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

ISSN 2377-8016 : Volume 2019/Issue 48

December 3, 2019

UN: Decarbonized Energy 'Key' to Cutting Global Emissions

By Christen Smith

Decarbonization of the energy sector holds the key to reversing greenhouse gas emissions and preventing a catastrophic rise in global temperature, the U.N. Environment Program (UNEP) said in its annual Emissions Gap *Report* published Nov. 26.

And the increased electrification of economies — powered by renewable resources — will be vital to that effort, UNEP found.

National-level climate policies have so far been unable to offset emissions levels over the last decade, and now, UNEP warns, a 7.6% annual reduction through 2030 is necessary to limit the world's temperature increase to just 1.5 degrees Celsius — in line with the goals of the Paris Agreement.

"When looking back at the 10 years we have prepared the Emissions Gap Report, it is very disturbing that in spite of the many warnings, global emissions have continued to increase and do not seem to be likely to peak anytime soon," said John Christensen, director of UNEP DTU Partnership, a collaboration between UNEP and the Technical University of Denmark (DTU). "The reductions required can only be achieved by transforming the energy sector."

UNEP's analysis identified six key areas that carry the most potential for decarbonization and limiting emissions to 21 gigatons of CO_2 equivalent in 2030: solar and wind energy, efficient appliances and passenger vehicles, afforestation, and stopping deforestation. Although concentration on these strategies will get the world much closer to its tempera-

Continued on page 3

Enviros, States Question Coal Self-commitments

RTOs Acknowledge Issue, Question Magnitude

By Tom Kleckner

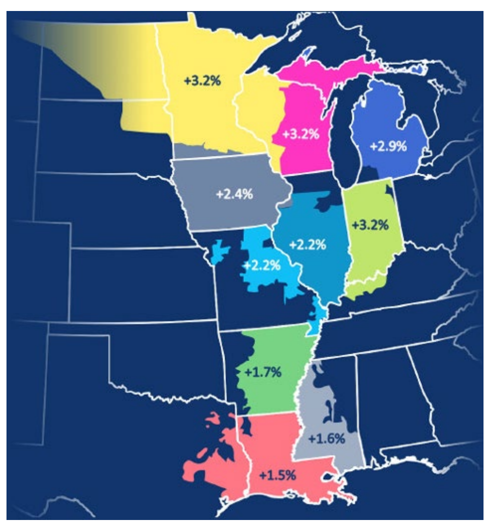
SAN ANTONIO — Two environmental groups that say regulated utilities' practice of self-committing coal plants is costing ratepayers have a point, RTO officials said Monday, even as they challenged the groups' estimates.

The issue is also attracting scrutiny from state regulators.

The Sierra Club released a *study* last month that estimates that "captive ratepayers" in MISO, SPP, ERCOT and PJM paid $3.5 billion more for energy from 2015 to 2017 because of the "noneconomic dispatch relative to the potential procurement of energy and capacity on the market."

Meanwhile, the Union of Concerned Scientists (UCS) will release a study early next year that indicates that if MISO economically dispatched

Continued on page 5



The Union of Concerned Scientists says that if MISO economically dispatched all its generation, average LMPs would rise 3%. MISO says its own study of self-commitments showed a "significantly lower production cost savings." | *Union of Concerned Scientists*

Bid to Limit NYISO News Coverage Fails

ISO Issues Own Proposal to Expand Media Access

NYISO headquarters in Rensselaer, N.Y.

By Michael Kuser

A proposal to limit press coverage of NYISO meetings died less than a week after being floated at the Bylaws Subcommittee meeting on Nov. 20.

The ISO on Nov. 26 proposed to expand access by allowing press and the public to attend all stakeholder meetings in person or by teleconference.

The *proposal* before the subcommittee would have limited press coverage by requiring approval for quotes at more senior committee meetings and barring any coverage of working group-level meetings.

A POLITICO *report* on the meeting Nov. 25

Continued on page 10

Also in this issue:

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

RTO Insider

CAISO ERCOT ISO-NE MISO NYISO PJM SPP

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

Plan	Price
Newsletter PDF Only	$1,450
Newsletter PDF Plus Web	$2,000

2019 Annual Subscription Rates:
See additional details and our Subscriber Agreement at rtoinsider.com.

In this week's issue

FERC/Federal News

UN: Decarbonized Energy 'Key' to Cutting Global Emissions

Continued from page 1

ture goals, UNEP said the reductions will still fall short of 32 gigatons necessary to keep on track for just a 1.5 C rise.

"The good news is that since wind and solar in most places have become the cheapest source of electricity, the main challenge now is to design and implement an integrated, decentralized power system," Christensen said.

'Easy Win'

UNEP calls the expanded use of renewable power to drive electrification an "easy win" in the short-term effort to reduce CO_2 emissions. It says the "three pillars" of decarbonizing the power sector include a "vast expansion" of renewables, along with a "smarter and much more flexible" grid and a "huge" increase in the number of products and processes that run on electricity — particularly for transportation and industry.

The report points to promising trends for electrification, noting that needed technologies already exist. Growing investments in renewable energy spawned capacity additions worldwide of 50 GW for wind and more than 100 GW of solar in 2018 — outpacing net additional power generation of nonrenewable resources for the seventh year in a row, UNEP said. Global investment in renewables that year reached $272.9 billion, about triple the spending on new gas- and coal-fired resources combined.

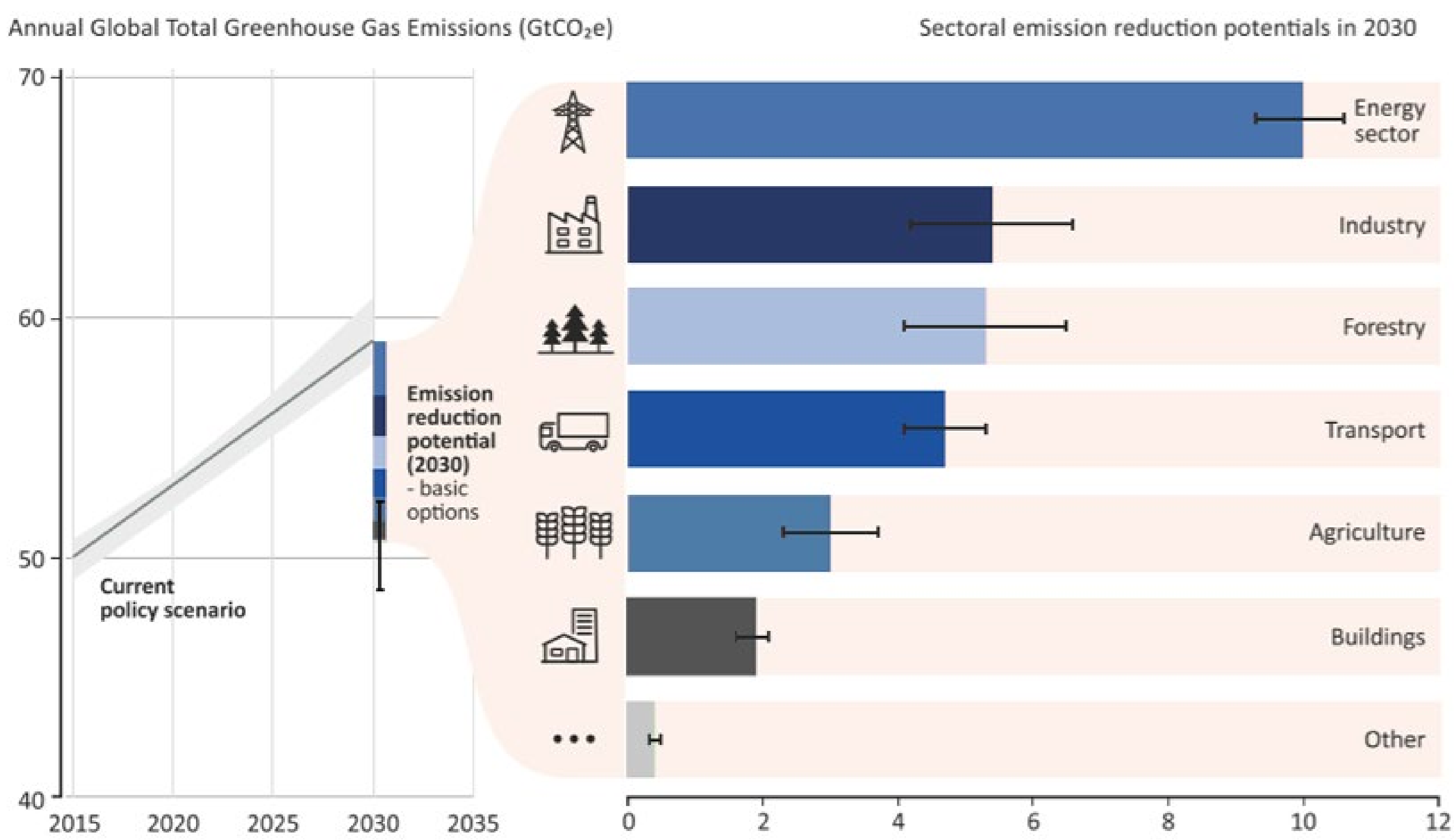
"The main enabler for the accelerated deployment of renewable energy in the last decade has been the continued and rapid decline in capital costs," the report said. "In most parts of the world today, renewables have become the lowest-cost source of new power generation and are generally competitive without incentives when directly compared with fossil alternatives."

