**Your Eyes and Ears on the Organized Electric Markets** CAISO = ERCOT = ISO-NE = MISO = NYISO = PJM = SPP

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September 21, 2021

## **MISO Stakeholders Blame Entergy for Long-range Transmission Impasse**

By Amanda Durish Cook

Some stakeholders directed blame this week at Entergy for obstructing grid planning in MISO South.

During the MISO Board of Directors' meeting Sept. 14, former FERC Commissioner and Iowa Utilities Board Chair John Norris admonished the RTO for not directing meaningful planning and allowing Entergy to influence long-term planning decisions.

Norris said he had reservations when he sided with FERC's order to approve Entergy's MISO membership in 2013.

"I must say though, that I did not, nor did my colleagues, suspect that by 2021 no advancement in the regional transmission planning would have taken place," he said.

Not having expanded the transfer constraint between MISO Midwest and MISO South for more than six years is unacceptable. Norris said. He said the restricted transfer between the regions "begs the question: 'What's the point?"

The long-range transmission plan "is already five years too late," Norris told MISO board members.

"MISO has to plan the grid that the future needs today," he said.

Norris said MISO is being "held hostage" by "anti-competitive" MISO South members and has allowed them to grind the long-range

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Entergy Fends Off Calls for Tx, Solar, Microgrid Investment (p.19)

### **WAPA Desert Southwest Region to Join Western EIM**

**Federal Power Marketing Administration** Split Between CAISO and SPP Markets

By Hudson Sangree

The Western Area Power Administration's Desert Southwest Region (DSW) signed an implementation agreement Wednesday to join CAISO's Western Energy Imbalance Market (WEIM), making it the second WAPA region to seek entry to the market in recent years.

DSW has been working with its customers for two years to "determine the most beneficial course of action for us and for our customers," WAPA Administrator Tracey LeBeau said in a joint statement with CAISO

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# Flexible Ramping Grows as Ancillary Service FERC Technical Conference Focuses on Products to Offset Weather Variability

By Tom Kleckner and Hudson Sangree

A FERC technical conference on ancillary services Sept. 14 focused on the need for flexible ramping products to compensate for shortfalls in forecasted wind and solar output as the variable energy resources play a larger role in organized markets.

"There is broad industry consensus that RTOs and ISOs will need more operational flexibility from resources to reliably serve loads as the resource mix evolves to include more weather dependent variable energy resources. and loads change due to weather dependent distributed energy resources, electrification, and other factors," FERC staff wrote in their whitepaper framing the panel discussions.

"Responding to these changing system needs involves several RTO/ISO market design considerations, including how to provide appropriate price signals that both reflect operational needs and incent resources to



The El Segundo Energy Center near Los Angeles is a fast-ramp resource in CAISO. Primoris Services Corp.

submit energy and ancillary services supply offers that increase the operational flexibility available on the system, and also encourage efficient investment and retirement decisions." it said.

Organized markets are increasingly focused

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**House Panel OKs** Dems' \$3.5T Spending Bill



**Barrasso Prods** FERC on Pipelines, SEEM



**OSW, GHG Bills** Go to California Governor



**ERCOT Finds 345-kV Solution for Valley Constraints** 



**New Yorkers Debate Clean Energy Policies** at IPPNY Fall Conference

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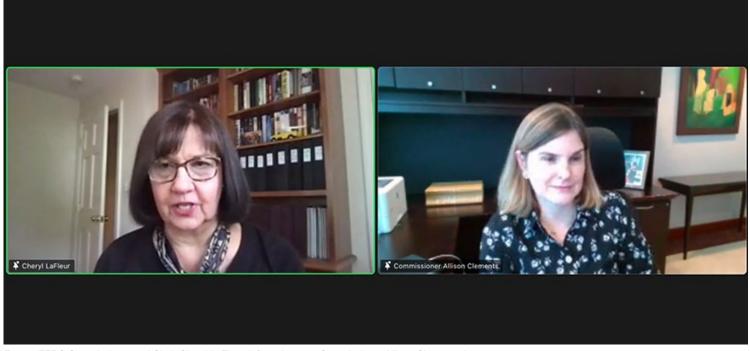
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#### NetZero Insider is now live! See p.30 for this week's coverage.



## LaFleur, Clements Talk Experience at FERC



Former FERC Commissioner and Chair Cheryl LaFleur, left, and current Commissioner Allison Clements. | CPES/NEWIEE

#### By Jason York

During her time at FERC, Cheryl LaFleur said, one thing that surprised her was the feeling of independence.

"I guess, theoretically, President Obama was my boss, but he sure never called," joked LaFleur, who served as both a commissioner and chair at various times from 2010 to 2019.

Commissioner Allison Clements has been at FERC since December 2020 and was sworn in amid the COVID-19 pandemic. "I started coming into the office despite the fact that the commission isn't open yet because I felt like I am playing commissioner on Zoom, and I need to go in and see if this card to get me in the door works." Clements said.

LaFleur and Clements spoke Sept. 14 at the annual joint event between the Connecticut Power & Energy Society and New England Women in Energy and the Environment, sharing their observations and perspectives during a wide-ranging discussion.

LaFleur, currently on the ISO-NE Board of Directors, said there was "big excitement" the previous week when President Biden announced his intention to nominate D.C. Public Service Commission Chair Willie Phillips to FERC. Phillips, a Democrat, would fill the seat most recently held by Republican Neil Chatterjee and give the commission a Democratic majority. (See Biden to Nominate Phillips to FERC.)

Phillips is an experienced regulator "used to balancing different perspectives and reaching consensus," according to LaFleur.

Clements said that with Chatterjee's departure Aug. 30, "we were already starting to bite our nails a little bit, given the slate of technical conferences and the Advanced Notice of Proposed Rulemaking on transmission planning, cost allocation and generator interconnection (RM21-17). (See FERC Goes Back to the Drawing Board on Tx Planning, Cost Allocation.)

Phillips restoring "a full complement of people who start collaborating with each other ... that's exciting," Clements said.

The density of technical conferences on the calendar was particularly interesting to LaFleur because the commission is "building records" to tackle various issues. Clements said that before joining FERC, she would not have linked technical conferences to "record building." However, she added that there have been a high number of them, so much so that her 6-year-old daughter has technical conferences as "part of her vernacular, which cracks me up every time."

"There is a recognition that we're going to be at five [commissioners], and there's a lot of things that need to get done," Clements said. "Every one of these technical conferences is on a topic that you can spend a lot of time thinking about and prioritizing."

In terms of regulatory philosophy, LaFleur said that because she had never been a regulator before her appointment to the commission, there was a line to walk between trying to do too much and taking a more measured approach to gain acceptance from the regulated community. LaFleur asked Clements about the tradeoffs between bold action versus incremental steps in the present regulatory

Clements said there are two "driving facts" that underscore her thinking most of the time. One is the increasing intensity, duration and frequency of extreme weather events wreaking havoc on the power grid, "causing catastrophe for people who are left without

The other fact is climate change is real.

"Now, I should maybe start with that fact since it's a precursor to the increasing extreme weather events, but we shouldn't be afraid to think about climate change as a scientific fact that implicates as an input into our decision-making process," Clements said.



## Flexible Ramping Grows as Ancillary Service

FERC Technical Conference Focuses on Products to Offset Weather Variability

Continued from page 1

on serving "net load," defined generally as load minus wind and solar generation, representing the demand that must be met with dispatchable resources. CAISO and SPP have run into problems meeting net load when demand is high but solar and wind ramp down, the whitepaper noted.

Until an adequate amount of storage is paired with variable resources, RTOs and ISOs will need other types of quick-start ramping products, including those that rely on gas generation, to compensate for unexpected shortfalls, it said. (See Calif. Needs far more Storage to Decarbonize, Panelists Say.)

### SPP's 'Wind Burn'

SPP is a poster child for the issue. The grid operator has added 21 GW of wind capacity since its Day 2 market went live in 2014 and has almost 30 GW of capacity on hand. In May, wind energy accounted for 84% of SPP's generation during one interval and, renewables make up 95% of its interconnection queue, SPP said in written comments.



Jodi Woods, SPP I **FFRC** 

Achieving "more certainty, and [being] able to respond quickly to the uncertainty and changes in wind output, is and will be a concern in SPP," said Jodi Woods, manager of the RTO's Market Monitoring Unit. "Specifically, actual wind

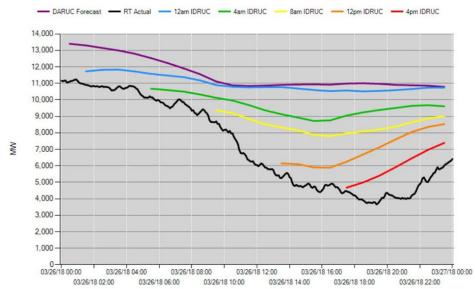
generation can deviate significantly from what was forecasted or expected."

The RTO experienced what it called a "wind burn" event in March 2018, when the dayahead forecast for wind output was 7,000 MW above the reliability unit commitment forecast.

"During this event ... SPP operators committed 54 units out-of-market to replace the unexpected decrease in wind generation and meet reliability needs," FERC said. "SPP stated that the root cause of the forecast error was the poor performance of meteorological forecasts."

Woods said that while SPP's wind forecast errors were off by only about 4.5% last year, that still represents up to 950 MW - the grid





A March 2018 "wind burn" event in SPP committed 54 units out-of-market to replace the unexpected decrease in wind generation and meet reliability needs. | SPP

operator's second largest single-resource contingency and larger than its spinning reserve requirement for the last two years.

SPP is using workarounds in some instances but "manual interventions lead to lower prices in the market and do not send the right pricing signals to responding duration," she said.

"Products that compensate for flexibility and ramping are needed," Woods said. "When the need for flexibility and ramping are not accounted for, the market may use the ramp for energy needs and not save it to meet the flexibility needs of the system," Woods said.

#### **Quick Ramp Products**

SPP and other organized markets with sharp increases in renewables are looking to quick-response solutions.

Ancillary service products in CAISO, MISO and SPP provide short-term ramp capability "to manage the changing system needs ... and reduce out-of-market actions by operators," FERC said. "Although the three ramp products differ, they share several similar features. The ramp products are bi-directional in that they procure and price upward and downward ramp capability as separate products. The ramp products add a constraint (i.e., a 'ramp constraint') to the energy and

ancillary services market clearing process that simultaneously procures and prices energy, traditional ancillary services, and the ramp products on a co-optimized basis."

"In all three markets, the ramp product prices are based on the opportunity cost resources incur from providing ramp rather than energy and the other ancillary services," it said. "In the event the system is economically or physically short of a ramp product, the ramp price is set by an administratively determined demand curve for the ramp product, with separate demand curves for upward or downward ramp capability."



Mike DeSocio, NYISO | FERC

At NYISO, the "changes to the grid and operational risk require flexible energy security needs," Director of Market Design Mike DeSocio said. "We will also need resources that can provide energy output for hours and days to allow grid

risks such as renewable output falls, system restoration needs, and storm watches. When we think about the need for flexibility, resources that can respond in a few minutes and run for several hours or days at a time,



will be invaluable to the grid of the future."



Rahul Kalaskar, CAISO

Rahul Kalaskar, CAISO's manager of market analysis, said that over the last decade, the ISO has seen increased variability and uncertainty between its day-ahead and real-time markets, driven by a signifi-

cant increase in variable resources. That has resulted in more real-time imbalances in both directions.

"The day-ahead forecast cannot predict the net load that will materialize throughout the operating day, so any difference that occurs between what is predicted and what occurs results in imbalances," Kalaskar said. "When there is a risk that imbalances may be too large to address through the real-time market, the ISO will rely on out-of-market actions to address these."

He said CAISO is currently adding improvements to the existing real-time flexible ramping product and developing a new day-ahead ramping product called an imbalance reserve to make sure there's sufficient real-time dispatch capability to meet net load imbalances. (See FERC OKs Ramping Product for CAISO, EIM.)

MISO expects an increased "future need for flexibility to address short-term market-wide reserve requirements as the mix of different types of resources ... continues to evolve, including the replacement of coal-fired power plants with variable energy resources and natural gas power plants," the FERC whitepa-

Wind generation in MISO increased from 1 GW in 2005 to 19 GW in 2019, and solar generation will reach 11 GW in 2032 if MISO's resource fleet continues to change at its current pace, it said.

### **Up Ramp and Down Ramp**

In 2014, FERC approved MISO's proposal to introduce two ramp capability products up-ramp capability and down-ramp capability, both intended to address short-term variations in net load. MISO's ramp capability products procure ramp capability within a 10-minute timeframe. (See MISO Quick Capacity Reserves Wait Until 2021.)

"When MISO is unable to meet the system's ramp requirements, a demand curve with a

maximum price of \$5/MWh sets the price for the ramp capability products," FERC said. "However, MISO is currently considering revising the demand curve for the up-ramp capability product to better reflect net load uncertainty and continue to track with this uncertainty as it changes with the evolving resource mix."



Adam Keech, PJM | **FERC** 

In PJM, uncertainty and the need for quick ramps to address shortfalls is a "major driver," said Adam Keech, the RTO's vice president of market design and economics.

"We tend to look at reserves in PJM as a

product with many different uses," Keech said. "When we look at uncertainty, we're really trying to get that net load uncertainty to inform the reserve requirement because we deploy reserves for a number of different reasons. For us, the most important things coming out of the reserve markets are the ability to commit units quickly and get megawatts onto the system and ramp them up quickly as well." ■





## House Panel OKs Dems' \$3.5T Spending Bill

By Rich Heidorn Jr.

The House Wavs and Means Committee on Wednesday approved the Democrats' \$3.5 trillion spending package, which includes billions for energy efficiency, renewables and electric vehicles.

The committee cleared the Build Back Better Act on a 24-19, party-line vote, sending it on to the Budget Committee. Democrats applauded as the committee completed its four-day markup of the massive bill. "Oh ves!" exclaimed Rep. Linda Sanchez (D-Calif.), when it came her turn to vote.

Committee Chair Richard Neal (D-Mass.) said the bill includes "substantial investments in the development and deployment of clean energy to do our part in fighting the climate crisis while also creating good, well paying jobs across the country."

