RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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Trump Nominates DOE's McNamee to FERC

'Fuel Wars' Likely in Confirmation Fight

By Rich Heidorn Jr.

President Trump on Wednesday [nominated](#) the Department of Energy's Bernard McNamee to replace former FERC Commissioner Robert Powelson — a pick that could be crucial to the administration's efforts to support at-risk coal and nuclear generation.

Powelson, who left the commission in August to head a trade organization, was a vocal opponent of the Trump administration's bid to provide price supports to coal and nuclear generators. McNamee, a former aide to Sen. Ted Cruz (R-Texas), was among the DOE officials who designed and lobbied on behalf of the plan.

Lobbying for Price Supports

Last November, McNamee joined FERC Chief of Staff Anthony Pugliese to make the case for coal and nuclear price supports at a breakfast meeting of the Consumer Energy Alliance (CEA) on the sidelines of the National Association of Regulatory Utility Commissioners' Annual Meeting in Baltimore. Watchdog group the Energy and Policy Institute has described

FERC Chief of Staff Anthony Pugliese, left, and Bernard McNamee, center, head of DOE's Office of Policy, made the case for coal and nuclear price supports at a breakfast meeting of the Consumer Energy Alliance on the sidelines of the NARUC Annual Meeting in Baltimore in November 2017. Michael Whatley, right, CEA's executive vice president, moderated. | *© RTO Insider*

Continued on page 33

Can Calif. Go All Green Without a Western RTO?

By Hudson Sangree

California may be able to meet its goal of relying entirely on renewable and other zero-carbon electricity sources by 2045, but it's going to be more difficult and more expensive without a wholesale market that includes multiple Western states, advocates of CAISO regionalization contend.

"This is essentially like leaving one of your best tools on the workbench when you're trying to build a very complicated project," said Carl Zichella, western transmission director for the Natural Resources Defense Council, a staunch proponent of a Western RTO. "You may end up with something jury rigged."

Gov. Jerry Brown, CAISO leaders and other

Continued on page 6

Little Common Ground in PJM Capacity Revamp Filings

By Rory D. Sweeney, Amanda Durish Cook and Rich Heidorn Jr.

The first round of filings in FERC's "paper hearing" on revisions to the PJM capacity market showed wide disagreement over the best way to address the impact of out-of-market subsidies on clearing prices.

Much of the debate in the dozens of filings focused on broadening the minimum offer price rule (MOPR) and modifying the fixed resource requirement (FRR), which were the basis of the hearing. But many stakeholders also proposed alternatives.

FERC ordered the hearing June 29 after

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IPCC: Urgent Action Needed to Avoid Climate Trigger

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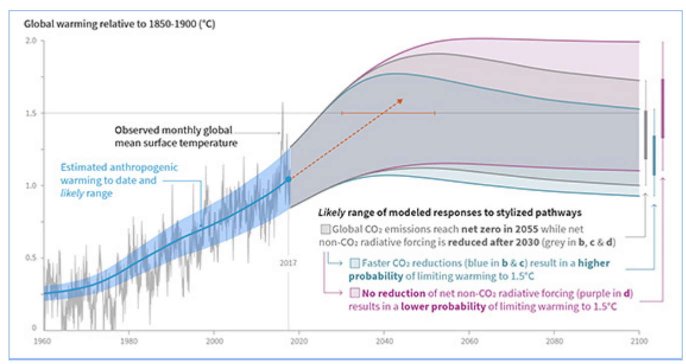

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In this week's issue

Counterflow

By Steve Huntoon

Kavanaugh on FERC: Keg Half Full

In the run-up to the Kavanaugh denouement, our industry was not spared claims of disaster from confirmation.

In our case, the claim was that Judge Brett Kavanaugh had it in for independent regulatory agencies like FERC, and the implication was that he might somehow persuade four other justices to override many decades of Supreme Court precedent upholding the constitutionality of such agencies.

Now, whatever else the merits or lack thereof of Kavanaugh as a Supreme Court justice (and no, I'm not going there, so please put the ricin away),[1] this particular claim is basically wrong.

The claim is grounded in Kavanaugh's opinion in ***PHH Corp. v. Consumer Financial Protection Bureau***, in which a mortgage lender challenged the delegation of executive branch powers to an agency headed by a single person — instead of to a multi member agency.

Some press promoted the notion that this opinion is an existential threat to all independent regulatory agencies. Utility Dive,[2] for example, quotes Joel Eisen, an energy law professor at the University of Richmond, as saying: "In that opinion, he called into question the entire concept of the modern independent regulatory agency, and of course FERC is one such agency." Now, of course, Eisen is entitled to his opinion, but the referenced Kavanaugh opinion, read in its entirety, does not support that sweeping interpretation.

In fact, quite the opposite. The opinion repeatedly stressed the difference between multi tmember agencies and those headed by a single person:

"In other words, to help preserve individual liberty under Article II, the heads of executive agencies are accountable to and checked by the president, and the heads of independent agencies, although not accountable to or checked by the president, are at least accountable to and checked by their fellow commissioners or board members. No head of either an executive agency or an independent agency operates unilaterally without any check on his or her authority. Therefore, no independent agency exercising substantial executive authority has ever been headed by a single person.

"Until now. …

"Because the CFPB is an independent agency headed by a single director and not by a multi member commission, the director of the CFPB possesses more unilateral authority — that is, authority to take action on one's own, subject to no check — than any single commissioner or board member in any other independent agency in the U.S. government. Indeed, as we will explain, the director enjoys more unilateral authority than any other officer in any of the three branches of the U.S. government, other than the president."

Brett Kavanaugh | *D.C. Circuit Court of Appeals*

FERC got an honorable mention as a multi member agency Kavanaugh did not have a problem with:

"Have there been any independent agencies headed by a single person? Prior to oral argument, in an effort to be comprehensive, the court issued an order asking the CFPB for all historical or current examples it could find of independent agencies headed by a single person removable only for cause. The CFPB found only three examples … the three examples are different in kind from the CFPB and other independent agencies such as the FCC, the SEC and FERC" (emphasis added).

Kavanaugh emphasized this distinction, again mentioning FERC, on the second day of his confirmation hearing in response to questions from Sen. Amy Klobuchar (D-Minn.), saying in that opinion "all I was talking about was a single-headed independent agency," and distinguishing that agency from the "SEC, FTC, FERC, NLRB, the Fed" that "are all multi-member agencies."[3]

Over the decades Congress has assigned Executive Branch powers to dozens of independent regulatory agencies.[4] In our ever increasingly complex society we are ever increasingly reliant on these agencies to perform countless governmental functions.

The notion that we could or would ever return to a time when Congress passed highly prescriptive legislation on everything so the Executive Branch would just perform ministerial administration is a joke.

Judge, now Justice, Kavanaugh knows that, and so does every other justice on the Supreme Court.

So FERC, and all of us who rely on and respect you, sleep soundly. The keg is half full. ■

[1] For anyone who does not know where the keg reference comes from, please see one of the funniest SNL sketches with Matt Damon as Kavanaugh here, https://www.youtube.com/watch?v=VRJecfRxbr8. Again, I'm not taking a position on his confirmation, but hysterical is hysterical.

[2] https://www.utilitydive.com/news/kavanaugh-pick-threatens-epa-policies-ferc-authority-lawyers-say/527552/.

[3] https://www.c-span.org/video/?449705-11/supreme-court-nominee-brett-kavanaugh-confirmation-hearing-day-2-part-3&start=850 (video starting about minute 14).

[4] From the opinion: Interstate Commerce Commission (1887), Federal Reserve Board (1913), Federal Trade Commission (1914), U.S. International Trade Commission (1916), Federal Deposit Insurance Corporation (1933), Federal Communications Commission (1934), National Mediation Board (1934), Securities and Exchange Commission (1934), National Labor Relations Board (1935), Federal Maritime Commission (1961), National Transportation Safety Board (1967), National Credit Union Administration (1970), Occupational Safety and Health Review Commission (1970), Postal Regulatory Commission (1970), Consumer Product Safety Commission (1972), Nuclear Regulatory Commission (1974), Federal Energy Regulatory Commission (1977) [somehow ignoring the creation of predecessor Federal Power Commission in 1920 – ouch!], Federal Mine Safety and Health Review Commission (1977), Federal Labor Relations Authority (1978), Merit Systems Protection Board (1978), Defense Nuclear Facilities Safety Board (1988), National Indian Gaming Commission (1988), Chemical Safety and Hazard Investigation Board (1990), Surface Transportation Board (1995), and Independent Payment Advisory Board (2010).

Stakeholder Soapbox

PJM is Doubling Down on the Wrong Solution

By Eric Gimon

Eric Gimon | *Energy Innovation Policy & Technology*

It's easy to love electricity markets. Mathematical algorithms efficiently, safely and transparently dispatch grid resources to match supply and demand. Market signals drive the most valuable grid additions and retirements over time, providing customer savings and a stable investment environment incorporating technology and input cost changes.

PJM has led power market development, embracing rising trends like demand response and grid-scale battery storage. But lately, PJM has doubled down on a "solution" leading down an ever-more complicated and fractious path: its Reliability Pricing Model capacity market.

Electricity power markets are not perfect; critics often cite the "missing money" problem, which contends — with only marginal justification — that price signals balance markets but do not sustain adequate system resources to guarantee supply matches demand. To address this, PJM created a singular "capacity" commodity traded in the RPM, which loads must purchase.

While the RPM has been a boon for some resources, a singular definition of capacity never fairly captures everything the grid needs, and the RPM is open to three criticisms:

- First, it tends to overpay some resources without offering premiums to ones that provide more grid services than just megawatts. Imagine forcing a museum to purchase insurance on its art collection with a flat rate on a Rembrandt or a painting from a local artist.
- Second, with the RPM, PJM is eschewing part of its system optimizer role by requiring individual or self-assembled coalitions of resources to provide capacity products instead of assembling a diverse set of resources to meet reliability needs.
- Third, a conservative organization like PJM naturally tends to forecast higher demand, just in case, effectively forcing customers to buy too much insurance.

Predictably, the RPM has cannibalized energy market revenues in favor of capacity markets and allowed uneconomic legacy coal and nuclear assets to create a large capacity overhang (>30% reserve margin in summer 2018 against a desired ~16%).

Today's power markets are also flawed by not pricing externalities. Seeing nuclear generators, which have provided free emissions mitigation, on the verge of going under, states like Illinois decided to provide direct financial support. These "out-of-market subsidies" (terminology that ignores other existing direct and indirect subsidies) became PJM's new bugbear, which contends state-sponsored resources drive prices "too low."

Last June, PJM wanted to double down on capacity markets by re-engineering them to force some resources to overbid at minimum offer

PJM's reserve margin for 2021 is among the highest in North America and well above its 16.5% target (reference margin level). Anticipated resources include operable capacity able to serve load during the peak hour with firm transmission, capacity that has completed construction or is under construction and transfers with firm contracts. Prospective resources include all anticipated resources, plus capacity that could serve load during the peak hour but lacks firm transmission and could be unavailable and transfers without firm contracts, but a high probability of future implementation. | *NERC*

Stakeholder Soapbox

prices to "mitigate" impacts of state policies, making customers double-pay for capacity instead of allowing markets to re-equilibrate by closing uneconomic resources.

Because of push back from FERC, which wants to allow matched resources and load to opt out of the RPM, PJM is doubling down again, striving to protect existing resources at all costs by proposing a two-stage capacity market called the extended Resource Carve-Out (RCO).

Extended RCO forces certain resources to offer into the capacity market at a higher price than their direct costs if they want to participate, or "allows" those resources to opt out of RPM by offering into the auction at a zero price. After this first stage of the two-stage capacity market, PJM determines which resources clear. In the second stage of the two-stage capacity market, PJM would then carve-out the opt-out resources and rerun the auction with the same demand curve to determine a higher clearing price to be paid to all non-carve-out resources that cleared in the first stage.

This would cause serious — and unnecessary — additional consumer expense.

Furthermore, extended RCO has yet another component: a payment to resources that would have cleared the second auction but not the first (the one that identified the actually needed capacity resources). This proposal extravagantly pays these so-called inframarginal resources even though they neither incur a capacity obligation nor provide capacity to PJM customers.

PJM committed the original sin of getting into capacity markets. (Band-Aid solutions FERC historically expected to wither away.) Over time, these capacity markets cannibalized energy markets, required constant "fixing," and became the last refuge of increasingly uneconomic legacy assets.

When low natural gas prices and states interested in shaping their resource mixes started to fray this safety line, PJM took a protectionist line and started treating states like monopsonist market manipulators. Then, when FERC — unfortunately sympathetic to these protectionist views — tried to offer a fig leaf to states with opt-out, PJM doubled down on its twisted economic logic to make even that unworkable and expensive.

What should PJM do instead? At the very least, it should allow loads and grid resources to sort out capacity needs bilaterally and unfettered if the RPM seems unfair.

But when you're in a hole, stop digging! Instead of doubling down on unworkable capacity constructs, PJM should double down on real markets and seek a new paradigm, working with states, that gets it out of the capacity business altogether. ■

CAISO News

Can Calif. Go All Green Without a Western RTO?

Continued from page 1

promoters of regionalization held the same opinion when they tried to pass AB 813 this year. The bill, which failed, would have started the process of turning the ISO into a multistate entity by creating a governing board independent of the governor and legislature.

Supporters reasoned it would greatly help California achieve a carbon-free grid if in-state generators could more easily sell excess solar power to neighboring states and buy clean energy from states that produce more wind and hydroelectric power.

Solar power in the Mojave Desert, for instance, peaks in the late afternoon when it's often least-needed in California but could be useful in states one time zone to the east — where residents of Arizona, Colorado and Montana are arriving home from work, turning on their TVs and adjusting their thermostats.

Wind from southeastern Wyoming and eastern New Mexico, meanwhile, could provide power after sunset in California, which currently relies on natural gas plants to meet each evening's peak demand.

That was a major reason behind AB 813. The bill stalled in the Senate Rules Committee on the last night of the legislative session Aug. 31. It was the third time in three years that efforts to turn CAISO into an RTO had fizzled. (See *CAISO Expansion Bill Dies In Committee.)*

In contrast, lawmakers passed, and Brown signed, the session's other major piece of energy legislation, SB 100. The new law establishes an ambitious timeline for California to rely

Mojave desert solar arrays are a large part of the state's renewable energy production. | *U.S. Dept. of the Interior*

Wind power in Wyoming could help California meet peak demand, replacing natural gas. | *Bureau of Land Management*

increasingly on renewable and zero-carbon energy sources, with the goal of achieving 100% carbon-free electricity by 2050. Along the way, it requires the state to accelerate its renewable portfolio standard program to approximately 50% by 2026 and 60% by 2030. (See *Calif. Gov. Signs Clean Energy Act Before Climate Summit.)*

That's a daunting challenge. In 2017, California got about a third of its electricity from natural gas-fired plants and more than 40% from hydroelectric, solar, wind and other renewable sources, according to the California Energy Commission. Ending the reliance on natural gas to meet peak demand will be difficult, especially because wind and solar often aren't available during the morning and evening peak periods. (The state's last nuclear generator, Pacific Gas and Electric's Diablo Canyon Power Plant, is scheduled to be retired in 2025.)

Mixed Reaction

For many supporters, the clean-energy and CAISO regionalization bills went hand in hand, with the goals of SB 100 achievable largely through a Western RTO.

"Right now, management of the Western grid that powers our homes and businesses is severely fragmented, with 38 separate [balancing] authorities managing electricity generation and flows over 14 states, two Canadian provinces and northern Mexico," Zichella wrote in an *NRDC opinion piece*. "This makes it harder and more expensive to add renewable energy generation here and elsewhere in the region, because each time the electrons flow through one of the authorities, a new charge is added."

Without regionalization, California will have to access other states' electricity through bilateral contracts and pancaked transmission access charges, Zichella said in an interview with RTO Insider. "It'd drive the cost up dramatically not having them in the wholesale market where the lowest cost [power] is dispatched first," he said.

CAISO News

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	California Energy Mix (GWh)	California Power Mix
Coal	302	0.15%	409	11,364	12,075	4.13%
Large Hydro	36,920	17.89%	4,531	1,536	42,987	14.72%
Natural Gas	89,564	43.40%	46	8,705	98,315	33.67%
Nuclear	17,925	8.69%	0	8,594	26,519	9.08%
Oil	33	0.02%	0	0	33	0.01%
Other (Petroleum Coke/Waste Heat)	409	0.20%	0	0	409	0.14%
Renewables	61,183	29.65%	12,502	10,999	84,684	29.00%
Biomass	5,827	2.82%	1,015	32	6,874	2.35%
Geothermal	11,745	5.69%	23	937	12,705	4.35%
Small Hydro	6,413	3.11%	1,449	5	7,867	2.70%
Solar	24,331	11.79%	0	5,465	29,796	10.20%
Wind	12,867	6.24%	10,015	4,560	27,442	9.40%
Unspecified Sources of Power	N/A	N/A	22,385	4,632	27,017	9.25%
Total	206,336	100.00%	39,873	45,830	292,039	100.00%

Natural gas and renewables each make up about a third of California's energy mix. | *California Energy Commission*

Other interest groups supported SB 100 but not AB 813. They feared partnering with the coal-burning states of the Interior West could undermine California's clean energy push. (Today, California has only one small coal-fired power plant and imports just a tiny percentage of its energy from out-of-state coal-burning generators, according to the U.S. Energy Information Administration.)

The Sierra Club, for example, hailed the passage of SB 100.

"It's impossible to overstate how significant it is for a state as large and influential as California to commit to 100% clean energy," the group's executive director, Michael Brune, said in a Sept. 10 statement.

But the Sierra Club opposed creating a Western RTO, saying CAISO regionalization could result in "resource shuffling."

"That is, it might actually encourage certain coal-heavy power companies to extend the life of their plants in one part of the West and shift the renewable energy to California," the group said in *a message opposing AB 813*. "All that extended and increased use of fossil fuel plants to accommodate the ability of California's 'excess' renewable energy to flow east and the Interior West's supply to flow to California can add up to more localized air pollution, especially for communities already struggling with dirty air, and more greenhouse gas pollution."

California can and should go it alone, those who opposed AB 813 but supported SB 100 argued.

"Rather than removing California authority over CAISO and eliminating a board appointed by the governor and subject to Senate confirmation, the legislature should direct CAISO to explore other measures that serve the goal of optimizing system operations, reducing GHG emissions, and addressing concerns about overgeneration and curtailment," read *a joint statement* to the State Legislature by Sierra Club California, The Utility Reform Network, the State Building and Construction Trades Council of California and other labor unions.

Among the coalition's proposals was expanding the Energy Imbalance Market to include additional Western utilities and allow day-ahead scheduling. It said an expanded EIM would significantly reduce curtailments of renewable resources in California while allowing states to retain control over grid reliability, resource planning and transmission investment.

Steven Greenlee, a senior spokesman for CAISO, said the EIM helps avoid curtailment by selling renewable power on the real-time market and could do even more if day-ahead bidding is allowed. CAISO has a day-ahead market-enhancement initiative in the works, he noted.

"That's going to help, but it's still not quite as good as having a full-blown regional transmission market," he said.

"It does appear possible to meet the 100% goal," he added, "but the cost and challenge of doing so without a robust regional coordination effort will be significantly increased."

Some relatively simple methods could help reduce the state's reliance on natural gas in accord with SB 100, he said. Such methods might include time-of-use rates to encourage consumers to use solar power when it's most plentiful and demand response programs to alert consumers to change their energy use in response to peaks and troughs in electrical demand.

No Silver Bullets

Storage also could be a major piece of a solution, especially with improvements in cost and efficiency, Greenlee noted.

"Energy storage is going to be a game changer … [especially] if all of a sudden we see it go dirt cheap, and it's just everywhere," he said.

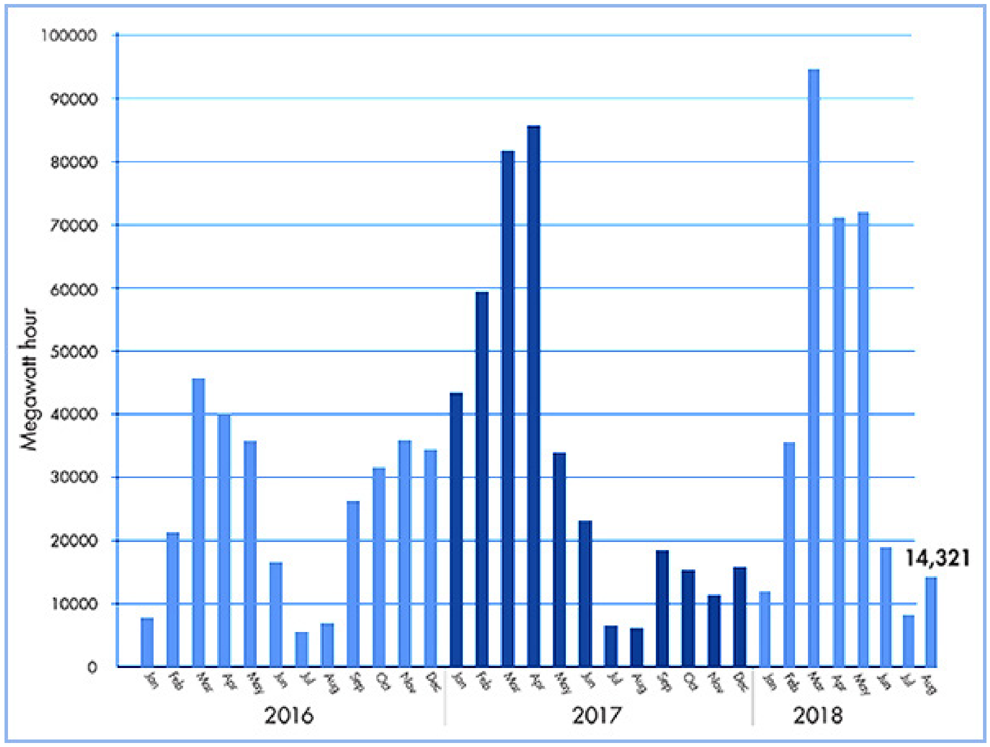
In February, FERC issued Order 841, requiring RTOs and ISOs to revise their tariffs to allow energy storage resources full market access and to ensure storage resources are eligible to provide all energy, capacity or ancillary services of which they are capable, while also enabling them to set clearing prices as buyers and sellers. Grid operators will also need to establish a minimum threshold for participation that doesn't exceed 100 kW. (See *FERC Rules to Boost Storage Role in Markets.)*

Then in September, Brown signed *SB 700*, which will provide an additional $800 million in incentives over the next five years for consumers to purchase behind-the-meter storage systems.

