RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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

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August 10, 2021

Too Late to Stop Climate Change, UN Report Says

IPCC: Unprecedented International Cooperation Needed to Mitigate Impacts

By John Funk

Catastrophes such as wildfires in Northern California and Greece, as well as floods in Europe, are evidence that climate change is here, not a distant threat, the U.N.'s Intergovernmental Panel on Climate Change says. The group released a report Monday predicting catastrophic droughts, lethal heat waves and rising ocean levels unless carbon dioxide and other greenhouse gases are reduced to zero by midcentury. | *U.S. Forest Service/Lassen Natio*

Raging forest fires, rising sea levels and scorching high temperature records are here to stay, the U.N.'s Intergovernmental Panel on Climate Change concluded Monday in a report based on an analysis of more than 14,000 scientific climate studies.

The *report* stressed that climate change is not a distant problem but one that is already here — and getting worse much faster than expected.

The findings are stark:

- Since 1850, industrialization has pushed up global average temperatures by 1.1 degrees Celsius (2 degrees Fahrenheit), leading to the major droughts, heat waves and super

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DC Circuit Sides with Public Citizen over 2015 MISO Capacity Auction

By Amanda Durish Cook

The D.C. Circuit Court of Appeals on Friday handed Public Citizen a win in the consumer advocate's yearslong battle against the expensive Southern Illinois capacity price produced in MISO's 2015/16 capacity auction.

The court said FERC's repeated decisions to uphold Zone 4's $150/MW-day clearing price were arbitrary and capricious because they lacked explanation (*20-1156*).

FERC last May turned down a final rehearing bid from Public Citizen to change the price.

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COVID Resurgence Scrambles RTOs' Return

Delays for NYISO, ISO-NE, SPP

By Michael Kuser, Amanda Durish Cook, Tom Kleckner, Jason York, Michael Yoder and Holden Mann

NYISO, ISO-NE and SPP are delaying plans for returning to their offices because of the new surge in COVID-19 cases.

NYISO

NYISO had planned to allow staff to return to work at the ISO building on Sept. 7, with stakeholder meetings to resume in person two weeks later, CEO Rich Dewey told the Management Committee on July 28. However, the situation was fluid, he said, and the ISO announced Monday it is delaying the return of staff until October.

"With the uptick in COVID-19 infections and the rise of the Delta variant, the NYISO is delaying our planned back-to-work date until at least Monday, Oct. 4," NYISO spokesman Zach Hutchins told *RTO Insider*. "In-person stakeholder meetings, which we were hoping to hold again beginning Sept. 20, have also been delayed until at least October. We will continue to monitor the situation and provide updates as necessary."

The *Albany Times-Union* *reported* Monday that the Delta variant contributed to the highest single-day new case rates in months for both Albany County and across the Hudson River in Rensselaer County, home to the ISO's headquarters building.

In July, the ISO surveyed market participants about the return to in-person meetings and found stakeholders evenly split between those who wanted to restart in-person meetings immediately and more cautious respondents who would choose to wait longer. Market participants will continue to have the option to join the meetings remotely once in-person

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In this week's issue

***NetZero Insider* is now live!**

See p.20 for this week's coverage.

Stakeholder Soapbox

Stakeholder Soapbox: Advancing Grid Parity

By Devin Hartman, R Street Institute

Devin Hartman | *R Street Institute*

Three priorities for FERC became clear this year: transmission reform, decarbonization and grid resilience. To address all three, FERC should provide true open access and competition for transmission development in RTO markets. Leveling the playing field for new transmission entrants in RTO markets would quickly provide needed reliability, clean energy and consumer benefits.

Deep anti-competitive flaws in RTO transmission policy deter both reliability and clean energy improvements. Current FERC policy permits incumbents in RTO markets to retain a blanket right of first refusal (ROFR) for projects meeting local reliability needs, but projects planned to meet regional needs must be competitively bid. To avoid this competition, incumbents in RTOs are building an increasing number of smaller local reliability projects which exclude larger regional projects. The result is higher transmission costs with little corresponding reduction in transmission congestion, interconnection delays and suppressed innovation, as demonstrated at FERC's 2019 grid-enhancing technologies workshop and further detailed by industry participants in post-workshop comments.[1] Consumers would benefit from new, innovative regional and interregional transmission solutions that eliminate congestion and unlock renewable generation resources.

Despite billions of dollars in potential consumer savings, only 3% of new transmission investment in the U.S. was subject to competition between 2013 and 2017. In many of these cases, incumbents in RTOs blocked winning bidders from moving forward with projects by successfully lobbying for the enactment of ROFR statutes at the state level.[2] Such laws give incumbents the exclusive right to build, maintain and own transmission lines within their service territories. ROFR proliferation since FERC issued Order 1000 has inflated costs and harmed interstate commerce. All the while, consumers' electric bills have continued to rise as transmission costs have doubled, and the reliability effects of transmission-related events have increased.[3]

With billions in transmission investment needed to meet aggressive clean energy goals, maintain reliability and enhance resilience to severe weather and cybersecurity threats, incumbent transmission owners are seeking to reinstate the federal ROFR that was eliminated by Order 1000. Some argue that transmission competition is a failed experiment that hinders the grid of the future by leading to inefficient and unnecessarily costly development. Industrial consumers and state consumer advocates adamantly disagree. They warn that giving incumbent transmission owners free rein without the downward cost pressure offered by competition will lead to even higher bills, further suppress innovation and increase delays in unlocking renewable generation. Instead, FERC should correct deficiencies in the existing Order 1000 competitive framework to spur innovation and reduce costs while promoting reliability and decarbonization efforts.

At a granular level, retail customers of incumbents in certain regions often experience more reliable service than the same incumbent's wholesale transmission customers, perpetuating unreliable "holes" and economic "dead zones" within regional grids. This is especially evident in smaller municipal utilities and rural electric cooperatives. The unequal transmission service quality and rate treatment these underserved communities sometimes receive also results in the hindrance of renewable energy development, especially in wind- and solar-rich areas like MISO, SPP and the Southwest.

There is ample evidence that the disparity in reliability performance and clean energy access within certain RTO regions is not random. Peer-reviewed studies have found that "unequal resilience" between communities is driven by institutional bias and bureaucratic rules.[4] This will continue under the status quo, as many incumbent transmission owners in RTOs work to shield their transmission cap-ex budgets from competition.

Thankfully, the winds of change are upon us. Industrial consumers, state consumer advocates, renewable developers and new entrants are increasingly recognizing that their fates are intertwined. They are beginning to rally against anti-competitive behaviors, promoting the expansion of transmission competition under Order 1000 and fair RTO zonal cost allocation rules, such as equivalent cost recovery for incumbents and new entrants. They are calling on FERC to either preempt state ROFR laws or change the regulatory presumption of prudence for transmission projects subject to a state or federal ROFR.

| © RTO Insider LLC

Regional consumer and new entrant interests, especially in SPP and MISO, are identifying additional transmission options that benefit wholesale customers. This includes allowing customers to contract with non-incumbent transmission providers to plug the "holes" in the electric grid and remedy the chronic "dead zones" that incumbents and RTOs refuse to address. To enable this, FERC could declare that RTO zonal cost allocation practices treat all networked transmission facilities — whether owned by new entrants or incumbents — equally.

Effective transmission reform can produce cleaner energy and more reliable service that benefits all customers. But first FERC must remedy incumbency bias and reduce the barriers to new entrants. Tactically, FERC can start by revisiting and undoing the most egregious RTO-specific competitive carve-outs granted since Order 1000 was issued. There is no doubt that FERC has a broader vision of transmission reform that will require extensive rulemaking and the reversal of the competitive exemptions enshrined in Order 1000 itself. But FERC leadership should prioritize remedying zonal placement and eliminating Order 1000 carve-outs to enhance competition without delay. ■

Devin Hartman is director of energy and environmental policy at the R Street Institute.

[1] See *FERC Staff Explore Barriers to Grid-enhancing Tech*.

[2] https://www.supremecourt.gov/DocketPDF/20/20-641/159802/20201105141834104_2020-11-05%20LSP%20Petition%20FINAL.pdf

[3] https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2021.shtml & https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC_SOR_2020.pdf

[4] https://daneshyari.com/article/preview/5105618.pdf

FERC/Federal News

Too Late to Stop Climate Change, UN Report Says

IPCC: Unprecedented International Cooperation Needed to Mitigate Impacts

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storms that have become common around the world.

- Carbon dioxide and other greenhouse gas increases are now on course to push global average temperature changes well beyond 1.5 C, which previous studies warned could lead to unstoppable climate disruptions. An increase of just 2 C would severely disrupt agriculture dependent on stable weather patterns.
- Carbon emissions must be sharply reduced as quickly as possible, along with cumulative emissions through direct air capture, in order to reach a net-zero position by 2050.
- Sea level rise, already underway, cannot be reversed and could continue for hundreds or thousands of years as polar ice caps and glaciers melt. Coastal cities can expect sea levels to rise through the 21st century. Frequent and severe flooding can be expected.

"This report is a reality check," IPCC Working Group I Co-Chair Valérie Masson-Delmotte said in a statement released before the group held a press conference. "We now have a much clearer picture of the past, present and future climate, which is essential for understanding where we are headed, what can be done and how we can prepare."

But the kind of concerted and cooperative global effort to reduce carbon emissions to the degree the report recommends will take unprecedented international cooperation, such that has never occurred except perhaps during war.

Predictions of climate change have been issued regularly for several years by the U.N. and by various U.S. federal agencies. But scientists said this year's study is more exact because of improvements in measurements. It is the sixth from the IPCC and one of several to be released before the 26th U.N. Climate Change Conference of the Parties (COP26) in Glasgow in November.

The U.S. Department of Agriculture has noted for several years, including in *a 2018 report*, that average temperatures were increasing and advised farmers to be prepared. But the report did not imagine the kind of disasters this latest U.N. report envisions.

The study comes just days after the Biden administration, in an effort to move the nation away from the internal combustion engine, unveiled a goal of 50% of new cars sold by 2030 being electric, an effort that will require the creation of an entire new industry and supply chain in the U.S. to compete with China. (See *Biden Executive Order Sets 50% EV Goal by 2030*.) Massive federal financial assistance is anticipated to jumpstart that transition, including the construction of charging stations.

The administration earlier this year set another goal of 30 GW of Atlantic offshore wind power by 2030 — a target that will also require the creation of a new U.S. supply chain, as well as billions of dollars in federal loans and incentives. (See *US Adds Offshore Wind Area off New York*.)

The rising sea levels and more severe storms predicted by the U.N. report could add billions to OSW developers' budgets as they try to modernize ports and harbors. ■

FERC/Federal News

COVID Resurgence Scrambles RTOs' Return

Delays for NYISO, ISO-NE, SPP

Continued from page 1

meetings resume.

The Independent Power Producers of New York announced in July that it was changing its annual fall conference in Saratoga to a one-day, virtual event on Sept. 15, but the golf tournament will proceed as scheduled.

ISO-NE

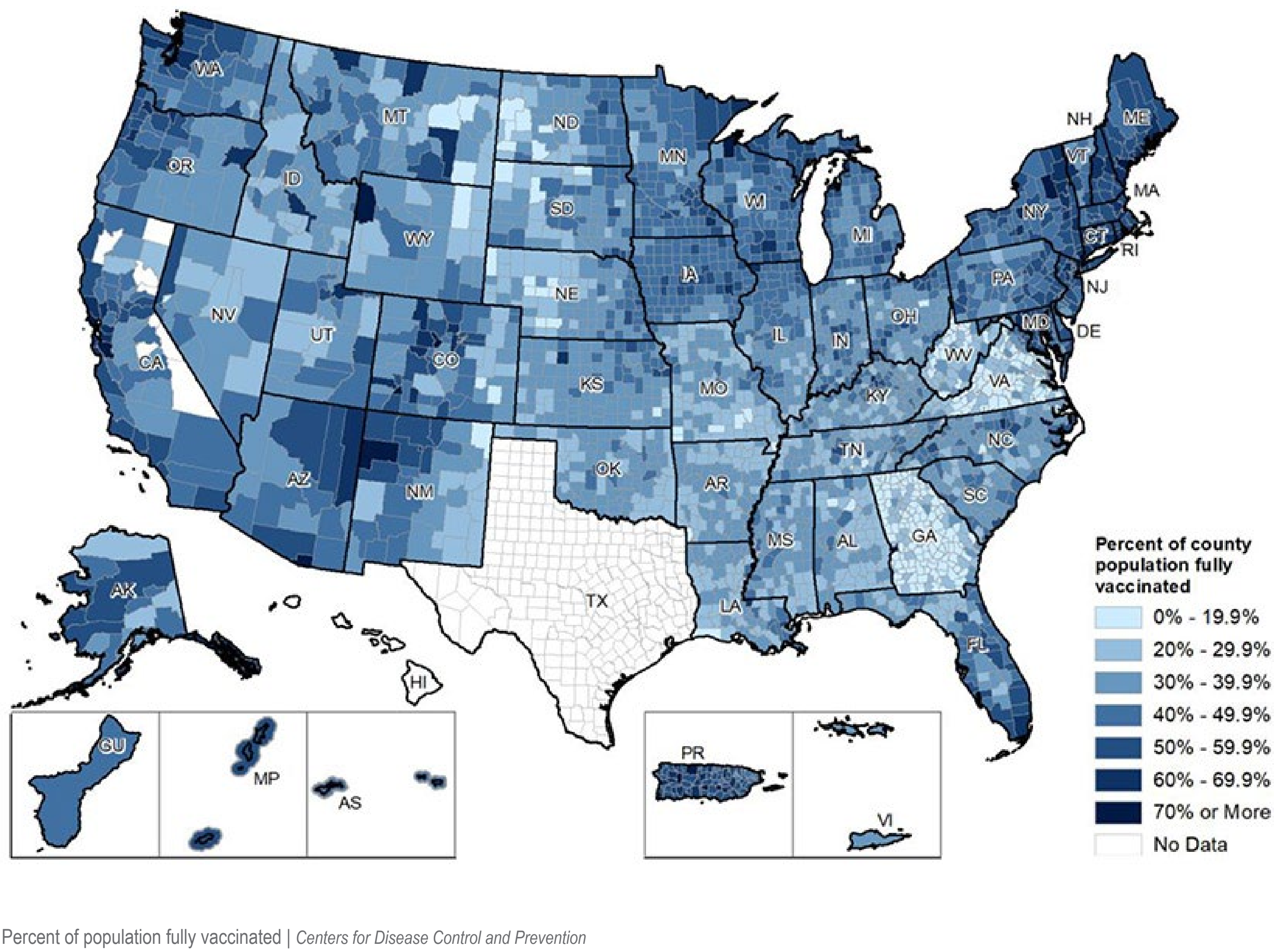
ISO-NE said concerns with the Delta variant extended the timeline of its return to the office until October. Spokesman Matt Kakley added that many employees have continued to work in ISO-NE's Massachusetts and Connecticut offices since the beginning of the pandemic.

"We continue to rely on guidance from state and federal health officials, with a focus on the health and safety of our employees and stakeholders," Kakley said. "No matter where our employees are physically working, ISO-NE will continue our important work of ensuring the region has reliable electricity."

As for its public meetings, Kakley said the Consumer Liaison Group meeting on Sept. 9 will be virtual, as will the Sept. 22 Planning Advisory Committee meeting. "I do not believe any decisions have been made beyond that," Kakley said.

NEPOOL Participants Committee Chair David Cavanaugh told *RTO Insider* that stakeholders are "still targeting" a return to in-person opportunities beginning with a Participants Committee meeting on Oct. 7.

"We would intend to follow and adhere to the latest CDC [Center for Disease Control and Prevention] guidelines — as well as any additional state or local requirements that may be in place," Cavanaugh said. "However, before NEPOOL's return to in-person meeting plans are solidified, and any associated protocols or policies are finalized, it is important that we



Percent of population fully vaccinated | *Centers for Disease Control and Prevention*

FERC/Federal News

gather additional information and feedback from our regional stakeholders."

Cavanaugh said NEPOOL would soon send out a questionnaire to its membership that will help "to formulate a plan that works for all of us," in addition to working closely with ISO-NE and New England state officials.

"Of course, no matter the final plans, we will continue to provide full opportunities for remote/virtual participation for all NEPOOL meetings moving forward," Cavanaugh said.

SPP

SPP had intended to resume in-person meetings in July and August, but postponed those plans amid a troubling spike of COVID-19 in its home state of Arkansas. (See *SPP Postpones July, August In-person Meetings*.)

During last month's virtual governance meetings, CEO Barbara Sugg apologized for the cancellations and said, "This is not what I wanted. I miss seeing your faces in person, shaking hands and not pretending life is normal."

