 1970. The task force would consider whether commissioners should be appointed rather than elected, and whether to increase the commission's seats from the current three.

"Are they funded properly? Are they regulating the right industries?" he said, noting the OCC currently oversees oil and the electric, gas and telecommunications utilities. "I do think the legislation will really address the efficiency and speed in which things are completed."

As currently written into the bill, the seven-member review group would be led by Oklahoma's secretary of energy and environment and include two legislative members, the state treasurer, attorney general and an appointee from the OCC. The task force would file a final report by September 2018.

Trauschke deferred several questions on Enable Midstream, its gas gathering and processing joint venture with Texas' CenterPoint Energy, to its majority partner. CenterPoint has been looking to sell or spin off its 55.4% share of the venture, in which OGE holds a 25.7% limited-partnership interest in addition to its 50% management interest in Enable's general partnership.

Enable on May 3 reported a first-quarter profit of $120 million, up from $86 million in the first quarter of 2016. Revenue increased to $666 million from $509 million a year ago.

Better margins at Enable and lower depreciation expenses at Oklahoma Gas & Electric boosted OGE's profits for the first quarter. The company had net income of $36 million ($0.18/share), compared to $25.2 million ($0.13/share) in the first quarter of 2016.

OG&E contributed earnings of 8 cents/share, up from 3 cents/share the year previous, and Enable pitched in with 10 cents/share, compared to 9 cents/share a year ago.

Wall Street reacted by driving OGE's shares down 66 cents from Wednesday's close of

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Con Edison Q1 Earnings Up 2.3%

By Michael Kuser

Consolidated Edison on Thursday reported first-quarter revenues up broadly across its operations, with results reflecting regulatory charges, changes in rate plans and weather's impact on steam revenues.

The company's $3.23 billion in revenue for the period represented a 2.3% increase over the $3.16 billion recorded in the first quarter of 2016.

According to its earnings presentation, Con Ed's electric distribution business earned $1.93 billion in the quarter, up 1.2% from $1.9 billion in the same period a year ago. The natural gas segment's earnings jumped 27.5% to $862 million, and steam revenues — the unit mostly serving Manhattan skyscrapers — climbed 15.5% to $298 million.

Related Developments

The New York Public Service Commission in March issued an order that changes the way distributed energy resources are compensated, which affects the holding company's two regulated utility subsidiaries, Consolidated Edison Company of New York (CECONY) and Orange & Rockland Utilities. (See *NYPSC Adopts 'Value Stack' Rate Structure for DER*.)

According to the company's most recent filing with the U.S. Securities and Exchange Commission, to provide a gradual transition from net energy metering, the PSC allowed "all existing resources to keep their current rate treatment and will delay making significant changes to policies affecting new residential and small commercial rooftop solar until 2020. Larger installations, including new commercial and industrial projects and new community solar projects, will be paid for the value of their exports to the electricity distribution system."

The New Jersey Board of Public Utilities in February approved a stipulation of settlement for a Rockland Electric rate plan commencing in March 2017, which provides for "an electric rate increase of $1.7 million, reflecting a return on common equity of 9.6% and a common equity ratio of 49.7%."

Con Ed reported its Clean Energy Businesses subsidiary had 1,133 MW of renewable energy projects in service and 398 MW under construction at the end of the quarter. Regarding Con Ed Transmission, FERC in March issued a revised schedule for the Mountain Valley Pipeline, setting June 23, 2017, for completion of the environmental impact statement and Sept. 21 as the 90-day federal authorization decision deadline.

Q1 EARNINGS ROUNDUP

PG&E Affirms Strategy to Help California Meet Environmental Goals

By Robert Mullin

Despite President Trump's moves to dismantle his predecessor's climate change policies, Pacific Gas and Electric isn't having second thoughts about its strategy of capitalizing on California's greenhouse gas reduction goals, the utility's new chief executive said.

"We believe that, regardless of what happens at the federal level, California will continue to lead the way in transitioning to a clean energy economy and we are absolutely committed to remaining a key partner in the state's efforts," PG&E CEO Geisha Williams said during a May 2 call to discuss quarterly earnings.

PG&E earned $576 million ($1.13/share) during the first quarter of this year, compared with $107 million ($0.22/share) during the same period a year ago, when the utility recorded $381 million in expenses related to the September 2015 Butte Fire. The blaze was sparked after a tree came into contact with a company-owned power line.

Operating revenues for the quarter were up 7.4% to $4.27 billion on a 43% increase in natural gas sales, just under a third of which was attributable to booking out-of-period revenues stemming from a 2016 decision by the California Public Utilities Commission related to the previous under-collection of gas transmission fees. PG&E's electricity sales were down 2% from a year earlier to $3.07 billion.

Williams said that California's transition to a cleaner economy would require state regulators to enact measures that "ensure a fair allocation" of electric supply costs to investor-owned utility customers that choose to depart for the state's growing number of community choice aggregators (CCAs) and direct access energy providers.

Last month, the state's three IOUs — which also include Southern California Edison and San Diego Gas & Electric — recently filed a proposal with the PUC seeking changes in how the utilities' costs for legacy energy contracts are allocated among existing and departing customers. That plan is intended replace the current power charge indifference adjustment (PCIA) with a new system the utilities have dubbed the portfolio allocation methodology (PAM). (See Utility Proposal Would Increase Legacy Costs for California CCAs.)

"As California continues to engage in discussions on the 'utility of the future,' we view this as a foundational step for the continued growth of CCAs or other choices that our customers may have in the future," Williams said, noting that the state's CCAs also agree about the need to reform the PCIA.