Batteries, which have been limited in their ability to store and disperse energy, are improving thanks to companies such as electric carmaker Tesla, which also manufacturers utility-scale battery systems.

CAISO News

The Crescent Dunes solar storage project near Tonopah, Nev., concentrates sunlight to heat molten salt to 1000 degrees. | *Solar Reserve*



California curtails large amounts of solar energy during many months. | *CAISO*

Probably more significant going forward, however, are systems capable of storing hundreds of megawatts such as pumped hydropower.

Zichella noted, for example, that the *Eagle Mountain Pumped Storage Project* — a controversial proposal in the California desert near Palm Springs — could store output from 1,300 MW of inexpensive solar power by using it to pump water uphill during the day and then releasing the water at night to spin turbines that would help meet peak demand. He also cited a proposed utility-scale system in Utah that would use renewable energy to compress air into underground chambers and release it later in the day to generate electricity.

Then there are storage projects that look and sound like science fiction. The 110-MW *Crescent Dunes Solar Energy Project* in Tonopah, Nev., uses thousands of revolving mirrors, called heliostats, to concentrate solar energy on a 550-foot tower and heat molten salt to 1,000 degrees Fahrenheit. The salt is stored in a thermal container, where it retains its heat for hours. That heat can be used at night to boil water and turn power-producing steam turbines, which light up Las Vegas.

With such large-scale storage, "you could have a much smoother variability curve" from wind, which is unpredictable and intermittent, and solar, which traditionally stops working after the sun goes down, Zichella said.

"None of these things by themselves are silver bullets," he said. But added together they could help California pursue its goal of all-green energy. Then again, he said, another run at regionalization will likely happen in the next legislative session. (See *Western RTO Proponents Vow to Keep Trying.*) ■

CAISO News

CAISO Modifies CRR Plan, Seeks Quick Approval

By Robert Mullin

CAISO is asking FERC for expedited review of a revised proposal to protect electricity ratepayers from funding shortfalls in the ISO's congestion revenue rights market.

The ISO filed the revision Oct. 1 after FERC last month rejected an earlier plan to eliminate full funding of CRRs and instead scale payouts to align with revenue collected through the day-ahead market and congestion charges (ER18-2034). *(See FERC Rejects CAISO Congestion Revenue Scaling Plan.)*

CAISO's most recent filing notes that CRR revenue shortfalls have continued into this year, and it urged the commission to quickly approve the revised plan to relieve ratepayers from paying costs for fully funding CRRs in 2019. The ISO's Department of Market Monitoring has estimated that CRR revenue shortfalls — which are allocated based on power consumption — cost California ratepayers about $100 million a year.

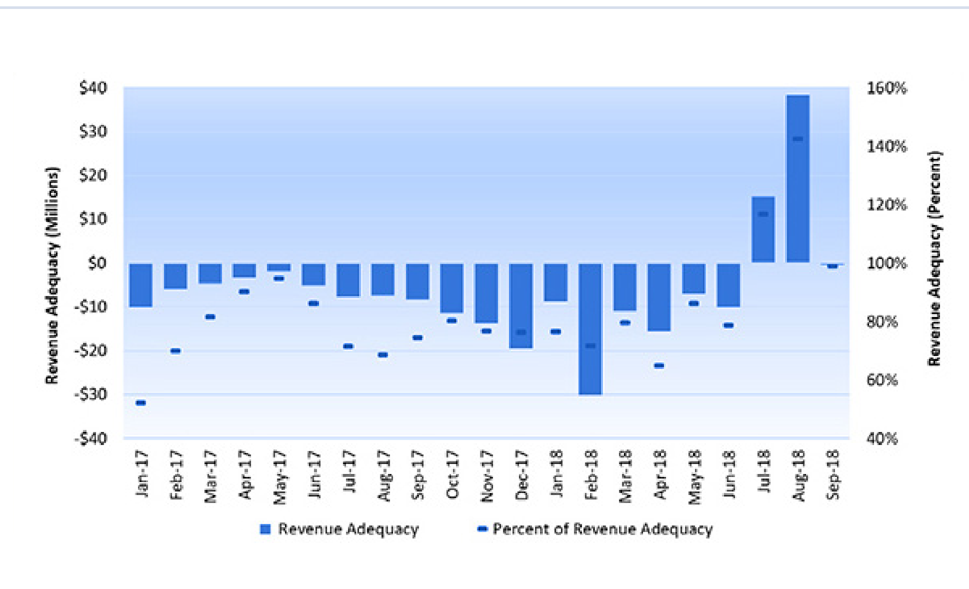
Under the scaling plan FERC rejected on Sept. 20, CAISO proposed to compare the CRR auction revenue and revenue from counterflow CRR holders for each constraint to the payments due to prevailing CRR holders for the constraint. When it does not collect enough revenue to pay prevailing flow CRRs the full value for an interval, the ISO would have reduced the payments proportionally.

The plan called for scaling only the payments to holders of CRRs in the prevailing flow direction, while not scaling the payments due from counterflow CRR holders on the same constraint. The ISO contended that discounting counterflow CRRs would increase revenue insufficiency because those CRRs help fund prevailing flow CRRs.

In denying CAISO's proposal, the commission noted that it "has long held that counterflow and prevailing flow CRRs should be netted against one another such that the expected net value of two obligation CRRs of equal megawatts from A to B and B to A will be equal to zero." The commission added that "we continue to believe that a symmetric approach is just and reasonable, while an asymmetric approach has not been shown to be just and reasonable."

FERC also pointed out that the proposal would have the "undesirable" effect of reducing transparency in the CRR market.

"Market participants could face difficulties valuing a counterflow hedge relative to a prevailing flow hedge, since one would be discounted while the other would not," the commission said.



CAISO said the trend of CRR revenue insufficiency has persisted into this year despite a recent uptick in congestion rents due to unusually high flow patterns. | *CAISO*

In its Oct. 1 filing, CAISO acknowledged that its revised proposal relies on "essentially the same methodology" found in its prior proposal, with one "important" modification: a provision to net CRRs with both prevailing flow and counterflow CRRs within a holder's portfolio before scaling the payment to that holder.

"In this Tariff amendment, the CAISO proposes a methodology that ensures that a CRR holder with a prevailing flow CRR from A to B can offset its obligation by holding a counterflow CRR from B to A," the ISO said. "The CAISO proposes to first net a CRR holder's portfolio of obligation CRRs of prevailing flow and counterflow CRRs with modeled flows on a particular constraint. After it nets these flows, the CAISO then would implement the same procedure it previously proposed through which it would scale CRR payments based on day-ahead market congestion revenue collected on individual constraints."

CAISO said that it was addressing the commission's concerns by creating "a procedure through which it can ensure a CRR holder's modeled flow in both the prevailing and counterflow direction on a specific constraint offset each other." It contended that complete symmetrical treatment of CRRs would prevent it from addressing the CRR funding issue by Jan. 1, 2019, because it would require greater redesign of software enhancements already underway to support the rejected proposal.

"The CAISO is able to follow the commission's guidance without a major redesign with the proposal it submits here today because it can net the prevailing flow and counterflow a CRR holder's CRRs place on a constraint upstream in the process and then feed that information into the scaling methodology the CAISO developed as part of its original CRR Track 1B proposal," the ISO said.

CAISO contends its proposal "completely addresses" the concerns spelled out in the commission's Sept. 20 order.

"Because the CAISO's proposal is just and reasonable and it can be implemented by Jan. 1, 2019, it is unjust and unreasonable to force the CAISO and market participants to have to deal with the risks of revenue inadequacy for another year," the ISO said.

CAISO asked that FERC set a shortened comment period ending no later than Oct. 11 and issue a ruling by Nov. 9. ■

CAISO News

NextEra Settles CRR Complaint Against CAISO

By Hudson Sangree

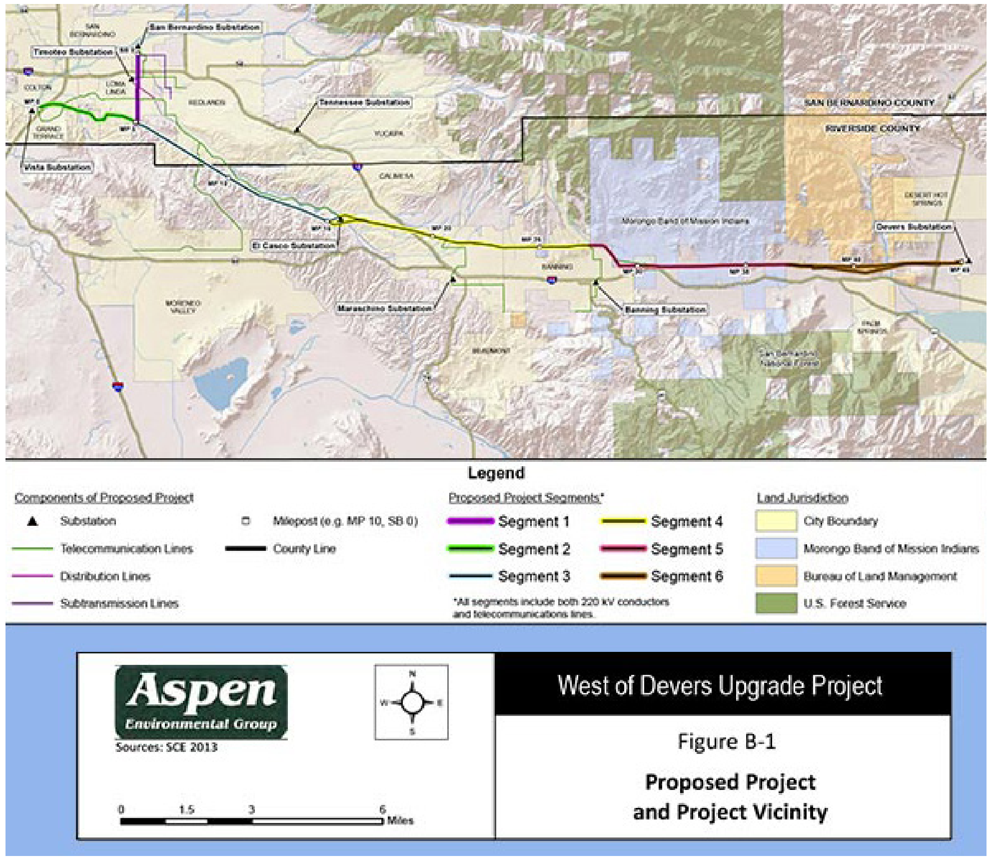
FERC last week approved a *settlement* that will grant a NextEra Energy subsidiary congestion revenue rights (CRRs) that CAISO denied the company in 2015.

The agreement among the ISO, Southern California Edison and NextEra Desert Center Blythe allocates Desert Center CRRs created by its investment in a Southern California transmission project *(EL15-47)*.

The *Interim West of Devers (IWOD)* project is meant to move renewable energy from eastern Riverside County to the Los Angeles area, and includes the removal and upgrade of 140 miles of existing 220-kV transmission lines.

In denying Desert Center the CRRs in 2015, CAISO contended that its Tariff awards CRRs under only two circumstances: for facilities proposed and evaluated under the ISO's transmission planning process; and for network upgrades identified in the generator interconnection process, when the generator funding the upgrades elects to receive the CRRs in lieu of a cash payment.

CAISO said the temporary upgrades for the IWOD — a project undertaken before construction of a permanent transmission solution — did not arise out of either circumstance.



CAISO, NextEra and Southern California Edison settled a case involving congestion revenue rights for the West of Devers transmission upgrade project in Southern California's Riverside and San Bernardino counties. | *CPUC*

FERC subsequently denied NextEra's complaint and its request for a rehearing. In January 2016, NextEra filed a petition for review of the commission's orders in the D.C. Circuit Court of Appeals, and in April 2017, the court remanded the matter to the commission.

Afterward, the parties engaged in settlement talks and came to an agreement, which FERC approved Oct. 4. The settlement stipulates that the CRR entitlements begin Jan. 1, 2019, and will remain in place as long as the IWOD project stays in service.

"For purposes of clarity, no merchant transmission CRRs will be awarded retroactively to Desert Center or SCE for the period of time that the IWOD project was in service prior to Jan. 1, 2019," the settlement states. ■

ERCOT News

Overheard at the GCPA 2018 Fall Conference

Kudos All Around as ERCOT Meets Summer Performance Expectations

By Tom Kleckner

AUSTIN, Texas — The Gulf Coast Power Association's 33rd Annual Fall Conference & Exhibition attracted more than 640 registered attendees for three days of workshops and discussions on the issues facing the ERCOT market. DeAnn Walker, chair of Texas' Public Utility Commission, delivered the keynote address, while panels examined the evolution of the wholesale and retail markets, grid resilience, cyber and physical security, renewable generation sources and ERCOT's fuel mix.

While October marks the beginning of ERCOT's fall season, many minds were still on the grid operator's performance during the summer of 2018, Texas' fifth-hottest on record. The lead-off panel credited ERCOT's preparedness and engagement with the market, the availability of wind and traditional generating units during peak-demand periods, and the lack of extended extreme heat with overcoming the retirement of more than 4 GW of coal-fired generation in 2017.

GCPA Executive Director Tom Foreman, who recently announced his retirement, holds gifts from the board of directors. | © *RTO Insider*

ERCOT survived the summer heat without making conservation calls or issuing alerts, despite recording 14 system demand peaks above the previous record set in 2016. All 14 peaks came during the summer's lone period of extreme heat (July 18-23). (See *ERCOT: Market Performed 'as Expected' During Summer Heat.)*

The grid operator went into the summer with a planning reserve margin of 11%, below its target of 13.75%. Generator outages were half of what staff projected, doubling operating reserves to more than 2 GW, despite a peak demand 552 MW above forecast.

"This summer was a good example, or illustration, of how our expectations are related to ERCOT forecasts," said former PUC staffer Julia Harvey, now director of regulatory affairs for Texas Electric Cooperatives.

Resmi Surendran, Shell Energy North America's senior director of regulatory policy, pointed to renewable energy's capacity contributions, which met peak demand of over 5 GW.

"We were extremely lucky, especially because of the wind generation," she said. "All the major events happened for only one week; the generators operated throughout July. … If we had had extreme weather in August, I don't know how that would have affected us."

Luminant Energy Vice President of Origination and Pricing Claudia Morrow reminded the audience that the company's Comanche Peak Nuclear Power Plant was offline for several months in the summer of 2017.

"Nobody is more pleased and happy than Luminant that our units were all online and performed as expected," she said. "That just illustrates everything went really well, as best as could be expected."

Panel moderator Beth Garza, director of ERCOT's Independent Market Monitor, said average real-time prices were up 25% over 2017 at $36.2/MWh, but reliability unit commitments were a rarity. "That's a credit to ERCOT and ERCOT operators," she said. "It would be easy on some days, to say, 'Wow, I'm really nervous. It would be great to get more capacity.'"

"Fortunately, we didn't have to use all those [processes] we practice for," ERCOT COO Cheryl Mele said.

A second panel, focused on a market design that is supposed to incent generation investments, discussed the grid operator's ability to manage slim reserve margins and the effect on future decisions.

Orion Energy's Nazar Massouh | © *RTO Insider*

"This [summer] gave one more reason for the forward market to not price scarcity," said Orion Energy CEO Nazar Massouh. "We had scarcity, but no forward reaction."

"The summer of 2018 was not performing in a manner consistent with what people thought from coiling the spring a little tighter" through retirements, Merrill Lynch Commodities Managing Director Mark Egan said. "As prices fall on the spot market and forward market, it does serve to effectively push us down the curve. Some fossil asset investment decisions get deferred."

Merrill Lynch Commodities' Mark Egan | © *RTO Insider*

GCPA Executive Director Tom Foreman addresses GCPA attendees. | © *RTO Insider*

Walker Expects 2019 Summer to be 'More Difficult'

Walker agreed with the lead-off panel, saying everything worked out as well as it could have.

But that said, "Next summer will be more difficult," she predicted, pointing to the state's increasing demand and potential retirements and mothballing of aging plants. "What does

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that mean for 2019? We already know we need to make changes."

Walker said the PUC and ERCOT are already planning for next summer, rather than starting in early March. The commission has scheduled an Oct. 25 *workshop* to review the summer's events and determine improvements for next year. ERCOT hopes to see all plant maintenance completed by May 15.

"I encourage you to offer suggestions on what we could do better," Walker said, noting final input is due Oct. 18 (*Project 48551*).

Walker expects ERCOT's reserve margin to remain tight in the short term. She discovered this year that planning to have units in neighboring regions help the grid operator "in a crunch" is "more difficult than I thought," so she is working on reliability coordinator agreements to resolve the situation.

"It's not my intent to have MISO or SPP give those units' control to ERCOT. My intent is to be more orderly than that," she said. "We have issues to work through. I would like these processes to be in place by next summer, but it's going to take some Protocol changes."

Is There a Place for Distribution Assets in ERCOT?

NRG Energy's Bill Barnes | © *RTO Insider*

During a panel discussion on "non-wire alternatives," AEP Texas President Judith Talavera and NRG Energy Director of Regulatory Affairs Bill Barnes debated AEP's proposal to install a pair of utility-scale lithium-ion batteries to solve distribution reliability needs in its West Texas service territory.

AEP Texas President Judith Talavera | © *RTO Insider*

AEP's plan to classify the facilities as distribution assets and include them in cost-of-service rates sparked broad opposition within the market. The PUC rejected the proposal in January, but it opened a rulemaking to address "non-traditional technologies in electric delivery service" (*Project 48023*). (See *PUC Opens Rulemaking on Distributed Battery Storage.)*

Talavera said the numbers — $2.3 million in costs for the battery facilities, as compared to $11.3 million to $22.5 million for "traditional" wires solutions — "demonstrated a battery was a much more cost-effective solution" in dealing with outages and other reliability concerns in the tiny towns of Woodson (estimated population in 2016: 246) and Paint Rock (287).

"We strongly believe [energy storage] has to be a tool. It's no different than a transformer or any other distribution asset," she said. "We view this as a distribution asset we will be adding to our system, and the rules don't require a [certificate of convenience or necessity] for a distribution asset you're adding or building.

"When the laws were written, we didn't have these types of technologies," Talavera said. "At the end of the day, we have a responsibility to serve everybody on our system."

"Where we differ is how we see those non-wires alternatives come to be," Barnes said. He said units that provide ancillary services such as batteries are generating assets. Ancillary services are defined in the ERCOT Protocols as any service needed to serve the transmission of load, he noted.

Barnes proposed extending transmission-level prices to the distribution system, "so you have distribution prices and distribution nodes."

"That would create incentives for suppliers to locate batteries on the grid where you have reliability problems," he said. "We create economic signals; we allow private investment to come into the market to solve those problems. For products that might not be priced, like voltage and stability, you create markets for them that ERCOT facilitates, like the existing ancillary services markets."

"Judith owns the storage," said panel moderator Bob King, president of Good Company Associates. "It's not clear [who pays if] she can charge or discharge, but it's clear she can't participate in the wholesale market."

"And we're not trying to," Talavera responded.

"The ultimate issue is the cost … is still funded through the rate base," Barnes said. "If you're awarded the [project], you're happy. If you're everyone else, you're not. The cost is funded through noncompetitive revenue, and you still have distortion in the market. If customers want that reliability, they can pay for it."

"Given the declining cost of batteries and the growing maturity of technology over the last few years, we identified two great options to help us provide reliable service," Talavera said. "We didn't get the approval, but I do think it helped open the conversation we're having today. I feel energy storage can provide real, quantifiable benefits for the customer and our distribution system."

ERCOT's Retail Market Running Smoothly

Rice University's Kenneth Medlock | © *RTO Insider*

Kenneth Medlock primed the pump for a panel discussion of ERCOT's retail market by sharing the results of a residential pricing study that covered a 14-year span following the onset of customer choice in January 2002.

Medlock, senior director of the Center for Energy Studies at Rice University's Baker Institute, stressed that sample averages don't "tell the whole story," but that price dynamics matter. He said prices fell in the state's competitive areas but rose in the noncompetitive areas (Austin, San Antonio and other municipalities and cooperatives). Residential rates in competitive areas were 2 cents less than those in noncompetitive areas in 2002, but those rates were on par with each other by 2016.