The RTO is tentatively set to resume in-person meetings in time for October's governance meetings, but Sugg cautioned stakeholders against making travel plans for the time being.

"Hopefully, we'll be able to put this pandemic in the rear-view mirror soon enough," Sugg said.

The grid operator is working on a hybrid approach for employees' return to the office, with staff expected to maintain a 50-50 balance between at-home and in-office work. The plans are being made at the departmental level, with staff allowed to determine the appropriate mix.

RTO/ISO	Staff in-person return	Stakeholder in-person return	Headquarters Location	% of total population fully vaccinated
CAISO	October 2021	October 2021	Sacramento County, Calif.	50.2%
ERCOT	allowing work from home	September 2021	Travis County, Texas	N/A
ISO-NE	October 2021	none before October	Hampden County, Mass.	51.5%
MISO	Sept. 1	2022	Hamilton County, Ind.	59.8%
NYISO	Oct. 4	none before late October 2021	Rensselaer County, NY	58.2%
PJM	pilot program; potential expansion in September	January 2022	Montgomery County, Pa.	55.2%
SPP	determined at departmental level	October 2021 or later	Pulaski County, Ark.	42.5%

The counties headquartering CAISO, ISO-NE, MISO, NYISO and PJM all have vaccination rates above the national average of 50.1%, while only 42.5% of the population is fully vaccinated in Pulaski County, Ark., which includes SPP and MISO offices in Little Rock. The Centers for Disease Control and Prevention had no data for Travis County, Texas, where ERCOT is headquartered. | *RTOs and Centers for Disease Control and Prevention*

PJM

PJM and MISO have both ruled out in-person stakeholder meetings in 2021.

PJM continues to stand behind its goal to resume in-person stakeholder meetings beginning in January, said spokeswoman Susan Buehler. She said the RTO is following guidance from the Montgomery County Office of Public Health in alignment with the CDC's four levels of COVID-19 community transmission. Buehler said PJM will continue to have discussions and updates with stakeholders as the January return date gets closer.

About 100 PJM employees have volunteered to come back to the Valley Forge campus as part of a pilot program to test onsite COVID protocols and collaboration tools. The return pilot program was introduced to stakeholders at the July Operating Committee meeting. (See "COVID-19 Update," *PJM Operating Committee Briefs: July 15, 2021*.)

"The pilot program has had great feedback and reviews, and we are continuing that until September when we will phase more employees back to campus, if it is safe to do so," Buehler said.

MISO

MISO plans to reopen its offices to visitors beginning Sept. 1, although stakeholder meetings will remain virtual for the remainder of 2021.

Employees of the grid operator are also returning to the office Sept. 1 with the option for some remote days in a work week.

Earlier this month, MISO Senior Director of Operations Planning J.T. Smith said MISO is reviewing its masking guidance after the CDC recommended a return to indoor masking even for vaccinated individuals in areas where community transmission is high. He said MISO offices in the Little Rock, Ark.-area are within a COVID hotspot.

Despite the Delta variant driving high caseloads once again, Smith said MISO remains committed to its Sept. 1 target. He pointed out that vaccines are widely available in all parts of the country.

ERCOT

ERCOT is planning to use an in-person/virtual approach when it resumes in-person stakeholder meetings in September, "highly encouraging" only voting members to physically show up.

Everyone attending ERCOT meetings in person will be required to wear a mask.

Staff told the Technical Advisory Committee on July 28 that they are reviewing meeting procedures to see if any modifications need to be made and promised to change their approach, if necessary. Market notices will be issued with further details.

ERCOT recently changed its policy to allow staff to work primarily from home, in the office or a combination of the two.

Travis County, home to Austin and ERCOT, last week *raised* the area's risk-based guidance to Stage 5, its highest level. Texas is second only to Florida in new COVID-19 infections, and its rolling seven-day average of new COVID-19 cases last week *soared by 92%* from the week before.

CAISO

CAISO hopes to begin a return to normal in October.

"We are monitoring the situation and are hopeful we will be able to begin allowing some level of in-person meetings at our facility beginning in October," said CAISO spokeswoman Vonette Fontaine. "We're currently targeting October for employees to start phasing in returning to the office in limited numbers at first." ■

FERC/Federal News

DOI Nominee Fields Tough GOP Questions at Senate Hearing

Stachelberg Stays on Message as Barrasso Rehashes Stone-Manning Allegations

By K Kaufmann

Cynthia Weiner Stachelberg | *Senate ENR Committee*

Cynthia Weiner Stachelberg spent a good part of her confirmation hearing before the Senate Energy and Natural Resources Committee last week reminding Republican senators that as an assistant secretary at the Department of the Interior, she would not be directly involved in issues such as tree spiking or gun control.

Nominated as assistant secretary for policy, management and budget, Stachelberg was one of three nominees at the hearing Aug. 3, but she took most of the heat in an otherwise civil and issue-focused session. The other two nominees were Geraldine Richmond, for under secretary of science at the Department of Energy, and Asmeret Berhe, for director of the DOE Office of Science.

Geraldine Richmond | *Senate ENR Committee*

In his opening statement, Sen. John Barrasso (R-Wyo.), the committee's ranking member, voiced opposition to Stachelberg's nomination based on her lack of experience with Interior's core areas of land and resource management. She is currently executive vice president for external affairs at the Center for American Progress, where she has worked on a range of issues, including gun control. She previously worked with the Human Rights Campaign on gay and lesbian issues.

However, Barrasso used most of his five minutes to rehash his opposition to the nomination of Tracy Stone-Manning to head the Bureau of Land Management.

Sen. John Barrasso (R-Wyo.) | *Senate ENR Committee*

Without naming Stone-Manning directly, he grilled Stachelberg on her position on tree spiking and involvement with groups that might support it. Opposition against Stone-Manning based on her involvement with a tree-spiking incident in 1989 resulted in a deadlocked committee vote on her nomination. (See *Senate Committee Deadlocks on Biden Pick to Head BLM*.)

In response, Stachelberg repeatedly refocused her answers on her own nomination. "Senator, I really wish to address questions that have to do with my portfolio and the challenging job

Research at DOE's National Laboratories — like this flex-manufactured battery enclosure at the National Renewable Energy Laboratory — is critical to ensure U.S. global leadership in energy innovation, according to Geraldine Richmond, nominee to be DOE under secretary for science. | *NREL*

FERC/Federal News

I have been nominated for," she said. "And if I am confirmed, I will be happy to work with you and others on the committee to address those issues."

Sen. Mike Lee (R-Utah) also pushed Stachelberg on her views on gun control, bringing up a recent tweet in support of banning assault weapons and high-capacity magazines. She again parried by saying the gun control issues she worked on at the Center for American Progress were not immediately relevant to "the position I've been nominated for now."

Stachelberg got an easier ride from Sen. Joe Manchin (D-W.Va.), chairman of the committee, who noted the wide portfolio of issues she might face as assistant secretary and asked about her priorities.

Staffing up the department would come first, Stachelberg said, to rebuild after staff losses during the Trump administration, followed by working on wildfire and drought issues, especially in the West.

Richmond and Berhe

Even Barrasso could find little to fault in Richmond's qualifications. A professor of chemistry at the University of Oregon for 26 years, she has been published widely, received DOE funding for research projects, visited the National Laboratories and served on several agency advisory boards. In her opening statement, Richmond said her top priorities at DOE would be providing a seamless process from basic research and development to demonstration and deployment at scale, buttressed by cross-agency and cross-industry collaboration.

Calling on DOE to be model for diversity, Richmond said, "We are stronger, smarter and simply better when we all seize possibilities together, and there is no better place on this planet for scientific discovery and innovation than a country built on the premise of joining forces."

Responding to questions from Democratic senators, Richmond also stressed the need for the U.S. to increase funding and focus on R&D to keep pace with global competitors, including China.

"We are the envy of the world when it comes to fundamental science and discovery science," Richmond said. "We have the potential of falling behind if we don't continue to increase our investment in basic science. That's where we will continue to win if we continue to provide support for them. ... We cannot lose this race, so the funding is critical."

Citing a 2018 report, Richmond said China's ramping of support for energy R&D "is frightening; especially when we think of ourselves as being a leader in the science and engineering enterprise, looking at the funding China is pumping into their technology and research, it's incredible. ... We can spend our time looking over our shoulder, worrying about China. Instead, we need to look forward and say, 'Let's be as innovative as we possibly can and get our scientists on board to make the kind of changes we need in order to stay ahead.'"

She even earned high marks on a question on biofuels from Sen. Roger Marshall (R-Kan.), recalling her own childhood on a farm in Kansas where her father shoveled coal into the furnace every morning to heat the house.

"We can make much more progress in the bioenergy sphere, but again, we've just got to make sure we're doing the best research that we can," Richmond said. "That and any other of the fossil fuels. We cannot give up on any of these fuels at all."

Rerouting Waste

Asmeret Berhe | *Senate ENR Committee*

Berhe also started out the hearing with criticism from Barrasso, who argued her 12 years as a professor of soil biogeochemistry at the University of California, Merced, did not include the broad scientific expertise or administrative experience needed to run the Office of Science.

But Berhe defended her specialty as one that requires "advanced experimental observational and computational tools and interdisciplinary perspectives."

"I approach my nomination to serve as the director of the Office of Science with the expertise of an Earth system scientist that works across and synthesizes knowledge from multiple scientific areas and teams," she said. "The integrative systems perspective that I would bring, if confirmed, is uniquely suited for this role, especially for the current time when we need to urgently address multiple issues."

A question from Marshall also allowed Berhe to talk about new areas of research in carbon sequestration in soil, citing an "incredible opportunity" to use carbon that is currently in animal and human waste streams. "There are a number of options, in particular ones that allow us to use waste and reroute waste and use it as a resource, options that allow us to store carbon in deep soils," she said. ■

FERC/Federal News

DC Circuit Sends LNG Approvals Back to FERC

By Michael Yoder

| Canaport LNG

The D.C. Circuit Court of Appeals on Aug. 3 found fault with reviews by FERC on climate and environmental justice issues for planned LNG projects in Texas, remanding the orders back to the commission for further consideration (20-1045).

The approvals include two different projects in the Brownsville area: the 750-acre Rio Grande LNG, which was proposed by Houston-based NextDecade, and the independently owned 635-acre Texas LNG. A petition against a third LNG project in the Browsville area, Annova LNG, was dismissed as moot as the project was discontinued in May.

"The commission's National Environmental Policy Act (NEPA) analyses of the projects' impacts on climate change and environmental justice communities were deficient under the Administrative Procedure Act (APA)," the court said in its ruling. "The commission's determinations of public interest and convenience under the Natural Gas Act (NGA) were therefore deficient to the extent that they relied on its NEPA analyses of the projects' impacts on climate change and environmental justice communities."

FERC originally approved the projects in 2019, and rehearing requests were denied in early 2020. Petitioners in the case included the group Vecinos Para el Bienestar de la Comunidad Costera, the Sierra Club and the city of Port Isabel.

While the court remanded the orders back to FERC, it did not vacate the authorizations. The project developers argued that vacating the authorizations "would imperil intervenors' ability to obtain funding necessary to complete the projects in a timely fashion."

"We find it reasonably likely that on remand, the commission can redress its failure of explanation with regard to its analyses of the projects' impacts on climate change and environmental justice communities, and its determinations of public interest and convenience under Sections 3 and 7 of the NGA, while reaching the same result," the court said in its ruling.

"As I said in my dissents when FERC approved these projects nearly two years ago, neither the Natural Gas Act nor the National Environmental Policy Act permit FERC to assume away the impacts of building and operating any natural gas facilities," FERC Chairman Richard Glick said in a statement. "This decision clearly demonstrates that the commission has the authority and obligation to meaningfully analyze and consider the impacts from GHG emissions and impacts to environmental justice communities. Moreover, failure to do so puts the commission's decisions — and the investments made in reliance on those decisions — in legal peril."

Directives to the Commission

The court agreed with the petitioners' arguments that FERC failed to sufficiently address the impact of greenhouse gas emissions by the projects because it didn't review the social cost of carbon or a similar accepted scientific methodology to evaluate their contribution to climate change.

FERC originally explained in its orders that it was "unable to determine the significance of the project's contribution to climate change" and that "there is no universally accepted methodology to attribute discrete, quantifiable, physical effects on the environment to [the] project's incremental contribution to" GHG emissions.

The petitioners argued that FERC was "required to do more," saying federal regulation 40 C.F.R. Section 1502.21(c) requires the commission's evaluation of environmental impacts to be "based upon theoretical approaches or research methods generally accepted in the scientific community."

"On remand, the commission must explain whether 40 C.F.R. Section 1502.21(c) calls for it to apply the social cost of carbon protocol or some other analytical framework as 'generally accepted in the scientific community' within the meaning of the regulation, and if not, why not," the court said.

The court also found FERC's environmental justice analysis for the LNG projects to be flawed, siding with the petitioners that the commission's decision to analyze the projects' impact only in census blocks within 2 miles of them was "arbitrary." The court said FERC determined in the orders that the environmental impacts of the LNG projects would extend beyond 2 miles, citing that air quality impacts could occur within a 31-mile radius.

The ruling said FERC must explain why it chose a 2-mile radius to determine environmental justice impacts or select a different radius.

"The commission has offered no explanation as to why, in light of that finding, it chose to delineate the area potentially affected by the projects to include only those census blocks within 2 miles of the project sites for the purposes of its environmental justice analyses," the court said.

The court did not set a date for when the review of the orders must be completed. ■

FERC/Federal News

Electric Customers Key to Decarbonizing the Grid

DOE Study Shows Opportunity, but Customer Acceptance Crucial

By John Funk

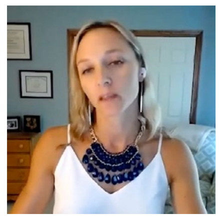
Reducing power plant carbon emissions may ultimately be in the hands of electric utility customers with the technology to automatically reduce their usage not only during peak demand but continuously.

Some utilities, relying on time-of-day rates or discounts to fixed tariffs, already signal customers through mobile phone texts to reduce power consumption during certain hours or as overall demand rises.

Kate Strickland, SEPA | *SEPA*

But much more can be accomplished, according to an analysis under way at the Lawrence Berkeley National Laboratory's Electricity Markets and Policy Department. What it will require is for local utility grids to become truly interactive with their customer loads using "technologies that are promoting demand flexibility and enabling a comprehensive transformation to a modern grid," said Kate Strickland, research manager of utility and regulatory strategy for the Smart Electric Power Alliance.

Strickland on July 28 moderated a webinar, "Crowd Sourcing Carbon Reduction with Demand Flexibility," which introduced some of Berkeley's analysis of projected future demand for the U.S. Department of Energy using grid-interactive technologies (GITs). The webinar also included some examples of programs and technologies already employed.



Natalie Mims Frick, Lawrence Berkeley National Laboratory | *SEPA*

Natalie Mims Frick, an energy efficiency program manager at the lab, said the deployment of GITs, enabling customer systems to interact with a utility, could cut the nation's utility carbon emissions by 6% by 2030, according to the lab's analysis of 2013 data.

"The study [was] funded by the Department of Energy's Building Technology Office," she said, in its effort to develop "a national roadmap for grid-interactive efficient buildings."

"The primary driver of the emissions reductions is the decrease in fossil fuel-based electricity generation, due to lower overall electricity demand, [as well as] changes in timing of electricity consumption through demand-flexibility measures and technologies that can shift usage to hours with lower emissions rates," she said.

In other words, the sophisticated technology that DOE wants utilities to deploy would lead to the "crowd sourcing" of emission reductions. And it would occur seamlessly, without the need for a customer to continually have to worry about it.

One utility that already works with customers to reduce demand, more on an hourly basis, is Holy Cross Energy, a cooperative serving rural communities in central and western Colorado.

Lisa Reed, Holy Cross Energy | *SEPA*

Lisa Reed, power supply supervisor at Holy Cross, said "demand flexibility will absolutely be key to our successful journey to 100%" carbon-free power.

"We are already seeing evidence of this in our peak-time payback program, where our members can opt in to

| *Shutterstock*

FERC/Federal News

receive emails or text messages from us, asking them to voluntarily reduce their consumption," she said. The company targets a two- to four-hour period during which it expects demand to significantly increase and then contacts subscribers in the program.

"For every kilowatt-hour they reduce during that period, they get paid a substantial incentive: 50 cents or $1," depending on the overall peak that occurs. "And with our individual members doing this, we can also save our membership as a whole, upwards of $15/kW in avoided demand charges on our wholesale electric bill," she said.

One of the utility's largest customers, the Eagle River Water & Sanitation District, participates "by simply changing the timing of their water treatment and pumping runs," Reed said.