Rep. Don Beyer (D-Va.), co-chair of the Safe Climate Caucus, said the bill "will be the single most important piece of climate legislation we have ever had the chance of passing."

Ranking member Kevin Brady (R-Texas) countered that the spending package and tax increases would kill jobs and harm small businesses. "Small business owners should dream about passing their success on to future generations," he tweeted. "Increasing taxes on families and entrepreneurs is why small businesses are fighting against the \$3.5 trillion stimulus Congress and the president are considering."

Democrats hope to pass the package through the reconciliation process to avoid a Republican filibuster in the Senate. But they may



Democrats applaud as the House Ways and Means Committee approve a \$3.5 billion spending package.

need to scale back their ambitions considerably to win the backing of Sens. Joe Manchin (D-W.Va.) and Kyrsten Sinema (D-Ariz.), who have said they would not support such a large spending bill. CNN reported that Manchin arrived at the White House late Wednesday afternoon for a meeting with President Biden, who has been campaigning in support of the

In addition to expanding social safety net programs, the package includes billions in spending on energy, including credits for renewable electricity production and renewable fuels, and incentives for electric and alternative fuel vehicles.

Paula Glover, president of the Alliance to Save Energy, praised its inclusion of several tax credits for energy efficiency, including a change she said "would allow homeowners

to budget and plan multiple energy efficiency investments over several years."

American Clean Power Association CEO Heather Zichal called the vote "another critical step forward for the domestic clean energy economy."

"The provisions in this legislation will enable the continued rapid deployment of renewable energy projects along with energy storage and transmission upgrades to help our nation address the climate crisis," she added.

But the Sierra Club lamented that Democrats failed to cut subsidies for the fossil fuel industry and that the bill "maintains the status quo by needlessly incentivizing technologies that will not advance us towards our truly renewable and clean goals, such as credits for municipal solid waste, biomass, carbon capture and utilization, and nuclear facilities."



The goal of Course 108 is to provide an overview of environmental law, principally at the federal level. The course provides an overview of the key federal and state environmental laws and their impact on the energy industry.







## Panel Dissects FERC Tx Planning Review

### What's Not in FERC's ANOPR: Equity, Extreme Weather and a Wider Range of Stakeholders

By K Kaufmann

Creating an equitable transmission grid for the United States will require not only thinking about the impact of new projects on low-income and disadvantaged "environmental justice" communities, but also recognizing "the equity implications of the status quo are pretty dire," said Alexandra Klass, a professor at the University of Minnesota Law School.

"We know that the power grid wasn't built to withstand today's more frequent and intensive storms," Klass said, speaking Friday on a virtual panel on the future of grid planning convened by the State Energy & Environmental Impact Center at NYU Law School. "So, when we delay building transmission, it means we have our old power grid that has greater environmental justice impacts every day ... and we make the problem worse."

Klass was one of four panelists who dissected FERC's advanced notice of proposed rulemaking (ANOPR) on transmission planning and cost allocation, with a focus on what the commission's 142-page document, released in July, may have left out and the challenges ahead. FERC is now about halfway through a 75-day comment period for the docket (RM21-17). (See FERC Goes Back to the Drawing Board on Tx Planning, Cost Allocation.)

Jennifer Murphy, senior counsel and director of energy policy at the National Association of Regulatory Utility Commissioners (NARUC), said her members believe "the planning process should require clear and standardized metrics for assessing the impacts on disadvantaged communities and ensuring that the benefits flow to those communities.

"We need to be specific and intentional," she said, to ensure a new project doesn't end up adding to negative impacts on disadvantaged communities.

Murphy pointed to the Joint Federal-State Taskforce that FERC and NARUC are establishing as a forum where cost allocation issues can be hashed out. Although she referred to it as the "FERC-NARUC taskforce," Murphy and other panelists said additional stakeholders must be part of the conversations on transmission planning reform, including other state policy makers, federal agencies such as the Department of Energy and the Bureau of Land Management and finance providers.



| Shutterstock

"For finance providers, the risks that a system can't deliver resources appropriately or includes significant upfront questions regarding deliverability, curtailment and interconnection costs and processing, [they] really end up getting rolled into the cost of the facility," said Noah Shaw, a partner in the energy and climate practice at Foley Hoag LLC. "Understanding the capital providers' perspective with respect to de-risking these projects should be paramount and important for purposes of policy making and cost considerations."

State-level participation, beyond regulators, will also be important for breaking down traditional transmission planning silos that classify individual projects as meeting either economic, reliability or public policy needs, said Gabe Tabak, counsel for the American Clean Power Association.

"The goal here should be to really take the various state renewable energy goals and fully incorporate those into the transmission planning process really as a starting point," Tabak said. "[We need] to assume that these are valid state goals that need to be met, that will be attained, and to look at what the leastcost means of getting to those state goals are, with a transmission plan that also addresses

economic and reliability needs as well."

Broad stakeholder engagement earlier in the process would also give state regulators time to "become more comfortable" with the complex issues involved in grid planning, Murphy

"It will allow them to know what the inputs are, what the assumptions being made are, where the data is coming from," she said. "And if states are more comfortable with the inputs, they're definitely going to be more comfortable with the outcomes."

### 'Super Technical and Nerdy'

Friday's webinar reflected the intensifying focus on the role of transmission in President Biden's goal to decarbonize the nation's electricity system by 2035 and move toward a net-zero economy by 2050. The bipartisan infrastructure bill now in Congress would provide \$73 billion for transmission projects, and advocates are pushing for a transmission investment tax credit in the \$3.5 trillion budget reconciliation package, also still moving through Congress.

But, as many in the industry have noted, transmission projects often stall out because of the long permitting and planning processes they must go through. The problems are "super technical and nerdy," said Shaw. "But for all those people who care about climate change, it's the biggest thing we're going to have to deal with in the electricity system over the course of the next five years."



Liz Salerno, FERC I State Energy & Environmental Impact Center at NYU Law School

FERC's authority is limited to ensuring project costs and their allocation are reasonable and prudent, said Liz Salerno, who leads transmission and technology initiatives for FERC Chairman Richard Glick. The ANOPR and the joint taskforce are part of FERC's

efforts to reimagine and update interstate transmission planning processes, she said.

Salerno provided an overview of the background and main points of the ANOPR, specifically its goal to overhaul Rule 1000 the transmission planning framework FERC issued 10 years ago — in the face of the dramatic changes in generation resources and



the demands variable, renewable energy is placing on the grid.

"The existing transmission planning process as required under our current rules just may not sufficiently do enough forward-looking and proactive planning for the future," Salerno said. "Because of that, the way we're planning for future generation, almost by default, is done on a project-by-project basis."

With 750 GW of mostly renewable projects sitting on interconnection queues across the country, "projects move through the queue ... upgrades get identified, costs get assigned and then either the project moves forward, or it doesn't," she said. "That sort of step-by-step approach maybe isn't a particularly costeffective or efficient way to build up the grid."

In addition, it "could be leading to a result that's ultimately more expensive for ratepayers than an approach that's more forward-looking and proactive," she said.

Salerno's comments largely echoed the arguments that Glick and Commissioner Allison Clements set out in a joint statement in support of the ANOPR.

Acknowledging the need for new ideas, the ANOPR solicits input on several questions:

- how to accommodate anticipated future generation within the regional transmission planning and cost allocation processes;
- whether the commission should require transmission providers to identify geographic zones with the potential for developing large amounts of renewables and plan transmission to integrate those resources:
- whether changes are needed to improve the coordination between the regional transmission planning and cost allocation and generator interconnection processes;
- how to allocate the costs of new transmission in a way that allocates costs "at least roughly commensurate" with estimated benefits; and
- whether participant funding of interconnection-related network upgrades may be unjust and unreasonable and whether FERC should eliminate rules that allow RTOs/ISOs to use participant funding for interconnection-related network upgrades.

#### The Regulatory Mismatch

Murphy said NARUC supports a more "holistic" approach to transmission planning, as opposed to Rule 1000's siloing of projects



At the Building the Grid of the Future webinar (clockwise from upper left): Liz Salerno, FERC; Katie Mapes (moderator), Spiegel & McDiarmid LLP; Noah Shaw, Foley Hoag LLP; Alexandra Klass, University of Minnesota; Gabe Tabak, ACPA; and Jennifer Murphy, NARUC. | State Energy & Environmental Impact Center at NYU Law School

based on their impact on economic, reliability or public policy considerations.

"A holistic approach would look at the impact of siloing on planning, cost allocation and whether better outcomes could be achieved if needs were not divided in this way," she said. It would "also consider alternative transmission solutions, including grid-enhancing technologies and non-transmission technologies in the regional planning process," she said. (See FERC Workshop Participants Differ on GETs Incentives.)

But Klass saw a larger challenge for any effort to reform transmission planning and cost allocation.

"The physical aspects of how the U.S. electric grid has worked for decades don't match the regulatory authority for the new lines we need for a grid that's powered primarily on renewable energy and is reliable and resilient in an age of climate change," she said. "In terms of building the grid of the future with interstate, long-distance transmission lines designed to ship renewable power across the country, we have a regulatory regime where states and in some cases counties within

states hold virtually all the regulatory power. And without a major shift in that regulatory authority, progress is going to be slow."

One solution, Klass said, could be financial incentives that "can both flow up to the companies that are able to take on these significant projects, and also flow down to the level in which regulatory authority exists so that money can be spread to all of the impacted communities that are going to need to be convinced that these projects are in their interest."

Another challenge will be integrating the impact of extreme weather events into planning processes, Shaw said. The ANOPR doesn't specifically talk about weather, he said. Longterm generation and transmission planning must take into consideration the impacts of such events and "the locational value of the resources that are being proposed in any particular transaction," Shaw said.

How to value projects that provide system reliability and resilience will also require considering the impact of not making those investments, he said. "There's an opportunity cost to not planning longer term." ■



## Barrasso Prods FERC on Pipelines, SEEM

Senator Calls out Delays in Multiple Projects

By Holden Mann

Sen. John Barrasso (R-Wvo.) sent a letter to FERC Chairman Richard Glick on Wednesday calling on him to speed up the processing of several matters in front of the commission, including approval of multiple gas pipeline projects and the proposed Southeast Energy Exchange Market (SEEM) (ER21-1111, et al.).

Barrasso, the ranking member of the Senate Energy and Natural Resources Committee, noted "what appear to be irregularities in the processing of important proceedings" in the commission's electricity and natural gas dockets. The senator cited several specific cases to illustrate his concerns, with specific questions about each in an appendix.

### **Environmental Studies Push Back Pipelines**

In the first section of the letter, Barrasso criticized FERC for notices it issued May 27 in several natural gas certificate proceedings: North Baja Pipeline (CP20-27), Iroquois Gas Transmission System (CP20-48), Tennessee Gas Pipeline (CP20-493), Columbia Gulf Transmission (CP20-527) and Adelphia Gateway

These notices announced that FERC would prepare an environmental impact statement (EIS) for each project, delaying their approval; Barrasso said similar notices have since been issued in "more than a few other pipeline certificate proceedings," while the Iroquois project was further delayed on Sept. 2.

The senator said the commission's actions "indicate that [FERC] is now requiring an EIS in all certificate proceedings and extending schedules for environmental review," contradicting Glick's letters of May 21 to Barrasso and other senators in which the chairman said FERC would "not wait to act on certificate applications" for natural gas projects. Barrasso expressed concern about "the imposition of new and as-yet-undefined requirements on certificate applications already under review."

In the appendix, Barrasso asked FERC for a chart showing the status of certificate applications currently under review, the dates they were filed, and their current stage of review, along with the relevant standard of review and how applicants have been notified of changes to the standard. He also asked whether the commission has "adopted a

generally applicable requirement for an EIS regarding gas pipelines," and if not, why the May 27 and subsequent notices were issued.

In addition, Barrasso questioned whether there are any laws requiring the commission to consider downstream or upstream greenhouse gas emissions of a particular project before issuing a certificate, and how FERC will meet the requirements of the Natural Gas Act to "encourage the development of plentiful supplies of natural gas at reasonable prices" if it does begin to enforce such consideration in the future.

### 'Timely Resolution' Urged on STL **Pipeline**

The letter's second section concerns the Spire STL Pipeline, a 65-mile natural gas pipeline for which FERC approved a certificate of public convenience and necessity in August 2018 (CP17-40). Earlier this year the D.C. Circuit Court of Appeals ordered the certificate vacated, saying FERC failed to balance the benefits and adverse impacts of the project. (See DC Circuit Slaps FERC on Pipeline GHG Analysis.)

While FERC granted a temporary certificate for the project on Sept. 14 "to ensure continuity of service for a limited period while the commission considers appropriate next steps." Barrasso guestioned "why the commission did not act sooner or more definitively to address the issues in this proceeding." In addition, the senator said that it's not clear whether FERC is "on a path to a timely resolution of this matter" that will ensure adequate gas supplies in St. Louis during the upcoming winter months

Barrasso also criticized FERC for setting a 60-day comment cycle on STL's emergency certificate application, which was submitted July 26. The commission said on Aug. 6 that comments on the application would be due Sept. 7, with reply comments due Oct. 7. Calling this schedule "curious" in light of the "urgent concern" of citizens of the impacted area, the senator asked whether such a comment cycle is common for this kind of emergency application.

Commissioner James Danly dissented in FERC's latest order, calling it an "unlawful commission response to the judicial vacatur of a certificate, itself a chastisement for our failure to adequately explain our decisions."



Senator John Barrasso (R-Wyo.) | Senate Energy and Natural Resources Committee

#### **SEEM Delay Questioned**

In the final section, Barrasso pushed FERC to move faster on approving SEEM, the planned expansion of bilateral trading in 11 Southeastern states that proponents claim will reduce trading friction while promoting the integration of renewable resources such as wind and solar.

FERC has issued two deficiency letters regarding the proposal this year: the most recent one was in August, 60 days after SEEM's supporters responded to the commission's first such notice. (See SEEM Members Push for FERC's Decision on Market Proposal.) This second letter asked just three questions, prompting Barrasso to ask why it took so long to submit such an apparently simple inquiry. He said "the public record" suggests that FERC is "unnecessarily delaying or impeding" utilities' attempts to improve the functioning of the wholesale energy market.