"If you're in a system with limited choice because you have one retail provider, then you don't understand what individual consumer groups prefer," Medlock said. "If you want to enhance the competitive paradigm, it's important that you remain transparent and open. That's the only way consumers can access enough information and data to make decisions in their best interest. Players in the market are forced to differentiate themselves

Board President Mark Walker opens the fall conference. | © *RTO Insider*

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Lloyd Gosselink Rochelle & Townsend's Chris Brewster | © *RTO Insider*

in different ways, which introduces an entrepreneurial paradigm that can lower prices."

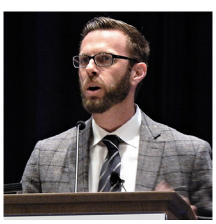
Chris Brewster, a principal with law firm Lloyd Gosselink Rochelle & Townsend, said the retail market's strength is rooted in the wholesale market.

"That's what ERCOT, the stakeholders and the PUC want. It works smoothly," he said. "We have a wholesale market that is very liquid and easy to transact in. It doesn't impose a lot of administrative requirements. We have a true market. We have a wholesale market that transacts in a commodity, and a retail market that specializes in a customized service for customers."

Connie Corona, the PUC's director of competitive markets, said "the consistent small changes made to the market have been critical."

"There's a balance in this market between certainty [about how things operate] and the ability of the policymakers, the stakeholders and market participants [to adjust] the Protocols," she said. "As a market, we've taken the opportunity to recognize how this and that could work better. Everyone has been open to examining that, from the Legislature on down to the subcommittee of the working group at ERCOT."

Future for Quick-start Gas, Utility Solar



Shell Energy's Greg Thurnher | © *RTO Insider*

Shell Energy North America's Greg Thurnher, moderating a discussion of ERCOT's fuel mix, recalled a not-so-distant past when the grid operator had 8 GW of wind, a 15% reserve margin, no major retirements, gas in the $10 to $13/MMBtu range, and construction of new nuclear and coal generation was expected.

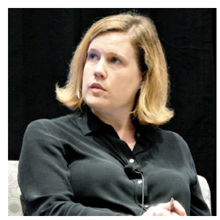
Ten years later, ERCOT has 1 GW of solar, 21 GW of wind and another 13 GW planned, while coal capacity has dropped by more than 4 GW, noted Thurnher, Shell's manager of real-time trading.

"Rather than say the resource mix is changing, it has changed, and the change is here to stay," Thurnher said.

STEC's Clif Lange | © *RTO Insider*

Clif Lange, manager of wholesale marketing for South Texas Electric Cooperative (STEC), said his business is investing in quick-start gas units, rather than renewables — or rather, because of renewables.

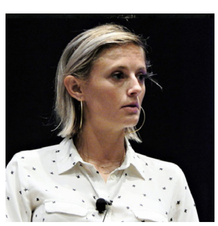
"The ability to be there quickly and, frankly, the ability to shut down quickly has provided a lot of value to STEC and ERCOT," Lange said. "How do you make a thermal generator effective in a market where you have seen depressed pricing for so long? The ability to react quickly to market signals has provided a great benefit. We can respond very quickly to transmission constraints that pop up very quickly or disappear very quickly. When you're not in the money, it's very important to be able to take that unit offline."



Recurrent Energy's McCall Johnson | © *RTO Insider*

McCall Johnson, senior manager of government affairs for solar developer Recurrent Energy, said utility-scale solar will be essential to the future because of its ability to provide predictable power during the afternoon peak.

"Those [solar] megawatts are not causing a lot of operational issues," she said. "We see that peak power, which is really cost-effective, driving a lot of interest. Solar … seems a more sophisticated purchase of renewables. You get a peak hedge. We all know when the sun is going to shine, and it's easy to predict."



Mothership Energy Group's Maura Yates | © *RTO Insider*

Maura Yates, managing member of the Mothership Energy Group, which calls itself "a boutique group of female-owned energy solutions companies," reminded the panel and audience to not forget about rooftop solar, "a silent asset happening behind the meter."

"We have a lot of data in the market, important data driving the generation stack. But you don't have an idea of how many behind-the-meter rooftop solar systems there are," Yates said. "It's a blind spot. It's really important to get a hold of that data, because it's driving the wholesale side now. Consumers want to be more involved and engaged. They're an asset class themselves."

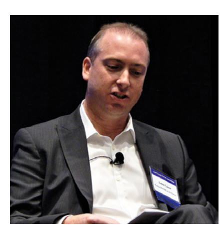
Opinions Vary on Grid Resilience

Several transmission operators opened their panel discussion by recounting the Department of Energy's proposal to prop up coal and nuclear generation and FERC's definition of resilience: "The ability to withstand and reduce the magnitude and/or duration of disruptive events, which includes the capability to anticipate, absorb, adapt to and/or rapidly recover from such an event" (*RM18-1*).

Southern Co.'s Katherine Prewitt | © *RTO Insider*

"It does align itself to the Baskin-Robbins 31 flavors of resiliency," CenterPoint Energy Associate General Counsel Patrick Peters said of FERC's definition. "[Resilience] started with solid fuels and nuclear but has now evolved into other topics. The definition covers just the normal day-to-day work of operating the electric grid. When I think of resiliency, I think of out-of-the-box planning to ensure the grid stays reliable if you lose a piece of equipment."

"One of the things I love about working in this industry is we're not afraid to take on hard projects, and this is one," said Southern Co.'s Katherine Prewitt, vice president of transmission. "We need to ensure we don't have a one-size-fits-all approach. We can't lose sight of our customers' needs. We have to talk to them, understand what they need and help them understand the impact of what they're asking for. There's always a cost for the ask. We have to ensure we don't over-engineer it and put ourselves in a position where we have unintended consequences."



ExxonMobil's John Gunn | © *RTO Insider*

"Our view is the markets work best," said John Gunn, vice president of regulatory affairs for ExxonMobil's gas and power marketing unit. "The power industry does have to comply with a whole lot of regulations. We've seen that in reliability improvements and [its] ability to respond in natural disaster." ■

ISO-NE News

Overheard at 2018 NEEP Summit

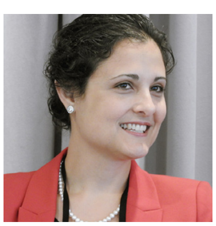
The 2018 Northeast Energy Efficiency Partnerships summit was Oct. 1 to 3 | © *RTO Insider*

By Michael Kuser

MIDDLETOWN, R.I. — The increasing interplay between energy efficiency and electrification was a hot topic at the 2018 Northeast Energy Efficiency Partnerships summit Oct. 1 to 3. But industry leaders and experts also discussed how to measure the benefits of energy efficiency — and how to motivate consumers to do more to save energy.

Carol Grant | © *RTO Insider*

"The truths of how we did efficiency 10 years ago are not necessarily how we're going to be doing it the next five years," said Carol Grant, commissioner of the Rhode Island Office of Energy Resources. "How can we bring more people into the drive, make more people aware?"



Mary Sotos | © *RTO Insider*

To get people to value efficiency, policymakers need to make it more visible, said Mary Sotos, deputy commissioner for energy at the Connecticut Department of Energy and Environmental Protection.

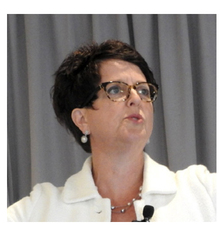
The department realized it needed to set priorities for its limited resources following a state budget crisis this year, which saw a third of energy efficiency funding swept into the general fund, Sotos said.

"One clear priority that came out of that process is that climate needs to be at the front of all of our efficiency work," Sotos said. "One of the biggest sectors of emissions in Connecticut is actually our home heating. So about half of Connecticut is heated with delivered fuels — fossil fuel, heavy emissions."

DEEP has long discussed applying a carbon or fuels charge, but officials now are uneasy about "creating another pot of money" that could be commandeered to fix a budget shortfall, she said.

"We need to look at the resources we have, including our conservational management plan, and be willing to use those resources to make this transition away from fossil fuels," Sotos said. "That's something new for us."

Energy marketing consultant Suzanne Shelton recommended brand marketing and psychological tactics to shift public perception — and find electricity's equivalent to the "natural" in natural gas.



Suzanne Shelton | © *RTO Insider*

"We don't know what we're doing, we don't think we need it, and we don't think it works. That's our huge problem with energy efficiency," Shelton said. "Americans want to be greener. Forget education, that's boring. Think of it in terms of engaging consumers, inspiring them, motivating consumers."

Who Pays?

Abigail Anthony | © *RTO Insider*

Utility and auto industry shareholders should be responsible for the costs of accelerating electrification, Rhode Island Public Utilities Commissioner Abigail Anthony said.

Additional electricity sales increase cash flow, and new load may result in infrastructure upgrades that provide earnings opportunities for the utility, or the utility could receive new incentive-based earnings to absorb increased electric load without new wires, Anthony said.

"From a regulator's perspective, I am cautious that electric utilities aren't promoting electrification at scale because they are holding out to see how much preferential regulatory treatment they can get first," Anthony said. "Why take on any risk if regulators are willing to put all the risk on ratepayers? In any case, we'll lose the public trust if we don't have good evidence for asking ratepayers to make the first move in a new business."

Grant gave a "shout out" to National Grid as the primary utility in Rhode Island: "I'm excited about the leadership they're providing in continuing to push themselves ... their talent and their innovation is really growing, and their focus on new approaches is exciting as well."

In Connecticut, DEEP this year for the first time asked the utilities to say how they could help homes convert from their current fuels to air-source or ground-source heat pumps, which are good for both heating and cooling, Sotos said.

Tommy Wells | © *RTO Insider*

One challenge in the nation's capital is that "our energy is too affordable," said Tommy Wells, director of the D.C. Department of Energy & Environment.

The whole regulatory structure is geared toward keeping electric power rates low, he said, "so when advocates say we want energy to cost more so you use less, it goes directly against the whole construction of our regulatory scheme."

"In D.C. we have the most valuable, highest re-

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newable energy credits in the country for solar ... but the uptake of solar on people's homes ... is slow because their power bills are so low," Wells said.

Electrification Metrics

Sotos noted that by 2030 Connecticut will need to reduce greenhouse gas emissions across all sectors 40% below 2001 levels, and each year it must save 1.6 MMBtu of energy.

"It's important to us to make sure that the metrics that we're applying to our programs actually match what we are trying to accomplish, she said. "Depending on how much you value carbon, or other environmental impacts, the cost-effectiveness of certain programs can potentially look very different."


Paul Hibbard | © RTO Insider

Paul Hibbard of the Analysis Group said there are two basic components to measuring the value of energy efficiency and electrification: forecasting and assigning a value to carbon.

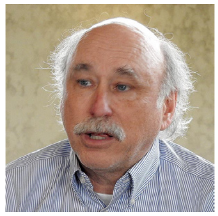
"Forecasting avoided costs is incredibly complicated ... [it] is really comparing the world with efficiency investments to a world without those investments, and calculating the difference," Hibbard said.

Assigning a value to carbon is more of a political decision, but it will grow increasingly important for directing investments and determining the right way to use public funding to focus investments, Hibbard said.


Bruce Biewald | © RTO Insider

Solid metrics benefit the decarbonization effort by providing consistent approaches to evaluating cost-effectiveness in outcomes, said Bruce Biewald of Synapse Energy Economics. He also got "abstract and philosophical" about public policy.

"I have raised six kids ... and you have some influence, a little bit of control, but you don't really control them," Biewald said. "And that's also in this nexus of companies and government regulations, and laws and individual consumer choice. So when you see something failing, like the pricing or not pricing of carbon, there's room for everybody in the solution. The idea that there's one actor or one policy approach that's going to solve this is not reasonable."


Rich Sedano | © RTO Insider


Pasi Miettinen | © RTO Insider

Is electrification the new energy efficiency, or is it a new species altogether? asked Rich Sedano of the Regulatory Assistance Project.

Pasi Miettinen, CEO of energy analytics firm Sagewell, said his company gave up energy efficiency to focus on electrification for non-regulated utilities because the latter gives better results for a dollar spent. Nonetheless, "we look at it as one category, maximum yield for dollars," he said.


Steve Cowell | © RTO Insider

Energy Security

Reducing carbon emissions is neither easy nor simple, said clean energy advocate Steve Cowell of E4TheFuture, an organization that promotes residential clean energy.

"Government funding versus regulatory versus market-driven investment, legislative mandates versus rate design, all these are pieces that we have to fit together," Cowell said.


Deborah Donovan | © RTO Insider

New England has enormous potential to bring offshore wind and other non-carbon imports into the region, and is also facing the recent or prospective retirements of some really important assets on the grid, said Deborah Donovan of the Acadia Center, a regional, nonprofit advocacy and research organization.

Regarding the wholesale energy market, the region is "in the precarious position of ISO-NE procuring gas capacity through the capacity markets and then saying 'oh my gosh, we're over-dependent on gas,' and really putting their thumb on the scale when we're confronted with issues like a request for retirement from the Mystic station up north of Boston," Donovan said.

The region needs natural gas to generate power and to heat its buildings, but the fuel security issue is really just about winter peak hours, she said.

The grid operator sees a natural gas problem and says it must have a natural gas solution, but "we and a lot of other advocates are pushing to stop that. ... [It's] costly to the environment solution," Donovan said.


Mark Kresowik | © RTO Insider

Mark Kresowik of Sierra Club's Beyond Coal Campaign said the Northeast states lead the country in energy efficiency, but he decried the "insanity of [CEO] Gordon van Welie in ISO New England proposing to spend hundreds of millions of dollars to bail out the Mystic plant and push billions of dollars in investment into gas pipelines for fuels that are mandated to decline by state policies."


Sue Coakley | © RTO Insider

NEEP Executive Director Sue Coakley turned the discussion back to scaling up energy efficiency in buildings.

Cowell said New York has decided to eliminate any ongoing residential or energy efficiency work in buildings and homes.

"We had a very difficult stakeholder session a couple weeks ago where the Public Service Commission basically said it's not worth it, we shouldn't be helping people insulate and air-seal their homes," Cowell said. "That makes it tough."

Coakley suggested basing the argument for efficiency on the costs of storm damage: "You could insulate and air-seal your house for $5,000 to $20,000 and do a really good job, and instead we're paying to repair houses from damage from bad weather."

Leah Bamberger, director of sustainability for the city of Providence, said that following natural gas pipeline explosions near Boston in September, residents in homes knocked off the gas system were reluctant to accept space heaters for fears that their outdated wiring couldn't handle the extra load.

Sotos said that DEEP is expanding its thinking on what constitutes barriers to adoption of energy efficiency measures, and it now realizes that structural issues in a house, such as a difficult to reach boiler, should qualify for state-funded remediation. ■

ISO-NE News

RTO Insider: NEPOOL Can't 'Have it Both Ways' on Press Ban

By Rich Heidorn Jr.

The New England Power Pool is trying to "have it both ways" in claiming FERC lacks jurisdiction to overturn the RTO's press and public ban while holding special privileges as ISO-NE's stakeholder body, RTO Insider said in filings Friday.

The publication's filings followed NEPOOL's Oct. 1 answer to protests that joined RTO Insider in calling for open stakeholder meetings. New England is the only one of the seven U.S. regions served by RTOs or ISOs where the press and public are prohibited from attending stakeholder meetings.

"While the opposition pleadings mostly repeat arguments previously made by RTO Insider, the opposition pleadings also seek to relitigate whether New England arrangements satisfy the commission's Order No. 719 requirements," NEPOOL said, referring to filings by New Hampshire Consumer Advocate D. Maurice Kreis, the Reporters Committee for Freedom of Press and a joint filing by the Sustainable FERC Project, Conservation Law Foundation, Earthjustice and Natural Resources Defense Council.

NEPOOL said preventing the public and press from attending and reporting on stakeholder meetings was necessary to ensure the meetings are "efficient and productive."

"NEPOOL fully expects that if press reporters are present in NEPOOL meetings, interested members would continue to advocate their positions. But NEPOOL also expects that an increased amount of such advocacy would largely take place outside of NEPOOL meetings. The presence of press reporters in meetings, undeniably, would erode the confidence built among NEPOOL members over its almost five decades of successful history that specific statements made by others in NEPOOL meetings will not be published publicly."

NEPOOL said its opponents are wrong in citing Order 719 as justification for opening its meetings. The commission said the order was intended to "establish a means for customers and other stakeholders to have a form of direct access to RTO/ISO boards of directors, and thereby increase the boards of directors' responsiveness to those entities."

Many of NEPOOL's meetings are held at the Westborough, Mass., DoubleTree hotel. | *Google*

"The 'access' referred to that of RTO/ISO customers and stakeholders to RTO/ISO boards. Press is neither a customer nor stakeholder, and they certainly are not a direct representative of either," NEPOOL said. "Further, NEPOOL is not the RTO/ISO board. As such, any reliance on Order 719 is misplaced."

On Aug. 13, NEPOOL asked FERC to approve amendments to its Agreement to codify an unwritten policy of banning news reporters and the public from attending the group's stakeholder meetings (ER18-2208). The group drafted the revisions after RTO Insider reporter Michael Kuser applied for membership in NEPOOL's Participants Committee as an End User customer in March.

Conditioning Authority

RTO Insider responded to NEPOOL's filing with a Section 206 complaint Aug. 31 asking the commission to overturn the organization's ban or terminate the group's role and direct ISO-NE to adopt an open stakeholder process like those used by other RTOs (EL18-196).

RTO Insider made filings in both dockets on Friday, including a 47-page answer to NEPOOL's motion to dismiss its complaint, in which the power pool claimed FERC lacks jurisdiction to order a change. (See NEPOOL: FERC Can't Change Press, Public Ban.)

RTO Insider said NEPOOL's claims that it is not a public utility is "incompatible with having the NEPOOL Agreement on file with the commission, with NEPOOL making [Federal Power Act] Section 205 filings with the commission as a filing party, with NEPOOL having 'jump ball' Section 205 filing rights, and with commission orders involving NEPOOL governance," RTO Insider attorney Steve Huntoon wrote. "NEPOOL's attempt to avoid commission oversight while enjoying vast powers, privileges and subsidies is a classic case of trying to have it both ways."

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In making its jurisdictional argument, NEPOOL cited the D.C. Circuit Court of Appeals' 2004 order rejecting FERC's attempt to force CAISO to replace its governing board.

Huntoon said NEPOOL ignored commission precedent in a 2016 ruling approving funding for PJM's state consumer advocates *(ER16-561-001)*. The commission in that order ruled that the "PJM stakeholder process is a practice that directly affects wholesale rates, and thus approval of a proposal that would enhance that process falls within the commission's jurisdiction under Section 205a." (See *FERC Upholds PJM Advocates' Funding.)*

Even if the commission determines it lacks authority to force NEPOOL to change its rules, "the CAISO opinion was clear that the commission retains conditioning authority," Huntoon said. "In CAISO, the court cited with approval a prior decision, ***Central Iowa Power Cooperative v. FERC***, in which 'FERC conditioned the approval of the power pool on removal of the membership criteria, rather than ordering the power pool to change those criteria directly.'"

Insiders and Outsiders

RTO Insider's filing included letters submitted by six U.S. senators and 12 members of the House of Representatives calling on FERC to open the meetings. (See *New England Senators Urge FERC to End Press Ban.)* It also included a copy of a Sept. 6 RTO Insider article quoting former Commissioners Pat Wood III and Nora Mead Brownell as saying they were unaware of NEPOOL's closed-door policy when they approved it as ISO-NE's stakeholder body. (See *Wood, Brownell: Unaware of Press Ban When OK'd NEPOOL.)*

Public Citizen filed comments Oct. 3 *challenging* NEPOOL's claim that its members "voted overwhelmingly against having press reporters as NEPOOL members" at the June 26 Participants Committee meeting. Only 115 of NEPOOL's more than 500 members were present or had proxies at the meeting.

While 32 votes were cast in favor of the press ban, 24 members were opposed and 59 abstained. In addition, NEPOOL records show that six officers or their associates represented companies that provided 21 of the 32 votes for the ban.