For those customers who have the ability to store energy on-site, the co-op has contracts to buy power from them if it is needed.

"Another approach that we have is our distribution flexibility bill credit, a tariff-based program that we created [in which] we basically buy a capacity call option from our own cooperative members. We pay them a set monthly bill credit in exchange for having the option to manage their flexible resource," Reed said.

Tyler Rogers, EnergyHub | *SEPA*

Tyler Rogers, senior director of sales at *EnergyHub,* a Reno, Nev.-based company that helps utilities with distributed generation technology, said harnessing "flexible load," as Holy Cross does, will grow in importance.

"I think EnergyHub, based on a study we've seen ... feels like there's about 400 GW of flexible load [in the U.S.] that will be out there for the grab in 2025," he said. "That's sizable, and I think this is all coming from the penetration and adoption of technologies like" smart thermostats, electric vehicles, residential storage, grid-interactive water heaters and rooftop solar. "Today, there are about 17 million smart thermostats in the U.S., about 2 million EVs and about 3 million homes that have rooftop solar. ... So in terms of crowdsourcing, the opportunity varies depending on the penetration of these different technologies, but I think we can all agree that they're only going to grow."

The question across the industry, he said, is "how do we aggregate and build these resources in a way that makes customers happy but also delivers the benefits, the massive grid benefits that [Berkeley's Frick] summarized. How do we decarbonize?"

Customer Experience

Also crucial, Strickland said, are the best practices that could be used to access that potential power while giving customers "a successful experience."

"Customer experience is a critical component of fully leveraging demand-flexibility programs and resources both today and into the future as we look to scale," she said.

Reed said Holy Cross has a lot of "early adopters."

"We have a lot of members who are fully engaged, but they are not the majority," she said. "The consumer whom we want to participate is this 'set it and forget it' type. They want to set up the system once we get them to enroll in the programs, and then they go on with their lives. We need to make this consumer's experience as painless [and] as simple as possible, perhaps even a one-click simple, like ordering something online from Amazon," she said.

Adding that a utility marketplace needs to be more than a store, she said, "Consumers want an experience. They want to trust us as a resource, and they want an easy way to enroll in the program and get the product needed to make that participation simple."

Rogers agreed with Reed, to a point.

"We're trying to solve a problem by not building stuff," he said. "I fundamentally believe that it's cheaper to go ask a customer who has a thermostat or a battery to let us tap into it for grid benefits than building out a grid solution to that problem. I think that's fundamental to this discussion. So if you if you believe that, then yes, you have to do this in a way in which customers are happy. And that makes it harder.

"If you have a marketplace, allow a customer to pre-enroll a device that they're buying into your utility program at the point of purchase. Make it super easy. Find a way to stack benefits, energy efficiency and demand response incentives to get to a low cost. A low-cost device for customer is extremely important.

"We believe it's best to not tie the ongoing incentive to individual customer performance," he added. "A lot of data has shown that if you're tied to performance, it gets complex for the customer to follow, and they oftentimes will leave a program."

To that, Frick added: "I think in the research from our roadmap, we found that [as] customer and market value propositions, consumer acceptance are still challenges to deployment." ■

Southeast

SEEM Critics Repeat Call for Technical Conference

Proponents Accused of Ignoring Previous Complaints

By Holden Mann

Opponents of the proposed *Southeast Energy Exchange Market (SEEM)* blasted the market's supporters last month in a filing that sought to "clarify the record" while renewing calls for FERC to initiate a technical conference on energy market policy in the Southeast (ER21-1111, ***et al***.).

The July 29 filing — by a group including the Sierra Club, Southern Alliance for Clean Energy, Georgia Conservation Voters, the North Carolina Sustainable Energy Association and the Natural Resources Defense Council, identifying themselves as "Public Interest Organizations" (PIO) — was in answer to an argument filed by SEEM's sponsors two weeks earlier. (See *Southeast Utilities Urge FERC Action on SEEM*.) The sponsors themselves were responding in part to the PIOs' original criticisms and call for a technical conference, filed in June. (See *Clean Energy Groups Pan Southeast Utilities' SEEM Proposal*.)

While the PIOs acknowledged that FERC's "procedural rules generally do not allow for answers to answers," they said an additional filing was necessary because the SEEM sponsors "refuse to modify the proposal" beyond "tweaks around the edges" that fail to address the issues they have raised previously.

Following the PIOs' filing, FERC staff on Friday issued a second *deficiency letter* with three questions, including a request for assurances that the SEEM administrator and auditor would be independent of members and their affiliates.

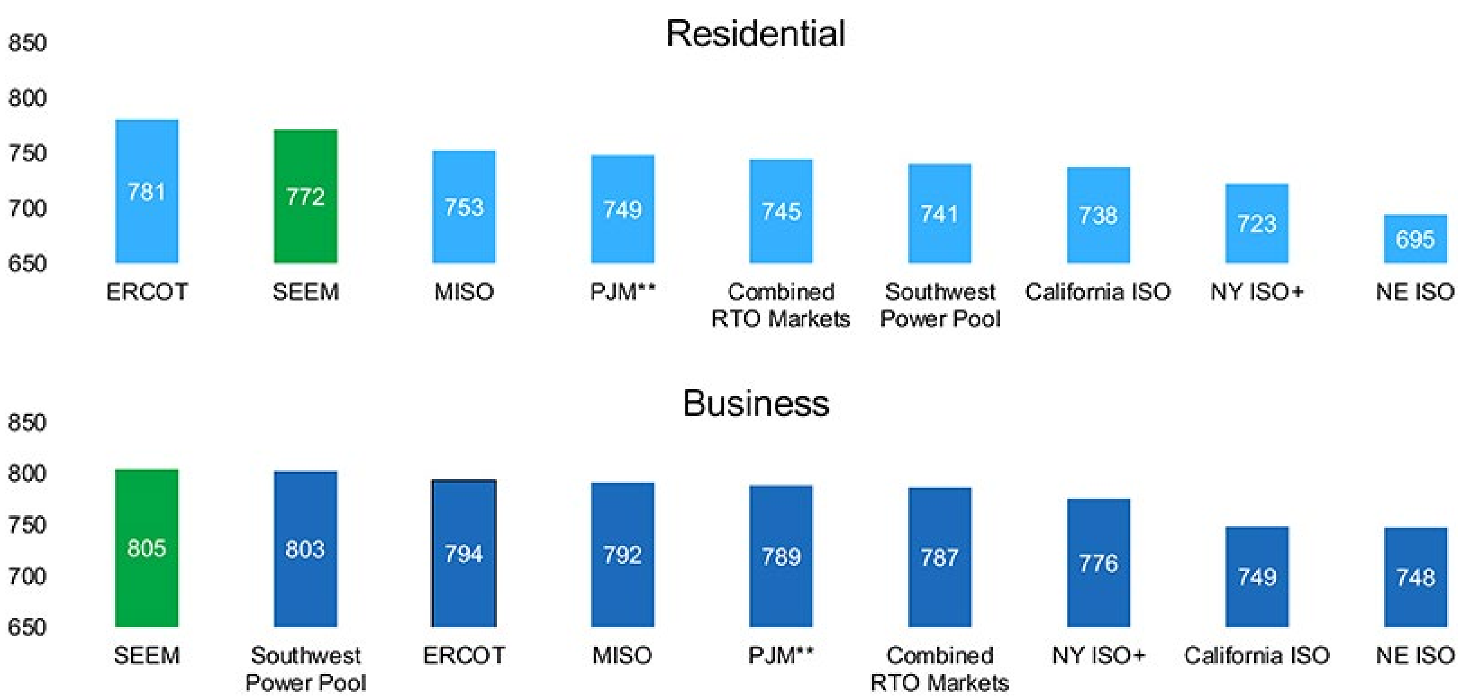
Staff asked how SEEM's operating agreement would ensure that members cannot access competitors' transmission function or commercially sensitive information through reports or information provided by the administrator or auditor.

They also asked about SEEM's proposal to post confidential information to a dedicated confidential portion of its website to which designated employees would have access. They asked whether the availability of redacted documents posted to the confidential portion of the website would vary depending on the identity of the participant accessing the documents to avoid divulging commercially sensitive information to a participant's competitors.

Serious Market Power Concerns

The complaints raised in the PIOs' July 29 filing mainly echo those of the PIOs' previous arguments against SEEM, which is intended to reduce friction in bilateral trading in 11 Southeastern states by introducing automation, eliminating transmission rate pancaking, and allowing 15-minute energy transactions. SEEM's proponents, which comprise more than a dozen utilities and cooperatives including the Tennessee Valley Authority, Southern Co. and Duke Energy, also claim that the market would promote "better integration of diverse generation resources" such as wind and solar.

First on the PIOs' list of issues with the proposal is the potential for transmission-owning utilities to "favor their own generated electricity and to exclude competitors from the market." Though SEEM proponents assert that they have no intention of preventing access to



Customer satisfaction index for utilities in the proposed Southeast Energy Exchange Market compared with that of the RTO markets | *SEEM*

Southeast

transmission by competitors, the complainants said it is likely that SEEM participants will feel "an incentive to maintain their monopoly power at the expense of their customers."

"Applicants' blustery denials have done little to dispel the applicability of this fundamental principle of economics," the PIOs said. "In fact, some applicants have used their considerable power to undermine efforts to introduce meaningful competition to the Southeast energy markets in ways that do little to allay PIO concerns regarding the potential for market power abuse in the proposed SEEM structure."

The complainants cited "considerable efforts and questionable tactics" allegedly expended by Duke Energy to block a study on the impact of an energy bill in North Carolina backed by the utility. The bill, HB 951, originally included a provision that would examine the benefits of forming or joining an RTO, but according to a report from the *Energy and Policy Institute*, Duke worked with the North Carolina Utilities Commission to remove this language from the finished bill.

Potential for Discrimination

The PIOs also assert that the SEEM proposal "presents structural opportunities for undue discrimination," as well as being inconsistent with open access transmission tariffs.

Pointing to the lack of a standardized enabling agreement in the SEEM rules, complainants said there is no guarantee that parties interested in participating in the market will "have rights to an enabling agreement." While SEEM's supporters have suggested that the 181 separate enabling agreements between proposed SEEM utilities show a robust network of trading partners, the PIOs replied that this only shows "some existing bilateral trading" between those members, not that others will be able to join on the same terms.

"Under other market structures and joint dispatch agreements, the commission has allowed some limitations on access to free transmission service to those with resources and/or loads located on the utilities' systems," the PIOs said. "However, at a minimum, those market structures provide imbalance service — that is, balancing loads and resources to meet needs reliably in real time. As applicants are fond of repeating, SEEM is not an energy imbalance market and has no imbalance or reliability requirements."

No Action on Previous Complaints

In addition to these issues, the PIOs complained that SEEM proponents have "continuously failed to remedy" several points they have raised previously, including an alleged preference in the governance structure for transmission-owning members over participants, and the lack of an independent market monitor. Complainants said that "any one of these flaws" should be enough to torpedo the proposal, but that none have been addressed despite repeated attempts to raise supporters' attention.

As a result, the PIOs urged FERC once again to reject the proposal and call a technical conference that would provide "an opportunity for meaningful stakeholder involvement."

"Contrary to the applicants' self-congratulatory claims, the existing bilateral energy market dominated by monopoly utilities is not working for families in the Southeast. And as explained in the PIO's previous filings, SEEM will not help and may hurt," the PIOs said. "A technical conference or joint regional meeting is a critical step towards a real solution that increases competition and lowers customer bills throughout the Southeast." ■

CAISO/West News

Dixie Fire Explodes, Burns Historic Town

PG&E Line May Have Started Huge Wildfire

By Hudson Sangree

The Dixie Fire closes in on the historic downtown of Greenville, Calif., on Wednesday. | *U.S. Forest Service/Lassen Natio*

The Dixie Fire, a massive wildfire that Pacific Gas and Electric equipment is suspected of causing, exploded last week and destroyed the historic gold rush town of Greenville, Calif., home to 1,000 residents, as it moved toward more populated areas.

Known for its Old West-style Main Street, Greenville lies 20 miles northeast of Paradise, a town of 27,000 residents destroyed by the PG&E-caused Camp Fire in November 2018.

"We lost Greenville tonight," U.S. Rep. Doug LaMalfa (R-Calif.), who represents the area, said in an emotional *video* posted to Facebook. He lamented the continuing loss from the fires that have plagued the state in the past five years.

Driven by strong winds, the Dixie Fire grew by 20,000 acres to more than 322,500 acres on Wednesday and Thursday. It has since grown to nearly 500,000 acres, making it the second largest fire in state history, and destroyed more than 800 buildings.

Firefighters and aircraft had "aggressively attacked large flame fronts in an effort to defend structures [Wednesday night]," the U.S. Forest Service said. "As fire entered the Greenville area, firefighting efforts shifted to assist law enforcement in evacuation efforts. A damage assessment team is being requested to evaluate damage in the Greenville community."

Initial reports showed that about 75% of the town's structures were destroyed, the Forest Service said.

The fire pushed Thursday toward Chester, a town of more than 2,000 residents on the west shore of Lake Almanor, a popular summer spot surrounded by homes. Thousands of residents had to evacuate as the fire approached.

The Dixie Fire burned near Greenville, Calif., on Wednesday. | *U.S. Forest Service/Lassen Natio*

"A red flag warning remains in effect today through 8 p.m. [Thursday]," the Forest Service said. "Extreme fire behavior with long range spotting, crown fire and group torching is anticipated."

PG&E's Possible Role

The Dixie Fire began on July 13, near where a tree had fallen onto a PG&E distribution line in the rugged Sierra Nevada foothills.

Cal Fire seized PG&E equipment as part of its investigation, which is ongoing. (See *PG&E Says Its Line May Have Started Dixie Fire*.)

The utility said in its second-quarter 10-Q *report* to the U.S. Securities and Exchange Commission on July 29 that it would likely face new liabilities from the Dixie Fire, with potentially serious consequences for the struggling company.

"While the cause of the 2021 Dixie Fire remains under investigation and there are a number of unknown facts surrounding the cause … the utility could be subject to significant liability in connection with this fire," the report said. "If such liability were to exceed insurance coverage, it could have a material impact on [PG&E's] … financial condition, results of operations, liquidity and cash flows."

PG&E emerged from bankruptcy in July 2020, after a reorganization that included giving 22% of its shares to a trust for fire victims.

The state's largest utility was blamed for catastrophic wildfires in 2015, 2017 and 2018 that cost it tens of billions of dollars. The blazes included the Camp Fire, the state's deadliest and most destructive wildland blaze, which killed at least 84 residents and leveled Paradise.

PG&E pleaded guilty to 84 felony counts of involuntary manslaughter in the fire.

PG&E equipment is suspected in major fires in 2019 and 2020, including the Kincade Fire in Sonoma County, for which it is being criminally prosecuted. (See *Prosecutors Charge PG&E for 2019 Kincade Fire*.)

It now faces charges in last year's Zogg Fire, which killed four residents of rural Shasta County. (See *PG&E Faces New Criminal Charges, Wildfire Liability*.) The fire was caused by a pine tree falling on a PG&E line, Cal Fire determined. ■

(See "*Dixie Fire now 2nd Largest Wildfire in State History*," State Briefs.)

CAISO/West News

CPUC Orders Independent Safety Monitor for PG&E

Cost Recovery Denied

By Rich Heidorn Jr.

California regulators last week ordered Pacific Gas and Electric to hire an independent safety monitor (ISM) for five years, rejecting the utility's request for a shorter period of oversight and insisting shareholders pay the $5 million annual bill.

The California Public Utilities Commission required the monitor as a condition for approving PG&E's plan for exiting bankruptcy in May 2020.

The commission said its staff will hire the ISM based on responses to a request for proposals. The monitor will be responsible for ensuring that PG&E (NYSE:PCG) "prioritizes and implements the highest level of risk reduction across all levels of the company, from senior officials to field personnel," the PUC said in an order Thursday. (Resolution *M-4855*)

The monitor will begin work before the term of the federal monitor, appointed in PG&E's federal criminal probation proceeding, expires on Jan. 26, 2022. The federal monitor, law firm Kirkland and Ellis, was appointed following the utility's 2017 criminal conviction for violating the U.S. Pipeline Safety Act and obstructing an agency proceeding in connection with the 2010 San Bruno gas pipeline explosion, which killed eight people and destroyed dozens of homes. The monitor's work was expanded to include PG&E's wildfire preparedness after the utility's equipment was identified as the cause of catastrophic wildfires in 2017.

The CPUC said the ISM will be "functionally equivalent" to the federal monitor, with responsibility for both electric and gas safety, including wildfire mitigation plans, public safety power shutoffs and monitoring safety-related recordkeeping and record management.