But while renewables have increased their share of global generation to 12.9%, helping to avoid about 2 gigatons of CO_2 emissions, UNEP insists adoption must grow at six times the current rate to meet climate targets.

The agency points to a key hurdle in achieving that level of adoption: the need for investments in flexible resources equipped to respond to the short- and medium-term variability of wind and solar.

"Conventional power plants, gas-fired generation and hydropower with reservoirs are currently the predominant sources of system flexibility in modern power systems, but other options will increasingly become important, such as electricity networks, battery storage, distributed energy resources and enhanced predictability," the report said.

UNEP points to findings that show the cost of flexibility needed to integrate renewables is "generally quite small," at $5 to $13/MWh, with costs rising on systems with more inflex-



| UNEP

FERC/Federal News

ible coal or nuclear units. The report notes governments and grid operators can take measures to support flexibility, including modifying legal and regulatory frameworks, market rules and system operation protocols.

Other major challenges to cleaner generation persist. Developing countries reliant on fossil fuels must take decarbonization slower so as to limit socioeconomic impacts, while other nations must take bigger swings toward reductions to keep the temperature goal within sight, UNEP concluded. G20 countries account for 78% of all worldwide emissions, but only five have committed to long-term zero-emissions targets.

"Our collective failure to act early and hard on climate change means we now must deliver deep cuts to emissions — over 7% each year, if we break it down evenly over the next decade," said Inger Andersen, UNEP's executive director. "This shows countries simply cannot wait until the end of 2020, when new climate commitments are due, to step up action. They — and every city, region, business and individual — need to act now.

"We need quick wins to reduce emissions as much as possible in 2020. … We need to catch up on the years in which we procrastinated," she added. "If we don't do this, the 1.5-degree goal will be out of reach before 2030."

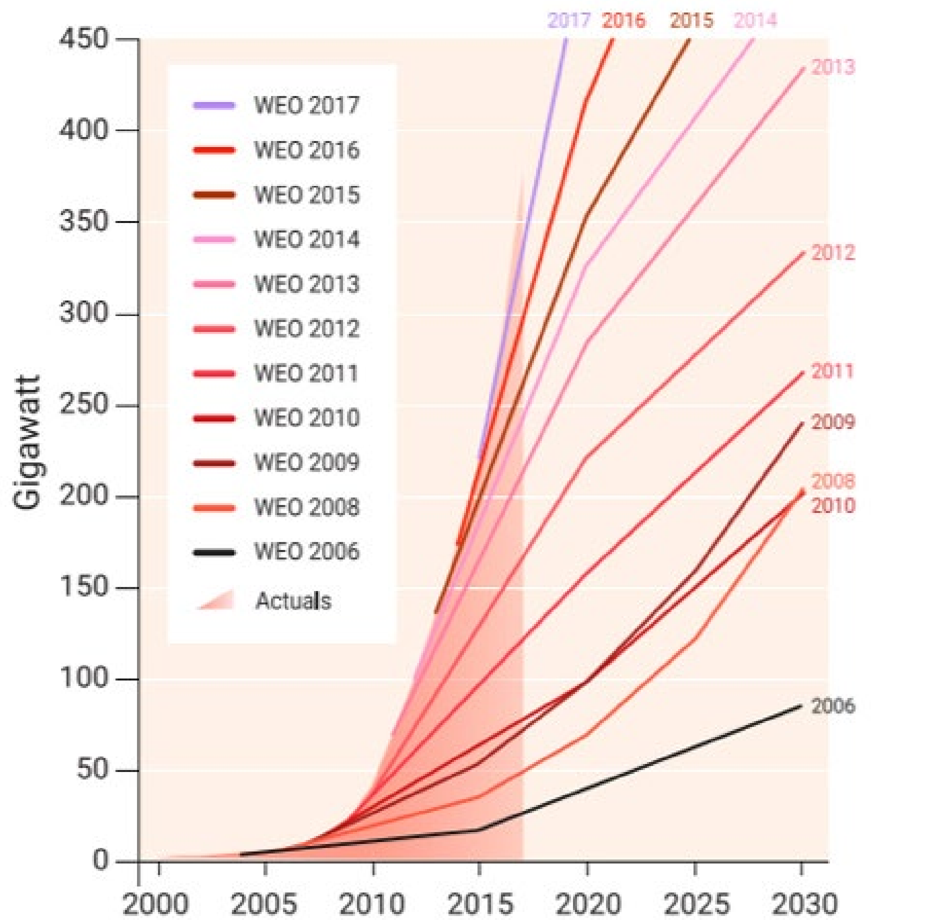
Ignoring the Alarm

UNEP's report provided a host of recommendations to several G20 countries — Argentina, Brazil, Japan, China, India, the U.S. and those in the E.U. — that could accelerate emissions reductions. Some of the policy changes include eliminating subsidies for fossil fuel generation, phasing out coal plants, supporting the electrification of vehicles and use of public transportation, and implementing carbon pricing.

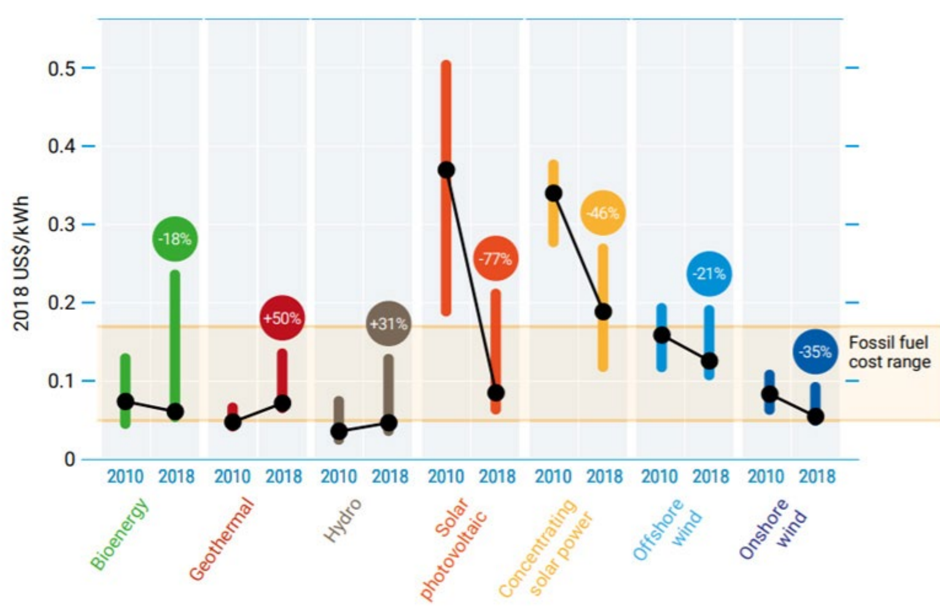
Even with energy-specific taxes and carbon policies currently in use, half of fossil fuel emissions are not priced at all, and less than 10% are priced at an appropriate level to limit global warming to 2 C, UNEP said.

"For 10 years, the Emissions Gap Report has been sounding the alarm — and for 10 years, the world has only increased its emissions," U.N. Secretary-General António Guterres said. "There has never been a more important time to listen to the science. Failure to heed these warnings and take drastic action to reverse emissions means we will continue to witness deadly and catastrophic heat waves, storms and pollution." ■

Robert Mullin contributed to this article.



Cumulative solar PV installations compared to forecasts from various International Energy Agency (IEA) World Outlooks | *UNEP*



Changes in global levelized cost of energy for key renewable technologies, 2010-2018 | *UNEP*

FERC/Federal News

Enviros, States Question Coal Self-commitments

RTOs Acknowledge Issue, Question Magnitude

Continued from page 1

all its generation, average wholesale power prices would rise 3% but production costs would drop 11%. That would lower consumer costs, UCS Senior Energy Analyst Joe Daniel said during a Nov. 19 breakfast panel at the National Association of Regulatory Utility Commissioners' annual meeting. "The market surplus, the relative profitability of the MISO system, would improve by 64%," Daniel said.