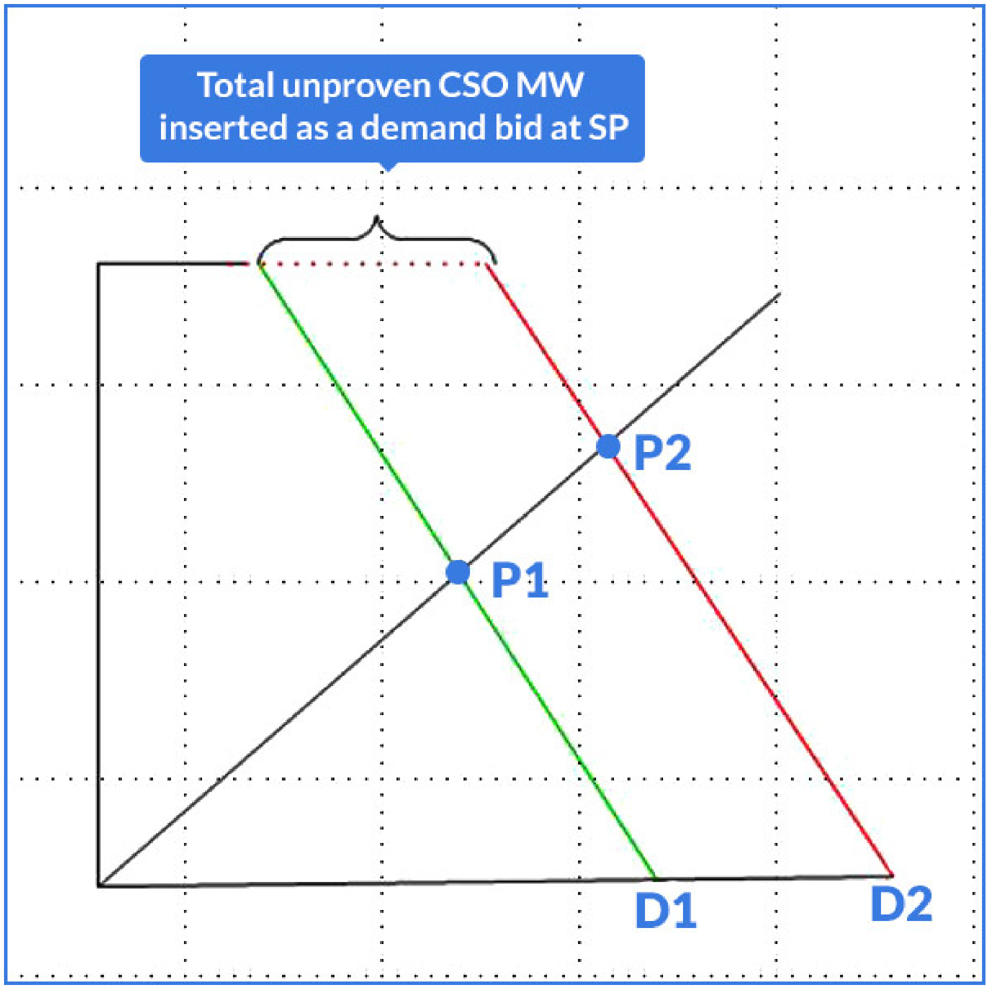
The six have conflicts of interest in voting for the ban because they earn income selling "intelligence" about NEPOOL proceedings, said Tyson Slocum, director of Public Citizen's Energy Program.

"When deliberative bodies are transparent and open to the public, information resources regarding details of their proceedings are inexpensive, reflecting the ease with which the information can be obtained and disseminated," Slocum wrote. "But restricting participation, and making access to deliberations more exclusive, bestows 'financial market opportunities' for those granted special access. Those participants on the 'inside' can sell their services to those on the 'outside.'" ■

ISO-NE News

NEPOOL OKs Penalty for Delayed Capacity Resources

By Rich Heidorn Jr.



For delivery years beginning in June 2022, the monthly charge rate for resources unable to meet their capacity supply obligations will be based on clearing prices in the third annual reconfiguration auction (ARA #3). A resource that submits and clears a demand bid in ARA3 will pay P1 (ARA3 clearing price). A resource that maintains their CSO and has unproven CSO quantities will pay the P2 rate, which will always be greater than or equal to P1. | *ISO-NE*

The New England Power Pool Participants Committee last week approved new penalties for ISO-NE market participants that fail to cover their capacity supply obligations (CSOs) when a new resource is delayed.

For delivery years before June 1, 2022, the monthly $/kW-month charge will be the higher of the capacity clearing price and the clearing price in any Annual Reconfiguration Auction for that year. After June 1, 2022, the charge will be based on the outcome of a second run of the third ARA, using the unproven CSO quantities as a demand bid.

The *rule changes* are designed to shift the responsibility for covering CSOs to participants, which ISO-NE says have the best information about projects' development schedule and potential delays.

Market participants will still be compensated for their CSOs and continue to have Pay-for-Performance risk.

The RTO said it was acting because of the time lag between its last critical path schedule (CPS) meetings with participants in early January and the beginning of the capacity commitment period in June.

Current rules require ISO-NE to assess a new resource's likelihood of meeting its CSO and submitting a demand bid if it is in doubt. The new rules will eliminate mandatory demand bids by the RTO for resources unable to satisfy all CPS milestones by the start of the delivery year.

The monthly charge would apply unless the participant covers the shortfall through a bilateral contract or with a resource that was previously counted as a capacity resource. Previous resources can be used for up to two years.

The changes were approved by voice vote after members rejected a proposal by PSEG Energy Resources & Trade to allow a three-month grace period before applying the charge for each year between June 2019 and May 2022. PSEG's proposal failed with a 47.77% vote in favor (Generation Sector – 14.68%; Transmission Sector – 6.71%; Supplier Sector – 15.48; AR Sector – 5.23%; Publicly Owned Sector – 0%; End User Sector – 5.59%; and Provisional Group Member – 0.067%).

The approval completed Phase I of ISO-NE's two-phase review of rules governing late projects in the FCM. Phase II will take a broader look at the participation of new resources in the market, the RTO said.

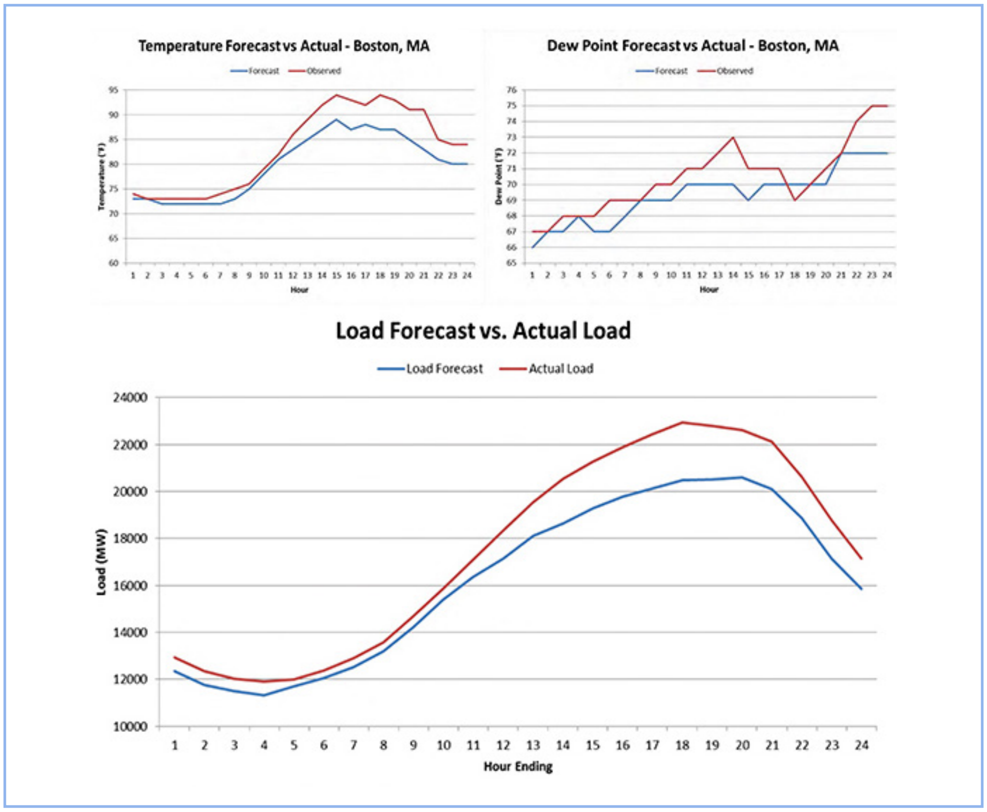
As of June 30, ISO-NE said it had identified 26 resources representing almost 30 MW of "unproven" capacity, including almost 28 MW of demand capacity and 2.1 MW of generating capacity. Last month, ISO-NE asked FERC to terminate the CSO of Invenergy's 485-MW Clear River Energy Center Unit 1 in Rhode Island because it will not be operating in time for the delivery year beginning June 1, 2019 (ER18-2457). (See *ISO-NE Asks FERC to End Clear River CSO.)*

ICR Values for FCA 13

In a related matter, the Participants Committee also approved by a show of hands a net *installed capacity requirement* of 33,770 MW for Forward Capacity Auction 13 next year (delivery years 2022-2023). In a separate vote, the committee also approved a 33,750 MW net ICR that will be used if FERC approves the termination of Clear River Unit 1's CSO.

Net ICRs exclude the Hydro-Quebec interconnection capability credit (HQICC), which members agreed to set at 969 MW. Including the HQICC, ISO-NE projects a reserve margin of 19.3%.

ISO-NE NEWS



Underforecasts of temperatures and dew points resulted in an underforecast of load for ISO-NE on Labor Day, Sept. 3. | *ISO-NE*

The committee also approved Tariff changes on assumptions used in the ICR calculation. One revision will reduce from 1.5% to 1.0% the amount of load relief assumed from a 5% voltage reduction. A second revision changes the assumption used for the availability of peaking resources in the transmission security analysis from a deterministic derate factor to an equivalent forced outage rate-demand for individual resources, based on their most recent five-year average.

2019 Budgets

In other action, the committee also endorsed the 2019 ISO-NE operating ($198 million) and capital ($28 million) *budgets*. The operating budget is up $2.9 million (1.5%) from 2018 but down $1.4 million from the preliminary budget presented in August. Including true-ups, the revenue requirement for the operating budget will drop 3.5% from the amount projected to be collected in 2018.

The capital budget is unchanged from 2018.

The committee also endorsed the New England States Committee on Electricity's 2019 operating budget of $2.35 million, a $45,000 reduction from the five-year pro forma projections endorsed by the committee in June 2017 and accepted by FERC.

Energy Emergency Forecasting

Members unanimously approved changes to Operating Procedure 21 and its Appendix A to create an *energy emergency forecasting* and reporting process. It includes forecast alert thresholds, criteria for declaring energy alerts and energy emergencies and related data collection provisions.

ISO-NE said the changes are intended to improve market signals for incentivizing resource preparedness before winter 2018/19.

The energy alert thresholds will be based on an assessment of fuel and emissions availability over the next 21 days of operation.

Consent Agenda

Approved as part of the *consent agenda* were:

- Conforming changes to ISO-NE manuals on price responsive demand, Pay-for-Performance, real-time reserve designation and settlement rules and the Forward Capacity Market; and
- Revisions to provisions regarding deposits for participating in cluster transmission studies.

Presentation on Labor Day Event

ISO-NE COO Vamsi Chadalavada gave a *presentation* on the capacity scarcity event on Labor Day, when heat, humidity and 1,600 MW of unplanned generator outages sent prices soaring above $2,400/MWh and led to emergency energy purchases from New York and Canada. (See *ISO-NE Prices Top $2,400/MWh in Labor Day Heat Wave.)*

Chadalavada said higher-than-forecasted temperatures and dew points, particularly in the afternoon of Sept. 3, caused the RTO's load served to peak at 22,956 MW (23,174 MW including active DR), almost 2,400 MW (11.5%) above its load forecast.

During the 4-5 p.m. hour, the RTO fell 718 MW below the 24,775 net capability required, which includes operating reserves of 2,108 MW.

The RTO purchased 150 MW from New Brunswick between 4:20 and 5:14 p.m. and 229 MW between 5:14 and 6. NYISO provided 251 MW from 5 to 5:30 and 150 MW from 5:30 to 6.

Real-time hub five-minute LMPs ranged from $19.79 to $2,677.05/MWh for the day, with an average of $262.61.

The real-time net commitment-period compensation was the fifth highest for the year and the highest of the summer at $1.9 million, including $1.1 million in economic payments, $540,000 in dispatch lost opportunity costs and $210,000 in rapid-response pricing opportunity costs.

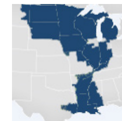
The high prices during the event will increase the peak energy rent adjustment by $7 million each month, for a total of $56 million, through May 31, 2019, RTO officials said.

The PER adjustment is intended as a hedge for load and a tool to discourage capacity suppliers from creating price spikes through economic or physical withholding.

The increased adjustment will affect generators, imports and active demand resources. Self-supply and passive demand resources are excluded.

ISO-NE is eliminating the PER adjustment beginning June 1. The RTO says Pay-for-Performance and changes to the day-ahead energy market made the adjustment unnecessary beyond that date. (See *FERC Rejects NESCOE Request on Scarcity Rules.)* ■

MISO NEWS



MISO Narrowing Options on Resource Availability Fix

Jeff Bladen | © *RTO Insider*

By Amanda Durish Cook

CARMEL, Ind. — MISO leadership has not yet decided on how it can improve resource availability, though it is evaluating several possible remedies, the RTO told stakeholders last week.

MISO Executive Director of Market Development Jeff Bladen told an Oct. 4 Reliability Subcommittee that the RTO will return in November with a narrowed list of short-term solutions for review with stakeholders. MISO said it will work with its Steering Committee to assign longer-term recommendations to the RTO's larger stakeholder groups for further development.

The RTO published a *white paper* last month focusing on four areas: improving its outage planning; studying characteristics of different resources to see how it can best incentivize them to perform; re-examining resource accreditation in the Planning Resource Auction; and reassessing what availability should be required of resources — especially load-modifying resources (LMRs). (See *MISO Moving to Combat Shifting Resource Availability.)*

Outage Control

Lately, MISO has been deliberating with stakeholders over whether it should ask FERC for more authority over outage scheduling to better manage reserves. (See *Advisory Committee Divided on MISO Outage Authority.)* Stakeholders generally agreed last month that MISO should keep the status quo while it works on process improvements.

Some stakeholders said MISO's challenges may resolve themselves as large transmission buildout from its 2011 multi-value project *portfolio* begins to come online.

"So maybe it's a bit of a wait-and-see as the processes we've been working on for years begin to bear some fruit," Bladen said.

"There's a cyclical nature to this discussion," Minnesota Public Utilities Commission staff member Hwikwon Ham commented. He said he remembered similar discussions on reserve shortages in the industry around 2005 and 2006.

"This is not a new problem; we can handle it," Ham said.

Bladen said MISO could require a minimum notice time for market participants taking planned outages. If owners cannot meet the requirement, their outages may be counted as forced outages in their resource's capacity accreditation. In the long term, MISO said it might consider establishing an outage rights market like the financial transmission rights market that already exists.

MISO reports that about 70% of planned outages during peak months are scheduled with less than a week of notice, based on a three-year average.

"This is surprisingly high," Bladen said. "There are several planned outages taken very, very close to the operating time frame. Maybe we should put a finer point on what the NERC standard for planning 'well in advance' in the MISO context will be."

Bladen also said MISO could improve the specificity of data it provides to market participants on its nonpublic Maintenance Margin tool, which supplies market participants with projected capacity availability margins to assist them in selecting outage dates.

But MISO's Independent Market Monitor criticized the Maintenance Margin as clunky, saying market participants are scheduling outages with vague information. Monitor David Patton said the Maintenance Margin information is "high-level and does not convey coincidental transmission outages or generator-specific details that may otherwise impact participants' planning decisions."

Historical, not Optimized

Bladen said MISO may begin using historical outage data to inform its planning reserve margin. Such a change could cause an increase to the planning reserve margin, he said.

"We currently anticipate in our planning reserve margin that outages are optimally coordinated. … We may need to plan for outages that are less optimally coordinated," Bladen said.

Seasonal Auction

However, Patton said a four-season capacity auction with distinct seasonal availabilities assigned to resources would be "far simpler" than adjusting MISO's existing outage planning.

"The megawatts that are available are the megawatts that matter, no matter why they're available," Patton said. "Our [seasonal] deratings are as big as our outages, and many of those go unreported."

Patton said a four-season capacity auction is "one of the only" possible solutions MISO could explore to better align resource availability with energy needs. The RTO's current capacity construct socializes the costs of outages and derates by raising capacity procurements, he said.

LMRs

For MISO's LMRs, stakeholders and the Monitor suggested implementing lead time thresholds.

Bladen said stakeholders suggested MISO reduce capacity accreditation for long-lead resources and incentivize shorter lead time LMRs. Some said MISO should implement a

MISO News

cutoff on response time for a unit to be considered an LMR.

"We have a gamut of lead times in MISO; some are very long leads, some are medium leads and some are short response time. And we don't think about those as different capacity values," Bladen said.

MISO should only allow full capacity accreditation to emergency-only resources that can be ready for dispatch within one to two hours and are available beyond the summer season, Patton said. Currently, MISO's LMRs do not have an obligation to respond to emergencies outside of the summer months.

"Do we have access to the planning resources we procured when we need them ... and if not, why don't we?" Patton asked stakeholders.

Planning studies of LMRs "don't look anything like" the real-time response of LMRs during emergencies, Patton said. He also said some emergency-only resources' long lead times render them "essentially unavailable in an emergency" because operators typically don't see shortages more than a few hours in advance.

"I don't have anything against LMRs ... but if they don't meet the needs of the system when we procure them in the capacity auction, then we shouldn't pretend that they do," Patton said.

Some stakeholders pointed out that MISO can call on LMRs only after it declares emergency conditions. Customized Energy Solutions' Ted Kuhn said the RTO should consider sending notification to LMRs when emergency conditions are likely but haven't yet emerged.

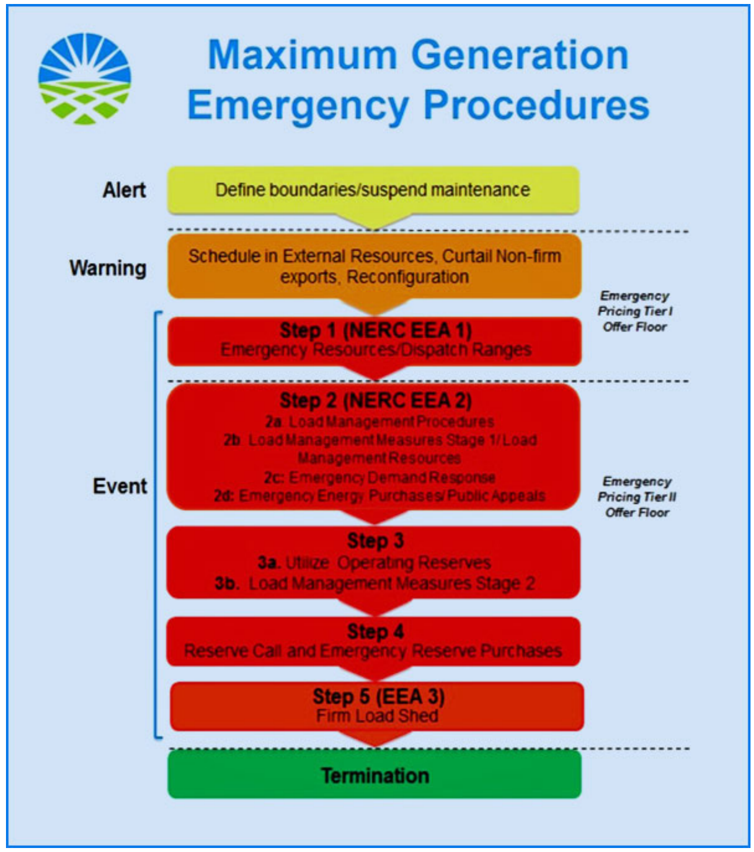
"You should be able to notify them that they might be needed, and earlier in the process," Kuhn said.

MISO's white paper suggests reordering the steps in its emergency declaration process as a potential solution.

Century Aluminum's Brian Helms said MISO's participant communication system should include more information to allow LMRs to decide when to reduce load for either economic reasons or as "the last stop before load shedding." He also said MISO's communication system is difficult for owners to navigate.

"Whoever created that, you didn't get your money's worth," Helms said.

"You don't know what we spent on it," Bladen responded jokingly.



Current MISO emergency process | © *MISO*

Reliability Subcommittee Vice Chair Ray McCausland reminded MISO that LMRs were once called "interruptibles."

"And boy, they complained when you used them," he said, warning that frequent deployment of LMRs will discourage loads from volunteering to provide the service.

Bladen agreed that MISO's frequency of LMR use is a delicate balance. He encouraged stakeholders to send in more written suggestions on outage planning, LMR rules and a seasonal capacity auction.

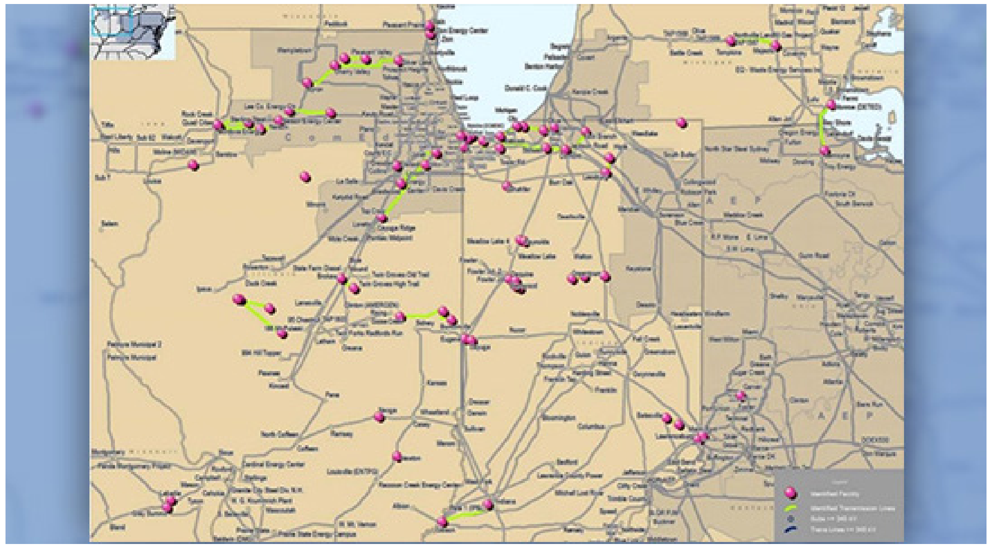
He also stressed that any upcoming recommendations would be technology-agnostic in nature.