"The ISM shall serve as the commission's consultant, dispensing reports, materials, advice, opinions and recommendations to the commission," the order said. "Consistent with the contours of the federal monitorship, the ISM's work is directed by the commission and shall be performed for the commission's benefit as well as PG&E's."

"In order to fulfill its role and effectively perform the areas within this scope of work, the ISM must be embedded within PG&E and have ongoing and regular access to PG&E's non-privileged, every-day decision-making at all levels," the order said. "The ISM must be able to raise safety concerns with PG&E and the commission immediately as they arise."

Helicopters are being used to provide water, retardant, imaging and supplies in the battle against the Dixie Fire. | *U.S. Forest Service/Lassen Natio*

The PUC said it would balance transparency with the need to protect from public disclosure utility confidential information and some communications, with the monitor required to produce a public report on its activities every six months.

"To the extent the ISM seeks access to materials that PG&E asserts are subject to attorney-client privilege or attorney work-product, PG&E shall use its best efforts to provide the ISM with comparable information without compromising the asserted privilege or protection," the commission said.

The commission rejected conflict-of-interest provisions recommended by *The Utility Reform Network* (TURN), saying they were too broad and "could significantly reduce the pool of qualified vendors." Instead, the commission's Safety Policy Division will evaluate applicants' potential conflicts and consult with its Legal Division to prevent conflicts that could jeopardize the monitor's independence.

PG&E asked the commission to set an annual budget of $2 million to $5 million, arguing that setting a "static budget amount" would incentivize applicants to submit estimates that reach $5 million.

"But given the enormous task of effectively monitoring PG&E's high-risk and expansive territory, we agree with TURN that 'the distinctions among proposals will likely relate to the amount of work that can be performed within a $5 million budget — as well as the quality of the ISM team — and not on whether the work can be performed for less than $5 million,'" the commission said.

It also rejected PG&E's request to hire the monitor for only two or three years, saying "five years is a reasonable amount of time considering the enormous task of developing a thorough understanding of PG&E's lines of business and the numerous and complex safety risks associated with it."

The utility also was rebuffed on its request to establish a "memorandum account" for ISM costs for potential cost recovery from ratepayers.

"These costs should be paid by PG&E shareholders and that PG&E may not seek cost recovery of ISM Plan costs in the future," the commission said, noting its earlier description of PG&E's safety performance "as ranging from 'dismal to abysmal.'" ■

ERCOT News

Abbott Names Glotfelty as 4th Commissioner on Texas PUC

By Tom Kleckner

New Texas PUC Commissioner Jimmy Glotfelty | *ConservAmerica*

Texas Gov. Greg Abbott on Friday expanded the Public Utility Commission beyond its traditional three-person membership by *appointing* Clean Line Energy Partners co-founder Jimmy Glotfelty as its fourth commissioner.

Glotfelty, managing director for ICF Consulting, was selected to a term that expires Sept. 1, 2025.

State lawmakers passed legislation earlier this year that increased the PUC to five members, one of several bills in response to ERCOT's near collapse in February. The commission has regulatory oversight of the grid operator.

Senate Bill 2154 expanded the PUC from three members to five and only requires two commissioners to be "well informed and qualified in the field of public utilities and utility regulation." Glotfelty brings a solid industry background to the position, unlike Chair Peter Lake and Commissioner Will McAdams, who came to the commission from other sectors. He and Mike Skelly founded Clean Line, and he was director of government solutions for Quanta Services.

Glotfelty also directed the U.S. Department of Energy's Office of Electric Transmission and Distribution and was a senior policy adviser to Secretary Spencer Abraham during the George W. Bush administration. He chaired the American Wind Energy Association's Transmission Committee and was a member of the White House Task Force to Streamline Energy Permitting, also during the second Bush administration.

The PUC's three-person bench is now an historical relic. | © *RTO Insider LLC*

Prior to his federal service, he served as director of energy policy for Bush when he was governor of Texas.

Also on Friday, Abbott *appointed* Arch "Beaver" Aplin III as his representative on the ERCOT board selection committee, which will select the eight independent board directors, a result of another piece of *legislation* passed this year. The new law replaces market participants with the new directors, who must be Texas residents, and are selected by the state's key legislators.

The board is to be seated by Sept. 1, though not all the positions are likely to be filled by then.

Aplin is CEO of the popular Buc-ee's convenience store chain and chair of the Texas Parks and Wildlife Commission.

Lt. Gov. Dan Patrick last month *selected* G. Brint Ryan as his representative on the three-person committee. Ryan is the founder and CEO of his eponymous global tax consulting firm.

House Speaker Dade Phelan has the third pick for the committee, but he has yet to announce it. ■

ISO-NE News

NEPOOL Participants Committee Briefs

NESCOE Advances its Vision of ISO-NE

The New England States Committee on Electricity (NESCOE) on Thursday presented its "Advancing the Vision" *report* to the NEPOOL Participants Committee.

Initially submitted to New England's governors in June, the report refines the October 2020 *joint statement* issued by five of the region's governors, who demanded reforms from ISO-NE in wholesale market design, transmission planning and governance.

The report is also the product of *technical forums* held earlier this year and stakeholder comments collected since October. Some of the report's recommendations include:

- participate in the phaseout or replacement of the minimum offer price rule (MOPR) and ensure that any changes that ISO-NE seeks are thoroughly evaluated and justified based on verifiable data;
- work with stakeholders to implement a proactive, state-led, scenario-based transmission planning process for long-term analysis of state mandates and policies as routine practice;
- shape other efforts, such as updating rules to provide states with a more meaningful role in evaluating and selecting public policy-driven projects and seeking ways to improve the interconnection process for clean energy;
- enable state officials' efforts to integrate equity and environmental justice considerations into decision-making on infrastructure;
- establish a standing committee on state and consumer responsiveness on ISO-NE's Board of Directors; and
- schedule annual public meetings of the board to allow states and the public to hear from board members on current issues and priorities.

Monitor Presents Annual Report

Record-low wholesale energy prices and demand in New England produced an average LMP of $23.30/MWh in 2020, the lowest since the implementation of the energy market construct 17 years ago, according to Jeffrey McDonald, ISO-NE vice president of market monitoring, who discussed the Internal Market Monitor's *Annual Markets Report*.

A milder winter in 2020 brought low gas prices, wholesale demand and energy costs, which accounted for almost 70% of the $1.1 billion drop in energy costs, McDonald said. COVID-related restrictions reduced demand, but the mild weather and growth in energy efficiency and retail solar generation had a more considerable impact. There were not many significant system events and no shortages because of high capacity and reserves, he said.

The Monitor added three new market recommendations to this year's report. Two relate to the requirement to not reduce peak load by the output of behind-the-meter generation for transmission charges. The third centers on developing an offer review trigger price (ORTP) for co-located solar/battery facilities.

Energy Market Value Drops

ISO-NE's energy market value for last month was $427 million (through July 28), down $51 million from the updated June valuation and $100 million higher than the same month in 2020, according to COO Vamsi Chadalavada's *monthly report* to the PC.

Natural gas prices were 14% higher than in June. Average real-time hub LMPs were 0.6% higher at $36.04/MWh. Average natural gas prices and real-time hub LMPs were up 99% and 60%, respectively.

Daily uplift or net commitment period compensation (NCPC) payments totaled $2.7 million over the period, down $1.2 million from the adjusted June value and $900,000 more than in July 2020. NCPC payments were 0.6% of the energy market value.

Chadalavada said five new projects totaling 410 MW applied for an interconnection study — two battery, two solar and one wind — with in-service dates ranging from 2022 to 2024. ISO-NE is currently tracking 292 generation projects, which total approximately 31,884 MW. ■

— Jason York

| Central Main Power

ISO-NE News

NECA Panel Discusses Highs and Lows of Offer Review Trigger Price Work

By Jason York

In early June, FERC approved parts of ISO-NE and NEPOOL's "jump ball" filing on offer review trigger price (ORTP) values for the 2025/26 capacity commitment period (*ER21-1637*). In addition, the commission accepted NEPOOL's proposed ORTP value for battery storage and proposed federal tax credits adjustments for solar resources for Forward Capacity Auctions 17 and 18.

FERC also accepted the RTO's proposed ORTP value for offshore wind and the establishment of ORTPs for hybrid and co-located resources, rejecting NEPOOL's proposed revisions in each case.

Chair Richard Glick dissented in part on the order, writing that FERC should have adopted NEPOOL's ORTP estimates for OSW, "which better reflect market activity as opposed to bureaucratic cost estimates that bear little relation to reality." He argued that NEPOOL's use of publicly available data from four recent power purchase agreements for large regional OSW projects gives its plan "a clear and strong connection to the actual resources being developed in New England." (See *FERC Accepts, Rejects Parts of ISO-NE, NEPOOL ORTP Filing*.)

Abigail Krich, president and founder of Boreas Renewables, provided extensive feedback during the NEPOOL stakeholder process, including a review of the publicly available data, which became part of a series of stakeholder amendments such as the assumed capital costs for OSW projects.

"ISO-NE assumes that an 800-MW OSW project in New England with a 2025 commercial operation date would optimistically have a capital cost of $5,350/kW from the extensive research and analysis we did with the help of Daymark Energy Advisors," Krich said during a Northeast Energy and Commerce Association webinar on ORTPs last week. "This seemed to be entirely outside the bounds of industry expectations for a project of this particular size, time and location."

Krich's research and analysis produced an ORTP calculation that assumes a capital cost of $3,326/kW, which she believes "falls squarely within the range of industry expectations." She added that this one assumption makes the difference between OSW having a default offer floor price equal to the auction starting price versus having the flexibility to offer it any price a project wishes in the auction.

"Now, unfortunately, in my opinion, the commission accepted [ISO-NE's] assumption, which leaves us where we are today with no ORTP for offshore wind," Krich said.

Krich is encouraged that for the first time, there is an ORTP value for solar and battery storage resources that are of increasing significance "as their economics rapidly improve." She added that onshore wind once again has an ORTP of $0, which recognizes it as among the most cost-effective renewable resource options in New England.

Ben Griffiths, energy analyst for the Massachusetts Attorney General's Office, said that Krich and others did "great" work on the renewable generation side of the equation, so he focused on battery storage.

Clockwise from top left: Rosendo Garza, Day Pitney; Ben Griffiths, Massachusetts Attorney General's Office; and Abigail Krich; Boreas Renewables | *NECA*

"Storage is one of those technologies that we think is super important for the state and keeps showing up in various roadmaps for how we're going to reach our 2050 targets," Griffiths said. "It's also ... hard to think about in large part because it has these unique characteristics ... and we don't have a great track record of being able to say exactly what we think it will do in the markets going forward just because the installed base is so small."

After reviewing the RTO's battery storage approach, Griffiths said that the conclusion was that it was too rigid and too simple, leading to suppressed revenue estimates and unreasonably high ORTP values.

"We thought we could advance the conversation a little bit by trying to come up with a new set of models that could more accurately reflect how storage operators might try to use a battery," Griffiths said.

That modeling came up with an ORTP value for battery storage of $2.601/kW-month. Griffiths found that "amazing," as it represented a 70% reduction from the initial value proposed early in the stakeholder process.

"It certainly appears that storage is going to be able to participate at almost any price it wishes, as opposed to being sort of severely constrained due to these unrealistic cost estimates," Griffiths said.

Krich added that it is "entirely plausible" that several large batteries clear the next FCA.

"I think we'll see more batteries clear because of the ORTP, but clearly batteries were already able to clear in the auction even before having this ORTP," Krich said. "Although this certainly lowers the hurdle for them to be able to do that."

Except for OSW, Griffiths said that technologies like solar, storage and onshore wind "have come into their own" and are not only viable through subsidy.

"Having ORTPs like this means that we can let a large number of renewables enter capacity markets through the front door, and we don't have to worry about things like the [Competitive Auctions with Sponsored Policy Resources] substitution auction that is a piece of market design that has not lived up to the expectations we had for it. So, I think this is, at minimum, a good opportunity to sort of remove barriers to entry and ideally should help facilitate cost-effective, new generation entering the market." ■

MISO News

MISO Stakeholders Demand Breather on Seasonal Auction, Accreditation

By Amanda Durish Cook

Stakeholders asked for more time during MISO's final scheduled meeting to design a four-season capacity auction, seasonal reliability targets, and an availability-based accreditation.

Speaking during Wednesday's Resource Adequacy Subcommittee teleconference, staff's Scott Wright said a special stakeholder workshop in September and a RASC meeting that same month will be dedicated to drafting tariff language.

MISO says it will file a proposal with FERC at the end of September to create four independent seasonal auctions and tougher accreditation metrics. (See *Discord Persists over MISO Seasonal Capacity Accreditation*.)

Wright pledged an additional stakeholder workshop Aug. 19 to review the proposal.

Stakeholders said MISO's filing timeline remains too aggressive for such a big change.

"This is completely railroaded and rammed down everyone's throat, to be frank. We need more time on this," Power System Engineering's Tom Butz said.

WPPI Energy's Steve Leovy said he was doubtful that stakeholders could gain a full understanding of the new auction design before MISO files it. "We have such a complicated framework here with accreditation, resource-adequacy hours, outage coordination and replacement requirements," he said.

"I'm having a hard time understanding how all the pieces fit together," said Clean Grid Alliance's Natalie McIntire.


MISO's Kevin Vannoy | © *RTO Insider LLC*

"We support delaying the filing so we can get it right instead of just getting it in," the Coalition of Midwest Power Producers' Travis Stewart said.

"All of us need to go back with this to our operators and plant operators, the people who this filing is going to affect," WEC Energy Group's Chris Plante said.

MISO Director of Market Design Kevin Vannoy said the grid operator's design values resources' contribution to reliability.

"Since 2016, roughly 75% of our emergencies have taken place outside of summer," he said. "It's key that we start addressing resource availability and capacity requirements outside of summer … We want to have confidence that the resources that we're counting on are made available to us."

MISO has been meeting with members to discuss their planning resources' accreditation values. Its new accreditation will assign an 80% weight on a planning resource's availability during the riskiest 3% of hours in capacity accreditation, while non-risky hours will carry the remaining 20% weight.

The RTO said if it can't detect enough risky hours during a season for accreditation, it will supplement with a resource's average availability during risky hours outside of the season.

The accreditation design remains a point of contention between MISO and stakeholders.

At the July 20 Entergy Regional State Committee, MISO South commissioners asked that staff consider a 60-40 weighting split for risky hours.

Entergy's Wyatt Ellertson said his utility still doesn't understand how MISO arrived at an 80% weight assignment. He said generation owners are always trying their best to meet demand during tight margins.

Texas Public Utility Commission economist Werner Roth said MISO sold a seasonal construct on the basis that it would better pinpoint risk in seasons. He said the plan to draw on performance during hours outside of the season for accreditation was disappointing and wouldn't paint a true picture of seasonal risk.

MISO Independent Market Monitor David Patton criticized the RTO's 24-hour grace period for start-up times in its accreditation as too lenient and said it should allow for only a four-hour response lead time.

"It creates the illusion of a large margin in a season," Patton told MISO staff. "It provides too much credit to resources that are not contributing to reliability."

Patton said that as MISO gains more renewable resources, it will be less likely to anticipate emergency conditions and could be caught off-guard with the generous lead times.

"As the system evolves, we're going to be in a situation where the peaks are not necessarily hours we're going to see coming 24 hours in advance. It's like we're trying to hang on to the old world with this 24-hour lead-time provision," he said. "At some time, we're going to have to acknowledge that we need a more flexible portfolio."

MISO has also proposed that planning resource outages last no longer than 30 days during a 90-day season. Unit owners planning outages longer than a month will be disqualified from participating in a seasonal auction. If a cleared resource foresees an outage lasting longer than 30 days before the season starts, planning resources owners must procure replacement capacity for every day beyond the 30-day threshold.

Staff isn't currently proposing any financial penalties for failure to replace capacity due to outages. The planning resources will, however, face hits to their accreditation if they fail to secure capacity replacements.

MISO will also use an existing rule that planning resource owners must notify it 20 days in advance of planned outages.

Vannoy said staff will publish the risky resource hours that accreditation will rely on months ahead of time so that generation owners can plan their outages.

Ellertson asked MISO to show generation owners the calculations behind individual resources' accreditations so owners can see how resource hours interact with planned and forced outages.

"It's kind of a black box to how MISO arrived at those numbers," Ellertson said.

Minimum Capacity Requirement

MISO's sweeping proposal also contains a new requirement that load-serving entities must demonstrate they've secured at least 50% of their capacity obligations prior to a season before a capacity auction.

MISO News

Patton has said he disagrees with MISO's minimum capacity requirement and has called it a solution in search of a problem that doesn't exist. The IMM also said auction prices should motivate an adequate capacity supply.