"Without speaking to the merits of this particular proposal, I am in favor of *voluntary* efforts of this type," Barrasso said. "By allowing incremental voluntary improvements, the commission can enable continuous and orderly market and facility development. Proceeding in this way is time-tested and has enabled the world's most extensive array of electric infrastructure largely paid for by equity and debt investors to be deployed in the United States."

FERC may be close to action on the proposal: The sunshine *notice* for the commission's meeting next Thursday lists it as the first item in the electric section.



## OSW, GHG Bills Go to California Governor

By Hudson Sangree

Measures tackling offshore wind, building decarbonization and other energy-related topics landed on the desk of Gov. Gavin Newsom last week after lawmakers completed their 2021 session and Newsom survived a recall

One measure, Assembly Bill 525, by Assemblymember David Chiu, a San Francisco Democrat, would instruct the California Energy Commission to develop planning goals for offshore wind generation for 2030 and 2045 and to coordinate with state agencies to develop a strategic plan for OSW development, to be submitted to the legislature by June 2023.

Chiu's bill passed the state Senate on Thursday, 38-0, followed Friday by an Assembly vote, 74-1, concurring in the Senate's amend-

"The signs of the climate crisis are all around us," Chiu said earlier this year when the measure passed the Assembly Natural Resources Committee. "With offshore wind, we have an opportunity to counter the threat of climate change, meet our clean energy goals, and create thousands of new good-paying jobs in the process."

The Biden administration announced in Mav it plans to offer leases for the state's first offshore wind areas — a 399-square-mile block off Morro Bay in Central California that could support 3 GW of wind generation and the Humboldt Call Area off Northern California, large enough for an additional 1.6 GW. (See BOEM to Offer Leases for Calif. Offshore Wind.)

Another bill that reached the governor deals with greenhouse gas emissions from the production of cement, a key ingredient in making concrete, the world's most common building material. California no longer has coal-burning power plants, but eight cement kilns continue to burn coal, releasing carbon dioxide.

Senate Bill 596, by Sen. Josh Becker (D) of San Mateo, would order the California Air Resources Board to develop a strategy for decarbonizing by July 2023 and set a goal of achieving net-zero greenhouse gas emissions no later than December 31, 2045. It cleared the Assembly on Thursday, 74-2, and the Senate on Friday, 29-9.

"This bill positions California to develop a model strategy to shrink cement's huge carbon footprint, while continuing to grow our economy and protect public health. Governor Newsom should quickly sign it into law," Alex Jackson, a senior attorney with the Natural Resources Defense Council, said in a statement after the bill's passage.

The California Energy Commission recently began looking more seriously at decarbonizing building materials as part of the state's GHG reduction strategy. Cement production accounted for 1.8% of GHG emissions in 2017, according to the California Air Resources Board. (See CEC Targets 'Embodied Carbon' in

Newsom has until Oct. 10 to sign or veto the measures.



A bill sent to Gov. Gavin Newsom would limit GHG emissions from cement manufacturing. | Shutterstock

## WAPA Desert Southwest Region to Join Western EIM

### Federal Power Marketing Administration Split Between CAISO and SPP Markets

Continued from page 1

on Thursday.

"Joining the EIM will support DSW's ability to economically market and dispatch energy on a timely basis and meet the needs of our customers," LeBeau said. "We look forward to working with the ISO and our partner utilities to implement the EIM in our balancing authority and take advantage of the many resources and flexibilities the EIM offers."

WAPA's Sierra Nevada Region, part of the Balancing Area of Northern California, became an active WEIM participant in April. (See Expansion Takes EIM into LA, New Mexico.) Parts of WAPA's Upper Great Plains West and Rocky Mountain regions decided to join SPP's competing Western Energy Imbalance Service (WEIS), which launched in February. (See WAPA, Basin, Tri-State Sign up with SPP EIS.)

The implementation agreement also applies to WAPA's Western Area Lower Colorado Balancing Authority, which includes generating resources in the Boulder Canyon and Parker-Davis projects (PDP) and the transmission systems of the PDP. Central Arizona Project and the Pacific-Northwest-Pacific Southwest Intertie Project.

DSW sells federal hydroelectric power and provides transmission service to dozens of cities, electric cooperatives, Native American tribes, government agencies and irrigation districts. One of its customers, the Arizona Electric Power Cooperative (AEPCO), includes six distribution cooperatives and five public power entities that serve more than 420,000 residential, agriculture and corporate custom-

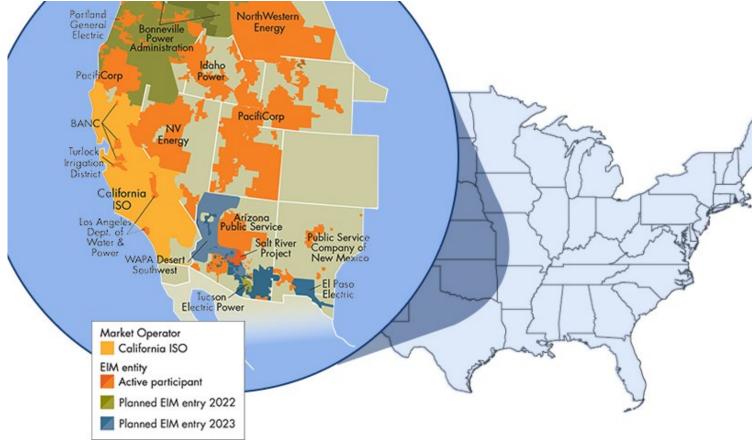
"Joining the Western EIM will ensure AEPCO and its members have real-time access to a much larger regional energy market," Jon Martell, AEPCO executive director of energy services, said in the joint statement.

Other participating BAs include the Cen-

tral Arizona Water Conservation District, Southwest Public Power Agency and DSW customers in Arizona, Southern California and southern Nevada.

"We are very pleased to welcome the WAPA DSW region and the Arizona Electric Power Cooperative to the Western EIM," CAISO President and CEO Elliot Mainzer said in the statement. "I appreciate the thoughtfulness that went into their decision and look forward to working together to create additional economic and environmental value for their constituents and the broader EIM community."

The WEIM now has 15 active participants in 10 Western U.S. states and part of British Columbia. Eight more entities are set to join in 2022 and 2023, potentially encompassing 84% of electric demand in the Western Interconnection. By allowing low-cost energy to be bought and sold in real time across state lines, it has provided more than \$1.4 billion in benefits to its members since launching in 2014, according to CAISO. ■



A newly updated WEIM map includes WAPA's Desert Southwest Region. | CAISO



## **CARB Seeks to Mitigate GHGs from Extreme Events**

By Elaine Goodman

California air quality regulators are devising a program to mitigate increased emissions that may occur when the state tries to meet energy demand during heat waves or wildfires.

The California Air Resources Board (CARB) hosted a workshop Thursday evening to discuss the initiative, called the Climate Heat Impact Response Program (CHIRP). The goal is to send a framework for the program to the CARB board for review in November.

CHIRP is the result of an emergency proclamation that Gov. Gavin Newsom issued on July 30, aimed at preventing blackouts during extreme weather in California. (See Calif. Governor Proclaims Emergency as Blackouts Loom.)

The proclamation relaxes certain air quality requirements to allow increased energy production during heat waves — when energy demand surges — or when wildfires disrupt energy transmission.

In California, Senate Bill 100 of 2018 set a target of 100% carbon-free electricity by 2045, and the state is making progress toward that goal.

But "there is insufficient time or supply to install new energy storage or zero-carbon

energy projects to address the immediate shortfall of up to 3,500 MW during extreme weather events that is now projected for this summer," the proclamation said.

California has not had an extreme heat event since the proclamation was issued, according to CARB staff. But the U.S. Department of Energy last week approved CAISO's request for an emergency order allowing it to run natural gas plants that may exceed federal pollution limits as California heads into peak wildfire season and the ISO seeks to maintain grid stability over the next two months. (See DOE Orders CAISO Emergency Reliability Measures.)

#### **Relaxed Requirements**

The governor's proclamation loosens permitting requirements for backup generators during heat waves, CARB staff said during Thursday's workshop. Thermal power plants regulated by the California Energy Commission may operate outside of their permitted requirements during the weather events.

And ships at berth may be allowed to use their auxiliary engines, rather than plugging into shore power when at the port.

The restrictions are relaxed when CAISO declares an energy warning or emergency caused by an extreme heat event, a sudden

> and severe reduction in transmission capacity, or both.

The different methods of meeting energy demand produce varying levels of pollution.

According to CARB estimates, a natural gas thermal power plant produces less than 1% of the nitrogen oxide emissions produced by a backup diesel generator or a ship at berth. A diesel backup generator had the highest emissions of particulate matter among the three sources.

"We know that there are going to be emissions that happen during these [extreme heat] events," said Michelle Buffington from CARB's Mobile Source Control

Division. "No matter what sources are put online during one of these events, we want to be able to, at least after the fact, mitigate the emissions that have occurred."

Kevin Hamilton, co-director of the Central California Asthma Collaborative, suggested that the state give residents an early warning when air pollution in their community is expected to spike because of an extreme heat event.

Safe spaces can be created within homes where residents can breathe clean air, he said.

Other workshop participants expressed concern that CARB was taking a reactive approach to the extreme heat events.

Los Angeles resident Rafael Yanez said allowing ships at the ports of Los Angeles and Long Beach to use auxiliary power is "the worst plan that we could possibly have." He noted that the ships are a major source of air pollution in Southern California.

Instead, Yanez said, the state should look at reducing power consumption among the biggest users. Electric rail service in Southern California could be cut back, as many cars are running with few passengers, he said.

And the fastest way to improve the electric system would be to upgrade aging transmission lines to reduce power losses, Yanez said.

"Look at the transmission lines because many of them are very, very old."

#### **Reporting Mandates**

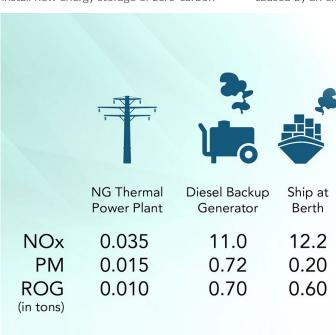
In addition to a mitigation strategy, CHIRP includes a reporting component.

Utilities must report to CARB each month on the amount of backup generation their customers plan to use during load-reduction periods, as well as an estimated load reduction by zip code for participating customers.

Thermal power plants must report operations above their permitted conditions to CARB, the CEC and air districts.

CARB will work with the CEC and air districts to calculate emissions produced from extra energy generation during extreme heat events. Funding for mitigation projects will be based on the amount of emissions and their location.

CARB staff asked anyone who would like to submit comments on the CHIRP framework to do so by Sept. 30. The program may be contacted at chirp@arb.ca.gov. ■



Estimated emissions from generating 1,000 MWh of energy from various sources | CARB

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## **FERC OKs CAISO Emergency Interconnection**

Commission Cites California's Immediate Need for Extra Generating Capacity

By Hudson Sangree

FERC granted CAISO's request for a tariff waiver Wednesday that allowed the ISO to immediately connect two temporary 30-MW generating units for grid reliability, though the commission cautioned it not to expect such waivers again (ER21-2753).

"Given the exigent circumstances currently faced by CAISO, we find that good cause exists to grant this limited waiver as another tool to help CAISO address [its] anticipated capacity shortfalls," Chairman Richard Glick and Commissioners Allison Clements and Mark Christie wrote in their majority decision, to which Commissioner James Danly dissented. "But we emphasize that CAISO must make every effort to avoid these sorts of waiver requests in the future."

California continues to face potential short-falls this year during late-season heat waves and wildfires. State agencies and CAISO have been acting since July 30 under an emergency proclamation by Gov. Gavin Newsom to prevent blackouts or close calls like those the state experienced in August and September 2020 and again this July. (See CAISO Declares Emergency as Fire Derates Major Tx Lines.)

The governor ordered the state to license new emergency and temporary power generators of 10 MW or more that can be connected to the grid before Oct. 31. In response, the California Department of Water Resources (CDWR) procured trailer-mounted, 30-MW gas generating units that can be installed in days, start up in five minutes and ramp to full capacity within a half hour.

The U.S. Department of Energy granted CAISO an emergency order Sept. 10 allowing the units and other fossil fuel generators to potentially exceed federal pollution standards. (See DOE Orders CAISO Emergency Reliability Measures.)

FERC's waiver applied to two of the CDWR units to be installed at the former Greenleaf 1 energy center in Yuba City, where a mothballed cogeneration plant remains connected to the CAISO grid with an interconnection service capacity of 49.2 MW. That means the new units required approval for only a 10.8-MW increase in interconnection capacity, FERC said.

The site is owned by Calpine and falls within



FERC's waiver applies to two GE TM 2500 units procured by the California Department of Water Resources. | General Electric

Pacific Gas and Electric's service territory. CAISO, PG&E and Calpine "intend to amend their existing generator interconnection agreement and market agreements to reflect these interconnections once the commission has ruled on this petition," FERC said in its order.

#### **Danly Dissents**

"CAISO seeks this latest emergency relief because of the ongoing and persistent failure of its markets to attract and retain adequate resources to maintain reliability," Danly wrote in a scathing dissent.

The waiver "only applies to two resources, but I have little doubt the majority would grant the same waiver the next time, and the next time, and indeed, every time there is an emergency," he said.

Moreover, he said, the waiver allowed CAISO

to connect the new resources on the same day the order was issued. Changes to its interconnection terms with Calpine and PG&E and "conditions of its filed rate" would follow.

That made the waiver "illegal" under the filedrate doctrine and longstanding commission precedent, he said.

The majority said Danly's argument "misunderstands CAISO's request and the waiver granted here."

"CAISO's tariff expressly provides for a waiver of timelines to meet requirements imposed by regulators or by the governor of the state of California," the majority said. "Indeed, CAISO has requested waiver in order to satisfy a proclamation issued by the governor. This tariff provision provides sufficient notice to regulated parties, meaning there is no filed-rate doctrine problem here."