PG&E has also kicked off a $130 million pilot to build the infrastructure to support 7,500 electric vehicle charging stations over the next three years. The utility's service area currently contains about 5,000 charging stations, a number that's expected to reach 150,000 by 2025.

The company earlier this month filed an additional request to spend $250 million to support the charging of medium- and heavy-duty vehicles, such as transit buses.

Williams couldn't provide a definitive answer to an analyst question about whether PG&E would enter the competitive space of retail charging in addition to participating in the regulated side of providing the supporting infrastructure.

The utility is in a "great position to put in the make-ready" for the charging stations that will facilitate the adoption of EVs, Williams said.

"Looking beyond a regulatory play, we have to really take a look at the economics and the financing and the whole nine yards to see whether [the retail side] really makes sense for us," she said.

OGE Anticipates Legislative Review of Oklahoma Regulators

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$34.62 to $33.96 in after-hours trading Friday.

CenterPoint Says Wait on Enable Update

CenterPoint is still on track to provide an update on its Enable ownership stake in August, when it will report second-quarter earnings, CEO Scott Prochazka told analysts during a May 5 call.

"We have talked about the list of options being a sale, a spin or keep," Prochazka said. "And even under the keep situation, we continue to work on things that would reduce the variability associated with our ownership of Enable."

The Houston-based company said Enable contributed 10 cents/share in the first quarter, compared to 9 cents/share the year prior. Prochazka said daily volumes of gas gathered, processed and transported were all up from the previous year, and noted the business recently announced a new project in the Texas-Oklahoma Panhandle's Anadarko basin that adds 400 Mcfd of processing capacity.

"We continue to believe Enable is well positioned for success in [its] industry," Prochazka said. "I think it's fair to say … that improvements in the industry and changes that are occurring at Enable are both favorable for us, from an ongoing ownership perspective."

CenterPoint reported earnings of $192 million ($0.44/share) for the first quarter of 2017, as compared to a profit of $154 million ($0.36/share) over the same period last year.

The company has asked for electricity and gas rate hikes to help recoup $480 million spent on transmission infrastructure in 2016 and $16.5 million spent on its natural gas distribution business.

CenterPoint's share price closed at $27.98 on May 4 and dropped to $27.72 shortly after the earnings call the next day, before finishing at $28.05 in after-hours trading.

Q1 EARNINGS ROUNDUP

Eversource Earnings Up, Northern Pass Seen on Schedule

By Michael Kuser

Eversource Energy on Wednesday reported first-quarter earnings of $259.5 million ($0.82/share), up 6.3% from $244.2 million ($0.77/share) in the same period a year ago off increased investment in transmission.

CFO Phil Lembo said in a conference call with analysts Thursday that through March, Eversource has invested more than $146 million in 28 transmission projects comprising the Greater Boston and New Hampshire Solution, with work expected to be completed in 2019. The company also has invested more than $141 million in 27 small projects in Greater Hartford, all of which should be completed by next year.

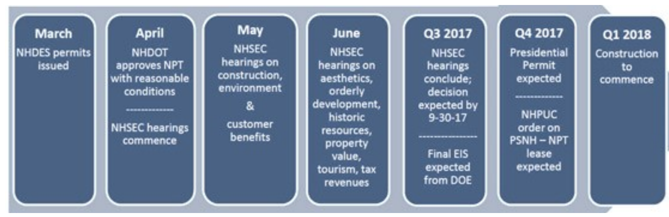
Transmission earnings were up 11% from a year ago to $94.2 million, the company said. Electric distribution and generation earnings improved 5.26% year-on-year to $114.1 million, reflecting higher distribution revenues and lower property tax expense, which were partially offset by higher storm restoration costs and higher depreciation expense. Natural gas distribution contributed 19.6% of earnings with $50.8 million in the first quarter, a negligible decrease from last year.

The company reaffirmed its 2017 earnings-per-share guidance of $3.05 to $3.20 and its projected 5 to 7% long-term EPS growth rate.

Northern Pass Moving Toward 2018 Construction

Together with partner Hydro-Québec, Eversource will bid the Northern Pass transmission project into the request for clean energy proposals in Massachusetts to bring Canadian hydropower into New England. The RFP is for up to 9.45 TWh annually for up to 20 years; bids are due on July 27; and projects will be selected for negotiations by Jan. 25, 2018. Bay State Wind, a 50/50 partnership between Eversource and DONG Energy, also will bid into a separate RFP exclusively for wind projects south of Martha's Vineyard.

The New Hampshire Site Evaluation Committee began hearings on Northern Pass in April. The company expects those to conclude, and the U.S. Department of Energy to have issued a final environmental impact statement, by Sept. 30. The Eversource timeline foresees a presidential permit in the fourth quarter and construction beginning in January 2018.



Northern Pass project timeline | *Eversource*

Regulatory Activity

The Massachusetts Department of Public Utilities in June will begin hearings on the electric rate reviews Eversource filed in January for NSTAR Electric and Western Massachusetts Electric — which include a proposal to combine the two utilities.

"FERC approved that combination earlier this year," Lembo said. "We expect to get a decision on the case around the end of November with new rates effective in January of 2018."

In Connecticut, Eversource joined the Office of Consumer Counsel and the attorney general on April 18 in filing a motion to modify the merger agreement with Connecticut Light and Power that was approved by the Public Utilities Regulatory Authority in 2012. The motion jointly requested that PURA extend the deadline for implementing new rates to July 1, 2018, and it was approved on April 20.

The day of the conference call, PURA approved revised rates for residential and business customers of CL&P and Avangrid's United Illuminating. According to PURA's statement, effective July 1, 2017, Eversource's residential generation rate will increase slightly from 7.87 cents/kWh to 8.01 cents/kWh. UI's residential generation rate will decrease from 9.26 cents/kWh to 7.6 cents/kWh. The new rates will be in effect through the end of 2017.