The group, along with the Sierra Club and consumer advocates, has raised concerns about coal plants owned by vertically integrated utilities that self-commit, or run out of merit at times when their production costs exceed the wholesale market price.

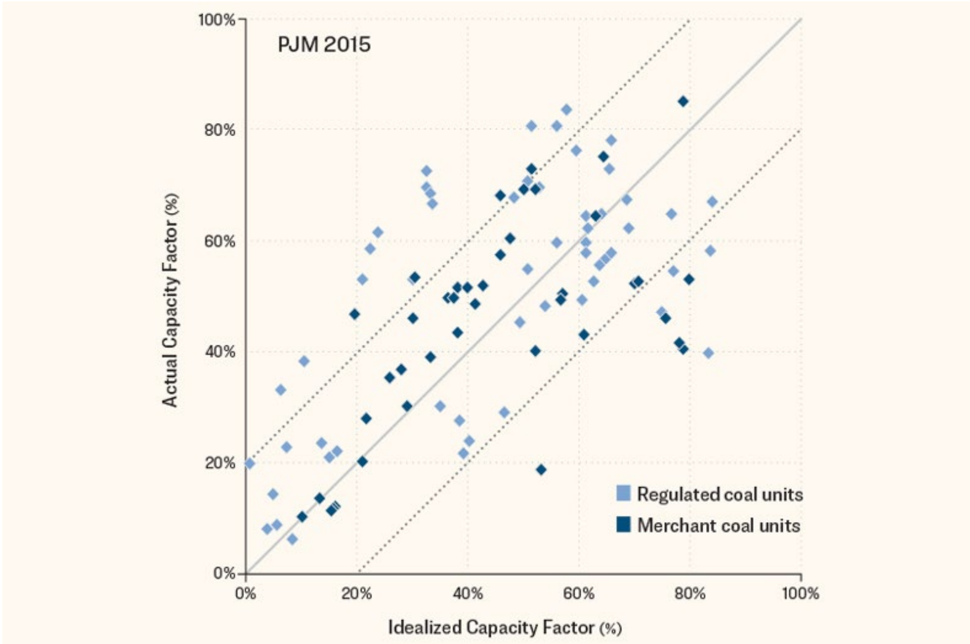
The Sierra Club said out-of-merit operations suppress market prices, estimating that MISO's median hourly market price would have been about $7.70/MWh (30%) higher if coal units had economically dispatched in 2017. "Improved dispatch practice would reduce customer costs, improve market revenues for efficient generators and renewable energy operators, and substantially reduce emissions," it said.

'Markedly Different Behavior'

The organization said the decision to operate consistently out of merit is not based on coal generators' constraints alone, such as slow ramp rates, large fixed-price fuel contracts and avoiding the thermal stresses of repeated start-ups. "For example, within PJM, where most power units are merchants (i.e. unregulated), coal units generally operate in accordance with market prices. The few regulated coal units, owned by Dominion [Energy] or American Electric Power, demonstrated a markedly different behavior, operating in far more hours than warranted by market prices."

Dominion did not respond to Sierra Club's observations in detail Monday, saying in an email only: "Our customers expect clean energy that's also affordable and reliable. We deliver just that, with enough solar and wind energy in operation or under development in Virginia by 2022 to power 750,000 homes. We're proud of what we've accomplished and plan to do more."

AEP's Melissa McHenry said the report "does not provide an accurate portrayal of AEP's generation unit operations within the RTOs"



The Sierra Club says PJM's merchant coal generators (dark blue) operated closer to their "ideal" capacity factor in 2015 than regulated coal units (light blue). | *The Sierra Club*

and said RTOs could improve efficiency through multiday dispatch and by sharing forecasted unit operation data.

AEP bids its generation into the markets to allow it to be economically dispatched, but the coal plants' long start-up time makes it necessary to commit the units "to ensure they are available to produce benefits for our customers," she said.

"During periods in which AEP anticipates sustained low prices, AEP does offer coal units for commitment and decommitment," McHenry said.

RTOs Respond

ERCOT said it doesn't comment on reports that are not staff's own. Beth Garza, director of ERCOT's Independent Market Monitor, said on Monday she had not reviewed the report and cautioned against assessing the results of decisions after the fact. "There are legitimate reasons why commitment decisions may appear uneconomic after the fact," Garza said. "Specific examples are the load forecast didn't materialize, or actual wind generation was higher than forecast."

SPP said self-commitment "is not inherently and totally undesirable," noting a self-committed unit may displace a more expensive one from running. But SPP spokesman Derek Wingfield acknowledged that self-commitments "may limit a market operator's ability to dispatch generation as economically as possible" and said that SPP studies have shown there is room for "further optimization" in the markets through "further reduction of self-commitments."

MISO conducted a study in 2017 that showed "significantly lower production cost savings" than Sierra Club's report, spokesperson Julie Munsell said. "MISO's generation owners and operators are in the best position to know all of the factors and requirements to optimize the reliable and efficient operation of their assets," Munsell said.

PJM spokesman Jeff Shields did not comment on the Sierra Club report but acknowledged that although units that self-commit on their own can't set LMPs, they do change the offer stack "and can ultimately impact what the marginal unit may be."

Self-committing units that provide an operating range and offer curve and allow PJM to dispatch them are eligible to set prices. PJM doesn't assess "outright" penalties, but self-scheduled units are subject to operating

FERC/Federal News

reserve deviation charges, Shields said.

PJM Independent Market Monitor Joe Bowring said the Monitor's analysis of coal plants at risk of retirement — which it defines as units for which the forward-looking net revenue from PJM markets does not cover going-forward costs — "does not support the conclusion that regulated units are uneconomic in PJM."

"We think the UCS analysis is insightful, and we are continuing to develop more detailed analysis of self-scheduling practices in PJM using unit-specific, confidential data not available to UCS," Bowring said.

Regulatory Recovery

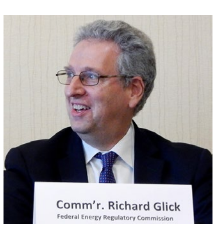
UCS and Sierra Club say that by running the plants out of merit when their production costs are greater than wholesale market prices, utilities can recover fuel and operations and maintenance costs through regulatory proceedings. Sierra Club said its study estimated coal plants with negative revenue lost more than $3.8 billion in 2015-2017 when accounting for fixed O&M costs and revenues from MISO's and PJM's capacity markets. State ratemaking likely makes the utilities whole for their losses, Sierra Club said.

Annie Levenson-Falk, executive director for the Minnesota Citizens Utility Board, noted that the UCS study indicates that the state's two largest entities — Xcel Energy's Northern States Power and ALLETE's Minnesota Power — could have realized $85 million to $90 million in gross savings had their coal units been dispatched economically.

Annie Levenson-Falk, Minnesota CUB | *© RTO Insider*

"Those are substantial numbers, and it raises concerns for us," Levenson-Falk said during the NARUC session. "Clearly, this is a problem in the way the plants are operating. In Minnesota, we're moving quickly to a much higher level of renewable power. You talk about not just generating to meet load, but scheduling variability."

FERC Commissioner Richard Glick, seated next to Levenson-Falk, was asked whether it was time for the federal commission to get involved.



FERC's Richard Glick | *© RTO Insider*

"This is primarily, at this point, a matter for the state[s]," he said. "Certainly, we're looking at it. It potentially could have a significant impact on the transparency in the markets we regulate and the price signals to market entry."

"We can agree and disagree on whether it's a state issue. I think it's a game of hot potato," said Indiana Utility Regulatory Commissioner Sarah Freeman, drawing a wry smile from Glick.

State Investigations

Minnesota and Missouri regulators have picked up the potato by opening investigations into self-commitment. Minnesota Public Utilities Commissioner Matt Schuerger said his commission opened the proceeding as an information-gathering process.

"I do think there are legitimate reasons for self-committing and scheduling, but things can be done better to save customers money," he said.

Schuerger said the PUC also has potential questions around the reliability unit commitment (RUC) process. "ISOs like MISO have built their reliability commitment process on a large chunk [of generation] coming in at self-commitment," he said.

"When I got to FERC, I thought I knew about markets," Glick said last month. "The general notion is you bid in at marginal costs. The ones that bid in the lowest get what they're needing. Where people aren't bidding in at the marginal cost, sometimes they're being told they're not bidding high enough.

"A significant part of some of these markets, especially MISO and SPP, are not having a truly functional market. That raises a broader question of whether markets are functioning well and sending the right price signals."

Ted Thomas, chair of the Arkansas Public Service Commission, suggested market monitors might be the right people to look at self-commitment practices.