### **ERCOT News**



## **ERCOT Finds 345-kV Solution for Valley Constraints**

By Tom Kleckner

ERCOT staff said Wednesday they are recommending one of two options for a 345-kV line in the Lower Rio Grande Valley, a region identified as in urgent need of more transmission capacity by the grid operator and state regulators.

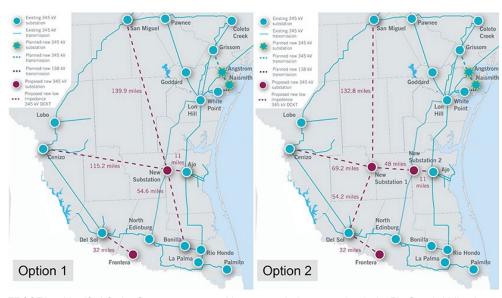
The project would add 351 miles of transmission lines radiating from a new substation in the Valley and create a link from the border to San Miguel south of San Antonio. The projected cost of \$1.28 billion is \$60 million cheaper than the other short-listed option.

Staff told the Regional Planning Group that the preferred alternative would improve reliability in the region and address stability constraints. Seven of ERCOT's 16 generic transmission constraints are in the Valley, which sits at the edge of the Texas Interconnection with limited and long-distance transmission circuits.

The project will meet future load growth and generation development with reliable longterm infrastructure, staff said, and minimize the construction's effect on the existing system.

The region's system can currently serve up to 3.2 GW of demand, according to a recent ERCOT assessment. However, there are only four conventional power plants in the Valley, generating a total of 1,461 MW, making it reliant on imports. If the wrong two plants go out of service, 77% of that capacity is lost.

Potential LNG and other industrial load additions in the Valley could trigger the need for



ERCOT has identified Option 2 as necessary to address transmission constraints in the Rio Grande Valley. |

system improvements before the proposal's targeted implementation by 2027.

"Our focus is to address the part of the system needed to reliably serve the Rio Grande Valley load," ERCOT's Shun Hsien Huang said.

The proposal will be taken up by the Technical Advisory Committee and then the Board of Directors in the fourth quarter this year, Huang said.

Brad Jones, the grid operator's interim CEO, included the need for new capacity because of the region's transmission limitations in his 60-point roadmap to grid reliability. The Texas Public Utility Commission also discussed add-

ing transmission in the Valley during its most recent open meeting. (See Texas PUC Considers Adding Grid Interconnections.)

Huang said the project is preferable to adding a second 345-kV circuit to an existing line as suggested by the PUC. That idea would require taking the line out of service for one or two years.

Renewable resources have ballooned along with the region's population and offer some support. Wind and solar capacity in the region didn't crack 1 GW until 2012 but is expected to reach 7 GW, when including planned projects, by the end of this year.







### **ERCOT News**



## Texas PUC Considers Efficiency, DR as Gen Alternatives

Lone Star State's Reduction Goals, Spending Among Nation's Lowest

By Tom Kleckner

Texas regulators last week convened another workshop to discuss redesigning the ERCOT market, only to have one of the state's leading energy experts dash their faces with cold water.

Alison Silverstein, former FERC and Texas Public Utility Commission Chair Pat Wood's right hand, was among those lobbying the commissioners to consider the importance of energy efficiency and demand response in addressing the state's increasing hunger for electricity and avoiding catastrophes like February's winter storm.

"Are you feeling lucky?" Silverstein asked the commissioners. "You guys are undertaking the world's fastest electric market redesign. These are incredibly complicated issues, and no one knows how to do this. You cannot afford to let load keep growing while you wait to see if all of your redesign works and all the pieces fall into place quickly, and load is growing wicked fast in Texas."

Indeed, the state's population is expected by some to nearly double to as many as 54.4 million by 2050. The state is already among the fastest growing in the nation and home to five of the nation's 13 largest cities: Houston, San Antonio, Dallas, Austin and Fort Worth.

And while ERCOT in August had more than 170 GW of capacity under some form of



Alison Silverstein discusses energy efficiency's and demand response's benefits with the PUC. | Texas Admin Monitor

study in its generator interconnection queue, only slightly more than 12 GW of that was the dispatchable generation favored by Gov. Greg Abbott in a July memo to the PUC. (See PUC Debates Answers to ERCOT's Reliability Issues.)

"Energy efficiency and demand response give you defense in depth; they give you diversity and operational tools; they will help to buffer reliability and reduce the need for all that additional generation and all the folks that want to come spend capital in Texas to show up and get through the interconnection queue," Silverstein said.

In an aside, she added, "And by the way, you can't fix that in the next year or two fast enough."

"Oh, but we can change it," PUC Chair Peter Lake interjected.

"I know you can," Silverstein responded, "but the question is, how fast between when you write the regulation and when the cash shows up and the infrastructure is on the ground? And you can't change that."

Texas' energy-efficiency programs have some of the lowest energy-use reduction goals and per capita spending compared to all other states, according to a report released earlier this summer by Silverstein, Wood and four other former PUC commissioners. (See Former PUC Commissioners Weigh in on ERCOT Fixes.)

The report pointed out that the U.S. Department of Energy has indicated that the state could use cost-effective energy efficiency measures to reduce 2030 residential electricity use by 18.5% and total electricity sales by 17%. It advocated for raising utility efficiency program goals to increase both annual kilowatt-hour savings and peak reduction; additional efficiency retrofits for low-income and multifamily housing across Texas; and increasing DR for grid emergencies by requiring utilities to offer customers compensated options and procure resources that can remotely cut at least 10% of each entity's summer and winter peak load.

"If we redesign the market correctly, do we still need to fund [utility] energy efficiency and demand response programs?" Silverstein said. "Yes, you do, and you cannot afford not to. Energy efficiency and demand response are the least costly resources available, relative to all that [dispatchable] generation and storage."

She urged the PUC not to place 90% of its "cash bet" on the generation side of the equation. "Cover that bet with even a fraction of that sum in energy efficiency and demand response delivering massive benefits."

The Sierra Club's Cyrus Reed pointed to the state's rule governing energy efficiency, which says "all customers ... have a choice of an access to energy efficiency alternatives that allow each customer to reduce energy consumption, peak demand or energy costs."

Other speakers during the workshop encouraged the commissioners to allow third-party aggregation of DR and distributed energy resources. Google's Aaron Berndt reminded them that they have the authority to increase energy-efficiency and load-management programs and to increase the \$50 million cap on emergency response services (ERS), the latter reminder seconded by many comments in the docket (52373).

ERS is one of the only two DR programs ERCOT currently administers. The grid operator also allows load resources, which include six "controllable" resources totaling about 300 MW, to participate in its ancillary services and real-time energy markets.

Kenan Ögelman, ERCOT's vice president of commercial operation, said he expects that latter population to grow because data centers involved in bitcoin mining and high-tech data management are rapidly moving into the state.

The grid operator procures ERS four times during the year and by selecting qualified loads and generators, including aggregations of loads and generators, to make themselves available during grid emergencies in 10- and 30-minute response times. Commissioner Lori Cobos asked Ögelman whether staff had any lessons learned from ERS' deployment during the February storm.

Noting ERCOT data that indicate load overperformed by 30 to 35% but that generation was 50 to 55% below its obligation, Ögelman said, "The generation performance jumped out at me. That side did not perform as well as we expected."

Commissioner Will McAdams filed a memo before the workshop calling for a "more conservative trigger" for deploying ERS resources and to consider increasing the program's \$50 million spending limit. The limit, found in a PUC rule. hasn't been raised since 2008.

### **ERCOT News**



McAdams also suggested developing an emergency pricing program, as directed by the state legislature; improving ERCOT's adequacy reports and forecasting; and reevaluating the market's scarcity pricing mechanism. He suggested potentially decoupling the systemwide offer cap, modifying the operating reserve demand curve and "setting the value of lost load in concert with examining the minimum contingency level."

The commissioners agreed to take up the issues during its open meeting Thursday.

#### Critical Gas Infrastructure Rules

Separately, the PUC opened to public comment a rule change requiring critical natural gas facilities to provide customer information to their utility providers and directing the utilities to incorporate the information into their load-shed and restoration planning (52345).

Stakeholders have until Oct. 7 to comment on the proposed rule. If a hearing is requested, it will be held Oct. 12.

The rule is a companion piece to the Texas Railroad Commission's (RRC) proposed amendment to the Public Utility Regulatory Act specifying the criteria and process by which natural gas providers are designated as critical customers or gas suppliers during an energy emergency. The RRC regulates Texas' intrastate natural gas industry.

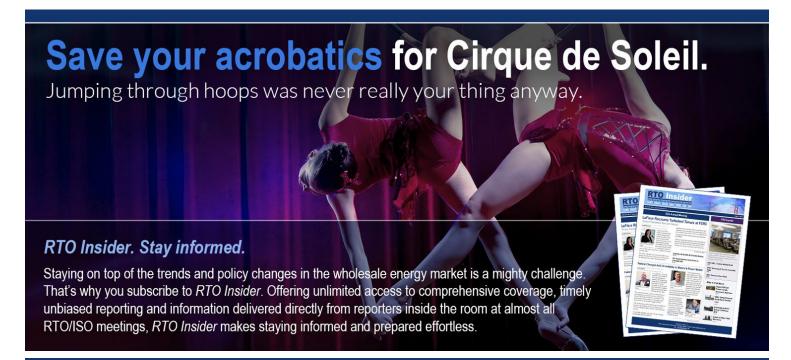
The two agencies have been urged to work



Texas energy efficiency programs have yielded savings but leave room for improvement. | Sierra Club

closer together in the wake of the February storm, when confusion over critical infrastructure led to some gas facilities being shut down during controlled outages. Chair Lake suggested the two agencies conduct a joint workshop, saying both industries are complex, "and we don't necessarily speak the same language."

"This is our quick action to ensure electric utilities have all the information they need from critical natural gas facilities to inform them in future load-shed events," PUC staffer David Smeltzer said.



### **ISO-NE News**



## **NEPOOL Markets Committee Briefs**

## ISO-NE Discontinues Feedback on Certain MOPR Elimination Proposals

ISO-NE plans to discontinue feedback on three stakeholder proposals as part of discussions on eliminating the minimum offer price rule, the RTO said during a two-day meeting of the NEPOOL Markets Committee last week.

In a *memo* to the committee, Mark Karl, vice president of market development and settlements for ISO-NE, said that while the RTO's current proposal is focused on removing the MOPR and addressing related market risks, "participants have also raised a notable number of market proposals during the committee discussions."

"Over the last few months, the ISO has consulted with and provided feedback to each of the sponsors of various conceptual stakeholder proposals," Karl wrote. "Some proponents have removed their proposals from the MOPR discussions onto separate tracks, while others primarily consist of feedback rather than developed conceptual proposals at this point."

Karl said it is not the RTO's intent to "completely dispense" with further discussion of

the proposals from FirstLight Power, Energy Market Advisors (EMA) and Jericho Power. But FirstLight's capacity performance payments (CPP) *proposal* and EMA's balancing resource constraint *concept* appear to be independent of the elimination of the MOPR, according to Karl, and are "complex relative to the time available to finalize the necessary and important design details."

EMA also presented concepts covering transition mechanisms, and ISO-NE is open to them. Still, the RTO does not support reinstating a price floor mechanism as an alternative to eliminating the MOPR and could not keep that as a part of any transition proposal, Karl said.

Jericho's demand curve scaling factor proposal and Pay for Performance (PfP) and accreditation modifications also do not appear to hinge on eliminating the MOPR, Karl said. However, the RTO said accreditation would be addressed better when discussing resource capacity accreditation.

## Tariff Changes Proposed for E&AS Markets for Order 2222 Compliance

For distributed energy resource aggregations

to participate in the energy and ancillary services markets, ISO-NE is *proposing tariff revisions* as part of its Order 2222 compliance filing due in early 2022.

Each substantive change to the tariff is linked to one or more of the 11 compliance directives, including:

- allow DER aggregations to participate directly in RTO/ISO markets and establish aggregators as market participants;
- register aggregations under one or more participation models that accommodate the physical and operational characteristics of the DER aggregations; and
- address distribution factors and bidding parameters for DER aggregations.

Because of the structure of its markets, ISO-NE is considering two effective dates for the proposed tariff changes, one for the Forward Capacity Market changes and a second for the remainder of the changes that impact the energy and ancillary services markets. The latter changes are more extensive and impact electric distribution companies and potentially their state regulators.





Wholesale electricity costs went up 19% this spring from the same period in 2020 driven by higher natural gas prices. | ISO-NE

### **ISO-NE News**



ISO-NE will send its compliance filing on Feb. 2, 2022, and it will likely take FERC several months to review it and issue an order. The Forward Capacity Auction 17 qualification process will be entirely or primarily completed when an order is given on the compliance filing. As a result, FCM changes could be effective for FCA 18, which will run in February 2024 for the capacity commitment period beginning on June 1, 2027. That would require the FCM portion of the design to be implemented by the start of the FCA 18 qualification process in spring 2023.

The RTO said it is confident that it can achieve that, assuming an order is issued by FERC accepting the proposed FCM design by the end of 2022. Thus, changes to the energy and ancillary services markets could be in place by the fourth quarter of 2026, ahead of the 2027 CCP. State regulators may also need to establish rules, requirements or cost recovery mechanisms associated with EDCs under Order 2222.

## **Monitor: Spring Wholesale Market Costs**

ISO-NE's spring wholesale market costs totaled \$1.49 million, an increase of more than 19% from the previous spring because of higher natural gas prices, the RTO's Internal Market Monitor said in its quarterly markets

Average day-ahead and real-time hub LMPs were \$28.69 and \$27.89/MWh, respectively, 66% and 58% higher than the same period in 2020, according to IMM Economist Donal O'Sullivan, who presented a summary of the report. Last spring, lower prices resulted from decreased residential and industrial demand during the economic shutdown amid the COVID-19 pandemic.

There also was a special section of the report that reviewed the performance of Competitive Auctions with Sponsored Policy Resources (CASPR) to examine if it is working as

designed. CASPR has been in effect for the past three FCAs, though the RTO has seen limited entry into the FCM. To date, only 12 existing resources have entered the auction as eligible to participate in CASPR. Seven of those resources obtained a capacity supply obligation in the primary auction, which they could potentially trade to a new sponsored resource in the substitution auction. Still, only one of those resources (54 MW) successfully retired via CASPR.