Return on Equity

Lembo also commented on the D.C. Circuit Court of Appeals' April 18 ruling overturning FERC's 2014 order setting the base return on equity for Central Maine Power and other New England transmission owners at 10.57%. The court said the commission failed to meet its burden of proof in declaring the previous 11.14% rate unjust and unreasonable. (See *Court Rejects FERC ROE Order for New England*.)

"The court decision is still recent, and really, the New England transmission owners as a group need to decide what the next steps will be," said Lembo, adding that the TOs in June need to file a proposed regional network service rate.

"One could say that the last approved ROE by FERC is the 11.14% ... so in the [rate] request, we're looking for a 10.5% ROE in the case, and the total rate increase is about $60 million at NSTAR Electric and about $36 million at Western Mass Electric," he said. Lembo later in the call said that NSTAR at the end of 2016 "was probably a little shy of that number of 10.5% when you do all the calculations for Massachusetts, and Western Mass was closer to 9%, so not at the levels that we were looking for in this case."

Eversource concluded its presentation to analysts by showing how natural gas pipeline projects lack funding or are delayed, trapping gas just west of New England. Pipeline capacity from the west (New York, Pennsylvania and Ontario) is 3 Bcfd, mostly contracted to local distribution companies, while New England LDC load on a cold winter day totals more than 4 Bcfd. Generators must rely on secondary capacity or imported LNG and Canadian offshore supplies to serve their needs, creating price/reliability issues. Meanwhile, offshore natural gas production in Eastern Canada is down more than 50% from its peak and continuing to decline.

Quotes based on the transcript provided by Seeking Alpha.

Q1 EARNINGS ROUNDUP

Exelon Encouraged by Perry's Memo, Thinks ZECs Will Hold Up

By Peter Key

Exelon is encouraged by Energy Secretary Rick Perry's order to study if government regulations and policies are forcing baseload power plants into early retirement and thinks courts will uphold the programs that provide zero-emission credits benefiting its nuclear power plants, executives said during the company's first-quarter earnings call Wednesday.

The executives also said Exelon's bids in PJM's upcoming capacity auctions will reflect the economic needs of its plants, even if that leads to some of its plants not clearing the auction.

Exelon CEO Christopher Crane said Pepco Holdings Inc., which the company acquired a year ago, has only rate cases in D.C. left from its first planned cycle of rate filings under Exelon and has started the second cycle at its Maryland and Atlantic City Electric subsidiaries.

Crane also said Exelon is not concerned that the bankruptcy of Westinghouse, which is one of the suppliers of fuel for its nuclear plants, will impact its ability to get fuel for the plants.

"We continue to competitively bid our reactor fuel suppliers … and we move that around based off of pricing," Crane said.

Exelon's first-quarter results exceeded earnings and revenue estimates. Its adjusted operating earnings of 65 cents/share beat the Zacks consensus estimate of 61 cents but were down from 68 cents the year prior. Its net income was $1.07/share, up from 19 cents/share in 2016. The company's revenue was $8.76 billion, beating the Zacks consensus estimate of $8.48 billion, and up 16.5% from $7.48 billion a year ago.

"We're off to a great start in 2017," Crane said.

Crane and Joseph Dominguez, Exelon's executive vice president of governmental and regulatory affairs and public policy, made positive comments about Perry's recent memo directing department staff to conduct a 60-day inquiry into "the extent to which continued regulatory burdens, as well as mandates and tax and subsidy policies, are responsible for forcing the premature retirement of baseload power plants."

The memo has been interpreted by foes of coal-fired and nuclear power plants as an attempt to find reasons for the department to support both.

Exelon has the nation's largest nuclear generation fleet and its plants have faced pricing pressure from cheap natural gas and the plunging costs of utility-scale solar arrays and wind farms.

"Energy Secretary Perry's recent directive to look at the importance of preserving baseload generation is early but encouraging," Crane said. "We appreciate the secretary's focus to promote needed market reforms to compensate these assets."

Exelon has argued that its nuclear plants need to be compensated for their ability to provide emissions-free power, and New York and Illinois have established zero-emissions credits to do that. The programs have been challenged by other power providers and some environmental groups, although other environmental groups have backed them.

Continued on page 39

NiSource Pegs Q1 Success on Infrastructure Investments

By Amanda Durish Cook

NiSource owes its "strong" first-quarter performance to the success of its infrastructure spending strategy, which the company intends to keep pursuing, according to CEO Joseph Hamrock.

The company earned $211.3 million ($0.65/share) last quarter, compared to $186.6 million ($0.58/share) in the first quarter of 2016. Operating income was $416.5 million, up from $381.4 million a year ago.

NiSource will invest up to $1.7 billion on new utility infrastructure this year and plans to continue spending along those lines for the next few years, company leaders said during a May 3 earnings call.

"We … expect to invest $1.6 billion to $1.8 billion annually in our utility infrastructure programs from 2018 through 2020," Hamrock said. "The program investments are part of our more than $30 billion of identified long-term investment opportunities."

Early this year, the company saw favorable outcomes on multiple rate cases related to gas pipeline investments, including settlement of a base rate case in Virginia and approval of bill surcharges for gas infrastructure programs in Massachusetts and Ohio. The company also filed a base rate case in Maryland, as well as a long-term gas infrastructure replacement plan update in Ohio that would allow for recovery of about $235 million in investments made last year.