MISO adviser Stuart Hansen said a minimum capacity requirement is a natural extension of staff's assumption that LSEs are actively planning adequate supply to cover their obligations and not simply rely on the voluntary capacity market.

"We don't want this to become an issue," Hansen said.

"This is MISO throwing up its hands and saying, 'We don't trust the markets,'" Patton said. "It sounds very parental, to be honest … If capacity is available [in the Planning Resource Auction], why isn't it responsible to buy it? If you're saying you don't want people to rely [on the auction], you're basically indicting your own market."

Wright pointed out that LSEs have several checks and balances from their state authorities. He said adding one small MISO obligation wouldn't be a burden.

"If it's parental, so be it," Wright said.

Patton promised to protest the filing if MISO includes the minimum capacity requirement. "If you put a flawed idea into your filing, you risk the whole thing getting thrown out," he said. ■

MISO IMM David Patton | *APPrO*

MISO News

DC Circuit Sides with Public Citizen over 2015 MISO Capacity Auction

Continued from page 1

It said clearing prices aren't unjust simply because they are "higher than expected." (See *FERC Shelves Grievances over MISO Capacity Auction*.) The D.C. Circuit blasted FERC's logic as an "anodyne statement" and remanded the case to the commission.

The commission in 2019 closed a three-year investigation into the auction when it ruled that the RTO's Zone 4 clearing price was just and reasonable, declining to set up an evidentiary hearing. It concluded pivotal supplier Dynegy (now Vistra by way of merger) had not withheld capacity to induce a price spike in Southern Illinois.

However, FERC didn't make any details of its investigation public, prompting criticism from now-Chairman Richard Glick, who argued that the investigation was closed prematurely and indicated that there was evidence that Dynegy manipulated auction prices.

"Because the details of the investigation remain nonpublic, I cannot explain why I believe that [then-Chair Neil Chatterjee] erred in terminating the enforcement process. Suffice it to say that I am confident that the evidence uncovered in that investigation was more than sufficient to press ahead," Glick wrote.

The D.C. Circuit seized on the incomplete details surrounding FERC's analysis and investigation, agreeing with Public Citizen that commission didn't offer a proper justification to support its decision that nothing anticompetitive occurred.

"The commission failed to adequately explain why the problems it identified in the existing auction rules affecting pricing — problems it ordered fixed going forward — did not also affect the fairness of the 2015 auction itself. That omission is particularly glaring in light of the starkly anomalous rates that the auction produced. Based on the unwonted record before the commission and the multiyear commission investigation into market manipulation that record prompted, the agency's conclusory and unreasoned decision to sustain the 2015 auction rates does not hold up," the court said.

Soon after the auction, FERC found MISO's circa-2015 market power provisions flawed and ordered the RTO to reset its $155.79/MW-day maximum bid to about $25. It also directed MISO to better gauge power exports. But FERC said those new policies were to be viewed on a going-forward basis and wouldn't impact the 2015/16 auction. (See *FERC Orders MISO to Change Auction Rules*.)

The court admitted it lacked the power to review FERC's decision to close its market manipulation investigation and could not force the commission to reopen it.

Vistra's Baldwin Energy Complex | *East St. Louis School District 189*

"In short, under the Federal Power Act, we cannot review either the commission's discretionary decision to close its Section 222 investigation into Dynegy or the fleeting explanation the commission gave for its action," it said. "Public Citizen fares better with its argument that the commission failed to explain adequately its conclusion that the results of the 2015 auction for Zone 4 were just and reasonable."

The court said FERC "fell far short of the type of reasoned explanation that the law requires" and conveyed skepticism that MISO was free to apply no-longer-valid opportunity-cost assumptions to the auction in question but not future ones.

"Most notably, the commission failed to reconcile its prospective holding that the tariff could no longer protect against anticompetitive behavior with its conclusion that the conspicuously uneven 2015 results — obtained under the same flawed tariff terms — were not similarly infected," it said.

The court also said the "generic" assertions FERC offered in its orders were no match for the explanation that the soaring prices warranted.

"The clearing price was not just higher but was massively higher than the rates in every other zone, and substantial evidence in the record raised the question of a market failure. What this record required was nothing more and nothing less than a reasoned assessment of the evidence as a whole," the court wrote. "On top of that, the commission's breezy analysis overlooks that a market participant could abide by a transmission organization's tariff and still manipulate the market."

While the court concurred with Public Citizen that FERC's explanation left much to be desired, it disagreed with the group's contention that the commission had a duty to examine capacity prices for reasonableness before they go into effect.

"That is not what the market-based rate scheme requires," the court said.

Vistra announced last year it would close its remaining coal-fired power plants in Illinois over the decade, idling units at its Joppa, Kincaid, Baldwin and Newton plants. ■

MISO News

Mississippi PSC Audit Questions MISO Membership

Renewable Advocates Admonish Mississippi Obstructionism in MISO Planning

By Amanda Durish Cook

The Mississippi Public Service Commission is using an audit of MISO membership to question whether Entergy Mississippi should remain a member, attracting blunt criticism from several renewable energy organizations.

The PSC opened the audit in April following February's winter storm and load shedding in MISO South. While it's not unusual for the PSC to audit MISO membership, the commission's language this time hints at a breakup with the RTO (*2021-AD-52*).

The Mississippi commission sought comments on the utility's possible migration to the newly formed Southeast Energy Exchange Market and the savings it might achieve there, compared to the transmission construction costs of connecting to the new market.

The PSC also requested opinions on several MISO initiatives, including interconnection queue management, long-term transmission planning and future resource mix assumptions, its plan to raise the value of lost load from $3,500/MWh to $10,000/MWh, and a proposal to move to a four-season capacity auction and availability-based resource accreditation.

The commission also solicited feedback on the limited transfer capability between MISO Midwest and MISO South.

Finally, the commission said it was looking for any other "deal-breakers … that would make it unreasonable or cost-prohibitive for Entergy Mississippi to be an RTO member."

"While [Entergy Mississippi's] analysis indicates that historically RTO membership has produced significant benefits for customers, it is less clear to this and other commissions whether the long-term benefits of RTO membership exceed the long-term costs and commitments of RTO membership, especially given that the RTOs' (including MISO) structure, services and membership continue to change significantly," PSC Chair Dane Maxwell wrote.

Fellow Commissioner Brandon Presley said in March that Mississippi regulators should examine the fairness of MISO's February load-shedding orders and "correct" other problems that exist within the RTO. (See "Mississippi PSC Unhappy," *MISO Underscores Need for RA Action in Winter Storm Review*.)

In public MISO meetings, PSC staffer David Carr and Washington, D.C.-based commission consultants Bill Booth and Nick Puga have voiced opposition to MISO's long-range transmission plan. Entergy Mississippi consultant Dave Harlan, constantly in touch with the commission, has questioned MISO's predictions of a renewable-heavy resource mix. (See *Entergy Consultant Under Fire for Covert Role in MISO*.)

Mississippi PSC Chairman Dane Maxwell | *Dane Maxwell for Mississippi*

The fiercely worded audit is unlikely to force Entergy Mississippi's exit from MISO. The utility filed comments that indicated it had no qualms about its membership. It said MISO has been able to deliver benefits for its customers and it will probably continue to do so.

The utility said that it is in the public interest to continue its MISO membership for the "foreseeable future." Entergy estimates it has saved $246 million in energy and capacity-related costs since joining the RTO in late 2013.

Harsh Words from Renewable Advocates

The Southern Renewable Energy Association (SREA) and other renewable power organizations didn't mince words over their opposition to the PSC's questions.

"Mississippi is saving tens of millions of dollars every year by staying in MISO and no analysis publicly exists to show otherwise," the SREA wrote. "While staying in MISO clearly has its benefits, Mississippi is not maximizing its membership. The state is spending millions of dollars every year on expensive out-of-state consultants to slow improvements at MISO.

"Previous positions by Mississippi Public Service Commission staff and consultants have stalled large scale transmission expansion efforts for many years. SREA recommends that Mississippi take a more proactive role in promoting transmission expansion and generation interconnection fixes at MISO," the organization said.

SREA added that "Mississippi ratepayers are literally making millionaires out of D.C. lawyer consultants that work to slow transmission development and restrict energy market competition." The group requested the PSC hire an independent third party to perform a "multiple scenario quantitative and qualitative analysis" to weigh Entergy's RTO membership options.

Incumbent utilities "employ a variety of tactics including threatening to depart the system, filing complaints at FERC, slowing down processes that would increase competition to the benefit of the ratepayer, or lobbying for passage of anti-competitive legislation" to further their interests within RTOs, SREA said.

"MISO staff will not publicly name names, document offenses, or share publicly all the specific examples of subterfuge by its own incumbent utility members that are working to oppose MISO's independence … SREA anticipates MISO will take a simple position of providing monetary and qualitative benefits of membership, without some of the straight talk desperately needed to fix Mississippi's role and relationship with MISO," the organization said.

SREA also noted that the Department of Justice's investigation into Entergy's anti-competitive behavior — a case that spurred Entergy into RTO membership a decade ago — remains suspended, but open. It suggested that an Entergy Mississippi exit from MISO would pique the department's interest as to whether Entergy was again restricting access to the wholesale market.

The Sustainable FERC Project said Entergy Mississippi isn't maximizing the benefits of its MISO partnership and said the commission "should consider how to more productively engage in MISO's planning process to increase the benefits to Mississippi customers."

Clean Grid Alliance agreed that the utility "has attempted to hinder progress at MISO, particularly in transmission planning."

The MISO interconnection queue contains 2 GW and $2.7 billion worth of renewable generation under development in Mississippi. The

MISO News

Alliance said further renewable development in the state could be a "game-changer for rural Mississippi."

CGA also said if Entergy Mississippi or all Entergy companies joined the newly formed Southeast Energy Exchange Market, its customers would almost certainly see bill increases. It said Entergy should consider SPP membership before it moves to the fledging southeastern exchange.

"Currently, Entergy does not have any physical ties to MISO North, and the tie between MISO North and MISO South is very constrained, with only 1,000 MW of firm contract capacity. On the other hand, Entergy has over 40 physical ties with SPP totaling 14,000 MW. Thus, the Entergy system would be more physically integrated into the SPP RTO than it currently is in MISO," the CGA *wrote*.

SREA said Entergy appears to be fond of the constricted Midwest-to-South flows.

"Many observers have noted that Entergy's selection of MISO has enabled the utility to maintain maximum control over the region, while reducing Entergy's exposure to competition," the organization said. "Joining MISO has not curtailed Entergy's anti-competitive business practices. As long as the North/South intertie remains restricted, Entergy will exert near total control over the MISO South region."

Climate activist group 350 New Orleans said an investigation should be opened into "whether certain actions or inaction on behalf of [Entergy Corp.] subsidiaries in the MISO South subregion have resulted in placing a limitation or obstruction to benefits, reliability, and competitive electric service to the region."

350 New Orleans pointed to the interconnectedness of MISO South and noted that it and Louisiana depend on the Grand Gulf Nuclear Power Station in Port Gibson, Miss.

"Given that this resource is a central component in resource plans throughout many years for Entergy Corp. subsidiaries in MISO South, any discussion related to subsidiaries leaving MISO relates to resources that ratepayers in New Orleans and the state of Louisiana are reliant on," the group wrote.

MISO, an intervenor at the request of the commission, predictably touted the cost savings Entergy has achieved under its supervision. The grid operator said it saved it members a collective $3.1 billion to $3.9 billion in 2020 compared to their going it alone on the grid.

The RTO said all of its transmission planning and resource adequacy initiatives are vetted with stakeholders and necessary to the continued reliability of the footprint. It pointed out that its value of lost load has been unchanged for 10 years.

MISO also said it will continue "to evaluate cost-effectively increasing the transfer capability between the MISO Midwest and South." ■

Entergy lineman | *Entergy Mississippi*

MISO News

Entergy Takes Q2 Loss with Indian Point Sale

By Tom Kleckner

Entergy took a $340 million hit to its earnings during the second quarter when it closed its sale of the *Indian Point Energy Center* to nuclear contractor Holtec International, the company *told* financial analysts Wednesday.

The impairment, $268 million when adjusted for tax effects, resulted in a second-quarter loss of $6 million ($0.03/share), as compared to a year ago when earnings came in at $361 million ($1.79/share). The New Orleans-based company missed the Zacks Investment Research consensus estimate of $1.41/share in adjusted earnings, coming 7 cents short.

The company said in its earnings release that the nuclear decommissioning trust funds' performance was below expectations and revenues lower because of the Indian Point 2 and 3 shutdowns. Entergy has been working on an exit from its merchant Entergy Wholesale Commodities business for several years now. (See *Entergy Celebrates Sale of Final EWC Nuke*.)

CEO Leo Denault said the company's recently announced plan to build the hydrogen-enabled *Orange County Advanced Power Station* in Southeast Texas was a "significant milestone in our strategy to provide clean energy that also supports reliability."

The 1,215-MW combined cycle power facility plays into the state government's desire to reward dual-fuel or dispatchable plants when the ERCOT market is redesigned in the next few years. Entergy expects the plant to be online by the summer of 2026; the regulatory process begins in the third quarter.

Entergy hydrogen plant | *Entergy*

Noting hydrogen burns cleaner than gas, Denault said, "That optionality [of hydrogen and gas] provides environmental benefits, but also resiliency, and that's something we see as we deal with weather events."

The company said it has filed regulatory applications to recover about $550 million for storm-restoration costs in Louisiana (*U-35991*) and Texas (*51997*). About $55 million of that is for costs stemming from the Midwestern storm in February; the company has already filed a securitization request in Texas for debt incurred during the event.

Entergy's share price closed at $103.71 following the market's close, down 29 cents from the previous close, but up $1.02 from the day's opening price. ■

MISO: No Choice but to Double Up on 841 Compliance

By Amanda Durish Cook

MISO is priming its aging market system platform to host energy storage offers by mid-2022 but still warns that compliance with FERC Order 841 poses a risk to the market system's replacement.

FERC in July issued without comment a second refusal to give MISO until 2025 to fully bring storage into its markets under Order 841 (*ER19-465-005*). The RTO had sought rehearing on the commission's first extension denial. (See *FERC Rejects MISO Request for 2nd Order 841 Delay*.)

The grid operator still argues that its June 6, 2022, compliance deadline will postpone the launch of a $145-million overhaul of its market platform because the software will have to twice build a storage participation model.

Jeff Bladen, MISO's executive director of digital strategy, told stakeholders Thursday that staff will try their best to launch a storage participation model alongside the new market platform.

"We're doing everything we can to accelerate it based on stakeholder ask," Bladen said during a Market Subcommittee teleconference. "We want all these deferred market products online sooner rather than later."

Bladen warned that MISO will be building a participation model twice on two separate platforms.

"We are full steam ahead to build the storage model twice — once on the legacy system and again on the new system," he said. "Right now, we see us on schedule, and we're doing everything we can to get the electric storage resource launched by the [second quarter] of next year."

MISO is slated to migrate to its new market platform in late 2024 or 2025, but Bladen said building the energy storage participation model twice might threaten that timeline.

He said the RTO "could not uncover, after many months of exploring," any way around two full software builds of the participation plan.

Clean Grid Alliance's Natalie McIntire thanked MISO for sticking to its original timeline after FERC's second rejection.

"There are, I believe, at least 7,500 MW of energy storage in the MISO interconnection queue," McIntire pointed out.

She said one reason storage development has faltered in the grid operator's footprint is because storage owners lack "robust" participation rules and clear financial incentives to bring storage to market.

"In my mind, it's sort of a chicken and egg problem," McIntire said. "Once this market model and Order 841 compliance is complete, you're going to see a lot more of it. Just because you don't see it now, doesn't mean there's not a lot of it behind the dam."

Staff is still pondering how a storage asset designated to solve transmission issues can also provide market services. That work is separate from Order 841 compliance.

MISO adviser Michael Robinson drew parallels between storage functioning in both the markets and transmission realms to an exchange between Alice and Humpty Dumpty in Lewis Carroll's "Through the Looking Glass."

"When I use a word, it means just what I choose it to mean — neither more nor less," he said, quoting Humpty Dumpty. He added Alice's reply: "The question is whether you can make words mean so many different things."

Robinson said storage as transmission assets will probably wait before being called on for transmission purposes. "They could sit idle a long time, so let's enhance the value-stacking," he said.

Storage serving as transmission assets must enter the interconnection queue before participating in the markets, Robinson said. He also said storage assets, when charging, will be affecting locational marginal prices and the energy imbalance.

MISO is also drafting a workplan on how it will redefine its markets to manage a changing resource mix and more intense weather. (See *MISO Begins Pondering Future Market Changes*.)

"The idea is to be able to articulate and describe the needs of the system," Senior Manager of Policy Studies Jordan Bakke said.