Test price mitigation, which is supposed to prevent policy resource subsidies from suppressing the primary auction price, does not appear to have been a determining factor in low participation from existing resources in the substitution auction. Instead, the RTO said in its opinion that the primary driver is low primary prices that reflect a system that currently has a moderate surplus of capacity.

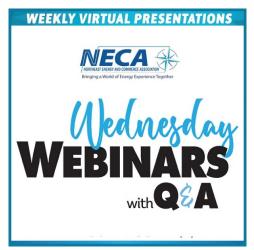
- Jason York





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## **Entergy Fends off Calls for Tx, Solar, Microgrid Investment**

By Amanda Durish Cook

Entergy is pushing back against suggestions that sturdier transmission infrastructure and more solar panels or microgrids would have helped the coastal Louisiana grid better endure hurricanes.

Entergy Louisiana CEO Phillip May said neither transmission reinforcements, solar generation, nor microgrids would have made for a nimbler restoration in New Orleans after Hurricane Ida. The company has been pressured on those points following the total blackout of the city after the hurricane's strike last month. (See Experts Call for Tx Reinforcements, Microgrids in Gulf System After Ida.)

"The damage to our grid is driven by a storm that was nearly a category five. It is the second strongest storm to ever strike Louisiana," May said during a Friday press conference. "The reason we have these outages ... is because Mother Nature is the undisputed world champion. We can engineer some of the most robust structures, and Mother Nature will simply take those out in storms like this."

He said Entergy has invested in a hardy system and continues to make infrastructure improvements.

"However, we have to balance the fact that perhaps a third of our customers are at or below the poverty level," May said, adding Entergy cannot trade reasonably priced energy for clean and more localized energy. "Ideas like solar panels and microgrids certainly have their place, but we have to ensure they're affordable," he said. "In my mind, the notion that we haven't invested in our grid is just flat wrong. The data refutes it. We are interested in microgrids and in adding solar."

May said Entergy will have "enhanced infrastructure" where complete rebuilds are needed, as is the case with the transmission tower that toppled along the Mississippi River.

"But even with that, we know that there will always be a storm that can take out that infrastructure, whether it's microgrids or the robust infrastructure that we continue to build," he said.

In an emailed statement, Entergy said it will step up hardening and resiliency investments as climate impacts become more pronounced.

"While ensuring the resilience of our infrastructure has always been a primary focus, we recognize that we must accelerate our efforts in light of increasingly frequent and se-

vere weather events," the company said. "We will continue to refine our understanding of where the specific risks attributable to climate change are expected to become more severe in the years and decades ahead and focus our hardening efforts accordingly."

Entergy pointed out that since 2016, it has completed \$12.6 billion in transmission and distribution construction and has recently spent about \$1 billion systemwide to upgrade plants and substations so they can better withstand hurricanes.

During a Sept. 9 media call. Entergy New Orleans CEO Deanna Rodriguez praised the new, natural gas-fired New Orleans Power Station, which she said performed "brilliantly" following Hurricane Ida.

"This is the plant that allowed first light to New Orleans nearly 48 hours after the storm," Rodriguez said.

Critics have cast doubt on the plant's black start capabilities, since Entergy opted out of starting the power station without first establishing a transmission link to the Eastern Interconnection. (See Entergy Touts Restoration; NOLA Leaders Question Lack of Blackstart Service.) More than 500,000 customers remained



Hurricane Ida restoration | Entergy

offline amid triple-digit heat indexes in Louisiana the week after Labor Day.

MISO Vice President of System Planning Jennifer Curran said Entergy's transmission system withstood the storm better than in past hurricanes. She said the utility's distribution system, however, took a more punishing

Curran said that as of Sept. 15, all major transmission has been restored except for a few towers that were directly in the storm's path.

"At this point, neither transmission or generation are limiting the restoration of load," Curran said during a Wednesday teleconference of the MISO Board of Directors' System Planning Committee.

But Ida's fallout may force Entergy to reckon with climate-change activists. They had harsh words for Entergy earlier this month during a press conference hosted by the Gulf Coast Center for Law and Policy (GCCLP).

The group's executive director, Colette Pichon Battle, said she is a resident of St. Tammany Parish on the north shore of Lake Ponchartrain.

"I'm calling in from Texas because my family,

like so many others, is still evacuated from southern Louisiana," she said.

Pichon Battle said Ida's landfall on the 16th anniversary of Hurricane Katrina is an "eerie reminder" that climate change is affecting the Gulf of Mexico's coastal regions now.

"The energy infrastructure is not built to withstand climate change," she said of the Entergy grid.

Jessica Dandridge, executive director of the Water Collaborative of Greater New Orleans, said she rode out the storm, but was then forced to stay with friends in Mississippi and then Michigan.

Dandridge said the failures of Entergy, a Fortune 500 company with billions in earnings, were unacceptable. She urged others to push utilities on grid resilience and renewable energy, pointing to residential rooftop solar and microgrids.

"We have given everything, all our savings ... our homes, our family heirlooms," she said, saying it was time for the utility to invest in the community.

"We as a nation cannot take the same approach," said Jennifer Crosslin, with both Southern Communities for a New Deal and GCCLP. "This moment calls for our nation do something it never has really done before."

Crosslin said climate justice and climate equity have become "hollow promises" from southern leaders.

In 2019, Entergy New Orleans was resistant to the city council's resilient renewable portfolio standard requiring net-zero emissions by 2040 and 100% clean energy by 2050. It threatened to sue New Orleans if it was forced to prematurely retire generation resources.

"Any standard adopted in this proceeding that would require [Entergy New Orleans] to retire council-approved resources before the end of their useful lives, or that would penalize [it] for operating those resources in a manner consistent with prior council approvals, would be unenforceable and lead to litigation," the utility warned in late 2019.

Entergy said New Orleans' renewable portfolio and climate resilience standard would lead to "needless rate increases" that would cause the "entire regional economy to suffer."

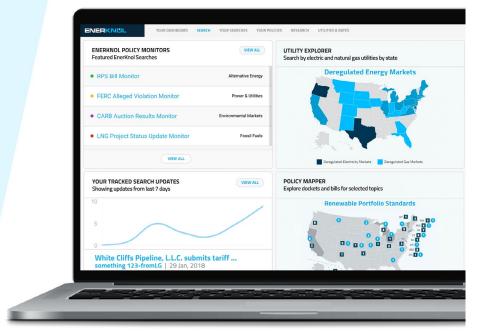
New Orleans approved the RPS in May after two years of negotiations. ■

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### MISO Stakeholders Blame Entergy for Long-range Transmission Impasse

Continued from page 1

transmission plan "to a halt."

"MISO needs to lead, not be led by members with parochial interests," he said.

New Orleans-based clean energy consultant Andy Kowalczyk also said MISO South would be better served by RTO-led effective and competitive transmission planning.

"The regional grid should not be built to accommodate the economic self-interest of investor-owned utilities and doing so will not just risk the larger market, it will risk the stability of the grid and public safety by blocking more competitive and/or efficient options," he told MISO directors.

Kowalczyk said Entergy Louisiana's grid is both unprepared for a transition to clean energy and extreme weather events. He said he was forced out of his home for several days after Hurricane Ida. "We've been given two warnings about the transmission grid in eight months with extreme weather events in the footprint, three in nearly a year if you count [2020's] Hurricane Laura," Kowalczyk said, referencing Hurricane Ida and Winter Storm Uri this year. "If the RTO is not assertive in deploying regional reliability projects for the next 20 years of challenges on the grid, the system will become a symbol for decline."

This isn't the first time Entergy has been accused of stalling major MISO transmission planning. Renewable advocates involved in a Mississippi Public Service Commission docket said recently that the state and Entergy Mississippi, the latter threatened by the prospect of competition inching into its territory, deliberately delay large-scale transmission expansion efforts. (See Mississippi PSC Audit Questions MISO Membership.)

Kowalczyk also asked MISO to lead the cost-allocation effort and develop a mechanism that results in "projects being built, not

something that checks all the boxes for some utility members."

#### **Deadlock over Allocation**

Members are at a stalemate over how MISO should divide up potentially billions of dollars in its long-range transmission planning construction costs.

Xcel Energy's Carolyn Wetterlin, chair of MISO's cost-allocation working group, said stakeholders have not reached consensus on an appropriate cost-sharing plan. She said some believe the grid operator can reuse cost allocation from its 2011 Multi-Value Project (MVP) portfolio while others favor an entirely new plan and want different cost-sharing plans for the Midwest and South regions. Still other stakeholders remain keen on assigning some costs to interconnecting generators hoping for grid treatment.

MISO "is in a tough spot, trying to find a balance between those conflicting positions,"



Great River Energy line construction in 2020 | GRE



Wetterlin told the board.

Stakeholders have cautioned the RTO against proposing cost allocations for projects in MISO Midwest that are different from those in MISO South, saying it would effectively create a seam within the footprint. (See MISO Dusts off MVP Cost Allocation for Long-range Tx Plan.)

The grid operator might finalize a costallocation proposal for long-range projects sometime in November, drawing on MVP cost-sharing principles.

"The cost allocation, no surprise, remains challenging," MISO Vice President of System Planning Jennifer Curran said.

She said the stakeholder community is unlikely to be in lockstep on any allocation approach or the project candidates themselves, calling broad consensus "elusive."

"We remain focused on getting to a leastregrets collection of projects as quickly as we can," she said. "At some point, more time won't get us to consensus no matter how much more discussion we have."

Curran said should MISO decide on a \$30 million portfolio, for instance, the projects would be brought forward for approval over the next three to five years.

#### **Insufficient High-voltage Tx**

Aubrey Johnson, MISO's executive director of system planning, said the RTO will have more than 5,000 miles in new transmission lines come online over the next decade that were approved under its previous MISO Transmission Expansion Plan (MTEP) cycles. He said only 232 miles of those new lines will be rated at 345 kV and greater.

On the other hand, Johnson said, all projects in the long-range transmission plan will be 345 kV or higher. He said firm transmission service for resources is crucial to MISO members being able to reliably serve load.

Johnson warned that an Organization of MISO States survey predicting adequate resources in 2022 doesn't account for extreme weather events. (See 2021 OMS-MISO Resource Adequacy Survey Shows Less Cause for Concern.) Should MISO encounter extreme weather, he said, some local resource zones could be at risk of insufficient resources to serve load.

None of MISO's long-range transmission projects will make the December cut for MTEP 21. Those projects will come before the board for approval in March at the earliest. (See MISO Targets March Approval for Long-term Tx Projects.) MTEP 21 currently includes 367 projects totaling almost \$3.25 billion.

MISO has opened a stakeholder suggestion window for additional long-range projects. Jarred Miland, the RTO's manager of transmission planning coordination, said staff may face a lot of work in analyzing project proposals.

"Are we going to get five solutions or 572? We'll see," Miland said during a long-range transmission workshop last month.

The monthly workshops on the long-range plan have become heated lately. In August, Miland told Bill Booth, a consultant to the Mississippi PSC, that he wouldn't rehash why staff is conducting a transfer analysis as part of the long-range study.

Miland directed Booth to staff's underlying reasons for the long-range plan: to support a

renewables-heavy fleet and additional electrification, to ward off reliability violations, and to adapt to shifting flow patterns as aging plants retire and members up carbonreduction goals.

WPPI Energy's Steve Leovy repeatedly asked why MISO edited a reliability analysis presentation the day before the Aug. 27 meeting.

Staff said the presentation was reposted to correct typos. When Leovy continued to question their reasoning, MISO planners said they would not address it further. Leovy said he was "disrespected" and expected better of the grid operator's management.

"I think we have a common goal of a safe, reliable transmission system," WEC Energy Group's Chris Plante said. "I really want to stress the importance of working together."

The Union of Concerned Scientists' Sam Gomberg told Leovy that his and others' concerns were part of the reason MISO has held the monthly workshops. Gomberg called the meeting frequency an "arbitrary milestone."

"This sort of hard, last-Friday-of-the-month might be an imposition here," Gomberg said, suggesting that MISO could sometimes forgo a teleconference and simply post the latest results of analyses for stakeholder review.

Clean Grid Alliance's Natalie McIntire thanked MISO planners for their "behind-the-scenes"

"It's clear to me that the scope of this study is the largest and most complex scope that MISO's ever done, larger than the [MVP portfolio]," she said. ■





## MISO Backs Divisive Seasonal Capacity Design

By Amanda Durish Cook

MISO said last week it will give stakeholders more time — but not much — to get comfortable with four seasonal capacity auctions and a capacity accreditation rooted in a generating unit's actual performance during tight conditions.

The grid operator has not determined how many more weeks it may wait before making a FERC filing. Its current goal is to make the filing before October.

"My biggest concern is that if we take more time, it means we're standing in a safe place. Past performance says we're not," MISO CEO John Bear said during Thursday's Board of Directors meeting. "I do sympathize with the members ... and I want to give you more time. But I want to make sure we file with enough time to get this in place for the 2023/24 planning year."

At present, no one appears happy with MISO's plan to embark on seasonal capacity auctions. Members have called for more supporting analysis and the Independent Market Monitor has criticized what he calls a too-lenient accreditation.

Bear said intensifying storms, escalating generation outages, and resources not performing to their accredited values means the RTO

must change its resource adequacy design. He pointed out that while 2005's Hurricane Katrine took out about 17,000 poles, Hurricane Ida took down 30,000 poles.

"We're seeing more than 20% of the fleet unavailable on hot summer days," he said. "With capacity continuously unavailable, we're relying on non-firm resources."

MISO management defended the need for four distinct capacity auctions and reserve targets with a performance-based accreditation after stakeholders overwhelmingly voted two weeks ago to delay the filing into the second quarter of 2022. (See MISO Stakeholders Vote on Seasonal Capacity Auction Delay.)

Richard Doying, the RTO's executive vice president of market and grid strategy, addressed the vote and said that while stakeholders asked for a slowdown, none fundamentally disagreed with MISO's proposal.