In February, NiSource subsidiary Northern Indiana Public Service Co. began recovering about $46 million in costs incurred as part of a seven-year, $1.25 billion electric infrastructure modernization program extending to 2022. NIPSCO's $824 million gas infrastructure modernization program is being completed alongside the electric upgrades.

NIPSCO is also seeking approval to perform $400 million in environmental upgrades at its Michigan City and R.M. Schahfer coal-fired plants in northwestern Indiana to store coal ash and prevent groundwater pollution, despite the planned closure of two Schahfer units by the end of 2023. (See NIPSCO Considers Closing 4 Coal Units in 7 Years.) NIPSCO officials have said that new EPA rules on coal ash contributed to the partial Schahfer closure. The utility filed the request with the Indiana Utility Regulatory Commission in November 2016 and expects a ruling sometime this year.

NiSource officials also said that NIPSCO is on schedule to complete two major transmission projects designed to move wind power into the eastern U.S. Slated to be in service in late 2018, the 100-mile, 345-kV Reynolds-Topeka line in northern Indiana and 65-mile, 765-kV Greentown-Reynolds line north of Indianapolis have combined costs of nearly $600 million.

Q1 Earnings Roundup

WEC Posts Strong Quarter Despite Rate Freeze, Demand Decline

By Amanda Durish Cook

WEC Energy Group turned a larger profit in the first quarter despite warm weather and slumping electricity demand in the company's Midwest markets — coupled with an ongoing rate freeze.

The company reported $356.6 million ($1.12/share) in net income for the first three months of this year, up from $346.2 million ($1.09/share) during the same period in 2016. Revenue increased 5% to $2.3 billion.

However, retail deliveries of electricity for WEC's Wisconsin and Michigan utilities were down 1.1% year-over-year, excluding consumption at iron ore mines in Michigan's Upper Peninsula. Residential use was down 2.1%.

CEO Allen Leverett attributed the extra income to more effective cost controls, better-than-forecasted electric fuel recoveries and the decoupling mechanisms at WEC's Illinois and Minnesota gas utilities — all of which helped to offset the effects of warm weather. Decoupling separates a utility's profits from energy commodity sales, with rates of return adjusted to meet revenue targets.

Leverett said WEC will have to continue to operate tightly over the next two years after its We Energies subsidiary last month filed a settlement with Wisconsin regulators agreeing to freeze all business and residential base rates. Twenty-four of the utility's largest business customers have so far signed on to the agreement, which will hold base rates steady through 2019.

"This will make for a total of four years that base rates will be flat," Leverett said during a May 2 earnings call. "This would essentially give our customers price certainty through 2019 and require us to continue to manage our costs aggressively."

The proposed agreement would extend current earnings-sharing mechanisms in which return on equity is shared equally between customers and shareholders, while earnings above a 10.5% return are given back to customers. That arrangement would be extended through 2019 at Wisconsin Electric and Wisconsin Gas, with a similar two-year mechanism put in place next year at Wisconsin Public Service.

"Settlements are uncommon in Wisconsin, but at this point, I expect the process to move expeditiously," Leverett said, adding that the deal will allow customers with expiring pricing options to avoid a price increase.

WEC's bid for regulatory approval for the construction of two new gas-fired plants in Michigan's Upper Peninsula is also moving as expected, Leverett said. The two plants will serve the newly formed Upper Michigan Energy Resources Corp., a partnership of WEC subsidiaries Wisconsin Electric Power Co. and Wisconsin Public Service. (See Michigan Upper Peninsula Getting its Own Utility.)

The company has obtained all local approvals for the plants and is just awaiting a go-ahead from the Michigan Public Service Commission, which Leverett anticipates will happen.

"As you may recall, our last several major proceedings in Michigan have resulted in settlements which the commission approved. We would welcome a similar outcome in this case," he said.

WEC will also invest about $300 million to modernize the Peoples Gas distribution system in the Chicago area. Leverett said that program is continuing as planned, even while the company awaits a review decision from the Illinois Commerce Commission that should come later this year.

Exelon Encouraged by Perry's Memo, Thinks ZECs Will Hold Up

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Crane said a New York federal judge heard oral arguments March 29 on Exelon's motion to dismiss a lawsuit challenging ZECs. "We made strong arguments at this hearing and believe the law is clearly on our side," Crane said. (See Federal Suit Challenges NY Nuclear Subsidies.)

The judge has not said when he would rule on the motion, Crane said, and that if Exelon prevails, it expects its opponents to appeal the judge's decision. If it doesn't prevail, he said, it will proceed with the case.

In Illinois, two groups of plaintiffs have challenged the ZECs in federal court. The cases have been combined before one judge, who has delayed action on a motion for a preliminary injunction against the ZECs while he receives a full briefing on Exelon's motion to dismiss the cases. (See IPPs File Challenge to Illinois Nuclear Subsidies.)

Crane said the briefing will be completed by May 15 and the judge is scheduled to let the parties know his intention concerning the cases on May 22.

Exelon began recognizing ZEC revenues in New York on April 1, Crane said. In Illinois, he said, it has filed tariffs to begin collecting the ZEC payments on June 1 but doesn't expect the actual procurement process to conclude until fall.

The earnings call came the day after the conclusion of a two-day technical conference at which independent power producers asked FERC to take action to prevent the ZECs from undermining the NYISO and PJM markets. (See related story, *NYISO See Carbon Adder as Way to Link ZECs to Markets.* p.1.)

Crane said he expects clearing prices in the upcoming PJM capacity auction to "come down to bidding behavior."

"You have seen us bid our assets in recent auctions to reflect the underlying economic needs of the individual plants, which in turn has led to some of our plants not clear[ing]. You should expect us to bid our assets in the same responsible fashion in this next upcoming auction."