"Any technology that can provide solutions will have a shot," he said. ■

MISO News

MISO, PJM Endorsing 2 TMEPs for Year-end Approval

By Amanda Durish Cook



MISO and PJM congested facilities on flowgates | *IPSAC*

MISO and PJM have whittled 20 prospective transmission projects down to two in their search for small interregional upgrades that relieve congestion on market flowgates.

If approved, the two targeted market efficiency projects (TMEPs) will be mostly paid for by MISO, which stands to reap the lion's share of project benefits, stakeholders learned during an Oct. 5 conference call held by the RTOs' Interregional Planning Stakeholder Advisory Committee (IPSAC).

MISO and PJM began the study process in spring, identifying 61 facilities that amassed about $500 million in congestion over 2016 and 2017. (See *"Possible Interregional Projects," FERC OKs MISO-PJM Double Charge Fix for Pseudo-ties.)*

A TMEP must cost less than $20 million, completely cover its installed capital cost within four years of service and be in service by the third summer peak from its approval. The process has a shorter outlook than the RTOs' interregional market efficiency project process, which evaluates projects over a 15-year timeline.

Alex Worcester, PJM interregional planning engineer, said the two projects that meet TMEP criteria will be recommended to the RTOs' boards in December:

- An upgrade on terminal equipment on the Marblehead 138/161-kV transformer in southeastern Michigan to increase its summer emergency rating. The facility has had $15.5 million in historical congestion. The RTOs said a $175,000 upgrade could yield $12.4 million in benefits within four years of service. MISO would pay for the entire project because it would reap all the project's benefits, Worcester said.

- A $4.3 million substation equipment upgrade to the Gibson-Petersburg 345-kV facility in southwestern Indiana. The tie has experienced $9.8 million in historical congestion over 2016 and 2017, and the project could provide a $19.5 million benefit within four years. MISO would cover 93% of the project cost, and PJM would cover the balance, pursuant to RTO benefits.

Worcester said the 18 remaining project candidates were disqualified from the TMEP process either because upgrades were already planned, upgrade costs were too high, the flowgate congestion was merely outage-driven or the issue was alleviated by the April *retirement* of We Energies' Pleasant Prairie coal plant in southeastern Wisconsin.

MISO and PJM also said two northern Indiana flowgates that were being investigated for potential TMEPs — the Dumont-Stillwell 345-kV tie linking Northern Indiana Public Service Co. and American Electric Power territories, and NIPSCO's Michigan City-Trail Creek 138-kV line — may be eligible in a future study to identify a larger interregional MEP project. ■

MISO News

MISO Granted Longer Deadline for Offer Caps

By Amanda Durish Cook

FERC on Oct. 1 granted MISO a two-year lead time to implement a new offer cap into its fast-start pricing mechanism, while also directing the RTO to submit yet another compliance filing to meet Order 831 requirements.

The commission's ruling set an Oct. 1, 2020, deadline for MISO to incorporate a $2,000/MWh hard cap for verified cost-based incremental energy offers into fast-start pricing (ER17-1570-002).

In a March ruling on a previous compliance filing, FERC accepted much of MISO's plan to permanently double its hard offer cap, but it also required the RTO to pledge to apply the new hard cap to adjusted energy offers from fast-start resources. (See *FERC OKs MISO's Doubled Offer Cap, Orders Alterations.)*

In the event FERC denied the extra time for implementation, MISO had also sought rehearing of the commission's March order, warning it would otherwise need permission to "resort to manual processes" to enforce the caps. Citing the ongoing replacement of its market system platform, MISO contended it would likely need more time to "make appropriate adjustments to automate the requirements of Order No. 831" and "complete necessary system software changes." The RTO also pointed out FERC granted ISO-NE a similar two-year lead time last November.

"We find that MISO has shown good cause for the granting of this requested effective date because it will allow MISO sufficient time for the development, testing and implementation of software needed to enable MISO's existing market platform to apply the offer cap requirements to fast-start pricing," FERC said.

One More Compliance Filing

Last week's order also approved other revisions FERC had ordered in the March compliance filing, although it directed MISO to refine its proposed rules to address adders to the soft offer cap.

FERC accepted MISO's fuller description of the data verification process for offers, how it would determine make-whole payments under the new offer cap and the process allowing market participants to dispute potential revenue sufficiency guarantee make-whole payments. The commission also accepted MISO's clarification that its Independent Market Monitor will use data from its operating cost survey to determine facility reference levels. The Monitor relies on the survey to collect operating cost data for market participants.

But in siding with the argument of a group of Midwestern transmission-dependent utilities (TDUs), FERC also directed MISO to submit another compliance filing to clarify that adders included in cost-based incremental energy offers above the soft cap of $1,000/MWh must be limited to a combined $100/MWh. MISO must also make clear those adders cannot be included in a resource's after-the-fact make-whole payment, the commission said.

MISO's Carmel, Ind. headquarters | © *RTO Insider*

> "Outage risk is a proper component of MISO's reference level and is not an adder to verifiable costs pursuantto Order No. 831. Midwest TDUs have not proffered any arguments or evidence that contradicts MISO's explanation of these risks." — *FERC*

FERC also denied a request for a rehearing of its March order from the same group of TDUs, who argued the commission was too quick to accept MISO's stance that outage risk is a verifiable component of energy cost rather than part of the $100/MWh adder above the soft offer cap. The TDUs argued it was arbitrary and capricious for FERC to find that outage risk is not an above-cost adder when it only used MISO's rationale that outage risk is already included in a resource's reference level in its current mitigation processes.

FERC didn't bite at their argument.

"MISO explained that outage risk is a legitimate short-run marginal cost calculated separately for each resource based on validated data provided by market participants," the commission wrote. "MISO also explained that incorporating this risk in a resource's reference level continues MISO's existing mitigation processes. As such, outage risk is a proper component of MISO's reference level and is not an adder to verifiable costs pursuant to Order No. 831. Midwest TDUs have not proffered any arguments or evidence that contradicts MISO's explanation of these risks." ■

MISO News

MISO: 20% Renewable Limit for Adequate Frequency Response

By Amanda Durish Cook

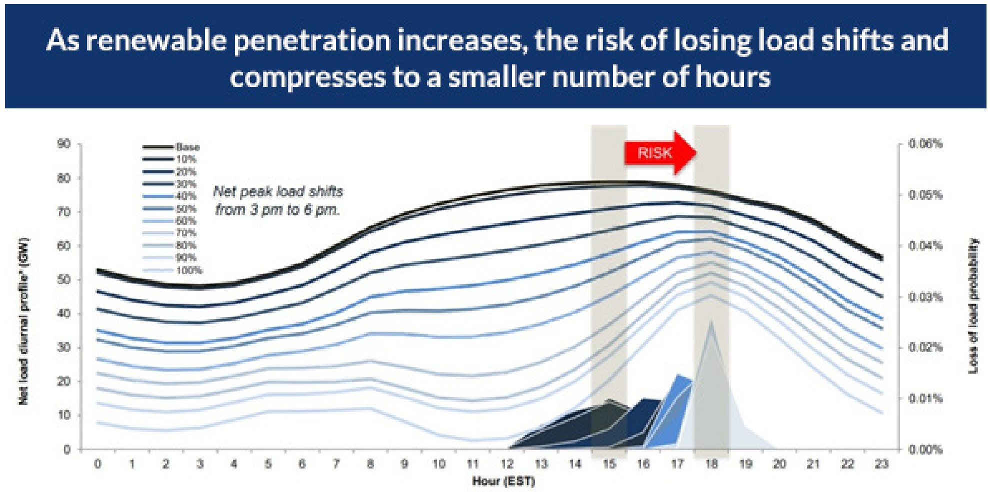
MISO last week said its grid can currently sustain 20% renewable penetration without damaging frequency response, the latest findings from its ongoing renewable integration impact study.

The RTO in spring published study results showing that increased renewable integration — especially solar generation — will shift peak load to evening hours, with a spikier but shorter daily loss-of-load risk. (See *MISO Renewable Study Predicts Later Peak, Narrower LOLE Risk.)*

The same study now concludes that MISO can more than double its current 8% renewable share of the resource mix while still maintaining a satisfactory frequency performance. Frequency response decreases slightly but is steady up to a 20% renewable mix, with the system remaining stable after the simultaneous loss of large generators up to 4,500 MW, Jordan Bakke, MISO policy studies manager, said during an Oct. 5 Reliability Subcommittee meeting.

Some stakeholders said the study doesn't contemplate that future storage resources could help improve frequency response.

"I think it's important to point out that this study doesn't include storage, and I think storage could really help the system," said Dave Johnston, an Indiana Utility Regulatory Commission staffer.



MISO later daily peak under renewable integration | *MISO*

Bakke said the study was conducted with the assumption that frequency response services will continue to go uncompensated.

"To the point we've gotten so far, storage hasn't been needed to solve an identified [frequency response] issue," Bakke said.

Early this year, FERC declined to order the RTO to compensate providers of primary frequency response, as Indianapolis Power and Light had requested. (See *FERC OKs MISO Plan to Expand Storage.)*

Coalition of Midwest Transmission Customers attorney Jim Dauphinais pointed out that FERC's Order 842 requires new generators to be capable of providing primary frequency response as a condition of interconnection.

Bakke said MISO's study did assume new generators "could provide it, but they won't because there's no incentive to provide."

MISO will continue to work on its renewable integration study through early next year. Bakke said the RTO will likely convene a stakeholder workshop on study results so far in November. ■

MISO: Sept. Emergency Response Improved by Jan. Event

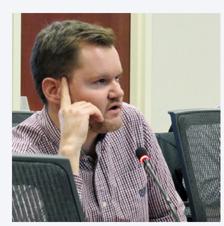
By Amanda Durish Cook

Lessons from the Jan. 17 MISO South emergency resulted in smoother management of the Sept. 15 emergency in the region, RTO officials told stakeholders last week.

MISO had better awareness of its contract limit on SPP transmission linking its Midwest and South regions during the emergency, Senior Real Time Operations Engineer Steve Swan told the Reliability Subcommittee meeting Oct. 5.

The latest maximum generation event resulted in emergency purchases and public appeals to conserve energy. (See *Emergency Ops, Calm Summer Top Talk at MISO Board Week.)*

"Overall, performance that day between MISO and our joint parties was a lot better than the January maximum generation event," Swan said, adding that MISO communicated often with SPP about flows to South, which exceeded the 3,000-MW north-to-south sub-regional contract limit on the SPP line for about 15 minutes.



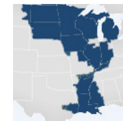
Dustin Grethen | © *RTO Insider*

MISO is pledging to do more in time for the next emergency, including conducting drills on emergency purchases with external entities and continuing to work with SPP on managing the North-South contract path.

MISO analyst Dustin Grethen said the Sept. 15 emergency could probably have been helped by a reserve capacity product. The RTO hopes to complete a conceptual design of a short-term capacity reserve project by the end of the year or early 2019. It is developing a capacity product with a 30-minute ramp response time furnished by units that are both online and offline.

In September, MISO Executive Director of Market Development Jeff Bladen said that he expected the product to become "a very valuable part of MISO's portfolio." He said the 30-minute time span

MISO News



will be useful for system flexibility because wind forecasts become "very, very accurate" 30 minutes out.

Weather Forecasts

Swan said a missed weather forecast led to a 1.8-GW load forecast error in MISO South on Sept. 15. The RTO ultimately had to commit 1.1 GW above the day-ahead commitment for South after a 1.4-GW generator in the region unexpectedly tripped off late on Sept. 14.

"This is one of the worst days we've had for our load forecast error historically. It seemed to be a one-off," Swan said.

MISO was in "constant contact" with its two weather forecast vendors throughout the day of the emergency, Swan said. The vendors continued to stand by their afternoon forecasts hours before the emergency. However, hotter-than-expected weather materialized quickly, and an expected cloud cover never appeared.

After stakeholder questioning, Swan said MISO had "no reason to believe" that missed forecasts would become more common.

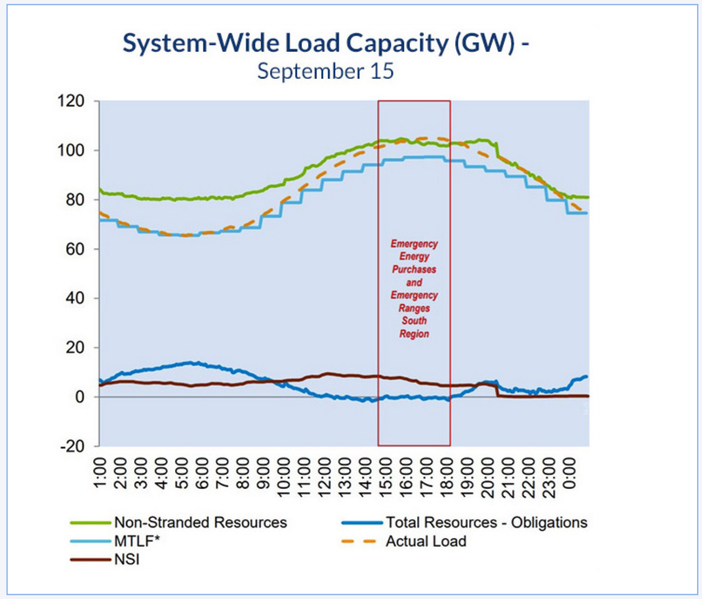
Some stakeholders argued that local meteorologists saw the extreme heat, asking MISO to include local forecasts in their weather predictions. We Energies' Tony Jankowski asked MISO to consider hiring an in-house meteorologist. However, RTO staff maintained that even local weather forecasters underestimated the heat that day. Staff said aggregate load forecasts from local balancing authorities were actually lower than MISO's load forecast for the day.

Michigan Public Service Commission staffer Bonnie Janssen asked if MISO could work with the forecasting vendors more closely. She said it's not uncommon for surrounding regions to experience unusual weather patterns as hurricanes make landfall. Hurricane Florence had arrived at North Carolina a day earlier on Sept. 14.

Swan said MISO is continuing to work with the vendors on communication protocols.

2 LMRs Disqualified

Meanwhile, MISO disclosed that it had disqualified two load-modifying resources (LMRs) from providing capacity for the remainder of the 2017/18 planning year because of nonperformance during the mid-January emergency.



MISO Sept 15 load and capacity | *MISO*

MISO analyst Scott Thompson said the LMRs had not updated their availability through the entire month of January or throughout the 2017 summer. They also did not respond to MISO's scheduling instructions during the January event, nor did they participate in earlier LMR drills, he said.

"They weren't making the effort to show up. They thought the capacity payment was good enough, but they didn't hold up their end of the equation," Thompson said.

FERC and NERC announced in early September that they would investigate the Jan. 17-18 cold snap and subsequent maximum generation alert for the South. (See FERC, NERC to Probe January Outages in MISO South.)

At an Oct. 4 Reliability Subcommittee meeting, Chris Miller, FERC's liaison to MISO, reminded stakeholders that the commission's action is simply an inquiry, not enforcement. Miller said MISO and other RTOs seemed to better handle communication during high temperatures this summer and severe weather from Florence. ■

PJM News

Little Common Ground in PJM Capacity Revamp Filings

Continued from page 1

concluding that increasing state subsidies for renewable and nuclear power were suppressing capacity prices. The commission's 3-2 ruling required PJM to expand the MOPR to cover all new and existing capacity receiving out-of-market payments, including renewable energy credits (RECs) and zero-emission credits (ZECs) for nuclear plants. The MOPR currently covers only new gas-fired units.

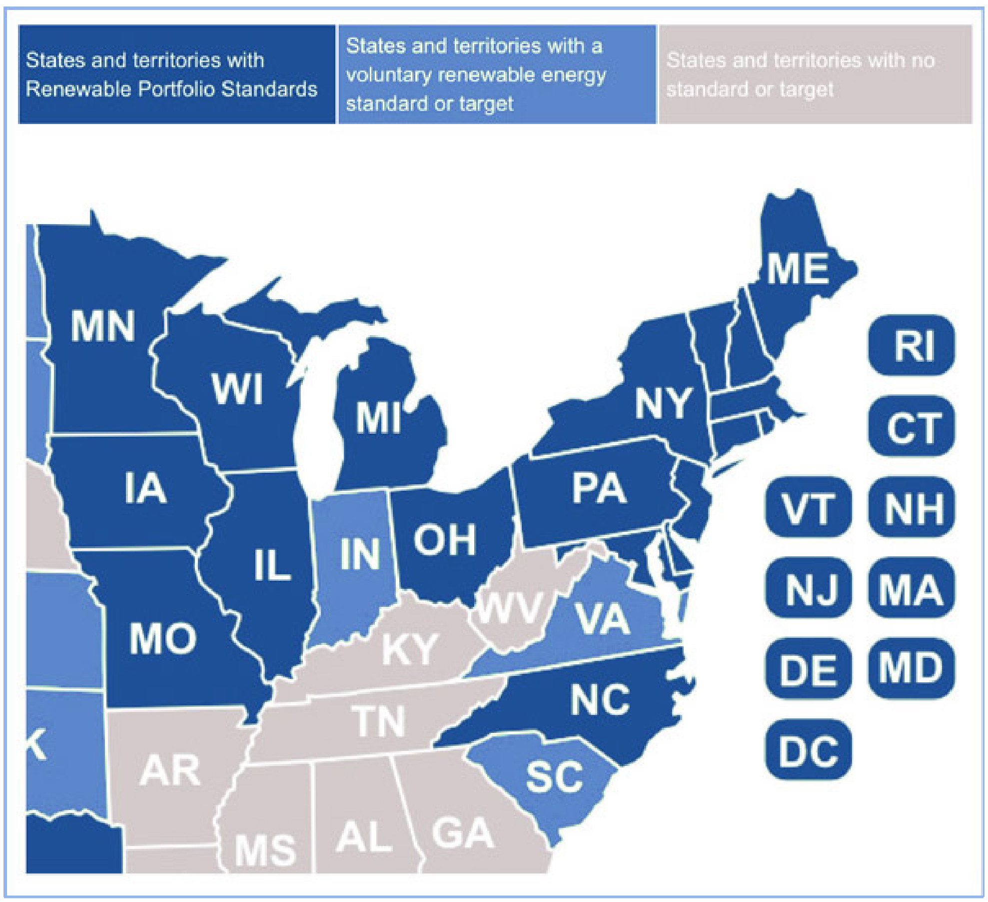
The commission's ruling rejected PJM's April "jump ball" capacity filing (ER18-1314), granted in part a 2016 complaint led by Calpine (EL16-49) and initiated a Section 206 proceeding in a new docket (EL18-178). FERC also recommended creating an "FRR Alternative" allowing states to pull subsidized resources — and associated loads — from the capacity auction. (See *FERC Orders PJM Capacity Market Revamp.)*

PJM's brief on Oct. 2 outlined its proposal for an "extended resource carve out" that builds on ideas it floated to stakeholders in August. (See *PJM Unveils Capacity Proposal.)*

The proposal would allow subsidized resources to obtain capacity commitments without clearing the capacity market, while creating a mechanism to restore prices to "the theoretically correct competitive level."

The RTO said its proposal is intended to ensure both capacity offers and prices remain competitive and recognizes a bifurcated market will result in tradeoffs. "Making room, outside the auction, to accept subsidized generation as a PJM 'capacity resource' ineluctably will degrade auction prices. Unless the commission is prepared to accept a mechanism to adjust prices to their 'correct' level, this trade-off must be understood as an unavoidable consequence that comes once uneconomic resources are relieved from having to participate in the market."

The Maryland Public Service Commission *proposed* what it called a "competitive carve-out approach" in which "a certain amount of load associated with the implementation of state policies is carved out of the existing capacity market and a separate competitive carve-out auction [is held] to meet the capacity needs associated with this amount of load."



RPS National Map | *National Conference of State Legislatures*

EPSA said the FERC's order would allow a state "to play the capacity market hokey pokey, putting its left foot into the market and pulling its right foot out."

"This capacity would be provided by resources eligible to meet any state's environmental policies," the PSC wrote. "In effect, this proposed approach recognizes that, in the aggregate, resources eligible to meet states' environmental policies and receive revenues for environmental attributes, may be capable of providing capacity to help meet the reliability requirements of all states and the region."

It noted that the Organization of PJM States Inc. (OPSI) supported development of the idea.

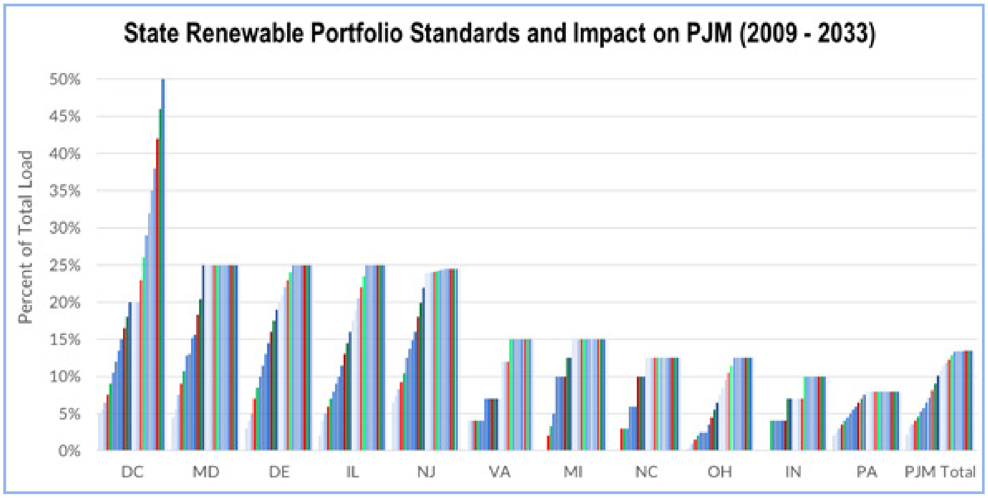
'Hokey Pokey'

The Electric Power Supply Association said the commission should prioritize protecting the capacity market from price suppression over accommodating state policies. It said the FRR Alternative would "effectively nullify" an expanded MOPR and could lead to the unraveling of the market.