"This is like the tip of an iceberg of a very big issue all markets will have to deal with," he said.

SPP MMU IDs Problem

Indeed, SPP's Market Monitoring Unit called self-commitment a problem two years ago and has been focused on the issue ever since. Its 2016 State of the Market report jived with a 2017 Sierra Club study that found SPP utilities with coal plants generated $300 million in excess costs in 2015 and 2016, costs that consumers picked up. (See *Report: Costly Coal Undermining SPP Market, Bilking Consumers*.)

The MMU is planning to release its own report on self-commitment within SPP in the next two weeks. Executive Director Keith Collins on Monday said the study results are "directionally" similar to Sierra Club's latest report, but at a lesser magnitude. The MMU study found only about a 7% increase in costs when units were economically dispatched, as compared to the Sierra Club's 30% figure.

Collins said the MMU used a day-ahead model in running its study, using historic bids and offers for additional granularity.

"The Sierra Club talks about more advanced forward markets that send a clear commitment signal. We, in our analysis, found that that is potentially a key factor in the analysis," he said. "Our study found that if you made no change to the market and you just told resources to participate in the market, not only do you increase prices, you increase production costs. When you add a second day to the optimization, you effectively get the benefits of reduced production costs and you do get the increase in price. With a second day … you can capture most of the benefits of addressing the lead-time resources you see self-committing in the market."

Recommendations

The Sierra Club report suggests commissioners examine the utilities' market self-commitment and self-scheduling practices through investigations, expanded fuel or rate-case dockets, or during resource-planning reviews. The group also urges regulators to consider disallowing operational costs in excess of market necessity.

Thomas and Freeman last month responded with their own suggestions.

"Meet analysis with analysis … but determine what is going on operationally," Thomas said. "There are formal and informal things we can do. There are suggestions, and there are carrots and sticks. My normal approach is to start with informal suggestions, because that's easy, and proceed until the normal collision."

Freeman argued against what she called adversarial proceedings. She invoked the name of noted regulatory attorney Scott Hempling, who she said preaches aligning interests, as opposed to balancing them.

"If ever there was an issue ripe for aligning interest, this is one of them," she said. "Everyone wants to achieve those really favorable economic numbers that Joe has shown." ■

FERC/Federal News

Senate Confirms Brouillette as Energy Secretary

By Michael Brooks

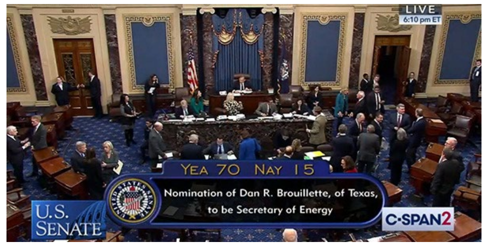
The U.S. Senate on Monday voted 70-15 to confirm Dan Brouillette as secretary of energy.

Brouillette spent most of the day as acting secretary, after Rick Perry resigned on Sunday. Prior to that he had served as deputy secretary since August 2017, when the Senate confirmed him 79-17.

His confirmation was expected. He enjoyed mostly bipartisan support at his nomination hearing last month before the Senate Energy and Natural Resources Committee, which quickly moved to advance him to the floor by a 16-4 vote. (See *Danly, Brouillette Advance to Senate Floor*.)

The Senate on Nov. 21 voted 74-18 to invoke cloture on Brouillette's nomination just before it adjourned for the month, setting up Monday's vote.

Shortly before the vote, Sen. Ron Wyden (D-Ore.) called for a delay on Brouillette's confirmation until the Senate received more information about Perry's role in U.S.-Ukrainian relations, central to the House of Representatives' inquiry into impeaching President Trump.



The Senate confirms Dan Brouillette as secretary of energy Dec. 2.

Wyden cited the fact that Perry had traveled to Ukraine in May for the inauguration of President Volodymyr Zelenskiy and provided him with a list of suggestions for the supervisory board of Naftogaz, the country's state-owned energy company. The Associated Press *reported* that two of Perry's political supporters secured a potentially lucrative oil and gas exploration deal from the Ukrainian government soon after the inauguration, and that one of them, Michael Bleyzer, was on Perry's list.

Bill Taylor, the acting U.S. ambassador to Ukraine, testified to the House last month that Perry — along with U.S. Ambassador to the E.U. Gordon Sondland and Kurt Volker, special U.S. envoy to Ukraine — ran a "highly irregular" channel of U.S. policymaking toward Ukraine. Perry has refused to testify before the House. At his ENR Committee hearing, Brouillette said he had no knowledge of any conversations Perry might have had with Ukrainian officials about the matters the House is investigating. (See *Brouillette Poised to Become Energy Secretary*.)

Wyden noted that Brouillette is already serving as acting secretary. "Western civilization is not going to end if the Senate insists on getting some answers to the questions I've presented this afternoon," he said.

Sen. Joe Manchin (D-W.Va.), ranking member of the ENR Committee, spoke in support of Brouillette. "I know some of my dear colleagues have some concerns about questions they want answered," he said. "I did get some of those from him. He assured me his answers were accurate and correct." ■

CAISO/West News

Judge Denies PG&E Bid to Avoid Wildfire Liability

Rules Inverse Condemnation Applies to Utility

By Hudson Sangree

The federal judge in charge of PG&E Corp.'s bankruptcy rejected the utility's argument that it isn't subject to California's legal doctrine of inverse condemnation, which holds investor-owned utilities strictly liable for damage to private property caused by their electrical equipment, regardless of fault.

PG&E and other IOUs have argued for years, in courts and in the State Capitol, that they shouldn't be held responsible for wildfires sparked by their equipment absent a showing of negligence.

The most recent effort was waged before U.S. Bankruptcy Judge Dennis Montali in San Francisco. (See *PG&E Seeks to Escape Inverse Condemnation*.)

PG&E and its main utility subsidiary, Pacific Gas and Electric, the debtors in the Chapter 11 bankruptcy case, challenged the application of inverse condemnation to them in connection with wildfires in 2015, 2017 and 2018.

They asked Montali to rule that the state's strict no-fault liability scheme does not apply to private utilities after a 2017 decision by the California Public Utilities Commission involving San Diego Gas & Electric. PG&E contended the CPUC ruling had undermined the ability of IOUs to pass on the costs of wildfires to ratepayers, which PG&E called a core tenet of inverse condemnation.

"Debtors do not appear to contest seriously the legal landscape of inverse condemnation, which is soundly against them," Montali wrote in his *ruling* Wednesday. "Instead, they argue that the SDG&E decision renders prior decisions incorrect and that the policy considerations of inverse condemnation demand a result in their favor."

PG&E told Montali he could limit the application of inverse condemnation to IOUs if he found the state Supreme Court was likely to reach a similar conclusion. The state's highest court has never ruled on the issue, though lower appellate courts have unanimously held that IOUs are subject to inverse condemnation.

Lawyers representing fire victims and insurance companies said the arguments had no merit and were countered by more than a century of case law.

In his decision, Montali said much of PG&E's argument boiled down to the idea that a privately owned utility shouldn't be treated the same as a public utility under the doctrine of inverse condemnation, which has been embedded in California's constitution since the mid-1800s and consistently applied by the courts to regulated utilities and railroads.

State lawmakers have refused repeated efforts to alter the law, including a push by PG&E in July to amend the doctrine to favor IOUs, the judge said.

"This court is not tasked to determine what the law should be and is merely tasked with interpreting what the law is and has been for 125 years," Montali wrote. "The California legislature has not taken up [PG&E's] cause to their satisfaction, and this court will not attempt to take its place."

'Prudent Manager'

Montali also said he thought it unlikely the state Supreme Court would find in PG&E's favor, and he rejected the argument by PG&E that the 2017 CPUC decision had jeopardized its ability to spread wildfire costs to ratepayers.

In that decision, the CPUC rejected an application by SDG&E to recover its costs from paying out damages for two major wildfires in 2007. The commission found SDG&E had failed to "reasonably manage and operate its facilities" prior to the fires, saying only the prudence principle, and not inverse condemnation, was relevant to its ruling. PG&E argued the CPUC's decision meant wildfire costs from inverse condemnation could no longer be spread to ratepayers.

Montali, however, said the CPUC had simply applied its longstanding reasonableness test to SDG&E. That test allows a utility to recover wildfire costs through higher rates only if it acted as a "prudent manager" in operating its grid.

"Essentially, the CPUC evaluates a private utility's behavior to ensure that it has comported with best practices before it is able to pass on costs to the ratepayers," the judge wrote.

Inverse condemnation is based on the concept that an entity, public or private, is responsible for damage it causes to private property because it has the power to seize private property for the public good, Montali said. The socialization of those damages is not a central component of inverse condemnation as described in the state constitution and decisions interpreting it, he said.