Exelon expects a ruling on Pepco's D.C. rate case in July, CFO Jonathan Thayer said. It expects rulings in the Maryland and Atlantic City Electric cases in the fourth quarter of 2017 and the first quarter of 2018, respectively, Thayer said.

Q1 EARNINGS ROUNDUP

Generation Woes Drive down NRG Q1 Earnings

By Michael Kuser

NRG Energy posted sharp losses in the first quarter on lower hedge margins and declining capacity revenues in the eastern U.S., signaling that 2017 is turning out to be a predicted "trough year," CEO Mauricio Gutierrez said.

The company lost $203 million ($0.52/share) during the quarter, compared with net income of $47 million ($0.24/share) for the first three months of 2016.

"The roll-off of higher-priced hedges that were executed after the polar vortex of 2014, lower capacity revenues in the East and a few known one-time items accounted for almost 75% of the total decrease," Gutierrez told analysts during a May 2 earnings call.

NRG management last quarter established a special committee to make recommendations to the company's board on its stated initiatives, especially regarding refinancing of debt for subsidiary wholesale electricity provider GenOn Energy, which the company last year said might be forced to file for Chapter 11 bankruptcy protection.

ERCOT Most Promising, Needs Better Price Signals

Market fundamentals make ERCOT the most attractive market for NRG, but management said it wants to see improved price signals before making more capital expenditures there. With future reserve margins in the high teens, the company is focusing on how increased loads, fewer new builds and more retirements can quickly tighten the market and create scarcity conditions in Texas.

"ERCOT has historically understated the actual number of megawatts leaving the system. … Looking forward, we see the same anemic estimate for retirements in the reports, assuming only 840 MW between 2017 and 2022," Gutierrez said.

NRG last month announced that it will mothball Greens Bayou 5, taking 371 MW out of the ERCOT system.

"And we believe that there are close to 5 to 6 GW of already identified generation at risk today in the market," Gutierrez said.

East Challenges Margins

Low natural gas prices and new efficient generation in the East continue to challenge NRG margins, although PJM this month will implement its first 100% Capacity Performance auction, helping the company maintain a positive outlook on capacity markets.

The higher reliability requirement under this new construct will be problematic for megawatts that cleared in previous auctions as base capacity, including less reliable generation and demand response.

"These resources will have to make a decision between taking themselves out of the market or pricing in a higher reliability premium," NRG said.

The company is concerned about recent actions by various states that it thinks could undermine the integrity of competitive markets.

"Out-of-market subsidies and contracts bestowed pricing that was needed to attract new capital investment, but often [by] raising prices for the end users," Gutierrez said. "We and a number of other parties have filed legal challenges to the nuclear subsidies in both New York and Illinois because we believe they're not legal and because regulators should focus on crafting competitive solutions for public-policy objectives."

Other first-quarter highlights included the transfer of 311 MW of utility-scale solar to subsidiary NRG Yield for $130 million. The company also offered NRG Yield its remaining 25% interest in NRG Wind TE Holdco, an 814-MW portfolio of 12 wind facilities.

NRG also started construction on the 600-MW Carlsbad Energy Center in Southern California, which it expects to complete on deadline in the fourth quarter of 2018.

COMPANY BRIEFS

Ameren Plans 1-MW Solar Array at Airport

Ameren Missouri is planning to build a 1-MW solar facility west of the airfield at St. Louis International Airport as part of its Community Solar Program.

If approved by regulators, the array would allow customers to purchase 100-kWh blocks of capacity, capped at half their average electric usage for the past 12 months. Prices have not been determined for the 1,200 blocks that are available.

Construction could begin as early as spring 2018, a company spokesman said.

More: *St. Louis Business Journal*

Westar, Great Plains Ask KCC to Reconsider Acquisition

Westar Energy and Great Plains Energy announced Thursday they are asking Kansas regulators to reconsider their rejection of Great Plains' proposed $12.2 billion acquisition of Westar.

The Kansas Corporation Commission rejected the deal last month, saying the price was too high and the combined utility would be financially weaker than the separate companies. The companies maintain the deal would create nearly $2 billion in operating efficiencies over the next decade to keep electric rates under control.

The utilities want until May 31 to determine

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whether they can revise the transaction to address the regulators' concerns.

More: The Associated Press; Reuters

Dominion Plans to Buy 79-MW Solar Facility in NC

Dominion plans to purchase a 79-MW solar energy facility presently under construction in Anson County, N.C., from Cypress Creek Renewables.

Dominion has agreed to acquire the facility, which has a power purchase agreement in place, upon its expected completion in the second quarter of 2017.

The company has 535 MW of solar generating capacity under development or in operation in North Carolina and Virginia.

More: Dominion

TransCanada to Sell Interest in Iroquois, Portland Pipelines

TransCanada announced it plans to sell its 49.3% interest in Iroquois Gas Transmission System and its 11.8% interest in Portland Natural Gas Transmission System to its master limited partnership TC PipeLines for $765 million.

The deal, which is expected to close mid-year, will consist of $597 million in cash and the assumption of $168 million in proportionate debt at Iroquois and Portland, TransCanada said.

TransCanada sold a 49.9% stake in Portland to TC in January 2016.

More: Oil and Gas Investor

Southern Co. Needs $3.7B from Toshiba to Finish Nuclear Plant

Southern Co. CEO Thomas Fanning said the company needs $3.7 billion from Westinghouse Electric's parent company, Toshiba, to complete the Vogtle nuclear plant in the wake of Westinghouse's bankruptcy filing.

Fanning said even if Toshiba agrees to pay the money, Southern Co. is still undecided as to whether it would finish building the plant.