"The FRR Alternative will actively push states towards the path of partial reregulation by letting them choose to be part in and part out of the [capacity] construct and, more importantly, away from reliance on competitive, organized markets," EPSA said. It said the order would allow a state "to play the capacity market hokey pokey, putting its left foot into the [Reliability Pricing Model] market and pulling its right foot out.

"Even if the FRR Alternative provides greater transparency, that transparency does not make

PJM News



the resulting reregulation any more planned or any less damaging to what remains of the market," EPSA said. "The only advantage of the transparency afforded by the FRR Alternative is that 'investors, consumers and policymakers' will have the opportunity to watch the collapse of the markets on the equivalent of a live-feed."

Carbon Pricing

Eastern Generation, an EPSA member, filed a brief *calling* on the commission to treat the expanded MOPR as a "bridge" to PJM developing a mechanism for incorporating carbon pricing into its markets. "Carbon pricing is a more durable and sustainable long-term approach that will improve the efficiency of PJM's capacity and energy markets while accommodating state and federal clean energy policies."

A coalition of consumer advocates, environmentalists and industry stakeholders filed a *joint brief* arguing for prioritization of state interests.

"We frequently disagree on many issues before this commission, and some of us even disagree on certain aspects of this proceeding, such as the circumstances that should trigger a minimum offer price rule," said the group, which includes consumer advocates from D.C. and Illinois, the Sierra Club, Natural Resources Defense Council, PSEG Energy Resources & Trade, Talen Energy, Exelon and the Nuclear Energy Institute.

"But as to the commission's proposal regarding a resource-specific fixed resource requirement alternative (FRR-RS), the joint stakeholders strongly agree the commission's decision should reflect certain basic principles: The commission should protect customers from paying for duplicate capacity and should preserve states' ability to achieve clean energy policy goals without forcing states to withdraw altogether from the PJM market." (See *Zero-Emissions Backers Propose PJM Capacity Principles.)*

In its standalone brief, Exelon called on the commission to "express its willingness to entertain a Section 205 filing from PJM incorporating carbon pricing."

The Natural Gas Supply Association said PJM's status quo would create an "untenable" environment where investment uncertainty erodes reliability and regulators pick winners and losers.

"Integrating a carbon price into PJM's markets would reduce or eliminate the need for states to address carbon emissions from the power sector in other ways," the company said.

PURPA Resources

Allco Renewable Energy *said* qualifying facilities under the Public Utility Regulatory Policies Act should have the option of choosing the FRR Alternative but should not be subject to the expanded MOPR, which it said would "unlawfully restrict, interfere and diminish the congressionally mandated right of a qualifying facility to sell energy and capacity."

Columbia University's Sabin Center for Climate Change Law *insisted* state environmental policies do not interfere with FERC-regulated markets. "Unless implemented with care, FERC's proposed Tariff revisions could interfere with the operation of state clean energy policies, effectively preventing states from exercising their authority over generation," it said. "There is no valid basis for concluding that REC, ZEC and other clean energy policies interfere with wholesale market operation."

A Matter of State Jurisdiction

The Governors' Wind and Solar Energy Coalition *said* FERC's minimum bid requirement would intrude on states' historical right to choose their own energy mix: "If the commission pre-empts or restricts the states' ability to regulate environmental effects from energy power production, it would constitute a dangerous shift in the balance between state and federal authority."

However, the Natural Gas Supply Association *said* it was "heartened" by what it called FERC's "strong defense of the competitive markets it regulates."

NGSA said PJM's status quo would create an "untenable" environment where investment uncertainty erodes reliability and regulators pick winners and losers.

"It is no easy task to achieve a balance that allows states to make their own procurement decisions, while still ensuring those decisions do not harm the wholesale markets in your jurisdiction. Despite considerable pressure to disregard actions that erode the integrity of PJM's capacity market, the commission had the courage to say, 'no more,'" NGSA CEO Dena Wiggins wrote.

The American Coalition for Clean Coal Electricity and the National Mining Association also *commended* FERC on what they viewed as an effort to keep PJM's market functioning through an expanded MOPR applied to all subsidies.

However, the groups asked for an exception to the MOPR: an exemption on a possible fuel security valuation in the PJM capacity market. They said a new MOPR shouldn't "counteract federal efforts to ensure grid resilience and promote national security." The groups urged FERC to require PJM to create a separate

PJM News

capacity auction for resources that can guarantee fuel security for a minimum number of days.

PJM's "current market design is contributing to the loss of fuel-secure electricity resources, while encouraging reliance on pipeline-dependent and intermittent resources," ACCCE and NMA said.

EPSA countered that any federal price supports for nuclear and coal units should subject them to the MOPR.

Other Out-of-Market Payments?

In arguing against an expanded MOPR, the Union of Concerned Scientists *said* PJM's proposal "would arbitrarily provide an exemption for resources that have one kind of state-supported revenue, but not for other kinds of state-supported revenue."

> **Restricting states' ability to regulate environmental effects from energy power production "would constitute a dangerous shift in the balance between state and federal authority."**
>
> *— Governors' Wind and Solar Energy Coalition*

UCS argued PJM's fleet of existing resources with state-sponsored out-of-market payments is "substantial" and greater in number than PJM has characterized.

"If the fundamental principles presented by both PJM and the commission are as important as suggested, and the commission has found that any price suppression due to out-of-market payments makes the PJM capacity auction results unjust and unreasonable, then there cannot be MOPR exemptions for investor-owned plants that have been receiving cost-recovery through state-administered rates," UCS wrote. It also said PJM did not collect the list of states with out-of-market revenues for investor-owned generation through either a renewable portfolio standard, zero-emission credit program or regulated cost-of-service.

"All of the states in PJM have one or more of these mechanisms that provide the means for generation to either enter or remain viable in PJM's capacity market," UCS said.

UCS said the fact that PJM's Tariff allows zero-priced offers is evidence of state-supported cost recovery to keep resources viable in the capacity market.

APPA: Start Over

The American Public Power Association went for a scorched-earth approach, challenging PJM's RPM itself.

The group argued PJM's mandatory capacity market with a strict MOPR is "ill-suited" to achieving a diverse resource mix. It said PJM's MOPR "now threatens to become an all-purpose restriction on any support for generation outside of revenues obtained through the PJM energy and capacity markets" and could "ultimately raise capacity prices without achieving any clear benefits."

"The time is ripe to revisit the RPM construct in a comprehensive manner," APPA said, rather than "doubling down" on a mandatory capacity construct with a "vastly expanded MOPR."

APPA also argued self-supply resources used to meet the load of public power and cooperative utilities should not fall under an expanded MOPR, arguing vertical integration and tax-exempt financing do not constitute out-of-market support.

IMM's 'Sustainable Market Rule'

PJM's Independent Market Monitor also *suggested* re-envisioning the RTO's structure with what it calls a "sustainable market rule" that it argues is simple enough to be implemented in time for the next Base Residual Auction. While the Monitor attempted to differentiate its proposal from a MOPR, it would require all resources to offer into the BRA at their avoidable cost rate (ACR).

"A competitive offer in the capacity market is the marginal cost of capacity, or net ACR, regardless of whether the resource is planned or existing," the Monitor wrote. "All capacity has a must-offer requirement and all capacity offers are included in the supply curve in the capacity market at competitive levels. All megawatts required for reliability are included in the capacity market demand curve (VRR curve)."

The Monitor acknowledged that load-side fears might be realized with this approach, but that "the possibility that customers may pay twice has been accepted by the courts" and FERC.

> **"The time is ripe to revisit the RPM construct in a comprehensive manner."**
>
> *— American Public Power Association*

CASPR Appears

Vistra Energy and Dynegy Marketing and Trade *proposed* the Capacity Performance with Sponsored Supply (CaPSS), which it said is based on ISO-NE's FERC-approved Competitive Auctions with Sponsored Policy Resources (CASPR) structure.

The two-stage auction would require all resources to offer in at their going-forward costs. PJM would create a table of resource-type ACRs, and any resource that believes its going-forward costs are below its applicable value in the RTO's table would request a review to validate its argument. The second stage would be "purely voluntary" and allow existing resources that received a capacity obligation but are willing to permanently exit PJM's markets to "give up" their obligations "in their entirety" to resources seeking subsidies that didn't receive obligations in the first stage.

Next Steps

FERC faces a daunting task of threading the needle between at least eight proposed options for the MOPR and numerous modifications on both its FRR concept and PJM's carve-out. Reply briefs in the docket will be due Nov. 6. ■

PJM News

Illinois: PJM Market Design Enriching Exelon

By Rory D. Sweeney

Transmission constraints combined with PJM's market design and Exelon's control of local generation allow the company to name its price for capacity commitments in the Chicago area, according to an energy economist advising the state of Illinois.

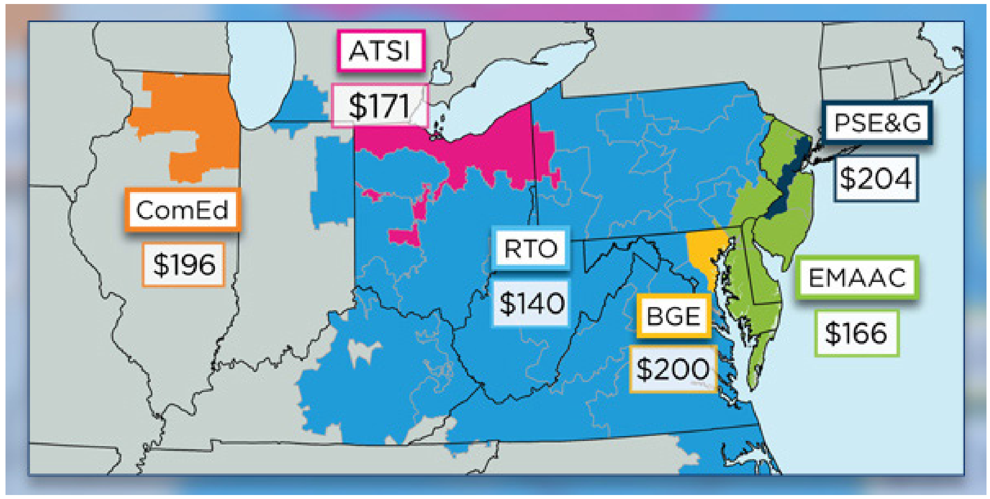
"While PJM's Base Residual Auction has many safeguards, it does not have an explicit ability to mitigate market power on the scale exerted by Exelon in Northern Illinois," economist Robert McCullough wrote in an *affidavit* commissioned by Illinois Attorney General Lisa Madigan. "Overall, it seems very likely that Northern Illinois is not well served by the existing algorithm."

Madigan included the affidavit last week in Illinois' brief in the FERC "paper hearing" on potential changes to PJM's capacity market (EL18-178). Madigan's brief said the high clearing prices in Exelon's Commonwealth Edison zone in the Chicago area "are consistent with an economic withholding strategy." (See related story, *Little Common Ground in PJM Capacity Revamp Filings.)*

At issue in the docket is whether generators that receive state or federal subsidies should have to remove the cost-lowering benefit of their subsidy from their offers into PJM's capacity auctions.

McCullough, who has worked on RTO issues for more than three decades, says concerns over the market impacts of subsidized generation may not matter in the ComEd zone because Exelon already looms so large there. The capacity offers of individual Exelon units — such as the Quad Cities nuclear plant that receives $170 million through Illinois' zero-emissions credit (ZEC) program — "is now irrelevant to the market clearing price in Northern Illinois," he wrote.

"It is impossible for Northern Illinois to meet its reliability requirements without Exelon's fleet of nuclear plants. Most importantly, the specific cost of any one of the plants is effectively irrelevant since four to five of those plants are required to meet the zone's reliability requirements," McCullough wrote. "Since Exelon's portfolio determines the market price, the actual bid for Quad Cities has no impact on the outcome. Quad Cities' capacity revenues will be set by the marginal Exelon resource. Exelon can also determine which plants will clear and which will not."



ComEd's clearing price was the highest west of BGE in the Base Residual Auction for the 2021-22 delivery year. | *PJM*

It's not the first time Exelon's market power in PJM has been questioned. Five of the company's nuclear units failed to clear in the 2014 capacity auction. But analysts said that actually boosted the company's capacity revenues by almost $150 million because the additional supply would have dramatically reduced clearing prices. (See *How Exelon Won by Losing.)*

Exelon responded to the Illinois filing by insisting that its bidding strategy followed all market rules.

"In [the 2018] auction, Exelon offered its carbon-free nuclear generation at a competitive price based on each plant's costs and risks of operation, and we did so in full compliance with all rules governing PJM capacity auctions," the company said in an email Monday. "Because current rules treat emitting generation the same as clean generation, half of our fleet was not selected in the auction and did not earn any capacity revenues. As a result, most of the generation that ComEd customers paid for in the last auction was other generators' fossil fuel-burning generation. That needs to change to protect customers and communities from the harmful effects of carbon and air pollution."

Exelon threw its support in the docket behind a coalition of environmental groups, consumer advocates for Illinois and D.C., and generation companies with nuclear assets to advocate for allowing states to subsidize "clean" generation. (See *Zero-Emissions Backers Propose PJM Capacity Principles.)*

Three Requests

McCullough's affidavit was developed to support the attorney general's *filing* in the docket, which set a paper hearing to determine how to insulate PJM's capacity auctions from price suppression created by subsidized generation. (See *FERC Orders PJM Capacity Market Revamp.)*

In her filing, Madigan urged FERC to require PJM to release bidding data from each auction as its neighbor in the state MISO does, while keeping bidders' identities anonymous. She also asked FERC to implement a cap on what revenues subsidized resources can obtain under the fixed resource requirement (FRR) structure and to delay implementation of any changes until states can adjust their own policies to account for them. It also called for developing a minimum offer price rule (MOPR) for any subsidized resources and ensuring that units' avoidable cost rates (ACRs) include all revenues, including those from subsidies and energy and ancillary services markets.

While other filings in the docket called for eliminating price suppression related to subsidies or ensuring that subsidized resources continue to count as capacity to cover a region's demands, the attorney general focused on the impact of Exelon's control of supply in the zone served by ComEd, which Exelon also owns.

"Exelon is a pivotal supplier with substantial market power to set the ComEd zone capacity price. The high clearing prices evident in the ComEd zone are consistent with an economic withholding strategy that aims to maximize

PJM News

revenues for a portfolio through strategic bidding of individual units," Madigan wrote. "Under current capacity auction rules, in the ComEd zone Exelon has no incentive to adopt a bidding strategy that will result in a clearing price that is lower than a competitive price due to the thousands of megawatts of other Exelon capacity that will benefit from a higher, competitive clearing price. ... There are insufficient non-nuclear resources for the ComEd zone to clear without some Exelon nuclear units clearing."

McCullough noted that ComEd's clearing prices increased from last year's 2020/21 BRA that didn't include ZECs to the most recent 2021/22 BRA that did, even though they should have fallen for at least three reasons: the ZEC law, the new tax law that substantially reduced generators' federal taxes and the expansion of transmission capacity into ComEd.

"Notwithstanding the presence of a subsidized plant, the relatively high ComEd clearing price is consistent with the fact that the subsidized company (Exelon Generation) owns a total of 10,604 MW out of the 27,930.4 MW [that] were offered in the 2021/2022 auction," the attorney general wrote. "With 40% of the generation owned by a single entity and a resulting [Hirschfield-Herfindahl Index] of 2,347, the ComEd zone is highly concentrated." The index is used by federal agencies to measure the concentration of markets and considers anything about 2,500 to be "highly concentrated," according to the Department of Justice's Antitrust Division.

Flawed Algorithm

McCullough developed his analysis by plotting what the ComEd clearing prices would have been under several hypothetical scenarios published by PJM and its Monitor. The resulting prices and quantities "resemble a cloud of points rather than the traditional monotonic supply curve we see in actual markets" in which costs rise with output, he said.

In fact, he found that the hypothetical clearing price decreased in some scenarios where supply was added or removed, meaning that the final clearing price could have been lowered in the zone either by adding or subtracting supply and the actual price was higher than it necessarily could have been.

"By all appearances, the PJM algorithm does not work well for constrained markets," he wrote. "The effect of ZECs or other major out-of-market payments on PJM's capacity market is far from clear or direct. To avoid further market distortions and assure just and reasonable rates, all aspects of the market, including the market characteristics of constrained zones, market power and the details of the PJM algorithms must be part of any analysis."

However, neither McCullough nor Madigan blamed Exelon for taking advantage of the situation. Instead, they argued it proves that the ZEC program is not suppressing prices.

McCullough said PJM staff incorrectly assumed prices would fall because Exelon would bid Quad Cities at $0/MW-day, when "Exelon could be expected to have simply adjusted its bids on other plants in its portfolio in the ComEd zone to offset the increase in supply and preserve the capacity price level." So instead of producing the price suppression PJM predicted, "the outcome was actually the opposite to the forecasts from the PJM experts — in spite of significant cost reductions and the expansion of alternatives, the price in the ComEd zone increased from $188.12/MW-day [in the 2020/21 auction] to $195.55/MW-day [in the 2021/22 auction]."

A Complex Market

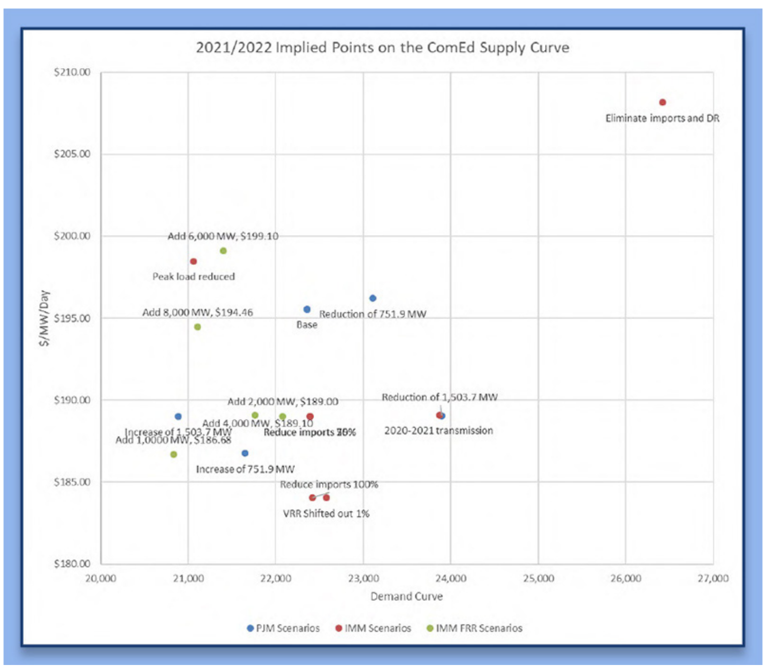
Because PJM doesn't release bidding data, McCullough used his analysis to attempt to deconstruct PJM's algorithm. He concurred with three issues previously identified by the Monitor that:

- Requiring the algorithm to solve within a specific amount of time can return different results based on the speed of the computers.
- The results can be impacted by small criteria changes.
- The algorithm can return more than one optimal result even with identical inputs and parameters.

"When only inflexible or very high-priced offers remain, none of the auction clearing procedures identified in [Reliability Pricing Model] documents are likely to lead to the competitive optimal price predicted by economic theory," he wrote. "Given the complexity of the PJM capacity market — far more complex than the neighboring capacity market in MISO — it is critical that FERC apply clear and transparent rules to enable review and analysis of the capacity market data and results. ... In Northern Illinois, where the same company dominates both the capacity market and owns the utility serving the major capacity loads, the FRR option opens the possibility of self-dealing. In the worst possible case, the FRR might well result in prices above competitive prices for consumers while depressing prices in the BRA."

To address the issues, he suggested both a MOPR and an offer cap for FRR units set at the net ACR calculated for each unit individually.