Bakke said the RTO will produce a report on evolving market needs by the end of the year. ■

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PJM News

Exelon CEO: Looming Nuclear Plant Closures will be 'Irreversible'

Company also Announces New 50% Emission Reduction Target by 2030

By K Kaufmann

Exelon CEO Chris Crane | © *RTO Insider LLC*

Exelon CEO Chris Crane opened the company's second quarter earnings call on Wednesday by announcing the impending closure of two Illinois nuclear plants and a new target for cutting operational greenhouse gas emissions.

Proposed federal and state legislation to provide financial support for nuclear plants will not delay or defer the shutdowns of the Byron and Dresden plants, which could result in thousands of job losses for the state economy, Crane said. "We don't want to close these plants, but we cannot make decisions based off of legislation being passed in the future."

With shutdowns possibly "only weeks away," he said, "it will take many years ... to add enough intermittent renewable energy to get to where Illinois is [now] in terms of clean energy production. In the meantime, more than 100 million metric tons of additional carbon will be emitted over the next decade."

The company also said it will cut operational GHG emissions by 50% over 2015 levels by 2030. Crane said the company would use "robust energy efficiency programs," electrify the company's light-duty fleet and develop "zero-carbon alternatives" for medium- and heavy-duty vehicles, along with investing in new equipment and processes to cut emissions from its gas plants and operations.

The company will also pilot new, low-carbon grid technologies and advocate for affordable grid decarbonization, he said. In addition, it has joined the Electric Highway Coalition, a group of 14 utilities working to deploy a "seamless network" of electric vehicle fast chargers on major highway systems across the country. The company has set a net-zero target for 2050.

Crane said hopes for a last-minute rescue for the Byron and Dresden nuclear plants have dimmed due to the slow progress on federal and state legislation. The bipartisan infrastructure bill moving through Congress contains $6 billion in funding to prop up existing nuclear plants that have been unable to compete against cheaper natural gas plants and solar and wind energy.

The Dresden nuclear plant is one of two Exelon has said could begin shutting down in the coming weeks. | *NRC*

Another possibility is a nuclear production tax credit, said Kathleen Barrón, executive vice president for government, regulatory affairs and public policy, who noted the Democratic reconciliation bill could include a federal Clean Energy Standard that would also benefit nuclear. But, echoing Crane, she said everything is speculative at this point.

A clean energy bill in Illinois also contained help for the state's nuclear plants but has been stalled due to unrelated labor issues, Crane said.

The CEO said that once the plant shutdown process starts, it is irreversible. "You shut down, you cool down, you disassemble the reactor," he said. "You offload all of the fuel into the spent fuel pool, and you relinquish the license to the Nuclear Regulatory Commission, and there is no path back from that. There is no regulatory path back."

Strong Quarter

The financial results for the quarter were mixed. Chief Financial Officer Joseph Nigro reported non-GAAP adjusted earnings of $0.89/share, versus $0.55/share for the same quarter in 2020. GAAP earnings were $0.41/share, a drop from $0.53/share reported in the second quarter of 2020.

Total operating revenue for the quarter was $7.9 billion, with a net income of $401 million, according to a *Form 8-K* Exelon filed with the Securities and Exchange Commission on Wednesday. Nigro also said the company is still on target to meet its full 2021 earnings predictions of $2.60 to $3/share.

The higher adjusted earnings were "driven in part by the absence of storm costs at Exelon utilities and the recovery of costs associated

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with ongoing investments to improve reliability and service for customers," Nigro said, noting that the company was successful this quarter in partially recouping its first quarter losses from the winter storms in Texas.

The generation side of the business also had a strong quarter, he said, "due to unrealized and realized gains on Constellation's technology venture investments, fewer planned nuclear outage days and realized gains in our nuclear decommissioning trust funds." Exelon subsidiary Constellation NewEnergy Inc. is a retail power supplier of natural gas and clean energy.

Analyst Q&A

Stephen Byrd of Morgan Stanley asked for more detail on the company's response to its losses in Texas and the ongoing discussions in the state about the changes needed to prevent future catastrophic outages.

"The plants in Texas were never designed for the weather that we saw and especially the duration of the weather that we saw," Crane said. "So, if we go to something much lower in temperature as a design basis, we have to look at what adequately would preserve the piping. Is it insulation? Is it other types of barriers, and what's the most economic way to get there."

"We've built the model that has certain assumptions on temperature, wind speed, prolonged longevity of the weather event, that will calculate the engineering changes we need to make to the plant," said Chief Operating Officer Bryan Hanson. "Once the weatherization standards are published and accepted in ERCOT, we can then tune that model to come up with our final outcomes and establish the price points for those plants."

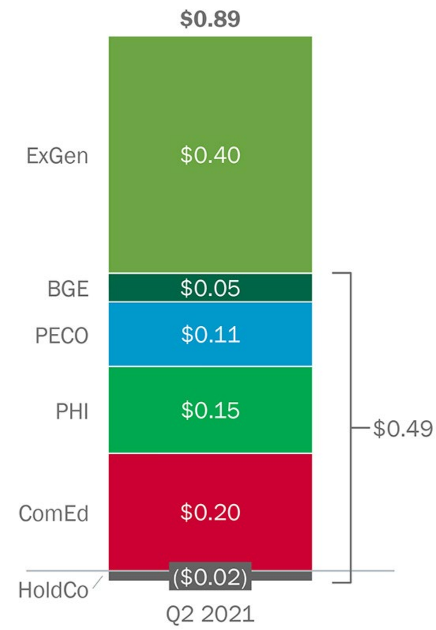
Julien Dumoulin-Smith of Bank of America asked about potential growth opportunities in the commercial and industrial sector as more and more companies set clean energy targets.

Constellation CEO James McHugh said the company already is creating products in response to customer demand, with offtakers in the mining industry, data centers and the hydrogen business.

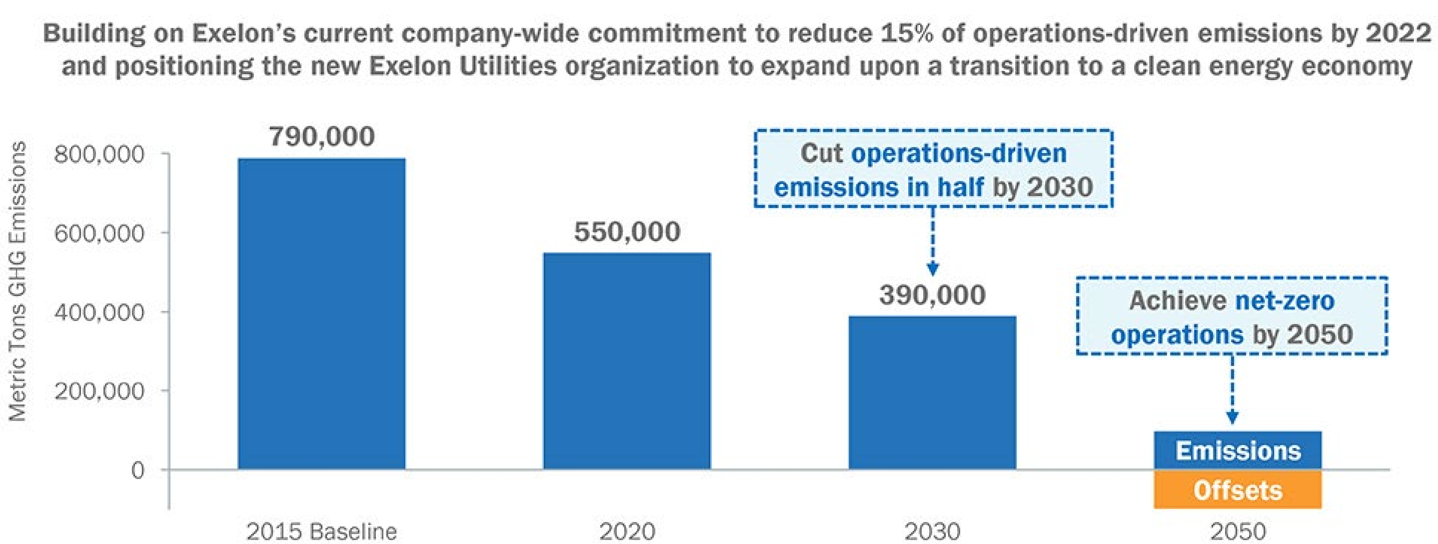
"They're interested in carbon free-energy, renewable energy, and we've had some success in selling emission-free energy credits and other renewable type products to some of our largest C&I customers," said McHugh. "They're also interested in sustainability information and data around energy usage and how to be more efficient. So, there's this burgeoning suite of different products and services that we're working through with our team and with our customers."

Other highlights from the call:

- The company's plan to split its regulated utilities and generation business, announced in February, is on track to be completed by the first quarter of 2022, Crane said.
- On the regulatory front, Exelon's Pepco utility won approval for new multiyear rate plans in both Washington, D.C., and Maryland, with revenue increases of $108.6 million and $52 million, respectively. Atlantic City Electric also received approval for a $41 million rate case in New Jersey.
- Crane called attention to the company's diversity and workforce development programs, "spanning from middle schools [and] high schools through colleges, as well as programs for work-ready, underemployed adults." Exelon's STEM Leadership Academy program for high school girls has started awarding full-ride two- and four-year college scholarships, which also include guaranteed internships. ■



Exelon Adjusted Operating Earnings per Share for Q2 2021 | *Exelon*



Exelon's Path to Net Zero by 2050 | *Exelon*

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PSEG Close to Fossil Asset Sale

By Hugh R. Morley

Public Service Enterprise Group on Aug. 3 said that it expects to be out of the fossil fuel business by the first quarter of next year and is pursuing ways to help meet its commitment to decarbonize by 2030, including buying a share of another offshore wind project off the Jersey Shore.

CEO Ralph Izzo said the company's 6,750 MW of fossil generation in New Jersey, Connecticut, New York and Maryland have "gotten a significant level of interest from numerous qualified buyers." The selling process could be concluded by September, but he is willing to let it go into early 2022, he told analysts and reporters during the company's second-quarter earnings call.

"I just don't want to sacrifice value for an arbitrary deadline," he said. PSEG closed its last remaining coal-fired power plant, a 400-MW facility in Bridgeport, Conn., on May 31.

The move, part of PSEG's effort to transform into a primarily regulated electric and gas utility, follows the sale of its 467 MW of solar generation in 17 states, which closed in the second quarter. It also comes as the company seeks to meet its June 24 commitment to accelerate its greenhouse gas reduction efforts by 20 years and reach net-zero emissions by 2030. (See *PSEG Speeds up Plan to Cut Emissions*.)

Offshore Wind Opportunity

Other measures that will contribute to the net-zero goal include the company's purchase of a 25% stake in the Ocean Wind offshore wind project, Izzo said. The $1.6 billion facility developed by Ørsted, which was approved in 2019, is the first offshore wind project off the coast of New Jersey. PSEG's investment in the project closed in the second quarter, and the company is mulling investments in other East Coast projects, including Ocean Wind 2, Izzo said.

The New Jersey Board of Public Utilities (BPU) on June 30 awarded Ocean Wind 2 and Atlantic Shores, the rights to 1,100 MW and 1,510 MW, respectively, in the state's second offshore wind solicitation. The latter project is a 50/50 partnership between Shell New Energies and EDF Renewables North America.

"It is obviously safe to conclude that we will have some conversations with Ørsted about" Ocean Wind 2, Izzo said. He added, however, that "we have a range of conversations across several projects that are in the Mid-Atlantic region underway with Ørsted."

But owning another share of an offshore wind project is less lucrative than providing the infrastructure for transmission services from the projects to the grid, he said. PSEG is preparing to bid on a competitive process to provide transmission infrastructure for the farms, Izzo said.

The BPU in April launched a solicitation for potential transmission solutions to deliver offshore wind energy to the grid as the state rolls out its plan to deploy 7,500 MW of offshore wind energy by 2035. (See *New Jersey Seeks OSW Transmission Ideas*.) The initiative will be conducted with PJM, which will provide the technical expertise, and the BPU will make the final decision.

"The potential projects can cover onshore upgrades, new onshore transmission connection facilities, new offshore transmission connection facilities and a networked offshore transmission system," Izzo said. He said his company initially believed the solicitation had the potential to yield a nine-figure investment in transmission infrastructure, and now believes it could be a 10-figure investment.

"All of this is great progress in our decarbonization efforts and continues to demonstrate our alignment with the state's clean energy agenda and our industry leadership on environmental stewardship," he said.

Nuclear Subsidies

Another sign of the company's contribution to that goal was the BPU's award on April 26 of a three-year extension of annual $10/MWh subsidies, known as zero-emission certificates (ZECs) to three nuclear plants in the state, which are owned or part-owned by PSEG.

Izzo said the company is also pushing for a federal nuclear production tax credit and is monitoring discussions of a potential nuclear grant program to be administered by the U.S. Department of Energy.

The extension of the ZECs to PSEG "will allow us, along with stakeholders in New Jersey and at the federal level, the time we need to work on a long-term economic solution to keep our merchant nuclear fleet economically viable and preserve its currently unmatched contribution of reliable carbon-free baseload generation, the most cost-effective clean generation source available," Izzo said.

The CEO said he also was pleased with subsidiary Public Service Electric and Gas' recent agreement with the BPU and Division of Rate Counsel to voluntarily reduce its annual transmission revenue requirement, which includes a reduction in its base return on equity from 11.18% to 9.9%.

"This agreement is a balanced resolution that delivers timely savings to customers and resolves a significant regulatory uncertainty for PSE&G," Izzo said in a statement. "Pending approval from the Federal Energy Regulatory Commission, the settlement is anticipated to save a typical electric residential customer approximately 3% on their monthly bills upon implementation."

PSEG reported a net loss of $177 million ($0.35/share) for the second quarter, a drop from $451 million ($0.89/share) in the same quarter of 2020. Non-GAAP operating earnings for the second quarter of 2021 showed a more positive picture: $356 million ($0.70/share) compared to $404 million ($0.79/share) in 2020.

Izzo said in the statement that the GAAP figures "reflect an asset impairment charge related to the quarterly assessment of the likelihood and timing of potential asset sales in connection with exploring strategic alternatives for PSEG Power's non-nuclear generating assets." These included the sale of the solar business and potential sale of the fossil assets, he said. ■

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PPL Announces Net-zero Goal by 2050 in Q2 Call

By Michael Yoder

PPL said Thursday that it plans to reach net-zero carbon emissions by 2050, bumping up its original timeline by a decade.

Vincent Sorgi, PPL CEO | *PPL*

In a call to discuss second-quarter earnings, CEO Vincent Sorgi said the company is on track to reduce carbon emissions to 70% below 2010 levels by 2035 and 80% below by 2040. Sorgi said PPL's new net-zero emissions goal and interim targets are based on the company's updated forecasts, analysis and business planning.

But Sorgi said the company will need breakthroughs in advanced technologies to achieve total net-zero emissions by 2050, which is why PPL is also focusing on research and development in clean energy technologies.

PPL recently *announced* a $50 million investment with global consulting firm Energy Impact Partners to work with other energy companies and entrepreneurs to develop sustainable technologies.

"PPL is fully committed to driving innovation to enable net-zero carbon emissions by 2050 and to ensure a balanced, responsible and just transition for our employees, communities and customers as we advance towards our clean energy goals," Sorgi said. "Our new goal reflects our continuous evaluation of our progress and opportunities through ongoing business and resource planning efforts."

Energy Mix

Sorgi said PPL is completing an updated, scenario-based climate assessment, evaluating the potential impacts to PPL from climate change and potential future regulations regarding carbon emissions around the country. The company's last climate assessment *report* was released in 2017, Sorgi said. The updated report, slated to be released later this year, will analyze new climate scenarios such as limiting the global temperature increase to no more than 1.5 degrees Celsius.

Sorgi said PPL's climate assessment efforts are considering current integrated resource planning (IRP) activities occurring at its Kentucky-based subsidiaries, LG&E and KU Energy. The companies are set to file their IRPs with the Kentucky Public Service Commission in October.

Based on the most recent rate case filings in Kentucky, Sorgi said, PPL expects to achieve a 70% reduction in its coal-fired capacity by 2035, 90% by 2040, and 95% by 2050 compared with 2010 baseline numbers. The 550 MW of coal-fired generation remaining in 2050 will consist of Trimble County Generating Station Unit 2, which started commercial operation in 2011 and uses clean technologies.

"Our internal view of what it could take to achieve 100% carbon-free generation by 2035, as proposed by the Biden administration, using current technologies would create significant affordability issues for our customers," Sorgi said. "Our new commitment to achieve net-zero carbon emissions by 2050, is backed by the actions that we are and will continue to take to support a low-carbon energy system that is affordable and reliable, and provides the time needed for the technology to advance."