"What people said is, 'This is complicated; can we have several more months to talk about it?" he said during a teleconference of the board's Market Committee on Sept. 14. "Unfortunately, I feel that the time for inaction is past us ... We're at the point where the time to file is upon us. We're taking a directionally correct step."

Doying said it's imperative that MISO move

away from the current resource-adequacy construct's assumption that emergency events only occur in summer. He said until summer 2016, emergency declarations were virtually unheard of.

"It was an incredibly rare event in the control room," he said.

But since mid-2016, MISO has had 39 maximum generation warnings and events, the majority of them outside summer months.

Doying said the RTO has been mulling a seasonal capacity method longer than some may realize. He said staff discussed the possibility years ago when a combined-cycle generator demonstrated poor availability in the summer but stable availability during the winter.

MISO Executive Director of Market Operations Shawn McFarlane said the grid operator is at the point where it may have a maximum generation event any day of the year during high-outage periods.

Consumers Energy's Kevin Van Oirschot said MISO should provide an exemption to accreditation reductions when outages are planned sufficiently in advance. The grid operator's current proposal would reduce unavailable generation's capacity credits during tight operating hours, even if they're on a previously scheduled outage.

Van Oirschot said members are struggling to understand how their fleets' accreditations will be affected under the proposal.

WEC Energy Group's Chris Plante said the proposal might cause members to submit several planned outage requests and then withdraw all but one to get better odds in landing an outage timeline that isn't in the predefined risky hours.

Doying said MISO's new availability-based accreditation concedes the new reality that emergencies are more unpredictable and likely to materialize at more points during the year.

"It's much more difficult when none of us know the hour when the emergency will occur," he said, acknowledging stakeholders' concerns that the new accreditation makes outage scheduling without reducing accreditation a trickier process.

Travis Stewart, representing the Coalition of Midwest Power Producers, said MISO has yet to articulate how the seasonal capacity and accreditation design will improve the con-



Ameren Missouri storm restoration in July | Ameren Missouri



version of capacity to energy. He said while MISO offered a proposal to stakeholders several years ago, it didn't have specific details firmed up until August.

Stewart also said the seasonal filing doesn't address winter weatherization of generating units.

"I think the last thing my company wants is to have these debates in front of FERC." Plante said.

"It is a fair concern that it's more difficult to predict risk, but that doesn't mean we shouldn't try" to anticipate it, Doying said.

The proposal forces staff and members to confront reality, Doying said, and determine sooner whether new resources should be constructed when a local resource zone won't have enough capacity to cover load. He also said the proposal has undergone a "lengthy stakeholder process."

### Not Far Enough for IMM

MISO IMM David Patton warned the RTO's executives and the board that he would oppose the filing in front of FERC if it's filed as-is.

"We're at a point where we can't support the filing, but we hope a second iteration of the filing might correct some of these concerns," Patton said.

He said MISO began with a strong proposal but made several changes that were "diametrically opposed" to its objective of ensuring resource availability. The accreditation component was changed at the behest of members, Patton said, making the proposed accreditation impotent.

The grid operator originally proposed that a

resource's accreditation would hinge solely on availability during "resource adequacy hours," or the year's top 5% of hours that staff believes contain reliability risks. The plan now includes unremarkable hours in addition to RA hours and a 24-hour grace period for offline resources during tight condition hours, leading to more lenient accreditations. (See MISO Softens Capacity Accreditation Proposal.)

Patton said a transition to a more intermittent-heavy fleet demands that MISO have a stricter accreditation. "The right answer is not the popular answer," he said.

Patton said he also opposes MISO's minimum capacity requirement, where a member must demonstrate that it has procured at least 50% of the capacity required to meet its peak load ahead of MISO's voluntary capacity auction. He said the rule was unnecessary and should be excluded from the seasonal capacity filing.

Doying characterized the minimum capacity requirement as "guardrails" and said it's important that MISO's tariff reflect its members' obligation to plan. He said the rule wouldn't impose new requirements on most members, who already must demonstrate that they've procured most of their capacity outside of MISO's auctions. He called it "a stretch for a small number of entities."

#### **Close Calls in Summer**

Punishing heatwaves in MISO's North and Central regions have led to several emergency procedures this summer. The grid operator declared six maximum generation alerts: June 10, June 28 and 29, July 6, and August 24 and 25. MISO said temperatures in the northern footprint were about five degrees higher than the five-year summertime average.

"Eleven days this summer, we experienced tight periods where it was difficult to serve load," Jessica Lucas, senior director of reliability coordination, told MISO board members.

The difficulties were reflected in MISO's \$35/ MWh real-time average price, substantially higher than 2019's and 2020's average \$24/MWh summertime price. The 119-GW summer peak on Aug. 24 didn't top staff's expectation of a 122 -GW peak.

MISO briefly entered a maximum generation emergency just once, on June 10. Greater than expected load-modifying resource (LMR) commitments and non-firm imports ultimately brought the emergency to heel before the situation could deteriorate. (See "MISO Defends June Emergency Declaration," MISO Market Subcommittee Briefs: July 8, 2021.)

Patton asked that MISO become "more surgical" in LMR commitments during emergencies, asking specifically that it only ask for the megawatts it needs rather than calling on the entire 11 GW pool of LMR capability.

"Even if we could scale back a moderate amount, we'd become more efficient." he said.

MISO believes that introducing a 30-minute energy reserve product before 2022 will help clarify when it requires an emergency.

MISO President Clair Moeller said the grid operator is "very much looking forward" to a reserve product that sets prices earlier and may tamp down out-of-market actions and pricing "turbulence" that take place ahead of emergency procedures.

The RTO reported that testing of short-term reserves is going well despite an interruption of some MISO South units during Hurricane lda. ■







## MISO IC Queue Tops 150 GW; Solar Maintains Lead

By Amanda Durish Cook

A record number of generator interconnection requests has ballooned MISO's queue to 153 GW, the largest it's ever been.

Developers this year submitted 487 proposals, doubling applications to 980, for approximately 77 GW of capacity. Were all the requests to be built, the 153 GW could handle MISO's current systemwide summer peaks with about 30 GW to spare.

Staff said renewable projects account for about 64 GW of the new additions, with solar generation accounting for 63% of the total queue.

"Ultimately, we've had the largest set of requests come in in the history of our company," Aubrey Johnson, executive director of system planning, told the Board of Directors' System Planning Committee on Wednesday.

Johnson said prospective generators continue to struggle to connect to the grid. Historically, MISO interconnects about a fifth of the generation projects that enter the gueue.

Johnson noted that in the past five years,

MISO has tied in about 35 GW worth of new generation to its grid.

"In many ways, the queue still works," he said. "It just wasn't meant to handle the volume of requests we're seeing today."

A decade ago, MISO accepted just 12 GW worth of requests. By 2019, the amount of new requests had grown to 44 GW and then to 52 GW in 2020. Over the summer, the gueue had dwindled to fewer than 80 GW and comprised approximately 500 projects.

"Know that we [are] rife [with] activity in the online queue portal," Manager of Resource Utilization Jesse Phillips told the Interconnection Process Working Group (IPWG) in July.

MISO said the monstrous queue further validates its long-range transmission planning, which is partly intended to better connect renewable-rich areas of the footprint to the system.

"The majority of the ... applicants are trending in line with meeting future clean energy goals set by our members and stakeholders," Andy Witmeier, director of resource utilization, said in a press release. "As intermittent resources become more prevalent, the need for our

long-range transmission planning efforts is reinforced to address potential operational challenges in the future and leverage our large regional footprint and resource diversity."

Global consulting firm ICF recently found that interconnection customers in MISO and SPP exclusively fund interconnection upgrades that have broader benefits for their systems. (See Report: Renewable Developers Footing Tx Upgrade Bills.)

MISO said the 2021 group of proposals marked the first time that requests for energy storage interconnections outstrip requests for wind generation interconnection. MISO processed 44 GW worth of solar requests, 12 GW of storage and a little more than 9 GW in wind requests.

"We anticipated this shift towards more renewable technologies as a replacement for retiring conventional generation across the footprint, and we expect it to accelerate in the future," Witmeier said.

The surge in storage requests come as MISO is readving its market platform to host storage offers by mid-2022. (See MISO: No Choice but to Double Up on 841 Compliance.)



| WEC Energy Group



## MISO Wants Abridged Stakeholder Meeting Schedule

By Amanda Durish Cook

When it emerges from the COVID-19 pandemic. MISO wants to limit its in-person stakeholder committee schedule to eight in-person meeting weeks per year.

The grid operator said it wants to group all stakeholder meetings of its main parent entities into eight separate weeks during the year. That means five full-day meetings will be packed into a single week. MISO hopes to debut the schedule beginning in late January.

MISO defines its main parent entities as the Market Subcommittee, Reliability Subcommittee, Resource Adequacy Subcommittee, Planning Advisory Committee, and Regional Expansion Criteria and Benefits Working Group, which makes cost-allocation decisions.

The committees currently meet monthly in separate weeks dubbed as planning week, markets week and reliability week.

MISO says the new arrangement will cut down on travel plans and registrations. The meeting weeks will be held on-site at either its Carmel, Ind., Eagan, Minn., or Little Rock, Ark., building locations. The weeks will be considered separate from MISO's board weeks, which are held quarterly at off-site locations.

If a committee wants to add additional meetings in a calendar year, the chairs must schedule a teleconference. Smaller committees like the Planning Subcommittee and the Loss of Load Expectation and the Interconnection Process Working Groups will also meet exclusively virtually.

Todd Hillman, the RTO's senior vice president and chief customer officer, said MISO also wants to make more use of joint committee meetings. He said staff often deliver the same presentation over multiple stakeholder meetings.

"It keeps our [subject matter experts] on a hamster wheel where they don't have new things to discuss, but they're forced to put a presentation together," Hillman said during a Wednesday Advisory Committee teleconference. "We want to try to get to the meat and potatoes of what we really want to discuss."

MISO said it will kick off meeting weeks with executive updates. It also said it won't schedule any stakeholder meetings after the December board week, which typically takes place during the month's second week.

Hillman said the new schedule will avoid meetings scheduled too close to holidays.

The Coalition of MISO Transmission Customers attorney Kevin Murray asked whether MISO would introduce a vaccine mandate before it begins holding in-person meetings.

"It's one that we're struggling and juggling with every day." Hillman said. "We've talked about vaccination proof; we've talked about masking; we've talked about COVID testing; we've talked about social distancing and how that's done with meetings of our size."

Hillman said MISO will survey stakeholders' willingness to vaccinate, mask and submit to testing at MISO facilities.

He also said MISO will try to get a feel of its members' travel budgets and restrictions, which Hillman said are currently "all over the

"If we have eight stakeholders show up, that's not going to be ideal," he said.

Some stakeholders said packing executive updates and five all-day meetings during the work week might be a whirlwind, with some referring to the eight weeks as "MISO Superweeks."

Madison Gas and Electric's Megan Wisersky worried that a "superweek" could lead to burnout. "No one should underestimate the amount of work this is, especially when a company sends one representative," she said.

Hillman promised more details on the new schedule soon.

During a Thursday board meeting, CEO John Bear said it's becoming clear that the COVID-19 virus is something that MISO will have to learn to live with. The grid operator has planned an in-person Board Week in Orlando, Fla., in early December. It will be its first in-person meeting in almost two years.

Bear also said staff was welcomed back to the office Sept. 7 in a hybrid in-person and virtual format, despite the Delta variant's threat.

"We've got a greater than 85% vaccination rate," he said of MISO's more than 1,000 employees. The grid operator has not yet enacted a vaccine mandate for staff.

CFO Melissa Brown said the pandemic continues to cause higher-than-expected employee vacancies and delays in building maintenance and outside consulting services. Altogether, COVID-19 is expected to yield a \$4 million savings to MISO's base operating



The February 2020 Resource Adequacy Subcommittee was one of the last meetings MISO held in-person. © RTO Insider LLC

budget, now at \$267.7 million. The COVID reductions are partially offset by an unexpected \$1.5 million in legal fees MISO spent after it decided to initiate rolling blackouts during February's winter storm. (See MISO Begins Cold Snap Examination.)

#### Stakeholder ID Rules

The new meeting schedule coincides with new etiquette requirements for stakeholders during meetings.

Members voted in new rules that encourage stakeholders to identify themselves and their companies before they speak in public meetings. The Advisory Committee approved the ruleset by consent on Wednesday

Rules for consultants are a bit more complex. If a consultant is working under a nondisclosure agreement, they must name the MISO sector aligned with the company they represent. Consultants are also expected to announce when they begin speaking whether they represent multiple clients.

To sign in to virtual meetings, stakeholders must also provide their full first and last

The instructions will be enshrined in the MISO Stakeholder Governance Guide's procedures section. The approved language concludes more than a year of debate on the topic. (See MISO Members Greenlight Stakeholder ID Rules.)

Steering Committee Chair Jeff Dodd confirmed that the language will empower committee chairs to stop recognizing stakeholders during meetings if they've refused to disclose their name, company or sector affiliation.

Hillman, cueing up the meeting's next topic, identified himself as working for MISO and "representing all sectors."

"I'm an Aries, I'm 52 years old and I married my high school sweetheart," Hillman joked.



### **New Yorkers Debate Clean Energy Policies at IPPNY Fall Conference**

By Michael Kuser

Experts from across New York's energy industry on Wednesday discussed how to best deal with global climate change, foster new technologies and ensure that the state leads the nation in clean energy while maintaining economic competitiveness.

"My priority is how do we evolve our industry, maintain reliability, and reach the goals of the Climate Leadership and Community Protection Act [CLCPA] of 2019 through competitive markets and private investment, which are really the linchpin to helping consumers prosper in New York state," Independent Power Producers of New York CEO Gavin Donohue said at IPPNY's 36th Annual Fall Conference.

Donohue said IPPNY last month partnered with the AFL-CIO and the New York State **Building and Construction Trades Council** to submit a petition to the Public Service Commission requesting the development of a market for zero-emission technologies that will help meet the state's goal of net-zero electricity by 2040.

The petition urged the PSC to establish a competitive program to secure investment in 1 GW of zero greenhouse gas emission resources by 2030, and to include prevailing wage clauses in project labor agreements (15E-0302). (See NY Generators Seek State Incentives for New Clean Energy Resources.)