"Absent that cap, the capacity market in Northern Illinois will continue to clear at an uncompetitively high level irrespective of the ZEC subsidies," McCullough wrote. "This is necessary to return the Northern Illinois market to a state as close as possible to competitive conditions where capacity prices represent the net revenues needed to enable the resource to be a capacity resource, based on costs needed to operate but not covered by other revenues." ■



While a graph of the ComEd clearing price under different scenarios should be generally monotonic and upward sloping, McCullough says the results didn't show that. | *Robert McCullough*

SPP

FERC Denies Rehearing on SPP Tx Cost Shifts

By Tom Kleckner

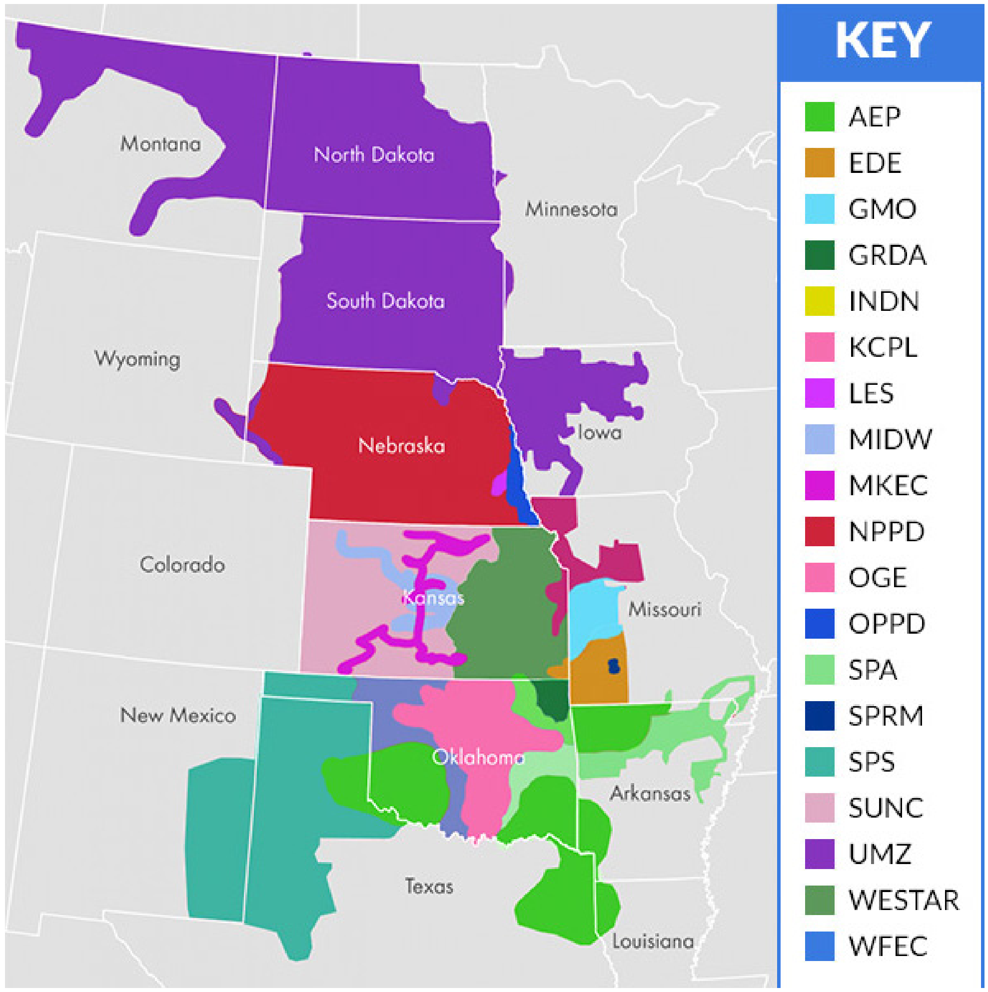
FERC last week denied a rehearing request by SPP transmission owners of its earlier decision on the allocation of transmission costs, saying the TOs had not shown the RTO's provisions had become unjust and unreasonable (*EL18-20*).

The commission's Oct. 3 order affirmed its March decision, which rejected the TOs' complaint that SPP unfairly allocates costs to incumbent TOs when a new owner is integrated into an existing transmission pricing zone.

The companies had argued that a "loophole" in SPP's Tariff forces customers within an existing zone to pay a share of the legacy costs for transmission lines newly integrated into the zone. That practice, the complainants said, runs counter to the "no legacy cost shift" protections SPP has established. (See *FERC Rejects TO Complaint on SPP Zonal Placements.)*

In the March ruling, the commission said the TOs failed to carry the burden of proof to support their request for a prohibition on cost shifts. In last week's order, FERC said the TOs also failed to prove that SPP's Tariff is unjust and unreasonable because it lacks provisions dictating what information RTO must include in filings to add a new TO to an SPP zone to justify cost shifts.

"As the commission noted in the March 15 order, SPP will need to make an [Federal Power Act] Section 205 filing to add the ATRR [annual transmission revenue requirement] of a new transmission owner to an existing zone's ATRR," the commission said. "The fact that SPP's Tariff does not expressly require this filing to justify any potential cost shifts does not change the commission's obligation to determine that the revised ATRR is just and reasonable. … SPP, and any other proponents of the revised ATRR, still has the burden of proof to demonstrate that the rate is just and reasonable and must ensure that there is a sufficient evidentiary record for the commission to make a reasoned decision. Likewise, the fact that SPP's Tariff does not specify that SPP must justify any potential cost shifts in its filing with the commission does not prevent parties from arguing that the allocation of the costs of a new transmission owner's facilities to existing customers in the zone in which SPP proposes to place those facilities renders the revised ATRR unjust and unreasonable under the circumstances of the case."



SPP transmission zones | *SPP*

The commission noted that it considered information regarding cost shifts in its May 17 ruling on SPP's placement of Tri-State Generation and Transmission Association in existing transmission pricing Zone 17 (ER16-204). (See *FERC Rejects NPPD Objection to Tri-State Zonal Placement.)*

The order "provides further assurance that the case-by-case approach to assessing the implications of cost shifts espoused in the March 15 order will not result, as indicated SPP transmission owners fear, in rate impacts being excluded from the commission's consideration or in protesters bearing an unreasonable burden of proof," FERC said.

The commission also reiterated its conclusion that the TOs failed to prove that cost shifts create a disincentive to RTO membership. "Indicated SPP transmission owners caution that transmission owners may be reticent to join SPP due to the potential that their customers' rates may one day increase if other transmission owners join and are placed in the same zone. However, as the commission noted in the March 15 order, not all cost shifts will benefit the new transmission owner, and some could even benefit the existing transmission owner and its customers."

The filing TOs were American Electric Power, on behalf of Public Service Company of Oklahoma and Southwestern Electric Power Co.; City Utilities of Springfield (Mo.); Kansas City Power & Light; KCP&L Greater Missouri Operations Co.; Nebraska Public Power District; Oklahoma Gas & Electric; Omaha Public Power District; Southwestern Public Service; Sunflower Electric Power; Mid-Kansas Electric; Westar Energy; and Western Farmers Electric Cooperative. ■

FERC & Federal News

EIPC Finds Interregional Tx Planning Working Well

By Michael Brooks

Transmission planning in the Eastern Interconnection is well-coordinated among its planning authorities, ensuring NERC reliability requirements are met, according to a *report* released Wednesday by the Eastern Interconnection Planning Collaborative (EIPC).

The "State of the Eastern Interconnection" doesn't get into the nitty gritty. At only 21 pages, it summarizes EIPC's efforts since its formation in 2009 to examine the interconnection from the bottom up and ensure that planning coordinators' individual regional transmission plans do not conflict with each other.

"The EIPC has completed a comprehensive description of Eastern Interconnection Planning Collaborative activities over the last decade, including results from its studies and analyses on the regional transmission plans of the major systems that make up the Eastern Interconnection," said Stephen Rourke, vice president of system planning for ISO-NE and chairman of the EIPC Executive Committee. "The report details how the Eastern Interconnection grid is being planned in a coordinated manner, facilitated in part by the work of the EIPC."

"The work undertaken at EIPC confirms that the regional plans mesh properly into a combined plan for the interconnection."
— EIPC

EIPC is made up of 20 planning coordinators — including the five Eastern RTOs — in FERC-designated planning regions: the RTOs' territories, the Florida Reliability Coordinating Council, South Carolina Regional Transmission Planning and Southeast Regional Transmission Planning. FERC Order 1000 only requires pairs of neighboring regions to coordinate their planning. *SPP and MISO* work together, for example, as do *MISO and PJM* — but PJM and SPP do not.

"EIPC efforts provide an additional forum to complement interregional coordination of the combined plans of the regional planning coordinators from an interconnection-wide basis," according to the report. "While reliability requirements are achieved in the first instance at the regional level through regional processes, the work undertaken at EIPC confirms that the regional plans mesh properly into a combined plan for the interconnection."

The heart of the collaborative's work are its two "roll-up" studies, which involved combining the individual regional plans and their underlying data, such as resource mix and projected demand, into an integrated, interconnection-wide model.

The first *study* was conducted in 2014 for the summer peak hours in 2018 and 2023. The *second*, released in 2016, covered the 2025 winter and summer peaks.

As part of the latter study, EIPC identified several interconnection-wide power-flow interactions resulting from the regional plans that could cause constraints, leading planning coordinators to develop "conceptual upgrades" for inclusion in future planning cycles.

Another analysis in the study to locate potential constraints simulated 5,000-MW transfers between regions.

"The roll-up analyses demonstrate that the respective planning coordinator transmission planning and interconnection processes, which explicitly include requirements for coordination, have yielded transmission plans that are well coordinated on a regional and interconnection-wide basis," the report says. ■

The Eastern Interconnection also includes the Canadian Maritime provinces: New Brunswick, Nova Scotia and Prince Edward Island. | *ERCOT*

FERC & Federal News

Trump Nominates DOE's McNamee to FERC

'Fuel Wars' Likely in Confirmation Fight

Continued from page 1

CEA as "a fossil fuel-funded advocacy group." (See *DOE, Pugliese Press 'Baseload' Rescue at NARUC.)*

In January, FERC voted 5-0 to reject Energy Secretary Rick Perry's Notice of Proposed Rulemaking to save at-risk coal and nuclear plants and instead opened a docket to consider resilience concerns. In June, however, Trump ordered Perry to save coal and nuclear plants under an obscure Korean War-era law. That effort is still pending, although the ***Washington Examiner*** *reported* Friday that it may have stalled in the face of opposition by conservative, free-market groups.

A graduate of the University of Virginia and Emory University School of Law, McNamee has had a variety of political and legal jobs in Texas, Virginia and D.C. In addition to stints at the law firms of Hunton & Williams (now Hunton Andrews Kurth), Williams Mullen and McGuireWoods, he spent time in the attorney general's offices in Texas and Virginia and was policy director for former Gov. George Allen's (R-Va.) 2000 U.S. Senate campaign.

After serving as Cruz's senior domestic policy adviser and counsel from July 2013 to November 2014, he spent a year as chief of staff to the Texas attorney general, where his LinkedIn profile said his work included "challenging the federal government on environmental regulations, defending religious liberty and promoting federalism."

Bernard McNamee | © *RTO Insider*

He first joined DOE as deputy general counsel for energy policy in May 2017 but left after 10 months to become the director of the Texas Public Policy Foundation's *Center for Tenth Amendment Action* and *Life: Powered*, a project to "reframe the national discussion" about fossil fuels.

'Blessed' by Coal, Natural Gas

In an *op-ed* published in The Hill on Earth Day in April, McNamee defended fossil fuels against criticism over their environmental damage. "America is blessed with an abundant supply of affordable natural gas, oil and coal. When we celebrate Earth Day, we should consider the facts, not the political narrative, and reflect about how the responsible use of America's abundant resources of natural gas, oil and coal have dramatically improved the human condition — and continue to do so," he wrote.

He returned to DOE in June as executive director of the Office of Policy.

In July, McNamee defended the administration's plans for price supports in a hearing of the Senate Energy and Natural Resources Committee. "A lot of the organized markets have distortions in them that aren't representative of an actual free-serving market, so the thought is you need to remove some of those distortions and get some more parity," McNamee said.

Reaction

Michelle Bloodworth, CEO of pro-coal group ACCCE, called Wednesday for McNamee's "swift confirmation."

"FERC has a critical role in assuring that wholesale markets value resilience attributes, especially fuel security. McNamee's background and experience at the state and federal levels make him well qualified to be the next FERC commissioner," she said. ACCCE says about 120 GW of coal-fired generating capacity, about 40% of the remaining fleet, has retired or announced plans to do so.

"If McNamee is confirmed to FERC, he will abuse that authority to lead the charge to force taxpayers to spend tens of billions of dollars to bail out old, expensive coal and nuclear plants, at the expense of cleaner, cheaper competitors like solar, wind and grid storage," Mary Anne Hitt, senior director of Sierra Club's Beyond Coal campaign said in a statement when McNamee's name was floated as a potential nominee in August. "Trump is hoping to install a crony at FERC who will unfairly tip the scales in favor of propping up those failing industries."

"Powelson's departure was widely seen as opportunity for the White House to more closely align FERC with its own policies," said Stoel Rives partner and FERC practitioner Jason Johns. "It is my belief that Powelson's opposition to certain policy efforts came as a surprise to the White House, particularly the White House's efforts to subsidize coal and nuclear facilities. I'm confident the White House is looking to address those surprises with this choice. "

"FERC has a longstanding commitment to fuel-neutral regulation, but Mr. McNamee's past writings and career track record suggest that he would seek every opportunity possible to support fossil fuels," said John Moore of the Sustainable FERC Project.

Strategy

ClearView Energy Partners suggested McNamee, a Republican, might be paired with a Democratic nominee to replace Commissioner Cheryl LaFleur if the GOP retains a majority in the Senate. LaFleur, whose term expires June 30, 2019, is unlikely to be renominated, ClearView said.

However, Senate Majority Leader Mitch McConnell (R-Ky.) could push McNamee's confirmation more quickly to restore the 3-2 Republican FERC majority, the consultants said.

Although LaFleur and fellow Democrat Richard Glick have repeatedly been on the losing end of 3-2 natural gas pipeline orders, the departure of Powelson has raised the prospect that pipeline approvals could stall in the face of 2-2 deadlocks.

Last month, E&E News reported that the Trump administration also was vetting Florida Public Service Commission Chairman Art Graham, a self-described conservative and nuclear power supporter, for a FERC seat. ■

FERC & Federal News

IPCC: Urgent Action Needed to Avoid Climate Trigger

By Michael Brooks

Climate change could have catastrophic effects sooner than previously thought and preventing them will require cooperation on an unprecedented global scale, according to a new *report* by the U.N.'s Intergovernmental Panel on Climate Change.

The study, released on Sunday from Incheon, South Korea, examined the effects of a 1.5-degree Celsius (2.7-degree Fahrenheit) increase in the global average temperature from 1850-1900 levels. If the current rate of global warming continues, the average temperature would hit 1.5 C by 2040, according to the report.

"It's like a deafening, piercing smoke alarm going off in the kitchen. We have to put out the fire," The Washington Post *quoted* Erik Solheim, executive director of the U.N. Environment Program. He said the world must either stop carbon emissions entirely by 2050 or find some way to remove them. "Net zero must be the new global mantra."

The report estimates that temperatures have increased by about 1 C (1.8 F) so far, and that the impacts of that increase are already being felt in increased storm intensity, precipitation, wildfires and heat waves; rising sea levels from melting polar ice; and the nearing extinction of several species, including coral. Such impacts could disrupt the global food supply chain and cause mass migration and increased poverty, the report says.

"Extra warming on top of the ~1 degree C we have seen so far would amplify the risks and associated impacts, with implications for the world and its inhabitants," the IPCC said in a *FAQ*. "This would be the case even if the total warming is held at 1.5 degrees C, just half a degree above where we are now, and would be further amplified at 2 degrees C global warming."

The report is a result of a provision in the 2015 Paris Agreement, which saw 195 countries, including the U.S., agree to reduce their carbon dioxide emissions by 26% from 2005 levels by 2025 to prevent a 2-degree Celsius (3.6-degree Fahrenheit) increase. It was added at the request of small island nations in the tropics, which wanted the effects of a 1.5-degree increase to be studied, as they are more susceptible to rising sea levels.

To prevent a 1.5-degree increase, global CO2 emissions would need to be reduced by 45% from 2010 levels by 2030 and 100% by 2050, according to the report. This is still possible, the authors say, but it would require a massive undertaking by the entire world.

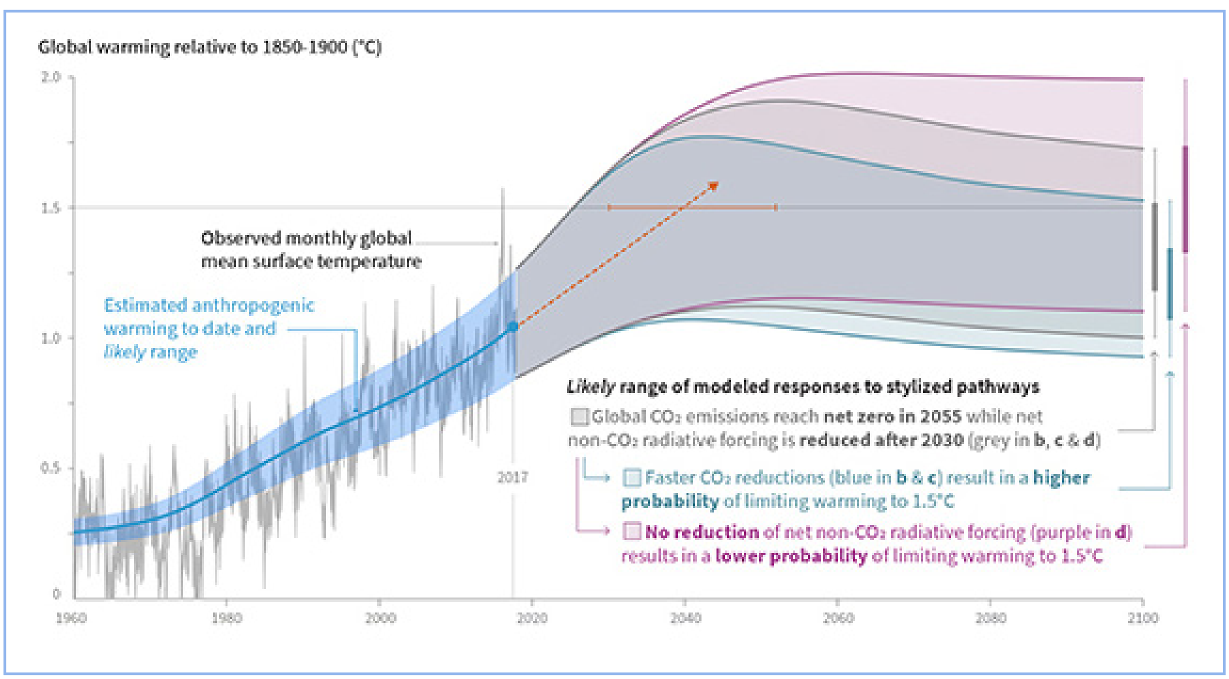
"The speed and scale of transitions and of technological change required to limit warming to 1.5 degrees C has been observed in the past within specific sectors and technologies," the report says. "But the geographical and economic scales at which the required rates of change in the energy, land, urban, infrastructure and industrial systems would need to take place are larger and have no documented historic precedent."

For the electricity industry, this means dramatically reducing the use of coal and increasing the use of renewable resources for generation. This is true under every scenario, or "pathway," studied by the report's authors.

Coal's share of the resource mix would need to drop to 1 to 7% by 2050, compared to 40% now, and only if large-scale carbon capture and sequestration technology is developed by then. Natural gas-fired generation would also have to be reduced by as much as 60% (though it could increase with the use of CCS), and renewables' share would need to increase to as much as two-thirds.

The report is less sure about nuclear power. Under some scenarios global nuclear capacity increases, while it decreases in others. The report attributes this to the high cost of building nuclear plants and political opposition stemming from perceived safety risks. While some countries may elect to rely on nuclear for emission-free power, it may not be feasible for developing countries, the researchers said.

President Trump in June 2017 announced he intended to withdraw the U.S. from the Paris Agreement. The earliest the country can do so is Nov. 4, 2020. (See *Trump Pulling U.S. Out of Paris Climate Accord.)* ■



Observed global temperature change and modeled responses to stylized anthropogenic emission and forcing pathways | *IPCC*

Company Briefs

FirstEnergy Announces RFP for SRECs, RECs for Ohio Utilities

FirstEnergy on Oct. 3 announced a request for proposals to purchase both Ohio-compliant solar renewable energy credits (SRECs) and renewable energy credits for its Ohio utilities — Ohio Edison, Cleveland Electric Illuminating and Toledo Edison.

FirstEnergy said the credits must be able to be used by the utilities for compliance with their 2018 renewable energy obligations under Public Utilities Commission of Ohio rules, be deliverable through PJM-EIS GATS and be generated between Jan. 1, 2016, and Dec. 31, 2018.

FirstEnergy is seeking 10,500 SRECs and 376,500 RECs. It won't buy energy or capacity under the RFP.

More: FirstEnergy

DOE Rules Lake Erie Wind Farm Won't Harm Environment

The Department of Energy has ruled that Lake Erie Energy Development Co.'s (LEEDCo) proposed Icebreaker offshore wind farm will have no significant environmental impact, meaning the department's funding arm can continue to support the project.

"We are pleased that the U.S. Department of Energy, the U.S. Army Corps of Engineers and the U.S. Coast Guard have found that Icebreaker poses no significant environmental impacts. Now we are urging the state of Ohio to follow suit and issue a certificate to allow Icebreaker to move forward and deliver the economic and environmental benefits it promises," LEEDCo's vice president of development, David Karpinski, said in a written statement.

DOE awarded LEEDCo a $50 million grant for the six-turbine wind farm it is proposing to build eight to 10 miles offshore in Lake Erie. So far, the DOE has dispensed $10 million of the grant as LEEDCo has met milestones on the project.

More: The Plain Dealer

Access to Areas at San Onofre Restricted After Asbestos Discovered

Access to areas in the Unit 2 and 3 containment domes at the closed San Onofre Nuclear Generating Station was restricted after workers found asbestos particles in the areas.

Workers on Aug. 2 found "friable" asbestos, which is asbestos that can easily be reduced to powder by hand when dry, in the areas.