He said the decision would be based upon ongoing negotiations with Toshiba and an assessment as to the amount of time and money required for completion.

More: Seeking Alpha; The Street

PECO Asking FERC for $21.7M Tx Charge Increase

PECO Energy is asking FERC to approve a $21.7 million increase in its transmission charge, saying it needs the higher rate to maintain the grid.

The system has been carrying less power because of energy efficiency and load shifting to off-peak hours.

The increase would boost PECO's revenue by 12.4% to $196.8 million. It would cost a typical residential customer 29 cents/month, a small business customer about $1.78/month and a large industrial customer about $76/month.

More: The Philadelphia Inquirer

MidAmerican Aiming For 100% Renewables

MidAmerican Energy is investing $3.6 billion in wind power with a goal of producing 100% of its energy from renewable sources.

The utility, which is Iowa's largest, has 2,000 turbines in the state and plans to build 1,000 more.

More: The Associated Press

Mississippi Power Delays Kemper Again, Adds $38M to Cost

Mississippi Power is again pushing back completion for its $7.3 billion Kemper power plant, this time by another month to May 31 at an additional cost of $38 million.

The plant is more than three years behind schedule and more than $4 billion over budget.

The subsidiary of Southern Co. said it can't reliably run parts of the plant, including units that turn lignite coal into gas.

More: The Associated Press; SunHerald

FEDERAL BRIEFS

EPA Removes Half of Its Scientific Board

EPA has dismissed half of its 18-member Board of Scientific Counselors, which provides advice to the agency.

A spokesman for EPA Administrator Scott Pruitt said the positions — usually filled by members drawn from academia, environmental groups, industry and local government — are likely to go to representatives from polluting industries the agency is supposed to monitor, in an effort "to take as inclusive an approach to regulation as possible."

"Anecdotally, based on what we know about the administrator, I think it will be science that will appear to be friendlier to industry, the fossil fuel industry, the chemical industry and I think it will be science that marginalizes climate change science," said Robert Richardson, an ecological economist at Michigan State University who was dismissed from his board position.

More: The Washington Post; The Huffington Post

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Federal Briefs

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Bipartisan Bill Aims for Climate Change Solutions

A bipartisan bill that would establish a commission charged with finding economically viable solutions for climate change was introduced in the House of Representatives for a second time.

The Climate Solutions Commission Act, which is cosponsored by six representatives from each side of the aisle, would set up a commission to explore what can be done in both the private and public sectors to reduce greenhouse gas emissions while growing the economy and protecting jobs. Additionally, it would direct the Government Accountability Office to report on the financial tools, policies and institutions that can help reduce emissions while protecting economic growth.

The bill failed to pass in 2016.

More: *InsideClimate News*

Pruitt Recuses Himself on EPA Suits He Previously Pursued


Pruitt

Citing ethical considerations, EPA Administrator Scott Pruitt announced he will recuse himself from cases involving the agency that he participated in during his prior role as Oklahoma attorney general.

Pruitt was one of the most active state officials to sue EPA, including challenges to the Obama administration's Clean Power Plan and a controversial rule related to the Clean Water Act.

In a May 4 memorandum, obtained by E&E News, Pruitt said he was required to take a "one-year cooling off period" on issues concerning his former employers and clients.

More: *The New York Times*

Groups Sue over Move to Rewrite Water Pollution Rules

About a dozen environmental and public health groups filed a lawsuit Wednesday against EPA challenging Administrator Scott Pruitt's decision last month seeking to rewrite the 2015 water pollution regulations.

The regulations would have required utilities to reduce toxic heavy metals in the wastewater piped from their plants into rivers and lakes often used as sources of drinking water.

Waterkeepers, Earthjustice, the Sierra Club, Clean Water Action and the Environmental Integrity Project are among the groups that filed suit in the D.C. Circuit Court of Appeals.

More: *The Associated Press*

Democratic Governors Urge Trump to Stay in Paris

Democratic governors from a dozen states sent a letter to President Trump last week urging him to stay in the Paris Agreement.

Citing conditions including rising sea levels, flooding, drought, snowpack decreases, forest fires and air pollution, the governors said states "stand to bear the brunt of these climate change impacts and the economic costs running in the tens of billions of dollars or more."

The signatories include governors from New York, California, Colorado, Connecticut, Delaware, Hawaii, Minnesota, Oregon, Pennsylvania, Rhode Island, Virginia and Washington.

More: *Route Fifty*

Pruitt: Coal Necessary to Ensure Reliability of Electric Grid

EPA Administrator Scott Pruitt said Wednesday coal is necessary to ensure reliability of the electric grid in an age of cybersecurity concerns.

"What would happen if we had an attack on our infrastructure when you've diverted to natural gas almost exclusively and you don't have coal there as a safeguard to preserve the grid?" he asked while speaking on Fox Business' "Varney & Co."

Pruitt also came out in favor of fuel diversity.

More: *The Hill*

EU Officials Try to Persuade Trump To Stay in Paris Agreement

EU officials are reaching out on multiple levels in an effort to persuade President Trump to remain in the Paris Agreement after White House advisers reportedly warned of legal consequences if the U.S. stays in but lowers its commitment to carbon cuts.


Canete

EU Climate Commissioner Miguel Arias Canete, who has telephoned the Trump administration, said "there is room for the new U.S. administration to chart its own path."

EU lawyers who have studied the deal say it does not prohibit a participant from seeking to reduce its commitments, an EU source said.

More: *Reuters*

NRC: Worker Error Responsible for Nuclear Reactor Shutdown in 2015

A Hope Creek generating station worker prompted the plant's nuclear reactor to shut down in 2015 when he deliberately attempted to correct an error made while performing tests, the U.S. Nuclear Regulatory Commission has found.