Today the dispatchable fuel in New York is natural gas, while in 2030 or 2035 it could be renewable natural gas, or hydrogen fuel cells, "not to mention the potential for carbon capture and sequestration," Donohue said. "It could be a technology none of us have even thought of yet."

#### New Leadership, Goals

New York has a new governor in Kathy Hochul, the first woman to serve as the state's chief executive, and she has established new clean energy goals since taking office Aug. 24, said New York State Energy Research and Development Authority CEO Doreen Harris.

"The announcement to sign legislation requiring the transition to 100% sales of zero-emission passenger vehicles by 2035, that's cementing our role as a leader in this space," Harris said. "She's been present when we've held events [and] it is clear to me and to others that she's there to support not only the industry and the process, but also the outcomes as being hugely beneficial across New York."

Harris said she'd been pleased to see the IPPNY petition filed with the PSC and looks forward to learning more about the topic, receiving comments, and ultimately developing an approach to realizing the technologies needed in support of the 2040 emissions-free power target.

The CLCPA also calls for the procurement of 6 GW of solar by 2025, 3 GW of storage by 2030, and 9 GW of offshore wind by 2035, and all targets are on track, she said.

Asked about responsible siting of large-scale renewable energy resources, Harris said that "from the perspective of host communities directly, we have an entire clean energy siting team, and their sole job is to bring information and resources to bear on those same host communities, because ultimately we need information to be flowing in both directions to get these projects right. And they do need to be permitted to begin paying on our contracts, so ultimately we need the projects to advance in a manner that can be successful in that process."

#### Goodbye Gas?

NYISO has repeatedly emphasized the need for dispatchable generation to firm up variable resources in a way that ensures the grid remains stable 24/7, 365 days a year, Donohue said.

Achieving the CLCPA goals will require transitioning the existing natural gas infrastructure to providing lower carbon fuels in the future, said Donna DeCarolis, president of the Na-



Clockwise from top left: Michael Mager, Couch White; Donna L. DeCarolis, National Fuel Gas Distribution; William Acker, NY-BEST; John Reese, Eastern Generation; and Kit Kennedy, NRDC. | IPPNY



tional Fuel Gas Distribution Corporation.

"In New York state we have 49,000 miles of underground natural gas delivery systems — 10,000 miles in western New York, and it's really storm-resistant in the coldest weather," DeCarolis said.

She cited the 2006 "October surprise" ice storm in western New York, and a 7-foot snowfall in November 2014, during which "natural gas was being delivered to homes without interruption, so that's just an important resource that we want to consider, and it also provides a great deal of storage as well."

The New York Climate Action Council's Power Generation Advisory Panel in May decided to recommend that the full council adopt a moratorium on building new gas-fired power plants and related infrastructure — with the caveat that it did not achieve consensus on the idea. (See NY Power Panel to Recommend Gas Infrastructure Moratorium.)

Many studies say that in 2040 New York will need between 17,000 and 25,000 MW of rapid-start, dispatchable units that can run for a long time, said John Reese, senior vice president at Eastern Generation.

"Currently, for those to be non-fossil fuels we require magic," Reese said.

The studies assume there are renewable natural gas units of some type that supply that need, but those are proxies, he said. Other potential solutions such as green hydrogen or long-term batteries could materialize, but "technology development is not easy and infrastructure in New York is not easy and we have very little time. I believe we need a moonshot-like level effort to ensure that we have the kinds of technologies we need to keep the lights on."

It's "a heavy moment" and in many ways the urgency of climate change and the impacts that New York is already experiencing grow larger every day, and the hardest impacts hit disadvantaged communities of color, said Kit Kennedy, senior director of the Climate & Clean Energy Program at the Natural Resources Defense Council.

"The work that New York state and the Climate Action Council are engaged in is more important than ever, literally a matter of life and death for increasing numbers of people," Kennedy said. "But there's still room for optimism and hope. The CLCPA is such a historic, transformative piece of legislation, and it gives me hope that New York is going to be a great leader on climate as it has been for a long time."

From the perspective of large energy consumers, it appears that all the major decarbonization efforts are being funded by electric and gas customers through their energy bills as opposed to being covered from all sectors of the economy, said Couch White partner Michael Mager, who represents Multiple Intervenors, a coalition of large electricity users in the state.

"Our concern is that, from an economic development perspective, continuously increasing the cost of energy in the state is the wrong way to go," Mager said. "We understand that sometimes it's the politically expedient way ... but we think that continuously expecting that energy consumers will fund the entire order or a predominant share of the cost of the CLCPA" is not fair.

Release of the Council's draft scoping plan "will change everything," Mager said. "We hope to see an estimate of CLCPA costs as well as of benefits."

#### **Carbon Pricing**

Carbon pricing in the electricity sector "is a very elegant answer to a problem, and it allows regulatory bodies to ratchet down the available carbon tons that are out there as the price increases." Reese said. A carbon price sends a very clear economic signal, "so I remain a very strong advocate of that as being

the most cost-effective and transparent way to get there; however, I despair that it actually can happen given today's panorama."

Anything that puts a price on carbon emitters is an important tool in the toolbox but not at all a panacea, Kennedy said. "I would never trade carbon pricing for the CLCPA. At some point, in some form it could be an add-on, but not a standalone, silver-bullet solution."

Regarding the carbon pricing proposal advanced by NYISO, Mager said some of his concerns are related to the impacts on the New York economy, if the state is the only one to do it. (See FERC OKs Carbon Pricing Policy Statement.)

"We also guestioned whether it made sense to only apply it to the electric energy sector and to not have it be applied on a more general statewide basis," Mager said.

It's best to keep policies technology-neutral and technology-inclusive whenever and wherever possible, said Dr. Melissa Lott, director of research at the Columbia Center on Global Energy Policy.

"We can often fall into this trap of picking a single winner, and at the end of the day that really undermines our progress over all, if the goal is to get to zero emissions or 90% or anywhere really ambitious," Lott said.

Policy makers and industry leaders have also debated whether it is better to adopt a carbon tax or a clean energy standard, which Lott called a false choice.

A modest carbon price can still produce a signal in conjunction with standards and it "can actually make a clean energy standard much more efficient to have that price working in the background," Lott said. "Whether it's 70% by 2030 or 100% by 2035 or 100% by 2050, if it's the CLCPA or a federal standard, you know these studies about how we can actually make policies as efficient as possible are really important."

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## **NYISO Business Issues Committee Briefs**

By Michael Kuser

#### Weather Data Exemption for Small Solar

The NYISO Business Issues Committee on Sept. 14 recommended that the ISO's Management Committee approve tariff revisions to exempt solar generators no larger than 20 MW from certain meteorological data collection and reporting requirements.

Consistent with FERC Order 764, the ISO's Services Tariff Section 5.8 requires solar resources to collect and maintain certain meteorological data required for energy forecasting, but Order 764 was targeted at large generators, identified as those greater than 20 MW. The order requires solar resources to provide, at a minimum, site-specific meteorological data, including temperature, atmospheric pressure and irradiance.

If approved by the Management Committee and the ISO's Board of Directors, NYISO will make a Section 205 tariff filing with FERC.

The ISO's forecast vendor has data necessary to forecast solar energy production for small solar resources consistent with the characteristics and location, and uses a combination of satellite data, weather data and data from NYS Mesonet, a network of 126 weather stations with at least one in all 62 counties in the

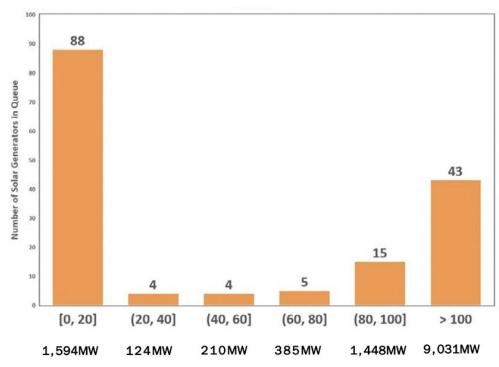
### AS, Reserves and CSR-related Manual **Updates**

The BIC also approved minor changes to three manuals to reflect changes for both the ancillary services shortage pricing and reserves for resource flexibility projects.

Based on stakeholder feedback, incremental changes were made to the proposed revisions for Section 4.3.4 of the Day-Ahead Scheduling Manual, Section 7.3.6 of the Transmission and Dispatch Operations Manual and sections 6.8.1 and 6.8.2 of the Ancillary Services Manual.

Changes to both the Day-Ahead Scheduling Manual and the Transmission and Dispatch Operations Manual updated the operating reserve demand curve values and clarified the descriptions of the various demand curves.

The BIC also approved revisions to the same three manuals to address implementation of the co-located storage resources (CSR) participation model.



As of May 2021, there were 159 solar projects in NYISO's interconnection queue. There were 88 projects of 20 MW or less for a total of 1,594 MW, four projects of 20 to 40 MW for 124 MW, etc. | NY/SO

The changes added language to include additional factors, such as scheduling limits, considered by security constrained unit commitment (SCUC) for CSR generators.

FERC in March accepted NYISO rules allowing an energy storage resource to participate in the wholesale markets with wind or solar as a CSR. The ISO currently anticipates that the CSR-related tariff revisions will become effective in the fourth quarter, following testing of needed software changes. (See FERC Approves NYISO Co-located Storage Model.)

#### **Uneconomic Production and Uneconomic Withdrawal**

The Business Issues Committee approved, with one vote against and one abstention, changes to the rules governing uneconomic production and uneconomic withdrawal to ensure that mitigation measures appropriately address such situations.

Previous limitations to the rules included: requiring intent on the part of a resource "to cause, and obtain benefits from" uneconomic production or withdrawal, challenges with the conduct test when references are low or negative, and challenges with the impact test being limited to an increase of 200% or \$100/MWh.

The new definition of uneconomic production and uneconomic withdrawal uses language from the definition of physical withholding, removes intent from the definition, and is more consistent with economic withholding and physical withholding.

The current threshold for triggering an impact test for uneconomic production or uneconomic withdrawal is: (1) a change of 200% or \$100/MWh, whichever is lower, in the hourly Day-Ahead LBMP, real-time LBMP, Day-Ahead congestion component, or real-time congestion component; or (2) an increase of 200%, or 50% for generators in a constrained area, in bid production cost guarantee payments or day-ahead margin assurance payments to a market participant or affiliate.

For purposes of the first trigger, a change is defined as the absolute value of the difference between the prices or congestion components that resulted from the market participant's uneconomic production or uneconomic withdrawal behavior and those that would have occurred if the market participant had operated in a competitive manner consistent with its reference levels. The new definition requires a minimum change in price of \$25/MWh.

The proposed revisions are intended to help



ensure the impact test does not generate very tight thresholds when LBMPs or congestion is low.

The Market Administration and Control Area Services Tariff section 23.4.3.3.2 clarifies that the mitigation measure is a penalty calculated as 1) 1.5 times the increase in guarantee payment(s) to the conduct-failing generator for uneconomic production, and 2) 1.5 times the absolute value of the congestion component of the LBMP, times the quantity of megawatts produced by the conduct-failing generator for uneconomic withdrawal.

The tariff provides opportunity for consultation between NYISO and a market participant prior to applying mitigation, and the ISO will consider participant demonstrations that

the questioned conduct was consistent with competitive behavior.

#### **Economic Planning Manual Update**

The BIC also approved updates to the Economic Planning Process Manual to reflect the enhancements to the Economic Planning Process that were implemented through the revised NYISO tariff approved by FERC earlier this year. The changes include a process description of the System and Resource Outlook as well as the defined terms for related studies.

The changes update the description and defined terms for the Economic Transmission Project Evaluation (ETPE), formerly, CARIS Phase 2, and for the Requested Economic Planning Study (REPS), formerly the Additional CARIS Study.

FERC in April accepted tariff revisions to the ISO's economic planning process, effective April 11 (ER21-1074).

"We no longer use the term CARIS, for Congestion Assessment and Resource Integration Study, using instead the System and Resource Outlook to encompass its wider scope," said Jason Frasier, NYISO manager of economic planning.

The ISO will begin the 2021-2040 System and Resource Outlook kickoff at the Sept. 22 Electric System Planning Working Group (ES-PWG), where staff will present the study plan and reference case assumptions, with preliminary results to be presented at the ESPWG in late October or early November.

## **NetZero Insider**

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#### **MIDATLANTIC**

Va. Electrification Project Cuts Emissions, Utility Bills for LMI Customers

NJ Municipalities Tackle Carbon Emissions

#### **MIDWEST**

Pollinator Friendly Solar Farms May Increase Crop Yields

#### **NORTHEAST**

New York Adopts Goal for Disadvantaged Communities Under Clean Energy Fund

NY Enviros Want Cleaner Farms, More Equitable State Policies

Vt. Explores Upstream, Lifecycle Emissions as Supplement to **GHG** Accounting

Vt. Senator Says State Needs Formal Environmental Justice Policy

Lawsuit Questions Feasibility of Gas Turbine for Enbridge Compressor Station

Hochul Pledges to Make Climate Policy a Priority in Wake of NYC Flooding

Experts Say Mass. EV Drivers Need Incentives for Off-Peak Charging

#### **WEST**

Climate, Turbines Help Land Hawk on Wash. Endangered List

Wash. Ferries Making Move to Hybrid Engines

Spread of Calif. Hydrogen Stations Should Fuel FCEV Growth

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Enviros, Industry Urge Oregon's Swift Adoption of Clean Truck Rules

Report Details Challenges for Meeting Ore. ZEV Goals

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## **NYISO Rejects Most Comments on DER Treatment**

Asks FERC to Accept Bulk of its Order 2222 Compliance Filing

By Michael Kuser

NYISO last week rejected most comments and protests on its treatment of distributed energy resources and aggregations in its Order 2222 compliance filing, urging FERC to accept the tariff revisions with minor adjustments (ER21-2460).

Certain comments and protests propose "helpful" modifications to the proposed tariff language, the ISO said in its Sept. 14 answer filing, and agreed to make those requested changes.