UK and RI

Besides the clean energy measures, Sorgi gave an update on the sale of PPL's U.K. utility, Western Power Distribution (WPD), and the purchase of National Grid's Narragansett Electric in Rhode Island. (See *PPL to Sell UK Business, Acquire Narragansett Electric*.)

Finalized in June, the sale of WPD to National Grid netted $10.4 billion for PPL. The sale allowed PPL to retire $3.5 billion in corporate debt, and the company is examining uses for the rest of the funds, including investments in Pennsylvania and Kentucky operations or renewable energy projects and the repurchasing of company shares.

PPL expects to repurchase about $500 million of its shares by the end of the year, Sorgi said, with the company's board of directors recently authorizing the purchase of up to $3 billion of outstanding shares. He said the board settled on the $500 million figure because it "struck a nice balance" and provided the company "financial flexibility" to continue examining other options for the money.

Sorgi said PPL is close to completing the $3.8 billion acquisition of Narragansett Electric from National Grid, with the deal expected to close by March or sooner based on final regulatory approvals. PPL is waiting for approval by FERC and the Rhode Island Division of Public Utilities and Carriers; an exact timeline for the approval has not been finalized.

PPL subsidiaries LG&E and KU Energy teamed up with Shaker Village of Pleasant Hill in Kentucky to place a flock of sheep at the E.W. Brown Generating Station to manage grass and weeds around its solar arrays. | *PPL*

"As we pursue the final regulatory approvals, we are working closely with National Grid on transition planning to ensure a seamless transition for Rhode Island customers and Narragansett employees upon closing," Sorgi said.

Earnings

PPL reported second-quarter earnings of $19 million ($0.03/share), compared with $344 million ($0.45/share) a year earlier. The company reported a net loss of $1.82 billion (-$2.37/share) for the first six months of 2021, compared with earnings of $898 million ($1.17/share) during the same period last year.

Special items in the second quarter included a U.K. tax rate change and a loss on the early extinguishment of debt, which was partially offset by earnings from the operations of the U.K. utility business prior to the completion of its sale in June, CFO Joseph Bergstein said.

PPL posted revenue of $1.29 billion during the quarter, nearly the same as in 2020.

The price of PPL's shares was up at the close of the market on Thursday, gaining 43 cents to $28.86. ■

SPP News

SPP to Operate NWPP's Resource Adequacy Program

By Tom Kleckner

SPP continues to spread its footprint with an *announcement* Aug. 3 that it will operate Northwest Power Pool's resource adequacy (RA) program in the Western Interconnection.

The RTO will work with NWPP and its RA participants to help develop, implement and operate the program. As a program operator, SPP will perform forward-showing and operations program functions, modeling and system analytics, real-time operations, continual technical improvement and IT systems work.

SPP is already providing reliability coordination services for entities n the West and is scheduled to go live with its Western Energy Imbalance Service market in 2024.

RA has become a hot topic in the West after last summer's extended heat wave forced CAISO to initiate California's first rolling blackouts in two decades. Several neighboring balancing authorities came close to taking the same action.

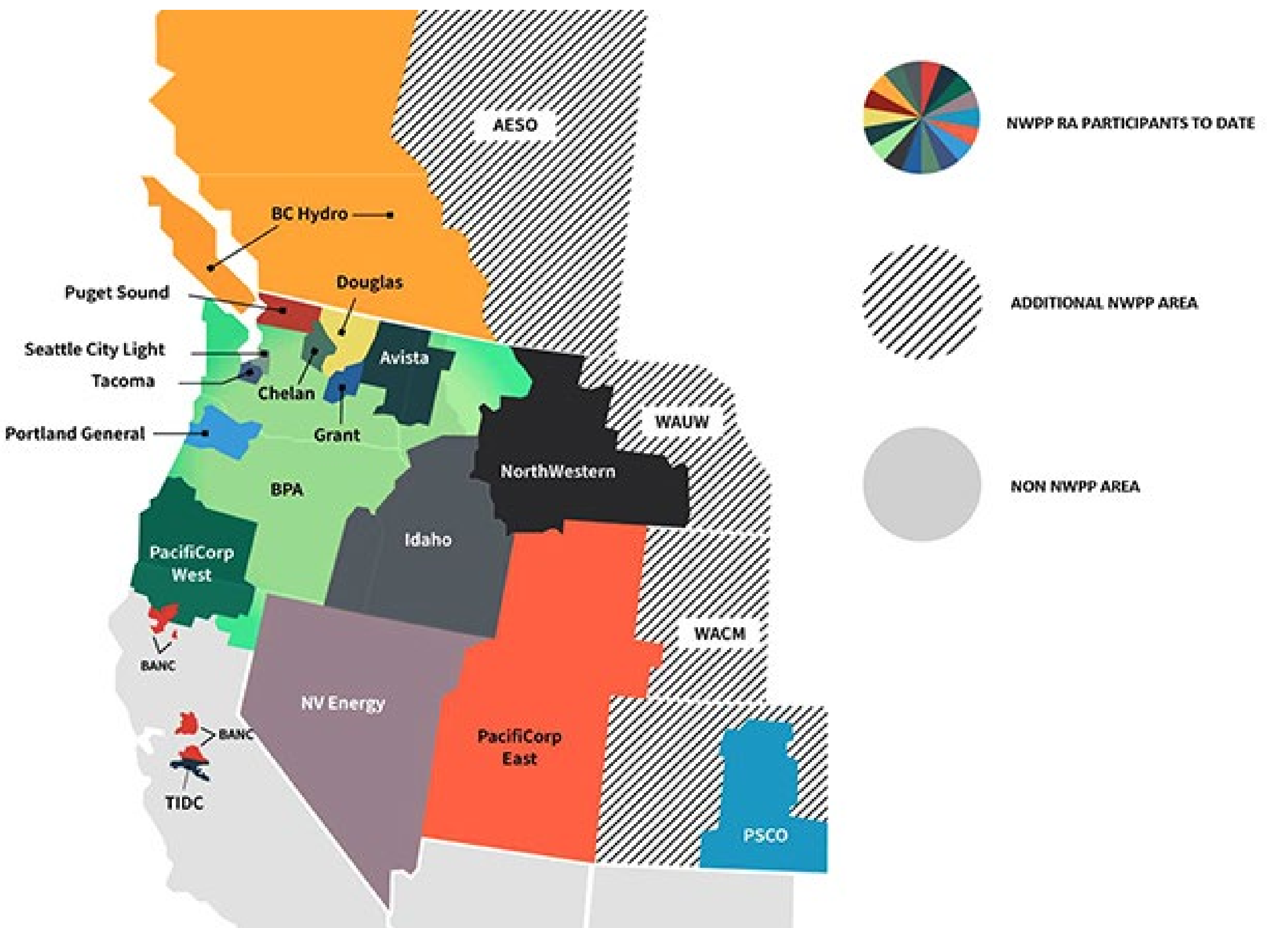
SPP CEO Barbara Sugg said the grid operator "appreciates" RA's importance in the Western Interconnection and pointed to the RTO's success in managing a multistate region.

"We look forward to the value we'll bring Northwest Power Pool members through strong customer involvement and experience improving reliability across multiple states with diverse generating resources," Sugg said.

"We believe SPP's track record of successfully administering a multistate RA program will help us operate the program in a manner that benefits all participants as well as the region," NWPP President Frank Afranji said.

Aided by former SPP COO Carl Monroe, NWPP wrapped up the RA program's design phase in January and plans to unveil a "non-binding" version in the third quarter of this year. The full binding program is scheduled to be rolled out in 2024. (See *NWPP RA Program Taking Shape for Q3 Launch*.)

Portland, Ore.-based NWPP dates back to 1941, as does SPP. It is a voluntary organization with 42 members, composed primarily of major generating utilities serving the Northwestern U.S., British Columbia and Alberta. Smaller, principally non-generating regional utilities participate indirectly through the member system with which they are interconnected. ■



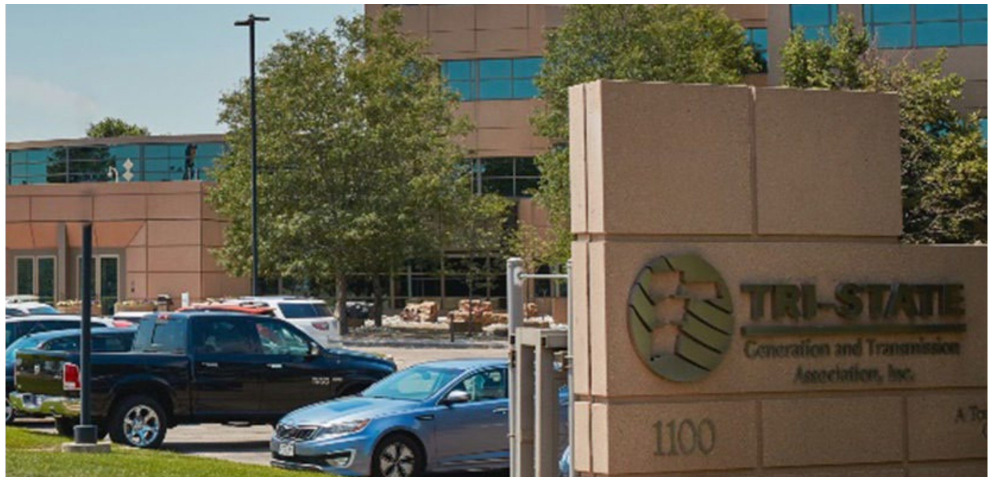
SPP will operate the Northwest Power Pool's resource adequacy program for its 34 members. | *NWPP*

SPP News

FERC Approves Tri-State's 1st Major Rate Case

Exit-fee Issues Still Hang over Members

By Tom Kleckner



Tri-State's headquarters in Westminster, Colo. | *Tri-State G&T*

FERC last week approved a settlement in the first major rate case filed by Tri-State Generation and Transmission Association since the power supplier became subject to the commission's jurisdiction (*ER20-676*).

The Aug. 2 letter order resolves several issues from regulatory filings that Colorado-based Tri-State made in 2019 and 2020 regarding rates and terms for wholesale power service to its 42 utility members in Colorado, Nebraska, New Mexico and Wyoming.

The uncontested settlement provides for an immediate reduction in members' current wholesale rates, with a total decrease of 4% by March 1, 2022. It also establishes a rate moratorium through May 31, 2023, with Tri-State agreeing to file a new rate case no later than Sept. 1, 2023.

Tri-State has already implemented a 2% rate decrease that went into effect on March 1, and it will lower rates another 2% next March.

FERC found the settlement to be fair, reasonable and "in the public interest."

Tri-State CEO Duane Highley | *SPP*

"This is a crucial step forward to achieve our goal of making Tri-State the most competitive option to meet the power supply needs of our utility members," Tri-State CEO Duane Highley said in a *statement*. "We also hope it paves the way to successful resolution of our other pending cases before FERC as we complete our transition to being a federally regulated public utility."

Tri-State became FERC-jurisdictional last year. (See *FERC Affirms its Jurisdiction over Tri-State G&T*.) It and United Power, a member, have asked FERC to resolve four discrete, or "reserved," issues that weren't included in the settlement, the association said.

Two of the issues involve rate design and cost-allocation principles that will help Tri-State develop new wholesale power rates when it makes its rate-case filing in 2023. At issue is whether the cooperative is required to unbundle rates for wholesale service under its contracts and whether it must directly assign members costs associated with transmission services. Tri-State said it has used a rolled-in rate applicable to all members for nearly 70 years.

The others concern United Power's challenge of a transmission demand charge for on-peak discharges from its battery storage devices and its protest of Tri-State's Community Solar Program.

Rulings on the reserved issues will apply to Tri-State's 2023 rate filing, except for that of the demand charge.

Tri-State has also said it would file by September with FERC a "simpler and more transparent" methodology for member's exit fees, or contract termination payments (CTPs) (*EL21-75*).

The commission in June *preliminarily found* that Tri-State's tariff was unjust and unreasonable in the barriers it imposes on utility members considering whether to terminate their memberships. It directed Tri-State to show cause as to why the tariff remains just and reasonable and to explain revisions the association believes would remedy the concerns.

"The lack of clear and transparent exit provisions has allowed Tri-State to impose substantial barriers for its utility members in evaluating whether to remain in Tri-State," FERC, said.

Tri-State said that under its modified CTP methodology, a departing member's exit fee would be the greater of the net present value of Tri-State's estimated lost revenues resulting from the departure, minus the incremental revenues the association would receive from selling the departing member's load into the wholesale market; any subsequent revenue Tri-State would receive if the member becomes a tariff customer; the present value of the member's accrued, unpaid patronage capital balance; or the member's *pro rata* share of Tri-State's total debt and other obligations.

The association has *shared* a list of members' CTPs, with United Power topping the list at $1.5 billion. Poudre Valley REA is next at almost $728 million, followed by Mountain View Electric Association and La Plata Electric Association (nearly $540 million and $450 million, respectively). Another 22 members have nine-figure CTPs.

Exit fees and the CTP methodology have long been bones of contention between Tri-State and its members, who are required to purchase 95% of their electricity from the association. Nine Tri-State members have asked for estimates of their exit fees. However, the association has argued that supplying the estimates would be premature, as the commission was still reviewing the tariff.

The commission in May rejected Tri-State's proposed procedural requirements for members seeking to cancel their power contracts and leave the association, saying the proposal imposes "excessive and unjustified barriers" to members seeking information on their CTP costs. (See *FERC Rejects Tri-State Exit Fee Proposal*.)

The CTP methodology calculates the cost for early termination of a utility member's power supply contract with Tri-State, "without financially harming other members," the association said. ■

Company News

Q2 Company Earnings Roundup: Utilities Still Dealing with Feb. Storm Aftermath

CEO Morgan: Vistra's Thermal Resources Still Valuable

While continuing to rebound from February's winter storm and a disastrous first quarter, Texas power producer Vistra said Thursday there is still a home in ERCOT for its fleet of dispatchable resources.

Vistra CEO Curt Morgan said the company has been hardening its assets and participating in the state's legislative and regulatory processes to redesign the ERCOT market after its near collapse in February.

"It is difficult at this time to speculate on what form these reforms might take," Morgan told financial analysts during the company's second-quarter earnings call, "though very clearly ERCOT and the [Texas Public Utility Commission] are focused on ensuring that Texans have reliable electricity going forward, reinforcing the importance of dispatchable resources like Vistra's."

Morgan said the most likely changes will be to ERCOT's operating reserve demand curve and its price adders, as well as additional ancillary services to incent new investment and maintain existing dispatchable generation.

In the meantime, Vistra is also investing nearly $50 million this year and another $30 million next year to further harden and weatherize its generating facilities for colder temperatures and even more extreme weather. The company is also contracting for a "meaningful amount" of additional gas storage and installing dual-fuel capabilities at its gas steam units.

Morgan said the actions are necessary "to address the risk we were exposed to during Winter Storm Uri," referring to The Weather Channel's name for the February storm. Vistra's share price lost almost a quarter of its value in February when the company said it expected to take up to a $1.3 billion financial loss because of its market losses during the massive ERCOT power outage. (See *Vistra Stock Plunges After Market Losses*.)

"There is no question the temperatures have been on the rise in 2021, as have the extremes in weather conditions," Morgan said. "These weather extremes, coupled with the greater percentage of renewable resources backing up the supply stack in various markets, have resulted in a heightened sensitivity to scarcity conditions by the system operators, reinforcing the importance of thermal resources."

Vistra has also completed a review of its renewable and battery business, which Morgan said is "one of the best."

"We've got a great pipeline," he said, noting the company's use of sites with access to transmission. Capital costs will likely force Vistra to find a partner, Morgan said, as management takes "a real hard look at how we can accelerate the growth in that business."

Vistra *reported* second-quarter ongoing operations adjusted EBITDA of $909 million, which excluded the effects of the storm but was in line with management's expectations. Including the storm's effects, the company's ongoing operations adjusted EBITDA was $825 million.

A year ago, Vistra's ongoing operations adjusted EBITDA was $929 million. The company uses adjusted EBITDA as a measure of performance because it says that analysis of its business is improved by visibility to both that metric and net income prepared in accordance with GAAP.

The Irving, Texas-based company's stock price dropped 5%, from $18.89 to $17.94, after it announced earnings, but it recovered somewhat to finish the week at $18.56.

OGE to Retire 850 MW of Gas Generation

OGE Energy said during its second-quarter earnings call Thursday that it expects to retire about 850 MW of "aging, less efficient, less reliable gas plants" built more than 50 years ago.