More than 14,000 homes in Paradise were gutted by the Camp Fire, the deadliest in California history. | © *RTO Insider*

Since the 1870s, the state constitution has provided that "private property may be taken or damaged for a public use … only when just compensation" is paid to the owner. The provision was initially intended to stem the power of the Southern Pacific Railroad. For decades, courts have interpreted the provision to mean that regulated, monopolistic utilities must compensate property owners whose houses and businesses are destroyed by wildfires sparked by electrical equipment.

PG&E filed for bankruptcy in January following two years of devastating wildfires. State fire investigators found the utility's equipment ignited 21 major fires in Northern California's wine country in October 2017 and started the Camp Fire in November 2018. The Camp Fire killed 86 people and destroyed more than 14,000 homes and hundreds of businesses in the Sierra Nevada foothills town of Paradise.

"Debtors have admitted that their equipment was the cause of all the wildfires except the Tubbs Fire; they have not admitted liability for any of them," Montali noted.

A trial in state court to determine if PG&E started the Tubbs Fire, which killed 22 people and leveled a neighborhood in the city of Santa Rosa, begins in January. Proceedings to estimate PG&E's monetary liability in the other fires is occurring before another federal judge in San Francisco, subject to the rules of inverse condemnation. ■

MISO News

MISO Explores Changes to Accommodate DER

By Amanda Durish Cook

MISO may have to devise new lines of communication, rethink its data management and alter dispatch rules to give distributed energy resources access to its markets.

Those opinions were laid out at a special Nov. 26 workshop focusing on DER assets' communication and visibility to the MISO control room.

DER Program Manager Kristin Swenson said the RTO may have to develop new means of communication to provide visibility into distributed resources in the footprint.

"We've been pretty locked into this [Inter-Control Center Communications Protocol] world," she said, referring to the predominant system of real-time data exchange for RTOs and ISOs. "There are a lot of other communication options." She added that MISO will have to ensure the cybersecurity of communication with DERs and aggregators.

Wisconsin Public Service Commission policy analyst Ryan Kohler, who also participates in the Organization of MISO States, said collecting DER insights is particularly challenging considering that no standardized DER data policy exists across states or RTO/ISOs.

"There's a cost to this; there's a question of how all these [data-gathering methods] are going to work together," Kohler said. "As penetration levels increase, it's going to be essential that we know what's going on."

Kohler said DER operators are going to have to predict their resources' behavior, be able to react in real time, and maintain forecasts for and historical data of their resources.

"It does take a specialist to get information like this. … So we're putting the call out. It's going to take a lot of folks with the same knowledge," Swenson said, asking that MISO's utilities make sure their representatives at DER workshops specialize in DER operations.

Kohler also said the question remains about what data DER operators need to share with RTO/ISOs in order for them to be able to respond to dispatch instructions.

Advanced Energy Management Alliance Executive Director Katherine Hamilton said aggregators will help DERs meet ISO/RTO dispatch instructions and facilitate communication.

Swenson said that while MISO currently receives real-time load information, it receives

MISO control room | *MISO*

no detailed or real-time information directly from devices or aggregations.

"We're interested in how that evolution will affect us," she said, adding that MISO is asking how much data it can realistically handle without being overwhelmed.

Answer in Aggregate?

Aggregator Enel X North America's Nicholas Papanastassiou said his company already offers virtual power plants with market optimization engines that crunch weather data, site-specific costs and price forecasts to update market offers to RTOs. He said virtual power plants provide services that are "beyond simple telemetry."

"Many other industry players have similar forms of this," he told MISO staff and stakeholders.

Papanastassiou said it's best if DERs are allowed to participate both in the retail and wholesale markets as much as possible, though he allowed that some issues might arise if DERs are held to an RTO's must-offer requirement when they planned on not being available.

MISO Managing Assistant General Counsel Michael Kessler said the RTO's must-offer requirement applies to capacity resources. Currently, MISO resources are barred from providing capacity if they also furnish output to areas outside the RTO.

Kessler said MISO hasn't yet examined how a DER would become a capacity resource.

"We're going to have to explore how these dual participations will line up with essential reliability services," Kessler said.

Voltus CEO Gregg Dixon said the issue isn't technology and metering, but dual rulesets from the states and RTOs.

"This isn't rocket science," he said of the technology involved for metering. He added that states should invite aggregated DERs into the wholesale market, where the states can benefit from both wholesale market resource adequacy credit and their DERs handling local needs.

"States sign up for the socialized benefits of a wholesale market. Yet, states don't take full advantage of the benefits," Dixon said.

MISO *said* its "key" future issue is aggregation. The RTO currently doesn't allow aggregation beyond its pricing nodes or local balancing authorities, depending on how demand response resources have registered. And so far, only MISO's Type II DR resources are eligible for dispatch, but they must be at least 1 MW in size.

Market design engineer Congcong Wang said a large aggregation across multiple transmission and distribution interfaces would affect transmission flow calculations, the RTO's congestion management and create locational pricing inaccuracies.

MISO is home to about 31 DER pilot programs. (See *OMS: 4.5 GW of Unregistered DERs in MISO*.)

Mission:data President Michael Murray predicted that MISO will end up using "hybrids" of metering and data-gathering practices, given its large footprint of different state jurisdictions and utility models. He said it was difficult to imagine the RTO imposing just one metering type. Mission:data is a 35-member nonprofit that encourages customer data access policies across the country.

"A lot of these utilities are becoming IT platforms, and they need to be regulated like IT platforms," Murray said, adding that states might consider designating centralized repositories for information.

"We're all kind of dealing with this new frontier of working together," Minnesota Public Utilities Commission DER specialist Michelle Rosier said.

The DER workshop was one of several MISO has hosted over 2018 and 2019, with plans to host more in 2020.

Swenson said MISO's next DER workshop on Feb. 25 will focus on how the resources will impact the current transmission planning process.

"Because of the changes we've seen to the distribution system … our planning horizons may take too long. They're very, very long," Swenson said.

MISO also plans to hold another workshop in March on how DERs might contribute to its markets in the future. ■

NYISO News

Bid to Limit NYISO News Coverage Fails

ISO Issues Own Proposal to Expand Media Access

Continued from page 1

quoted several stakeholders opposed to limiting press coverage, including utilities New York State Electric and Gas and Consolidated Edison; the Natural Resources Defense Council; Liam Baker, representing Eastern Generation; Aaron Breidenbaugh of Luthin Associates, representing Consumer Power Advocates; and *RTO Insider* editor and co-publisher Rich Heidorn Jr.

The Bylaws Subcommittee proposal was prompted by a request by *RTO Insider* to allow its reporters to attend committee meetings by teleconference, which the *current* bylaws forbid.

Subcommittee Chair Alan Ackerman was later *quoted* as saying the proposal would not move forward as it did not enjoy stakeholder support. The ISO *said* on Nov. 26 that its management did not support the draft proposal, which it said would have unnecessarily restricted media access.

"The NYISO's [own] draft proposal reinforces our longstanding commitment to transparency of the shared governance process by allowing teleconference access to all stakeholder meetings."

Kevin Lanahan, vice president of external affairs and corporate communication, said, "This commitment is a founding principle of the NYISO and our shared governance process since our formation 20 years ago."

NYISO's draft proposal says: "The public may attend meetings of the committee and associated subcommittees, working groups and task forces in person or by teleconference, and shall register with the secretary prior to attendance. Guests of members who attend with the representative in person or by teleconference shall also register with the secretary before entering the meeting. The secretary shall keep a list of those who register with the minutes of the meeting." ■

ERO Insider

ERO Insider's website is now live! Here are our latest stories:

FERC, RF in Debate over CIP-014 Modeling

Supply Chain Team Wary of Changing Access Control Terms

Extreme Weather Tops NERC Winter Outlook

Gen Operators Cool to Winter Preparedness Standard

RTO Insider subscribers have access to two stories each month. Use your *RTO Insider* credentials to log in at www.ero-insider.com

PJM News

Ohio Supreme Court Dismisses FES Nuke Lawsuit

By Christen Smith

The Ohio Supreme Court last week rejected FirstEnergy Solutions' attempt to block a referendum to repeal $150 million in subsidies for its two nuclear plants.

Four of the court's seven judges dismissed FES' *lawsuit*, citing a "lack of justifiable controversy." While the court documents offer no further elaboration, the referendum effort against FES' plant subsidies failed in October, and its future — including whether petitioners will get extra time to gather the necessary signatures for inclusion on the November ballot — pends before the same court.