The now-former employee entered data into a wrong area and, rather than following procedure and informing management, tried to go back and fix it. The plant's safety systems sensed something was amiss and the water recirculation pumps turned off, which triggered the reactor to shut down, NRC spokesman Neil Sheehan said. The plant was shut down for four days.

Sheehan said PSEG Nuclear, which operates the reactor, will not be fined, citing its investigation that uncovered the employee's actions and its prompt reporting of its findings to the commission. He said the commission will be closely following up to ensure the utility adopts procedures to prevent a similar incident from happening again.

More: *NJ.com*

Trump Selects Renewable Foe to Lead Renewable Office

President Trump has appointed conservative scholar Daniel Simmons, who has come out against renewable energy and curbs on

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greenhouse gas emissions, to oversee the Energy Department's Office of Energy Efficiency and Renewable Energy.

Simmons, a member of Trump's transition team, served as vice president for policy at the Institute for Energy Research prior to the election. IER is a conservative think tank that supports fossil fuel use and opposes the Paris Agreement.

At an energy forum last year, Simmons came out against federal subsidies for renewable energy.

More: *The Washington Post*

Suit Seeks Info About Harassment Of DOE Climate Workers

A nonprofit watchdog organization has filed suit against the Department of Energy seeking information about harassment by the Trump administration of federal employees working on climate change issues.

United to Protect Democracy said it went to court after the department ignored its request for documents under the Freedom of Information Act.

In December, the department distributed a 74-question poll to its workers with questions that appeared to be attempts to identify those who worked on climate change projects.

More: *The Huffington Post*

AWEA Report: Wind Industry Q1 Best in 8 Years

The first quarter of 2017 was the best first quarter in eight years for the U.S. wind industry, according to a report released by the American Wind Energy Association.

The industry installed 908 utility-scale turbines worth 2,000 MW, which is more megawatts than the first three quarters of 2016 combined, AWEA CEO Tom Kiernan said.

Demand remained strong, with 1,781 MW signed in power purchase agreements, the "U.S. Wind Industry First Quarter 2017 Market Report" says. That marks the most in a first quarter since 2013.

More: *American Wind Energy Association*

Bipartisan Group Using Ads to Lobby Trump on Climate Change

A bipartisan group that advocates for a carbon tax is hoping to reach President Trump and members of Congress with a series of ads on cable news calling for action on climate change.

Partnership for Responsible Growth hopes to run ads year-round to combat the deluge of fossil fuel advertising in the D.C. area, said George Frampton, the group's leader. Frampton is a longtime conservationist and lawyer who was a key environmental aide in the Clinton administration.

"It matters what people see every day, and policymakers are surrounded with the message that we can continue with business as usual. That's simply false, and it's dangerous," he said.

More: *InsideClimate News*

Democrats Blast DOE Grid Study as Biased


Cantwell

A group of Democrats who sit on the Senate Energy and Natural Resources Committee blasted the Energy Department's ongoing study on grid reliability as favoring coal and nuclear sources.

"The study, as you have framed it, appears to be intended to blame wind and solar power for the financial difficulties facing coal and nuclear electric generators and to suggest that renewable energy resources threaten the reliability of the grid," the group, led by Sen. Maria Cantwell (D-Wash.), wrote to Energy Secretary Rick Perry.

Travis Fisher, a veteran of the pro-fossil-fuel Institute for Energy Research, is leading the review Perry ordered on April 14. The study's purpose is to determine whether renewables are pushing baseload power sources, such as coal and nuclear, out of the market and whether baseload sources should be allowed to charge more money for their reliability.

More: *The Hill*

STATE BRIEFS

IOWA

Work Begins to Cap Coal Ash Ponds in Cedar Rapids

Alliant Energy has begun capping four coal-ash ponds tied to a former power plant built more than 100 years ago in Cedar Rapids, with work being done close to a downtown area.

The company estimates capping the ponds associated with the Sixth Street Generating Station, which was torn down in 2014 after it was destroyed by a 2008 flood, will cost $3.5 million and will be completed in October. The plant was the largest generating station west of the Mississippi River when it was built, and the ponds were in place before I-380 came through and the city filled in, Alliant spokesman Justin Foss said.

Alliant cleared its closure plans with the state Department of Natural Resources even though it wasn't obligated to because the plant closed before new federal rules for coal ash ponds, said Jill Stevens, manager of decommissioning.

More: *The Gazette*

LOUISIANA

Bill Aims to Help Solar Customers Who Lost out on Tax Credit

A bill that would help more than 1,000 solar customers who lost out on a refundable tax credit when the State Legislature retroactively capped it has cleared a legislative committee and is heading to the full House for consideration.

If approved, House Bill 187 would allow anyone who installed solar power before

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the cap went into effect to receive the state's 50% credit, even if they did so after a $10 million limit was hit. Solar power systems purchased on or after June 30, 2016, are not eligible for the credit.

Customers typically purchased $25,000 solar panel systems and received $7,500 in federal tax credits for 2016. They were supposed to get 50% rebates from the state, or $12,500 back in cash, to bring their total out-of-pocket expense down to $5,000.

More: The Times-Picayune; 4WWL

MAINE

Sponsor Wants to Kill Bill that Regulates Fracking

The sponsor of a bill to regulate fracking has asked members of the Legislature's Environment and Natural Resources Committee to kill the bill because it's inconsistent with his original intent and the state already regulates such activities.

Rep. John Martin (D) said he originally hoped to ban fracking after seeing on TV a story about potential efforts to use fracking in neighboring New Brunswick, Canada. However, the final version of L.D. 1453 instead would have directed the state Department of Environmental Protection to adopt rules regulating the practice to protect drinking water.