The plant's operator, Southern California Edison, said asbestos was commonly used in nuclear power plants in the 1970s and 80s when the containment buildings were constructed, so its presence wasn't unexpected. The company said it has put appropriate safeguards in place and hired a contractor to test and clean up the areas.

More: The San Diego Union-Tribune

AEP Notifies Conesville Employees of 2020 Closure

American Electric Power on Oct. 5 told employees of its coal-fired power plant outside Conesville, Ohio, that it will close the 1,590-MW plant by May 31, 2020.

Units 5 and 6 at the plant, which originally were set to go offline in 2022, will probably close next May, with Unit 4 remaining operational through May 2020, an AEP spokesperson said.

AEP decided to close the plant because the cost of keeping it operating and the outcomes of recent competitive generation auctions. The plant did not clear the PJM capacity auction for 2021 to 2022 and only partially cleared the auction for 2020 to 2021.

More: Coshocton Tribune

Former SEC Chief Says Musk's Latest Tweet Should Be OK

The Oct. 4 tweet in which Elon Musk referred to the U.S. Securities and Exchange Commission as the "Shortseller Enrichment Commission" likely won't get the Tesla CEO in more trouble with the commission former Chair Harvey Pitt told CNBC on Oct. 5.

Still, Pitt said, it shows why the SEC made the condition that Tesla's board should have control over Musk's tweets part of its settlement with the CEO in its lawsuit over his tweets about taking the company private.

Pitt said Musk's latest tweet "does not do anything other than express his erroneous view. It doesn't relate to the securities laws, and it doesn't even relate to his settlement. So he's allowed to express his views."

More: CNBC

Bankruptcy Judge Wants more Details About FES Retention Bonus Plan

Bankruptcy Judge Alan Koschik said Oct. 1 that FirstEnergy Solutions must reveal more about its plan to give retention bonuses to nearly 1,000 salaried workers at the three nuclear power plants it intends to close if it wants him to approve the plan.

Koschik spoke to lawyers representing FES and the unions at the power plants in a status conference, two weeks after he rejected the plan.

The unions object to the plan because they say it's deliberately opaque and designed to exclude their members, who do most of the hands-on work at the power plants.

More: The Plain Dealer

No Records of Former SCANA CEO's Consulting on Nuke

Former SCANA CEO **William Timmerman** was paid $1.8 million over five years for consulting on the failed attempt by SCANA and Santee Cooper to expand the V.C. Summer Nuclear Station, but the South Carolina Office of Regulatory Staff said SCANA was unable to provide documentation of what he did.

Timmerman retired as SCANA CEO in November 2011 and immediately signed on to a consulting job that lasted from December 2011 to December 2016. SCANA and Santee Cooper gave up on the expansion in July 17 after spending $9 billion on it.

The ORS cited Timmerman's contract in testimony it filed with the South Carolina Public Service Commission, which next month will begin trying to determine whether SCANA shareholders, the customers of its South Carolina Electric & Gas subsidiary, or both should have to pay off the nearly $5 billion in debt that SCE&G racked up on the failed expansion.

More: *The State*

Experts File Testimony Against Transource Tx Project

Three independent experts have characterized Transource Energy's proposed Independence Energy Connection transmission project as inefficient and unnecessary in testimony filed with Pennsylvania's Office of Consumer Advocate.

Their testimony has prompted cautious optimism for Maryland residents opposed to the $320 million project in Harford County.

Last month, about half a dozen project opponents attended a meeting of PJM's Transmission Expansion Advisory Committee to protest the RTO's reconfirmation that the project would be beneficial to the public. *(See PJM Redirects Residents' Protests of Tx Project to States.)*

More: *The Baltimore Sun*

Con Ed, Johnson Controls Form Energy Storage JV

Consolidated Edison Solutions and Johnson Controls said Oct. 1 they have formed a joint venture to expand the market for Johnson's energy storage technology.

The companies said Con Ed will be the majority owner and operating partner of the JV while Johnson will participate as a minority owner and contribute its intellectual property. As part of the companies' relationship, Con Ed has been designated as the exclusive provider of battery energy storage to Johnson's customers.

More: *Con Edison Solutions* ■

Federal Briefs

Report: Mass. Tops Country in Energy Efficiency Efforts, Calif. Second

Massachusetts led the country in energy efficiency efforts, with California coming in a close second, according to the "2018 State Energy Efficiency Scorecard" released Oct. 4 by the American Council for an Energy-Efficient Economy.

ACEEE ranked the states on 32 metrics in six areas for the report. Massachusetts got points for launching a plan to set new three-year energy savings targets and approving utility spending for grid-scale modernization.

California led efficiency efforts in three areas — buildings, transportation and appliances, ACEEE said.

More: *American Council for an Energy-Efficient Economy*

Russians Charged with Conspiracy to Hack Westinghouse

The U.S. Justice Department on Oct. 4 charged seven Russian intelligence officers with conspiring to hack computers and steal data from nuclear reactor maker Westinghouse Electric, along with anti-doping watchdogs, sporting federations and an international agency investigating the use of chemical weapons.

The department said one of the Russians researched Westinghouse and its employees online and stole login credentials of U.S.-based Westinghouse workers, including staffers at the company's advanced nuclear reactor development and new reactor technology units.

More: *Reuters*

Utilities: ACE Rule to have no Effect on Planned Coal Plant Closures

EPA's plan to replace the Clean Power Plan with the Affordable Clean Energy Rule won't keep ailing coal-fired power plants open, according to a Reuters survey of U.S. utilities.

Of 44 utilities that have announced plans to close coal generation units, 24 think the plan will have no impact, four think it is too early to say if it will have an impact, seven declined to comment and the other nine didn't respond.

The 35 that responded account for more than three quarters of the nearly 150 coal units scheduled to be shut in the next decade.

More: *Reuters*

Judge Grants Class Certification to Lawsuit Alleging PREPA Overcharges

A federal judge has granted class certification for a lawsuit filed in February 2015 that claims the Puerto Rico Electric Power Authority overcharged its customers by more than $1 billion.

The lawsuit against PREPA, Brazilian oil giant Petrobas and other companies accuses 20 people of receiving kickbacks and payments for colluding to raise fuel oil prices and passing the cost on to consumers.

The class includes everyone who paid a fuel oil surcharge on their electric bills from January 2002 to April 2016.

More: *The Associated Press*

Tariffs Could Boost US Wind Power Prices 10%, Executives Say

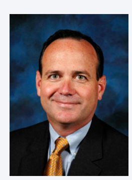
President Trump's tariffs on $250 billion of Chinese imports, as well as on metals from Europe and elsewhere, could raise the cost of wind power in the U.S. by as much as 10%, wind industry executives said Oct. 2.

"If you close the country to tariffs, prices will increase," Jose Antonio Miranda Soto, CEO for Siemens Gamesa Renewable Energy's onshore business, said at the Wind Energy Finance & Investment Conference. "Tariffs equal higher prices."

Higher steel prices will be "a powerful driver," said Josh Irwin, sales director for Vestas Wind Systems' Americas unit. "Those costs do have to manifest themselves someplace. There's just no way around it."

More: *Bloomberg*

TVA Promotes Skaggs to COO, Rice to Financial Operations VP



The Tennessee Valley Authority has promoted **Michael Skaggs** to chief operating officer and Tom Rice to vice president of financial operations and performance.

TVA executives announced the promotions on Oct. 1, saying both were effective immediately.

Skaggs has been with TVA more than 25 years. He most recently was executive vice president of operations. Rice has been with TVA 16 years. He most recently was director of business planning and analysis.

More: Tennessee Valley Authority; Tennessee Valley Authority

Judge Denies Request to Overturn BOEM Lease for Empire Wind

U.S. District Court Judge Tanya Chutkan on Sept. 30 refused to grant the Fisheries Survival Fund and its allies a request for a summary judgement overturning the Bureau of Offshore Energy Management's grant of a $42.5 million lease to Equinor for its Empire Wind project.

The judge ruled that the fishing groups' challenge to the lease was premature, as BOEM has yet to review Equinor's construction and operations plan for its 80,000-acre offshore wind energy project near New York.

The fishing groups had argued BOEM ignored potential impacts on the environment and fishing when it granted the lease.

More: WorkBoat

Protesters Disrupt EPA Meeting on Affordable Clean Energy Proposal

EPA's only public meeting on the Affordable Clean Energy Proposal was disrupted by protesters wearing shirts reading "Stop killing us" and shouting, "When people and climate are under attack, what do we do? Stand up! Fight back!"

The protesters caused EPA to stop the meeting, which was held in Chicago on Oct. 1, for about 10 minutes. The protesters dispersed after two federal law enforcement officers warned them to leave.

Several Democratic public officials from across the country traveled to Chicago to testify against the proposal, which is meant to replace the Clean Power Plan. The officials included Gavin McCabe of the New York state attorney general's office and Washington Gov. Jay Inslee.

More: Chicago Tribune ■

State Briefs

CALIFORNIA

Nonprofit Veloz to Spend $4 Million to Promote EVs

Veloz, a nonprofit alliance of car makers, electric utilities, policymakers and others, intends to launch a $4 million campaign to raise awareness of electric vehicles in the state.

The funding for the campaign includes $2 million from Electrify America, which Volkswagen formed to promote EV adaption in the U.S. as part of its settlement for rigging its cars to cheat emissions tests.

The $2 million is part of $800 million that Electrify America plans to spend in the state and $2 billion it plans to spend in the country over the next 10 years to promote EV adoption.

More: Government Technology

CONNECTICUT

Group Asks PURA to Accommodate EVs in Grid Modernization Plans

The Connecticut Electric Vehicle Coalition on Oct. 1 submitted a letter to the Public Utilities Regulatory Authority asking it to make sure plans for modernizing the state's power grid include the necessary components to accommodate the expected growth in electric vehicle use.

PURA is in the first phase of a review of the state's electric grid and how it should be improved to meet future usage demands.

The Electric Vehicle Coalition comprises more than 30 clean-energy advocates, organized labor and environmental justice groups.

More: The Hour

ILLINOIS

Pollution Control Board OKs Part of Coal Plant Regulation Change

The Pollution Control Board on Oct. 4 agreed to the state Environmental Protection Agency's request to stop requiring Dynegy to operate its cleanest coal-fired power plants to balance the pollution emitted by its dirtiest ones. But it rejected the agency's plan to replace the requirement with an annual cap on emissions from all eight Dynegy plants in the central and southern parts of the state.

The board said the air pollution caps by the agency, which is controlled by an appointee of Gov. Bruce Rauner, were too high, and it proposed lower total emissions of sulfur dioxide and nitrogen oxide. It also said the limits should be lowered further if Dynegy decides to close any of its plants.

The board plans to hold a public hearing later this month on its proposal.

More: Better Government Association

MAINE

Controversial Wind Group Established by Governor Finally Meets

The Maine Wind Energy Advisory Commission held its first meeting Oct. 4, more than eight months after Gov. Paul LePage created the controversial group and only three months before his term in office ends.

The commission is charged with examining the potential economic impact of commercial wind power development on tourism in the western and coastal parts of the state and with recommending changes to the state's permitting system for wind power projects.

LePage has said the commission is needed to ensure wind turbines on mountaintops and near bodies of water don't hurt the state's tourism industry. Critics say it's just another shot at the wind industry by LePage, who has clashed with renewable power and environmental advocates.

More: Portland Press Herald

PUC Says CMP Customer Info Release Didn't Violate Rules, Laws

Central Maine Power didn't violate any rules or laws by not notifying the Public Utilities Commission that its information technology department accidentally made the names, addresses and former account numbers of 77,300 customers who were found to be ineligible for low-income bill-paying assistance available online last year because of human error, the PUC said Oct. 3.

CMP initially didn't notify the commission because its lawyers and management considered the incident to be minor. But it phoned and briefed PUC Chairman Mark Vannoy, the Office of Public Advocate and the office of Gov. Paul LePage about the incident on Oct. 2 after two weeks of inquiries from The Portland Press Herald.

Public Advocate Barry Hobbins said that after consulting with Vannoy on Oct. 3, his office drafted a letter to the PUC proposing that it update its rules to require utilities to report any releases of personal information about their customers.

More: *The Portland Press Herald*

MASSACHUSETTS

Vineyard Wind, Barnstable Agree on Tx Cable Landing Spot

Vineyard Wind has agreed to pay the town of Barnstable $16 million for being allowed to bring the transmission cable from its proposed offshore wind farm onshore at the William H. Covell Memorial Beach rather than using a disputed route through Lewis Bay in West Yarmouth.

A Vineyard spokesman said the agreement was part of the company's due diligence in preparation for the hearing on the transmission cable route and landing spot before the state Energy Facilities Siting Board that began Oct. 4.

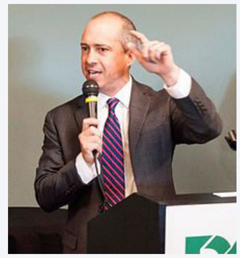
Vineyard still must get three easements from Barnstable to be able to land the cable at the agreed-upon spot. The Barnstable Town Council could approve the easements as soon as Oct. 18.

More: *Cape Cod Times*

Gubernatorial Candidates Agree to Sign Offshore Wind Pledge

Gov. Charlie Baker and his gubernatorial election opponent **Jay Gonzalez** have agreed to sign a pledge from environmental organizations stating that if elected, they will move to have the state procure more offshore wind power if doing so makes economic sense and explore joint wind power procurements with other states.

The groups behind the pledge are the Environmental League of Massachusetts Action Fund and the National Wildlife Federation Action Fund, which said their members wanted "a guarantee that the next governor of Massachusetts would ensure that our state maintains a leadership role in launching the nation's offshore wind industry."



The pledge also would require Baker or Gonzalez to see that the state meets all offshore wind requirements of a 2016 renewable energy law.

More: *Gloucester Daily Times*

MISSOURI

OPS, PSC Staff Critical of Ameren Energy Efficiency Plan

The Office of Public Counsel and Public Service Commission staff say the six-year, $551 million energy-efficiency plan that Ameren Missouri filed with the PSC in June would benefit the utility more than its customers.

Clean energy advocates are siding with Ameren, which says the benefits of the 15 new programs to help its customers save energy that are detailed in the plan exceed the standards set by the 2009 Missouri Energy Efficiency Act.

The PSC is expected to decide this month whether to approve the plan.

More: *Energy News Network*

NEVADA

Brattle: Storage Potentially Cost-Effective Resource in State

Energy storage can be a cost-effective component of the state's energy resource mix, according to a study by The Brattle Group for the Public Utilities Commission and the governor's Office of Energy.

The study, which was released Oct. 3, found that for a peak demand of roughly 8,500 MW in the state, up to 175 MW of utility-scale battery storage (with four-hour storage capacity) could be deployed cost effectively by 2020.

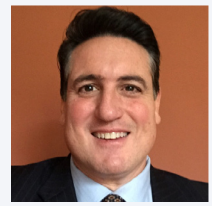
By 2030, the study found, declines in storage costs and changing market conditions could boost cost-effective deployment levels to a range of 700 to more than 1,000 MW. The study also notes that behind-the-meter storage adoption by commercial and industrial customers could further increase this value by up to 70 MW by 2030.

More: *The Brattle Group*

NEW JERSEY

PSEG Attorney Says Company will Close Nuclear Units Without Subsidies

Public Service Enterprise Group will shut down its three nuclear generation units in Salem County within three years if it doesn't get state subsidies for them, its deputy general counsel, **Joseph Accardo**, said Oct. 4 at a Board of Public Utilities hearing.



A law passed earlier this year to subsidize nuclear power generation requires an officer of any company that applies for subsidies to certify that the plants for which it's seeking the subsidies will close within three years absent significant financial changes.

The BPU is holding hearings to establish how it will determine which plants gets subsidies.

More: *NJ Spotlight*

NEW YORK

NYPA Trustees Authorize $173.2 Million for Grid Modernization

Gov. Andrew Cuomo on Oct. 5 announced that the New York Power Authority trustees have authorized $173.2 million for two initiatives that will help the authority more quickly and accurately collect data and respond faster to outages and other grid issues.

The trustees authorized $95.7 million for the second phase of the NYPA's Sensor Deployment Program, in which the authority will deploy sensors on power turbines, circuit breakers, cable systems and battery banks and connect them to its Integrated Smart Operations Center in White Plains.

The trustees also authorized $77.5 million for the NYPA's Communications Backbone Program, which involves upgrading the system used by the authority to manage data originating from its facilities and equipment.

More: *New York Power Authority*

OKLAHOMA

NextEra Agrees to Stop Construction on Wind Farm

Attorney General Mike Hunter said Oct. 2 that NextEra Energy Resources has reached an agreement with the Strategic Military

Planning Commission to stop construction of a wind farm in airspace the U.S. Air Force uses for training to allow the Defense Department to complete a mitigation plan.

The commission claims the windfarm being constructed west of Hinton violates an amendment to the Wind Energy Development Act that requires anyone building or expanding a wind farm to get either a determination that the planned turbines will have no military impact or an approved mitigation plan.

NextEra plans to work with the Defense Department to have a mitigation plan completed by Oct. 15.

More: *Oklahoma Attorney General's Office*

VIRGINIA

Northam Energy Plan Calls for Solar, Offshore Wind Expansion

Gov. Ralph Northam on Oct. 2 released his 2018 Energy Plan, which calls for the state to have at least 3,000 MW of solar and offshore wind energy by 2022.

The plan also calls for the state to expand its net metering, power purchase agreement and community solar programs, and double its renewable energy procurement target to 16% by 2022.

The Department of Mines, Minerals and Energy was charged with developing the plan and submitting it to the governor, State Corporation Commission and General Assembly by Oct. 1.

More: *Daily Press*

WASHINGTON

Michael Bloomberg Pledges $1 Million to Support Carbon Fee Initiative

Michael Bloomberg on Oct. 2 pledged $1 million to support a ballot initiative that would impose an escalating fee on large carbon dioxide emitters.

Opponents of the measure, which include oil companies Phillips 66, Andeavor and BP, have raised more than $21 million, putting them on pace to break a fundraising record for statewide initiative campaigns.

Supporters of the measure, which include environmental groups and Seattle tech leaders, have raised about $7 million.

More: *The Associated Press*

Snohomish County PUD Commission Names Haarlow CEO

The Snohomish County Public Utility District's three-member commission on Oct. 1 unanimously named the PUD's assistant general manager, John Haarlow, to be its CEO.

Haarlow has been with the PUD since February 2017. He replaces Craig Collar, who retired in June after three years as CEO and general manager.

Haarlow's hiring was controversial, with critics alleging that the process by which he was selected was hurried and too secretive.

More: *The Daily Herald*

Seattle City Council Confirms Debra Smith as Utility CEO

The Seattle City Council has voted 9-0 to confirm **Debra Smith** as general manager and CEO of Seattle City Light.

Seattle Mayor Jenny Durkan, who nominated Smith in August, will swear her in on Oct. 15.

Smith will be only the second woman to lead Seattle City Light in its 108-year history. She had been the general manager of Central Lincoln People's Utility District, which provides electricity to residents of Oregon's Central Coast.

More: *Mayor Jenny Durkan*

WEST VIRGINIA

DEP Rewriting Rules to Help Mountain Valley Pipeline Get Permit

In response to the 4th U.S. Circuit Court of Appeals blocking a key permit for Mountain Valley Pipeline on Oct. 2, the Department of Environmental Protection is rewriting the construction standards that prompted the decision.

Once the standards are rewritten, the developers of the 300-mile natural gas pipeline will apply for a new permit, which they expect to obtain early next year, a spokeswoman for them said.

The ruling against the pipeline and the action to change the standards mirror actions taken over the past two years by federal and state environmental agencies regarding the pipeline, according to a review by the Charleston Gazette-Mail, in collaboration with ProPublica. The review found that the agencies have repeatedly removed roadblocks to the pipeline's construction, even changing rules at times.

More: *ProPublica*

WISCONSIN

PSC Declares Tx Project Application Complete, Triggering Review

The Public Service Commission on Oct. 4 declared the application for the Cardinal-Hickory Creek transmission project complete, triggering an 180-day review of the proposed 345-kV line between Dubuque, Iowa, and Middleton, Wisc.

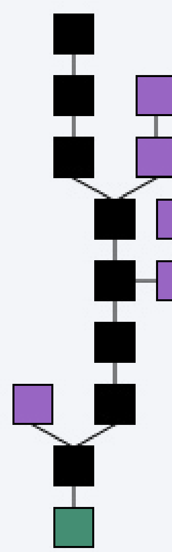
The commission had declared two previous applications incomplete.

American Transmission Co., ITC Midwest and Dairyland Power Cooperative are behind the project, which they say would cost from $492 million to $543 million, depending on its route.

More: *Wisconsin State Journal*

WYOMING

Black Hills Energy Submits Proposed Tariff for Blockchain Customers



Black Hills Energy said Oct. 4 it has submitted an application to the Public Service Commission for a new electric tariff to support the growing blockchain industry.

The company said its proposed Blockchain Interruptible Service tariff is designed to serve customers with electric requirements of at least 10 MW. The tariff also would benefit Cheyenne Light, Fuel and Power customers by giving them a $2 credit to the Power Cost Adjustment for each megawatt-hour of electricity served to them under the tariff.

Black Hills said if the tariff is approved by the PSC, it will implement it on Dec. 1.

More: *Black Hills Energy* ■

RTO Insider

Your Eyes and Ears on the Organized Electric Markets

CAISO ■ ERCOT ■ ISO-NE ■ MISO ■ NYISO ■ PJM ■ SPP

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