"The decision by the Ohio Supreme Court is a victory for Ohio's electric customers and recognizes the attempted referendum on HB 6 is over," Tom Becker, an FES spokesperson, said in email to *RTO Insider* on Monday. "Those opposed to the bill were unable to gather the requisite number of signatures to initiate a referendum; therefore there is no longer a need for the court to rule on the case."

Ohioans Against Corporate Bailouts began a campaign against Ohio's House Bill 6 the same day Gov. Mike DeWine signed the legislation in July. In October, however, the group said it fell nearly 45,000 signatures short of the count necessary for the referendum's inclusion on the 2020 ballot.

In its lawsuit, FES argued the new ratepayer fees collected for its nuclear plants — ranging from 80 cents to $2,400/month — are equal to a tax, making the underlying legislation ineligible for the petition that the group was circulating for a ballot referendum. The *lawsuit* named both the group and Secretary of State Frank LaRose, the state's chief election official, as defendants. (See *FirstEnergy Challenges Nuke Vote in Ohio Supreme Court*.)

Gene Pierce, spokesperson for Ohioans Against Corporate Bailouts, had a different interpretation of the last week's ruling.

"The Ohio Supreme Court decision correctly rejected FirstEnergy Solutions' argument that HB 6's billion-dollar bailout is not subject to referendum, one of many desperate and greedy FES maneuvers trying to deny Ohioans' right to vote on bad legislation," Pierce told *RTO Insider* in an email. "The argument was ridiculed from the first time it was aired in public, and this legal proceeding was a waste of the Ohio Supreme Court's time and taxpayers' money."

Pierce's group had asked a federal court to issue a preliminary injunction against HB 6, claiming 38 days of its 90-day allowance to collect signatures were wasted in a "blackout period" during which it sought the attorney general's approval of the petition's language before circulation could begin. The suit, filed in the U.S. District Court for the Southern District of Ohio in October, also alleged a well-funded opposition used illicit tactics to undermine its effort.

But Judge Edmund A. Sargus Jr. denied the group's request later that same month, saying only the state Supreme Court can determine whether state law thwarted the group's ballot petition — a *review* the panel has not yet indicated whether it will undertake. (See *Federal Court Denies Nuke Petition Extension*.) Attorneys for the group appealed Sargus' ruling Nov. 22. ■

Perry Nuclear Power Plant, located about 40 miles northwest of Cleveland | *FirstEnergy*

PJM News

Monitor: Record Low PJM Prices Persist

By Christen Smith

Record low energy prices persisted for the first nine months of the year in PJM, and so too did rumblings from legacy generators losing money over it.

But the loud grievances of some shouldn't outweigh the benefits to the many, the Independent Market Monitor said in its quarterly State of the Market *report*, urging stakeholders to be wary of sweeping changes to the markets.

"There is no reason to overturn the key components of the PJM capacity and energy markets," the Monitor wrote in its report, published Nov. 14. "There is no reason to create convoluted capacity market rules to exclude any competitive offer from any technology including renewable and nuclear technologies. There is no reason to artificially increase energy prices to benefit nuclear and coal plants."

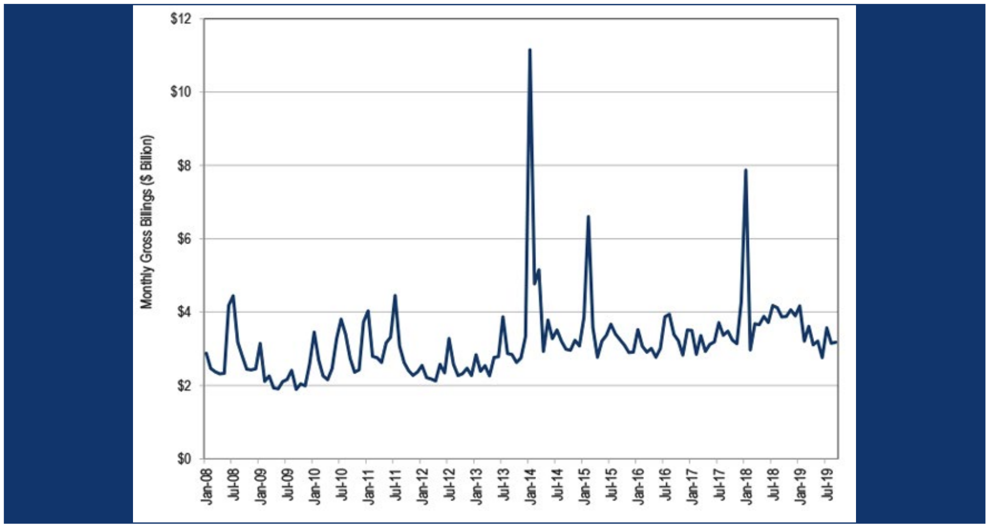
The sentiments echo the Monitor's warning in August that PJM's markets "remain under attack" from those who think its outcomes shortchange them. (See *Monitor: PJM Markets Remain Under Attack*.)

Instead, the Monitor said, stakeholders should focus on the "refinement of market rules" to "ensure the continued effectiveness of PJM markets in providing customers wholesale power at the lowest possible price, but no lower."

The Monitor also said that a market-based carbon price — such as that of the Regional Greenhouse Gas Initiative — would serve PJM better than unit-specific subsidies or "inconsistent" renewable portfolio standard rules.

"Implementation of a carbon price using RGGI or a similar market mechanism by the states would mean that the states control the carbon price and that no FERC approval would be required and no PJM rule changes would be required," the Monitor said. "The carbon price would become part of the marginal costs of power plants, and the impacts on production and consumption decisions would be market based. States would control the resulting revenues. This is the case regardless of the number of PJM states that join RGGI or a similar market."

In the interim, natural gas plants will continue displacing coal-fired resources, and some nuclear units will lose money while sellers' efforts to artificially control those elements will keep PJM's capacity market uncompetitive,



PJM reported monthly billings ($ Billion): 2008 through September 2019 | *Monitoring Analytics*

the Monitor said.

"The fact that some plants are uneconomic does not call into question the fundamentals of PJM markets. Many generating plants have retired in PJM since the introduction of markets, and many generating plants have been built since the introduction of markets. The level of potential retirements of coal and nuclear units does not imply a reliability issue in PJM and does not imply a fuel security issue in PJM."

Energy Prices, Congestion Trending Down

Energy prices dropped 30% compared with the same time frame a year earlier, and congestion decreased by two-thirds, the Monitor said.

LMPs dipped from $39.43/MWh in the first nine months of 2018 to $27.60/MWh through September. Lower fuel costs contributed to nearly half the decline, the Monitor said.

As a result of the record low prices, many generators — including FirstEnergy Solutions' two Ohio nuclear plants — won't recover costs. (See related story, *Ohio Supreme Court Dismisses FES Nuke Lawsuit*.) The Monitor's analysis concludes that average energy market net revenues decreased by 52% for new combustion turbine units; 32% for combined cycle; 82% for new coal plants; 32% for a new nuclear plant; 74% for a new diesel units; 29% for a new onshore or offshore wind installation; and 19% for a new solar installation.

New Recommendations

The Monitor's highest priorities center around ensuring effective market power mitigation and updates to PJM's real-time security-constrained economic dispatch (RT SCED) methodology, which stakeholders are exploring through a special session of the Market Implementation Committee. (See "5-Minute Dispatch and Pricing," *PJM MIC Briefs: July 10, 2019*.)

To address market power issues, the Monitor said PJM should commit units based only on their parameter-limited schedules when the three-pivotal-supplier test is failed or during high-load conditions, such as cold- and hot-weather alerts or more severe emergencies.

PJM should also approve one RT SCED case for each five-minute interval to send dispatch signals and calculate prices using the same approved SCED case.

Other new *recommendations*:

- PJM should model generators' operating transitions and peak operating modes.
- PJM should revert to the method for the calculation of implicit balancing congestion charges used prior to April 1, 2018.
- Fleetwide cost-of-service rates used to compensate resources for reactive capability should be eliminated and replaced with compensation based on unit-specific costs.
- The market efficiency *process* used to calculate the cost-benefit ratio of reliability-based regional transmission expansion projects should be eliminated because it is not consistent with a competitive market design. ■

PJM News

PJM MRC/MC Preview

Below is a summary of the issues scheduled to be brought to a vote at the PJM Markets and Reliability and Members committee meetings Thursday. Each item is listed by agenda number, description and projected time of discussion, followed by a summary of the issue and links to prior coverage in *RTO Insider*.

RTO Insider will be in Valley Forge, Pa., covering the discussions and votes. See next Tuesday's newsletter for a full report.