CEO Sean Trauschke said the company has filed draft integrated resource plans in Oklahoma and Arkansas that call for replacing the gas units with solar- and hydrogen-capable combustion turbines and successful energy efficiency and demand-side management programs.

"This plan is a significant step forward to meet our objectives of fuel diversity and provide our customers with cleaner energy solutions while maintaining our affordable rates," Trauschke said. He said OGE's transition plan is to add 100 to 150 MW each year, beginning with solar, "to really smooth out the customer impacts."

OGE also plans to recovery 85% of its total costs from the February winter storm through a securitization filing with the Oklahoma Corporation Commission. A hearing is expected in the fall.

The Oklahoma City-based company *released* earnings of $200 million ($0.56/share), compared to the year prior of $200 million ($0.43/share). That beat analysts' expectations by 4 cents.

OGE's share price opened at $34.18 on Thursday and twice came within 12 cents of its 52-week high Friday when it hit $35.34 on Friday. It closed the week down at $35.04.

CenterPoint Hits 'Stride' Under Lesar

CenterPoint Energy CEO David Lesar celebrated his one-year anniversary with the utility, saying the company is "now hitting the fast-paced organizational stride I want us to have."

The Houston company *reported* second-quarter earnings Thursday of $221 million ($0.37/diluted share). That compared favorably with CenterPoint's second quarter the year before, when earnings were $59 million ($0.11/diluted share).

Lesar said CenterPoint has invested about $1.5 billion in the first half of the year and is on track to spend about $3.4 billion for the entire year. He said new Texas legislation for transmission and distribution utilities to improve the grid's resilience "helps minimize the risk of prolonged outages and allows us to put all of this into rate base."

The company has also requested that the Texas Railroad Commission *approve borrowing $1.1 billion* in bonds to help pay for gas costs incurred during the February winter storm. If approved, CenterPoint said customer bills could go up as much as $5/month; if not, it would levy a fee as high as $40/month to pay for the costs.

Lesar replaced interim CEO John Somerhalder in July last year. Somerhalder replaced Scott Prochazka, who resigned after seven years at the helm in February 2020. (See *Prochazka Steps down as CenterPoint CEO*.)

CenterPoint's share price set a new 52-week high of $26.92 on Friday and closed at $26.48. It opened Thursday at $25.90. ■

— Tom Kleckner

Company News

Duke Highlights Renewable Efforts in Q2 Call

By Michael Yoder

Duke Energy on Thursday touted its ongoing "clean energy transformation" through its five-year, $59 billion growth capital plan during the company's second-quarter earnings call, highlighting decarbonization and renewable development efforts across the country.

Lynn Good, Duke CEO | *Duke Energy*

CEO Lynn Good *said* the company is continuing construction on about 250 MW of new solar projects in North Carolina and Florida and expects to bring them online by the end of the year. Duke also recently commissioned the 144-MW Pflugerville Solar and 182-MW Maryneal wind farm projects in Texas, Good said, pushing the company over 10,000 MW of solar and wind resources.

Good said that at the current pace, Duke is on track to pass 16,000 MW of renewable resources by 2025 and about 24,000 MW by 2030. She said that by 2050, renewables will represent 40% or more of Duke's energy mix.

"With the completion of these two projects, we hit a significant milestone," Good said. "In addition to carbon reduction and the benefits of creating a diverse energy infrastructure, solar and wind investments foster economic development, tax revenue and job creation in the areas we serve."

Net-zero Steps

Besides its solar and wind efforts, Good pointed to nuclear energy remaining a "foundational component" of Duke's clean energy strategy, which currently provides the largest source of carbon-free energy in its system.

The company submitted its application in June to the Nuclear Regulatory Commission to renew the operating licenses of the Oconee Nuclear Station in South Carolina for an additional 20 years. The license renewal application marks the first submitted among Duke's six nuclear units in the Carolinas, Good said, and the review process is expected to last 18 months.

Oconee is Duke's largest nuclear station, with three generating units producing more than 2,500 MW of generation. Good said Duke's nuclear fleet provided 83% of the company's carbon-free generation in 2020.

"We'll pursue similar extensions for each of our remaining reactors as they approach the end of their respective licensing periods," Good said.

Duke is continuing to develop its electric vehicle infrastructure through eTransEnergy, a subsidiary introduced in February aimed at offering energy transportation services to logistics and last-mile delivery companies, along with school districts and transit agencies. Good said eTransEnergy was recently named a preferred provider by General Motors to help its fleet customers transition to EVs.

Duke asked North Carolina regulators in June to approve $56 million in spending to fund more than 1,000 EV charging ports and aid school systems to purchase 60 electric school buses. (See *Duke Proposes $56M EV Charging Plan in N.C.*)

"Electrifying vehicles is a win-win approach to reducing carbon emissions from both the electric and the transportation sectors," Good said. "Our ambitious climate strategy also puts us in a strong position to help other sectors, such as transportation, meet their emission-reduction goals."

Legislation

Good said Duke is monitoring developments in North Carolina as the House of Representatives recently passed *House Bill 951*. The legislation calls for the retirement of 12 coal units at five locations in the state, replacing them with "cleaner forms of generation, renewed solar programs and modern ratemaking tools to better align clean energy investments with customer needs." (See *NC Republicans Roll out Bill to Close Coal Plants, Add Renewables*.) Good said Duke supports the initiatives in H.B. 951.

She also addressed the infrastructure bill currently making its way through Congress. She said the company is "engaged" with federal lawmakers and the Biden administration on several issues in the bill, including tax and climate policy. (See *Bipartisan Infrastructure Bill Offers Funding for Grid, EVs*.)

With the bill's funding for a large-scale expansion of charging infrastructure to "prepare for and further drive adoption of electric vehicles," Good said, investments in the grid will also need to grow. Funding for innovation in the bill is also a "critical part of the journey to net-zero" emissions, she said, because existing technologies won't be enough.

"We're pleased to see the framework includes funding to accelerate the development of next-generation clean-energy technologies such as hydrogen, carbon capture and advanced nuclear," Good said. "Robust and sustained government support is vital to ensure the commercialization of these advanced technologies. It's critical for us to tackle this issue today so the technologies are scalable when we need them."

Earnings

Duke *reported* second-quarter adjusted earnings per share of $1.15, up from $1.08 during the same period in 2020. Unadjusted earnings per share were 96 cents compared to -$1.13 in 2020.

CFO Steve Young said the difference was because of "onetime impacts of the initiative to redefine workspace usage" resulting from COVID-19, including the consolidation of corporate office space and accommodating a hybrid work environment. Young said the office space initiative resulted in a 60% reduction in square footage and annual savings of approximately $25 million to $30 million.

"Overall, we had strong results compared to last year, supported by our continued execution and the rebounding economy," Young said. ■

Duke Energy's Pflugerville Solar project came online in Texas in July. | *Duke Energy*

Company Briefs

Exxon Considering Net-zero Pledge by 2050

Exxon Mobil is considering a pledge to reduce its net carbon emissions to zero by 2050, according to people familiar with the matter, in what would amount to a significant strategic shift by the oil company.

The company is facing pressure from investors to demonstrate a bolder path to reducing emissions. It plans to unveil a series of strategic moves on environmental and other issues before the end of the year, according to *The Wall Street Journal's* sources.

Exxon last week was also kicked out of the Climate Leadership Council, a pro carbon tax group, after one of its lobbyists was secretly recorded by Greenpeace saying that the company only voiced support for such a tax because it knew it would be almost impossible to implement.

More: *The Wall Street Journal*; *Bloomberg*

Talen Planning Bitcoin Mine at Susquehanna Nuke

Talen Energy announced last week that it has signed a deal with TeraWulf, an Easton, Md., cryptocurrency mining firm, to build a bitcoin factory next to its Susquehanna nuclear plant, near Berwick, Pa.

The first phase of the venture, dubbed Nautilus Cryptomine, could cost up to $400 million. The project could eventually use up to 300 MW, 12% of Susquehanna's 2,500 MW of capacity.

It's the second bitcoin-mining venture in the last month that involves owners of Pennsylvania nuclear facilities. Last month Energy Harbor announced it signed a five-year agreement to provide power from its Beaver Valley Power Station in Western Pennsylvania to a new bitcoin mining center operated by Standard Power in Coshocton, Ohio.

More: *The Philadelphia Inquirer*

Berkshire Posts Higher Profit on Railroad, Utilities and Energy Operations

Berkshire Hathaway last week said second-quarter net earnings rose 7% this year, boosted by improved results for its railroad, utilities and energy companies.

The company reported second-quarter net earnings of $28.1 billion, compared with a profit of $26.3 billion in the same quarter last year. Its railroad, utilities and energy divisions' profits offset declines in earnings from its vast insurance operations. Operating earnings, which exclude some investment results, rose to $6.7 billion from $5.5 billion in the year prior.

Berkshire disclosed that it paid about $6 billion in the second quarter, and $12.6 billion in the first six months of the year, to repurchase its own shares.

More: *The Wall Street Journal*

Federal Briefs

Democrats Aiming to Boost Solar Roof Tiles in Bill

A pair of Democrats are looking to expand the federal solar investment tax credit to make it easier for consumers to install roofs with solar shingles.

The bill, introduced by Rep. Mikie Sherrill (N.J.) and Sen. Jon Ossoff (Ga.), would expand the credit for residential consumers and small businesses to include entire roofing systems that integrate solar technology.

The current 26% tax credit only covers the roof tiles, not other parts of the roof, something the industry sees as an obstacle to attracting new customers.

More: *Reuters*

EIA: Number of Producing Coal Mines Fell in 2020

Forty coal mines were opened or reactivated last year, while 151 mines were idled or closed, reducing the national number to 551, the lowest number since U.S. production peaked in 2008, the Energy Information Administration said last week.

The number of mines in the U.S. has declined by more than 60% since 2008. Annual coal-fired generation declined by 20% in 2020 as lower-priced natural gas became a more popular choice.

More: *Houston Chronicle*

EPA Announces New Members of Science Board

EPA last week announced the selection of 47 new members to its Scientific Advisory Board (SAB) after previously firing those who had been appointed during the Trump administration.

The agency touted the new SAB members as the most diverse since the committee was established, saying it comprises 22 women and 25 men and includes 16 people of color.

The board provides scientific advice to the administrator, including reviewing the quality and relevance of the information being used to propose regulations and reviewing agency programs.

More: *The Hill*

State Briefs

ARKANSAS

SWEPCO Files for Rate Increase

Southwestern Electric Power Co. last week submitted an $85 million rate increase request to the Public Service Commission.

The request covers two major points: a base-rate increase and another to cover storm damage costs. The base rate would add about $130 annually to residential bills consuming 1,000 kWh/month, while the weather charge would add another $7.72/month. The company says the increase would allow it to better prepare the system for the future and invest in renewable resources.

If approved, the increase would take effect next June.

More: *Northwest Arkansas Democrat-Gazette*

CALIFORNIA

Drought Causes Hydro Generation to Drop more than 40%

In-state hydroelectricity generation in 2020 dropped 44.3% from the year before, according to data released by the Energy Commission. In all, 21,414 GW came from a combination of the state's large and small hydro power plants — significantly lower than the 38.494 GW delivered in 2019.

"The change is directly attributable to the significantly reduced hydroelectric generation ... as dry conditions returned to the state," the commission explained.

More: *The San Diego Union-Tribune*

Dixie Fire now 2nd Largest Wildfire in State History

The Dixie Fire became the second-largest wildfire in state history on Sunday after gobbling an additional 15,000 acres to sprawl across 489,287 total acres in four northern counties, the Department of Forestry and Fire Protection said.

The huge fire burning across Plumas, Butte, Tehama and Lassen counties has destroyed 404 structures, including the historic Gold Rush town of Greenville, and damaged 27 others, a damage assessment finds. More than 5,000 firefighters were battling the blaze. (See related story, *Dixie Fire Explodes, Burns Historic Town*.)

The Dixie Fire ignited on July 13, possibly sparked by a tree that fell on a Pacific Gas and Electric power line, the company said. PG&E said its equipment also may have ignited the smaller Fly Fire, which merged with the Dixie Fire overnight on July 24.

More: *San Francisco Chronicle*

MARYLAND

OSW Developer Announces Expansion Plans

US Wind last week announced plans to expand its 22-turbine MarWin project off Ocean City into a new project called Momentum Wind, which would include up to 82 turbines and produce 1,200 MW.

Plans also call for developing 90 waterfront acres into a new steel fabrication facility in Baltimore County along with the expansion.

"Developing Momentum Wind and Sparrows Point Steel at full capacity will give Maryland the opportunity to bring steel back to Baltimore and become the epicenter of offshore wind manufacturing," US Wind CEO Jeff Grybowski said in a statement.

More: *The Associated Press*

MICHIGAN

Regulators Deny Permit for Wind Project

The Department of Environment, Great Lakes and Energy's Water Resources Division last week denied permits for the Scotia Wind project.

The department denied the permits over concerns of harm to wildlife and wetlands, finding that the project did not benefit the public enough to outweigh those potential impacts.

Circle Power, the company that proposed the project, has 60 days to file an appeal or a revised plan.

More: *The Daily Mining Gazette*

NORTH CAROLINA

Brunswick County Unanimously Opposes OSW Turbines

Brunswick County Commissioners last week unanimously voted to oppose construction of wind turbines within 24 nautical miles (about 27 miles) of the county's shoreline.

Although no wind projects are planned for the area, the federal government has identified three Wind Energy Areas off the state's coast as potential sites for turbines, with two off Brunswick County.

"Wind turbines located within the viewshed of Brunswick County beaches would damage tourism and the economy of the county by transforming open ocean views to

views of massive industrial machinery," the county's resolution said.

More: *WHQR*

NORTH DAKOTA

PSC Orders Removal of Turbine in Landowner Dispute

The Public Service Commission last week sided with a landowner and ordered Minnesota Power to remove a turbine from its North Dakota Bison wind farm. The unanimous decision by the commission concluded a year-old case against Minnesota Power that could cost the company $1 million.

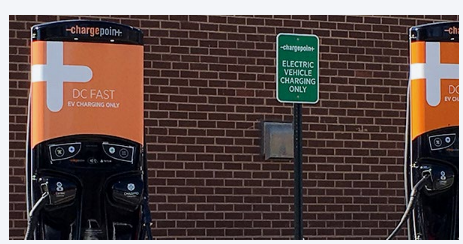
The complaint was brought by two residents who said a turbine was constructed 1,125 feet from a farmhouse on their property, within the 1,400-foot buffer zone the company guaranteed for occupied residences. Minnesota Power claims it did not apply the buffer because the farmhouse was unoccupied when the facility was approved in 2013. The company also argued the couple did not raise concerns until February 2017.

Minnesota Power has six months to remove the turbine, but it could challenge the decision in court.

More: *Grand Forks Herald*

UTAH

Salt Lake County Installs Public EV Chargers



Salt Lake County last week announced it will be installing seven new electric vehicle charging stations at its Government Center.

The new stations will provide charging capacity for up to 14 vehicles.

More: *Gephardt Daily*

VIRGINIA

Lawmakers Ask SCC to Analyze Dominion Rates

Eighteen legislators wrote a letter last week asking the Corporation Commission to analyze what refunds Dominion Energy customers might receive and what electric rates would be if regulators weren't bound by provisions in state law that are favorable to the utility's bottom line.

The lawmakers the commission to assess two questions: what refunds might customers be entitled to if regulators didn't have to accept Dominion's accounting for certain costs, approve reinvestments of certain overearnings or allow the utility to keep 30% of any overearnings; and what rates would the commission set if it didn't have to align its rate of return with returns set for peer utilities.

Del. Sally Hudson (D) said the request is intended to show regulators there is a "sincere appetite" to understand how current laws are affecting utility rates and earnings.

More: *Virginia Mercury*

SCC Approves Dominion Bill Increase for RGGI

The Corporation Commission last week approved nearly $168 million in costs Dominion expects to accrue as a result of purchasing carbon allowances in auctions held by the Regional Greenhouse Gas Initiative between Aug. 1, and July 31, 2022.

The costs are expected to increase the average residential customer's monthly bill by about $2.39.

Through 2045, when the Virginia Clean Economy Act mandates that 100% of the power Dominion generates must come from renewables and nuclear, RGGI participation will cost an estimated $3 billion for its state ratepayers, according to utility and commission staff calculations.

More: *Virginia Mercury*

WEST VIRGINIA

PSC Keeps Coal Plants Open Through 2040, Approves Rate Hike

The Public Service Commission last week approved environmental upgrades to keep three American Electric Power coal-fired plants federally compliant and operating through 2040.

The upgrades will happen.

The PSC also approved a 38-cent surcharge for average residential customers beginning Sept. 1 to recover construction costs at the John Amos, Mountaineer and Mitchell plants.

More: *Charleston Gazette-Mail*