Melanie Loyzim, deputy commissioner at the DEP, testified that the state already prohibits most types of injection wells required for fracking. Those not prohibited must prove the substances they use would not pollute groundwater to receive a license. The state's Geological Survey director testified the state doesn't have the geology that fracking targets.

More: Portland Press Herald

Conservation Group Appeals PUC's Reduction of Solar Incentives

The Conservation Law Foundation filed a notice that it will appeal a January decision by regulators to reduce residential solar incentives. The appeal comes while the Legislature plans to hear testimony on a bill designed to overturn the measure and restore previous financial inducements.

Under the Public Utilities Commission's new rule, homeowners with solar panels installed by Dec. 31, 2017, will receive compensation for power they add to the electric grid at the current, full-retail rate for 15 years. However, those who install panels over the next decade will see the credit gradually decline.

The PUC said it tried to match financial incentives with the expected pace of falling equipment prices and that the return on investment for homeowners should not be affected. The foundation argues the commission's rollback is unsupported by facts and based on "selective analysis of only certain evidence."

More: Portland Press Herald

NEVADA

Idaho Power Wants to Retire Coal-Fired Plant 10 Years Early

Idaho Power wants to close the coal-fired North Valmy Generating Station, which it co-owns with NV Energy, 10 years ahead of schedule, according to filings it made with state regulators Wednesday. The plant is the state's last utility-owned coal plant.

Under the proposed settlement agreement, Unit 1 would close in 2019, and Unit 2 would close in 2025. Presently, the units are slated to close in 2031 and 2035, respectively.

The plant, which remains idle most of the year, operates primarily to meet peak energy demand during the summer.

More: The Associated Press; Idaho Statesman

NORTH CAROLINA

Duke Seeking to Pass Along Coal Ash Cleanup Costs

Duke Energy is moving forward to bill ratepayers for some of its coal ash cleanup costs by striking cost-sharing deals with several dozen communities that buy their electricity wholesale for distribution on community-owned power lines.

Over the past several months, Duke has filed numerous petitions with FERC seeking approval of the agreements, which would affect at least 40 towns and cities. In June, the company plans to ask the Utilities Commission to pass along similar costs to retail customers, who are served by company-owned lines.

At issue in the community deals, and the upcoming state review, is how much of the coal ash expenses Duke should pay because of its own wrongdoing. Duke has admitted misconduct resulting in a massive coal ash spill three years ago at the retired Dan River Steam Station. The company subsequently pleaded guilty in federal court to criminal violations of the Clean Water Act linked to coal ash handling at the Eden plant and at four other plants in the state.

More: Winston-Salem-Journal

NORTH DAKOTA

Governor Asks Trump for $38M for Pipeline Protest Costs

Gov. Doug Burgum is asking President Trump for $38 million to reimburse the state for law enforcement costs related to about six months of protests over construction of the Dakota Access pipeline.

In an email sent to Trump on Saturday, the governor asked for a presidential disaster declaration to make federal aid possible.

The state's two senators, Democrat Heidi Heitkamp and Republican John Hoeven, have said a $1 trillion spending bill that Congress is considering includes money for a Justice Department program that could help with the bills. However, the program would likely only cover a small amount of the state's expenses.

More: The Associated Press

PENNSYLVANIA

PUC Dismisses Smart-Meter Case Following Complainant's Death

State regulators Thursday dismissed a case by a Philadelphia smart-meter opponent without resolving her underlying claim that her meter's electromagnetic pulses made her sick and, therefore, violated state law

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requiring utilities to provide “safe and reasonable” service.

The Public Utility Commission dismissed the case of a 59-year-old nurse who claimed she suffered “deleterious health effects” after PECO Energy installed the wireless meter, but that her symptoms went away when she replaced it with an older analog meter.

The nurse died in November from complications related to a fall in her home, and three of the five commissioners voted to dismiss her case for “lack of jurisdiction.” The executor of the nurse’s estate has 45 days to pursue the case but indicated he would not, as other customers are pursuing similar claims.

More: The Philadelphia Inquirer

VIRGINIA

State Politicians Shunning Dominion Cash

Dominion Energy, long the top corporate political donor in the state, is finding itself shunned by many politicians this year.

Stewart

Dominion has given $425,000 to Democrats and $356,000 to Republicans in the past year, but 61 Democratic challengers for House of Delegates seats have refused donations from the company. Democratic gubernatorial candidate Tom Perriello has also rejected donations, while Republican candidate Corey Stewart called Dominion a “horrible corporate citizen.” In addition, former state attorneys general from both parties are challenging Dominion in the state Supreme Court.

Dominion’s woes are because of numerous issues — controversies over coal ash, a pipeline, transmission towers across the James River and a 2015 rate freeze that largely protects Dominion from refunding customers for overpayments — that raised questions about political influence in a state with some of the country’s loosest campaign finance laws.

More: The Washington Post

WEST VIRGINIA

State Officials Predict Energy Sector Uptick Based on Coal, Gas Taxes

State officials predict an energy sector uptick that will stay the course into 2018 after tax collection from coal and natural gas production continued to climb in April, exceeding budget estimates by almost $11 million.

Revenue Secretary Dave Hardy attributed the gain in tax receipts to a 60% increase in natural gas prices from a year ago and a 19% increase in the state’s coal production since Jan. 1.

The 28 million tons of coal mined in the state during the first quarter may translate to a total of about 84 million tons for 2017, Deputy Secretary Mark Mucho said. That’s down from 140 million tons the state produced four or five years ago, he said.

More: The Associated Press