Markets and Reliability Committee

Consent Agenda (9:10-9:15)

PJM will ask for endorsement of:

B. PJM Manual 3: Transmission Operations — periodic review to *update* operating procedures.

C. Operating Agreement and Manual 6: Financial Transmission Rights — The first round of recommended rule *changes* for the RTO's financial transmission rights market in the wake of the GreenHat Energy default include updated sections reflecting additional rounds of the long-term auction and monthly-only balance of planning period auction. (See "FTR Market Rule Changes," *PJM MRC Briefs: Oct. 31, 2019*.)

D. Manual 13: Emergency Operations — *revisions* to incorporate 2020 day-ahead scheduling reserve requirement.

E. Manual 15: Cost Development Guidelines — *revisions* that clarify that market sellers can only change the format of maintenance adders ($/MMBtu, $/MWh or $/start) during the annual review period for energy offer components. (See "Manual 15 Clarifications on VOM Costs," *PJM MIC Briefs: Nov. 13, 2019*.)

F. Manual 18: PJM Capacity Market — *revisions* that implement the new must-offer exception process approved by FERC in October. (See *FERC to PJM Gens: Use or Lose Capacity Rights*.)

G. PJM Manual 19: Load Forecasting & Analysis — a periodic *review* and documentation of the long-term load forecast.

H. OA *revisions* that clarify the requirements for sharing forecasted unit commitment data to transmission owners for reliability studies.

1. Transmission Asset End of Life Problem Statement and Issue Charge (9:15-9:45)

Stakeholders will decide whether to formally discuss how incumbent TOs make asset management decisions and whether those projects should stay outside of the regional planning process.

American Municipal Power and Old Dominion Electric Cooperative proposed a *problem statement* and *issue charge* at the October MRC meeting that would create a special session of the MRC to discuss what criteria TOs should observe before determining their infrastructure has reached the end of its life and whether those determinants could be — or should be — standardized across all zones. (See "Stakeholders Mull Tx Asset Management Discussion," *PJM MRC Briefs: Oct. 31, 2019*.)

2. Opportunity Cost Calculator (9:45-10:05)

The MRC will decide between two packages to update PJM's opportunity cost calculator.

The main motion from Dominion Energy and Panda Power Funds would make what the sponsors called "modest improvements" to the calculator and include Manual 15 revisions so that it more closely resembles the Independent Market Monitor's calculator that most stakeholders prefer using. Just under 84% of stakeholders at the Market Implementation Committee voted in favor of the new package in September. PJM's *package* — which maintains the status quo but also makes minor clarifications in Manual 15 — received endorsement from 51% of the MIC and will also receive MRC consideration if the main motion fails to gain a two-thirds, sector-weighted plurality. (See "Opportunity Cost Calculator," *PJM MIC Briefs: Sept. 11, 2019*.)

3. Governing Document Enhancement and Clarifications Updates (10:05-10:20)

The MRC will vote on non-substantive *changes* to the Tariff, OA and Reliability Assurance Agreement that standardize cross references in all three documents.

4. Manual 03A Revisions (10:20-10:30)

The *revisions* to Manual 03A: Energy Management System Model Updates and Quality Assurance stem from a cover-to-cover periodic review and is phase one of an effort to update, reorganize and streamline the manual's content.

Section 2 was redesigned to reflect PJM's overall modeling philosophy. The RTO added sections on its "internal world modeling" (BES facility modeling, sub-transmission modeling); "external world modeling" (model exchange and extraction, pseudo tie modeling, pseudo tie eligibility, pseudo tie EMS modeling) and naming and modeling standards.

Members Committee

1. Governing Document Enhancement and Clarifications Updates (1:25-1:40)

The same non-substantive changes to the Tariff, OA and RAA that standardize cross references in all three documents that will be up for a vote at the MRC earlier in the day.

2. Load Management Testing Governing Document Revisions (1:40-1:55)

The MC will vote on new load management and price-responsive demand testing rules for Capacity Performance resources after PJM said old measures failed to mimic real-life emergency procedures. (See *PJM Stakeholders Support More Realistic DR Testing* and "Stakeholders Urge Consensus on Load Management Testing Requirements," *PJM MRC/MC Briefs: Sept. 30, 2019*.)

The MRC endorsed the new rules, effective with the 2023/24 delivery year, at its October meeting. (See "New Load Management Test Rules Endorsed," *PJM MRC Briefs: Oct. 31, 2019*.) If approved, PJM would hold authority over scheduling tests — instead of the resource itself — and provide advanced notification so participants can prepare. The changes would implement a three-step system that gives resources first notice of an upcoming test one week prior to the two-week testing window, with additional alerts by 10 a.m. the day before and the day of the scheduled test. There will be one test per year when there is no event, with half of resources tested in winter and the other half in summer.

3. Elections (1:55-2:05)

The MC will elect its vice chair for 2020, members of the 2019-2020 Finance Committee and the 2020 sector whips. ■

– Christen Smith

Company Briefs

Southern Co., AEP Ditch ACCCE

American Electric Power and Southern Co. will not renew their membership in the American Coalition for Clean Coal Electricity next year, leaving the prominent trade association without any utility members.

The announcements from two of the top burners of coal in the U.S. on Monday followed questions from E&E News about the utilities' continued membership in ACCCE, which has promoted a federal bailout for struggling coal plants and cheered the rollback of the Clean Power Plan, even as AEP and Southern announced plans to shut down coal plants and reduce carbon dioxide emissions.

AEP and Southern were the only investor-owned utilities to remain in ACCCE, but the group still counts power cooperatives like the Big Rivers Electric, Buckeye Power and Oglethorpe Power among its members.

More: *E&E News*

Georgia PSC Staff: Vogtle Timeline 'Significantly Challenged'

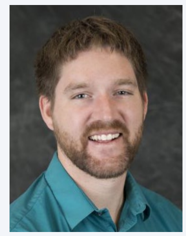
Unless performance improves considerably, the latest deadlines for commercial operation of two new reactors at Georgia Power's Plant Vogtle by November 2021 and November 2022 are "significantly challenged," according to a filing by the Georgia Public Service Commission last week.

Two weeks ago, a Georgia Power spokesman said the utility expects to meet the in-service dates for the new units. However, PSC staff and consultants said in the new filing that they have difficulty estimating when the reactors will be fully operational because the schedule Georgia Power submitted a few months ago was not reasonable and is "no longer relevant to the project." The project is already "significantly behind the schedule" that was set in April, staff wrote.

PSC staff and consultants concluded it still makes economic sense to continue the Vogtle expansion, but if the project is delayed by another year and a half, that would no longer be the case. Georgia Power already has spent 10 years and incurred billions in costs to get as far as it has, which includes $2 billion in financing costs already recovered from customers through a special fee in monthly bills.

More: *The Atlanta Journal-Constitution*

Hughes Returns to ELCON to Fill in for Departing Hartman



The Electricity Consumers Resource Council (ELCON) on Monday announced that CEO **Devin Hartman** will depart at the end of the year and be succeeded by John P. Hughes, who will return as interim CEO until the association selects a permanent head.

Hartman is headed back to the R Street Institute, where he will lead the energy and environmental policy program for the pro-market think tank. He served as electricity policy manager before going to ELCON in September 2018, serving as an assistant to Hughes in a transition phase before taking over as CEO in January.

Hughes had served as CEO since 2015, having begun with ELCON in 1987 as technical director.

More: *ELCON*

Federal Briefs

Department of Energy Funds Carbon Capture Project in California

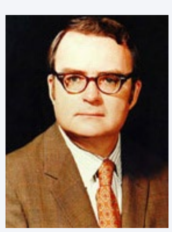
The Department of Energy awarded $300,000 in funding to Southern California Gas and the Pacific Northwest National Laboratory for a project that would advance the development of integrated CO_2 capture and conversion to methanol (ICCCM).

The funding will be used to design, fabricate and demonstrate a modular ICCCM prototype for the combined capture and conversion of CO_2 into methanol. As part of the research, the viability of the prototype will also be assessed. The unit will be designed for installation at an industrial CO_2 source.

SoCalGas has spent more than $10 million on the research and development of low- or zero-carbon technologies in the last three years.

More: *Environment + Energy Leader*

1st EPA Chief William Ruckelshaus Dies at 87



William Ruckelshaus, who served as the nation's first administrator of EPA and later quit the Justice Department rather than obey President Richard Nixon's order to fire the independent special Watergate prosecutor, died on Wednesday at age 87.

He twice served as the EPA chief: from its founding in 1970 through 1973, and then again from 1983 to early 1985 following the resignation of Anne Gorsuch amid a scandal over mismanagement of the Superfund program.

Under Nixon, Ruckelshaus oversaw the enactment of the nation's cornerstone environmental laws, like the Clean Air Act, and the consolidation of a disparate set of environmental programs into a single federal agency. His second stint tasked him with restoring trust in the agency following the scandal around Gorsuch.

During the Watergate scandal, he resigned as deputy attorney general rather than carry out Nixon's order to fire special prosecutor Archibald Cox in what came to be known as the "Saturday Night Massacre."

More: *POLITICO*

State Briefs

ARKANSAS

Rice Cooperative to Build Solar Plant

Producers Rice Mill will build a 26-MW solar power plant with up to 40 MW of storage capacity in conjunction with Scenic Hill Solar to supply electricity to its two rice mills in Stuttgart. The project will be the largest commercial solar energy and storage facility in the state.

The cooperative is still taking bids from contractors and does not yet know how much the final cost will be. The plant, which will be built on 160 acres and use more than 65,000 solar panels, should be operational within six months upon receiving Public Service Commission approval.

More: *Northwest Arkansas Democrat Gazette*

INDIANA

Commissioners Vote to Extend Solar Energy Moratorium for 6 Months

The Madison County Commissioners last week voted 2-1 to reject a recommendation for a year extension on the moratorium on large-scale solar energy projects.

The Commissioners instead voted to extend the moratorium only until July 6, 2020. Earlier this month, the Madison County Planning Commission voted unanimously to extend the moratorium on solar energy developments of larger than 50 acres through Jan. 7, 2021.

The proposed six-month extension now returns to the Planning Commission, which has 45 days to approve or deny the recommendation. If rejected, it would be returned to the Commissioners for another vote.

More: *The Herald Bulletin*

MISSOURI

FBI Probes into Contracts Issued by Independence City Council

Independence City Council members **Karen DeLuccie** and Scott Roberson said FBI agents separately questioned them about two controversial projects pushed through by members.

The demolition of the Missouri City Power Plant and Rockwood Golf Club, which the city turned into a solar farm, are the two projects in question and cost taxpayers more than $10 million.

The power plant, located in a desolate area, was deemed safe by EPA and did not need to come down. Still, the council, with the exception of Roberson and DeLuccie, decided to move forward with the project and selected Environmental Operations Inc. for the job. The company bid twice the cost of the low bidder.

More: *KSHB*

MONTANA

PSC Gives Residential Solar Panel Users a Break

The Public Service Commission last week unanimously rejected NorthWestern Energy's plans to increase rates on customers who net meter solar power, saying the company did not present enough information to justify the charge.

NorthWestern has approximately 2,100 state customers who net meter. Those customers argued throughout the year that the utility was punishing those who generate power and said it was killing the rooftop solar industry. The commission voted Oct. 30 to increase NorthWestern's rates by $6.5 million across several classes but left the net metering issue unresolved until last week.

Commissioner Tony O'Donnell gave NorthWestern two options to resolve the issue. It could either bring sufficient information forward to take up the bill increase again soon or allow rates to stay the same until energy from customers who net meter makes up 5% of the utility's portfolio.

More: *Billings Gazette*

Regulators Address Wildfire Risks from Power Lines

The Public Service Commission said last week NorthWestern Energy must spend at least $3.2 million a year on removing trees near power lines, saying they are worried power equipment could spark flames like the devastating wildfires in California.

The minimum amount NorthWestern must spend on its tree removal program is one of the final steps in the company's massive docket before the regulators. The company currently holds a $300 million liability insurance plan.

During the rate case expected to wrap up before the end of the year, regulators will give final approval for costs NorthWestern can pass on to its customers.

More: *Montana Public Radio*

NEW MEXICO

State's Largest Wind Farm Breaks Ground

The Sagamore Wind Farm officially broke ground in Roosevelt County last week. It will be the largest in the state when completed.

The 100,000-acre, 240-turbine project will cost an estimated $900 million and provide $131.5 million in state and local benefits, as well as $43 million in gross receipts tax, according to Xcel Energy Project Manager Brian Hudson. No timetable for completion has been announced.

More: *The Eastern New Mexico Times*

NEW YORK

Cuomo, National Grid Reach Deal on Gas Moratorium

National Grid and Gov. Andrew Cuomo announced an agreement last week that would restore gas service to customers and applicants the utility had previously rejected.

National Grid will lift its moratorium immediately and will have 30 days to contact all residential customers and small businesses who need gas hookups, and 45 days for larger commercial projects. To compensate customers who were impacted by the moratorium, National Grid will pay a $36 million penalty that will also support new energy conservation measures and clean energy projects as directed by the Division of the Budget in consultation with the Public Service Commission. The deal comes after Cuomo threatened to revoke the company's certificate to operate.

"This agreement is a victory for customers," **Cuomo** said. "National Grid will pay a significant penalty for its failure to address the supply issue, its abuse of its customers and the adverse economic impact they have caused. The company is also working to address the long-term supply problem and will present options in the coming months to the people of Brooklyn, Queens and Long Island, letting them choose the best way forward for their communities."

More: *WABC*

Request Made to Accelerate Decommissioning of Indian Point

Entergy and Holtec International announced last week they jointly filed a license transfer application with the U.S. Nuclear Regulatory Commission, requesting approval for the transfer of the licenses for the Indian Point nuclear power plant to Holtec after the last unit permanently shuts down by April 30, 2021.

Holtec aims to initiate decommissioning at Indian Point, following regulatory approvals and transaction close, 40 years sooner than if Entergy continued to own the units. The companies asked NRC to approve the transfer application by November 2020 to facilitate a timely transaction closing targeted for May 2021.

In January 2017, Entergy announced a plan for the early and orderly shutdown of Indian Point by April 30, 2021, as part of a settlement with the state and Riverkeeper. Holtec's plan for decommissioning will result in the release for reuse of portions of the site in the 2030s, except for the Independent Spent Fuel Storage Installation.

More: *Entergy*

TEXAS

Permit for Texas LNG Remains up in the Air

Liquefied natural gas company Texas LNG landed a federal permit for its proposed export terminal at the Port of Brownsville, but its state permit may take at least another four months to sort out.

After more than three years of review, FERC granted Texas LNG a permit authorizing the plant to make up to 4 million metric tons of LNG per year. Before construction can begin, the company must secure customers, financing and permits from state and federal agencies, and may not be able to obtain an air pollution permit from the Commission on Environmental Quality (TCEQ) until March.

A panel of judges with the Office of Administrative Hearings has been tasked with reviewing the air pollution permit. The judges heard testimony last week and have until Feb. 24 to make a ruling. Once a ruling has issued, their decision will be placed on the next TCEQ meeting, which would most likely be in March at the earliest.

More: *Houston Chronicle*

PUC Approves CenterPoint Energy Project

The Public Utility Commission of Texas last week approved CenterPoint Energy's Bailey-Jones Creek transmission line project.

The 345-kV electric transmission line connects the company's Bailey Substation in Wharton County to its Jones Creek Substation in Brazoria County. Specific routing criteria for new lines, including whether the route utilizes or parallels compatible rights of way, were considered during the approval process.

CenterPoint anticipates the project will be completed by April 2022.

More: *Daily Energy Insider*

VIRGINIA

DEQ Approves First Solar Farm for Appalachian Power

The Department of Environmental Quality last week approved the 15-MW Depot Solar Center in Campbell County. It is the first industrial-scale solar farm to produce electricity for Appalachian Power.

The power purchase agreement with Coronal Energy, a private company that will operate the facility, marks the utility's first venture into industrial-scale solar power.

Construction of the 150-acre site is expected to begin next spring and be completed by the end of 2020.

More: *The Roanoke Times*

Dominion Willing to Remove Coal Plant from Green Energy Package

Amid complaints from businesses and environmental groups, Dominion Energy said it would be willing to let regulators remove the Virginia City Hybrid Energy Center, a power plant that relies almost entirely on coal, from a renewable energy portfolio it is aiming to sell to environmentally conscious consumers.

Dominion formally noted its willingness to let regulators exclude the plant from the portfolio, which is being packaged as a "100% renewable energy" offering, in State Corporation Commission rebuttal testimony filed Nov. 12. The Hybrid Energy Center produces energy using a mix of biomass and coal. Currently coal represents 93% of all fuel used by the facility and powers 80% of its production.

While opponents of Dominion's Rider Total Renewable Generation (TRG) green energy plan expressed satisfaction about the removal of Virginia City from the proposal, they remained unconvinced about its overall value. Among the complaints: The tariff would not result in the addition of new renewable resources; does not meet the environmental sustainability standards many large corporations have set; and makes customers pay a premium for energy that is currently less expensive than that generated by traditional fuels.

Still, Dominion pointed out its proposal matches three criteria for green tariffs outlined by the SCC earlier this year: Any green tariff must ensure that nonparticipating customers aren't financially harmed; all electricity comes from 100% renewable energy; and rates are reasonable.

More: *Virginia Mercury*