"With respect to all of the remaining comments and protests, the commission should reject those comments and protests and accept the compliance filing without further modification," NYISO said. (See NYISO Discusses FERC Order 2222 Compliance.)

State regulators and related agencies, New York Transmission Owners (NYTO), investor-owned utilities, environmental organizations and consumer advocates have all submitted comments in the proceeding.

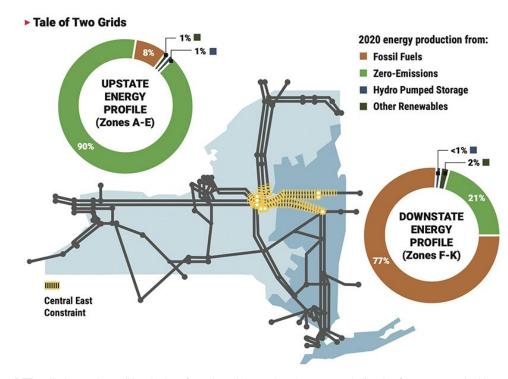
The ISO's DER and aggregation market rules treat these new types of resources comparably to other types of resources participating in its wholesale markets, consistent with commission directives, while also ensuring reliability, NYISO said.

NYISO commits to discussing the detailed technical requirements for DER and aggregation participation in the markets, it said, insisting that no additional "periodic updates" are needed beyond the established shared governance process. In addition, the ISO's market software can integrate these new resources without adversely impacting other market participants or the market.

### **Defining Small**

Regarding the ISO's "opt-in" to wholesale market participation for customers of utilities delivering 4 million MWh or fewer per year, various parties protested that the threshold should be calculated by distribution utility rather than by load-serving entity (LSE) as proposed in the compliance filing.

NYISO said it does not object to identifying small utilities by distribution utility rather than LSE, "so long as the commission accepts its proposal that the aggregator be responsible for attesting that the RERRA has authorized



DERs will change the traditional roles of supply and demand on the system, challenging forecasters and grid operators to account for these resources. | NYISO

the customers of that small utility to participate in the wholesale markets as part of an aggregation."

The ISO's metering and settlement systems are not designed to measure and calculate energy deliveries by distribution utility and would require time consuming and expensive upgrades to do so, it said.

NYTOs' proposed a tariff revision to more clearly identify the time gap between when the 4 million-MWh calculation can be performed (after Dec. 31) and the date any resulting decision to opt in or out would take effect (on May 1, at the start of the next new Capability Year).

NYISO agreed that NYTOs' proposal to add the words "for the forthcoming Capability Year" to the Market Services tariff is a helpful clarification.

NYISO's proposed rules on market participation agreements for DER aggregators are "impermissibly vague" because they fail to provide sufficient details about sequencing and the distribution utility's role and responsibilities in the authorization process, NYTOs said. The group therefore asked the commission to require the ISO to better define the distribution utility's obligations and to provide a timeline for the various components of the registration and enrollment process.

The ISO said it understands the NYTOs' concerns and is developing software that will automate the DER and aggregation enrollment process that will provide aggregators with electronic forms to be submitted to the

#### Same, or Substantially So

FERC granted RTOs/ISOs regional flexibility with respect to the restrictions each proposes to minimize market impacts caused by the double counting of services by DERs in the

NYISO's proposed restrictions prevent a DER from enrolling in an aggregation to provide the same megawatts for the same or a substantially similar service in wholesale and retail programs, preventing the DER from being compensated twice for providing a similar service.

Various parties argued that the phrase "same or substantially similar service" is vague



because the ISO's tariffs do not define what constitutes a "substantially similar service."

NYISO said it agrees that the language results in "unneeded uncertainty about what programs are prohibited," and that it also agrees with comments indicating that the New York Public Service Commission has taken an active role in specifying when participants in specific retail programs cannot also participate in the wholesale markets.

The ISO said it does not object to removing the phrase "or a substantially similar service" from the tariff requirements so that the requirements only apply to the provision of the "same" service in the wholesale and retail markets.

Several protestors and commenters found unjust and unreasonable NYISO's telemetry requirement that an aggregator must provide six-second telemetry for its aggregation and the requirement that metering data be submitted by noon the day after the operating day for use in the ISO's settlement process.

"As explained in Docket No. ER19-2276 and reiterated here ... the six-second scan rate applicable to all generators and aggregations is needed to (i) maintain situational awareness of the [New York Control Area] NYCA electric system, (ii) operate the NYISO's Automatic Generation Control process to maintain load and generation balance, (iii) meet mandatory bulk power system reliability criteria, including criteria unique to New York State, and (iv) respond to emergency conditions," the ISO said.

NYISO pointed out that it currently uses six-second telemetry signals to meet mandatory reliability criteria required by the New York State Reliability Council.

#### **Energy Efficiency**

Clean energy parties and consumer advocates argued that NYISO should be required to permit energy efficiency resources to participate as supply-side DER resources in its capacity market.

NYISO urged the commission to reject the request, saying it should not be required to change the DER rules that the commission accepted previously (ER19-2276).

"Energy efficiency reduces demand. Its impact is accurately accounted for on the demandside without the need to estimate the expected benefit, or to measure, verify and audit

resource performance on a continuing basis," NYISO said.

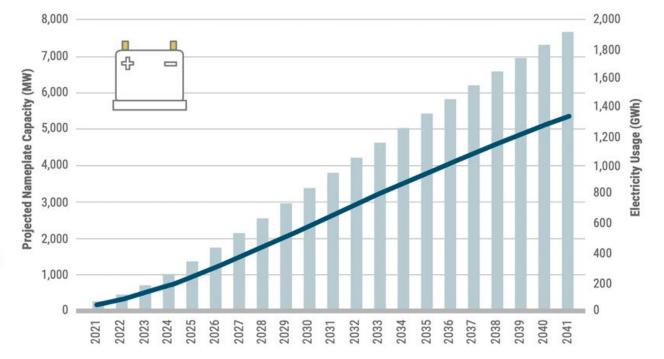
While capacity payments could be an additional source of revenue to spur energy efficiency projects, the ISO said it does not see significant reliability or market efficiency benefits in moving energy efficiency from the demand-side to the supply-side.

In its comments, the ISO's Market Monitoring Unit, Potomac Economics, recommended that the commission refrain from mandating that NYISO implement a supply-side energy efficiency participation framework or initiate stakeholder proceedings to pursue such a framework, as requested by the advocates.

"A mandatory supply side model would likely provide few benefits in terms of encouraging additional economic EE, while creating a host of problems associated with measurement and accreditation, cost shifting, adverse incentives, double compensation, load forecast modeling," the Monitor said. "Fundamentally, such an approach is unnecessary because customers that adopt EE measures can benefit directly or indirectly from reduced capacity obligations when EE is reflected on the demand side of the market."



Energy Storage **Forecasted Annual Net** Electricity Consumption (GWh)



Because of charging and discharging cycles, storage resources represent net load to the grid because they consume more electricity than they inject. | NYISO



## Two Transmission Projects Selected to Bring Low-carbon Power to NYC

Environmental Advocates Remain Concerned About Negative Effects on Hudson River

By Emily Hayes

New York has selected two transmission line projects to help decarbonize power in New York City, Gov. Kathy Hochul said Monday during the opening ceremony of Climate Week NYC.

The state, she said, chose the Clean Path New York project and the Champlain Hudson Power Express project from among seven submitted to the Clean Energy Standard Tier 4 solicitation issued in January.

"New York's communities are repeatedly facing serious consequences as a result of the devastation caused by the global climate crisis, and the stakes have never been higher as we deal with the economic and environmental destruction these extreme weather events leave behind," Hochul said.

The Champlain Hudson line, developed by Transmission Developers Inc. and Hydro-Québec, is an underground and underwater transmission line that would run 339 miles between the Canada-U.S. border and New York City.

"This is a transformative moment for New York City's fight against climate change,"

New York City Mayor Bill de Blasio said in a statement.

The project's opponents are concerned about the developers' plan for the line to cut through the Hudson River. The cable would be laid along 200 miles in Lake Champlain and the Hudson River with a machine that uses high-powered water jets to blast away sediment to create a 7-foot-deep trench.

That process, according to the environmental organization Riverkeeper, could churn up legacy contaminants such as polychlorinated biphenyl, which were once used as dielectric and coolant fluids in machines and dumped into the Hudson by General Electric.

"I'm dismayed that New York state found a way to avoid caring for ... the river when there are other solutions," John Lipscomb, Riverkeeper's patrol boat captain, told RTO Insider.

New York is "checking the green box without looking at the details, and the details are important," Lipscomb said.

Riverkeeper plans to meet with the New York State Energy Research and Development Authority (NYSERDA) next week about the final

approval of the line.

Once finalized, NYSERDA will submit the negotiated contracts for the awarded projects to the Public Service Commission for consideration and approval. If the Tier 4 contracts are approved, NYSERDA payments will begin when the line has all required permits and local approvals, is constructed and delivers power to New York City.

Routing and environmental work is underway on the 174-mile Clean Path line, according to a statement from the developers, Forward Power, a joint venture of Invenergy and EnergyRe, and the New York Power Authority. The project route runs from Delaware County, in New York's Southern Tier economic development region, through the Mid-Hudson region to New York City. A majority of the transmission line will be built on existing rights of ways already used by roads and transmission lines, the developers said.

The proposed Clean Path route, according to the developers' application, also requires burying the line in the Hudson River.

Full operations are expected to begin in 2025 for Champlain Hudson and 2027 for Clean



New York selected a 339-mile transmission line from Canada to Queens, N.Y., Monday from among the submissions to its Clean Energy Standard Tier 4 request for proposals. | Shutterstock

## PJM, NJ Staff Brief Stakeholders on State Agreement Approach

By Michael Brooks

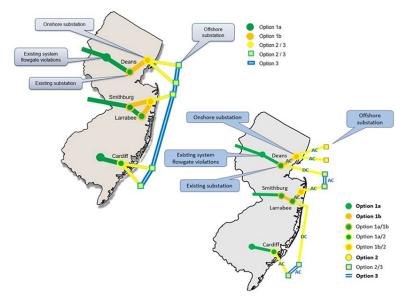
Staff for PJM and the New Jersev Board of Public Utilities on Sept. 14 gave stakeholders the nitty gritty details on the terms of the transmission projects the state is seeking to develop to facilitate offshore wind projects.

The special session of the RTO's Planning Committee came ahead of the close Friday of the competitive solicitation window for the transmission projects under the "state agreement approach" (SAA) of FERC Order 1000. Under this process, the New Jersev BPU asked PJM to conduct the solicitation, and the RTO will recommend a proposal, though the board will ultimately select the winning project.

The approach allows states to seek transmission solutions in response to public policy goals: in this case — the first ever, New Jersey's goal of deploying 7,500 MW of offshore wind by 2035. (See NJ Asks PJM to Seek Bids for OSW Tx.)

As projects are still being submitted, PJM staff did not go over the details of any candidate. Rather, the purpose of the meeting was to inform stakeholders how the winning proposal would link to the new offshore wind projects New Jersey is soliciting.

The BPU has already selected 1,100-MW and 2,658-MW offshore wind projects with



PJM gave an example of how proposals to New Jersey's solicitation for offshore wind transmission projects may look. | PJM

their own transmission that won't be subject to SAA cost allocation. The state is planning three more solicitations about every two years, beginning in the third quarter next year: two 1,200-MW projects and one 1,342-

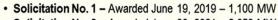
Suzanne Glatz, director of strategic initiatives and interregional planning at PJM, explained that the RTO would use all transmission capability created by the winning transmission project, under the term "SAA capability," as an input for performing its feasibility and/or system impact studies for the three new wind facilities.

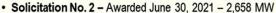
The BPU would be required to assign the new capability to the new offshore wind projects. But in the event that a selected wind project withdraws from the PJM interconnection queue, the board would be able to reassign the capability to a different offshore wind project, or even a different public policy resource, within two years of the withdrawal. Any unassigned SAA capability would be treated as open access.

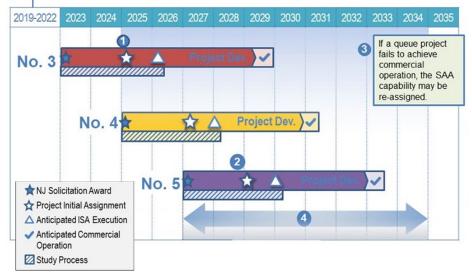
Glatz emphasized that though the offshore wind projects would get the first bite of the transmission, they would still need to enter the RTO's interconnection queue, the same as any other generator.

Gregory Carmean, executive director of the Organization of PJM States Inc., asked if the RTO is assuming that all the transmission upgrades needed to interconnect the new offshore wind would be located in New Jersey.

"I don't think we have solutions yet, but I think we've identified at least one violation that's outside of New Jersey," Glatz answered. A New Jersey BPU staff member clarified, however, that any upgrades driven by the state's public policy needs, even those outside the state, would still be subject to the SAA's cost allocation.







| PJM

## **Company Briefs**

### Avangrid's Vineyard Wind I Joint **Venture Reaches Financial Close**



Avangrid last week announced that its joint venture offshore wind project,

Vineyard Wind 1, has become the first commercial-scale offshore wind project in the U.S. to reach financial close. The \$2.3 billion project will receive lending from nine global banks.

Closure of the deal enables the 800-MW project to begin construction this fall and become operational in 2023.

More: Avangrid

### **GM Tells Bolt EV Owners to Park Away** from Vehicles in Decks



General Motors last week recommended that Chevrolet Bolt electric vehicle owners parking in decks do so on the top floor or on an

open level, at least 50 feet away from other vehicles, citing potential fire risks. GM previously had asked owners to park the

vehicles outdoors, away from structures, and to not charge them overnight.

GM in August widened its Bolt recall to more than 140,000 vehicles to replace battery modules, at a cost of \$1.8 billion after reports of 10 fires.

The company said it will not resume Bolt production or sales until it is satisfied that the recall remedy will address the fire risk issue.

More: Reuters

#### **Natural Gas Prices Surge**

U.S. natural-gas prices ended last Friday at \$5.105 per million British thermal units. They were about half that six months ago and have leapt 17% in September. Prices haven't climbed as high since blizzards froze the Northeast in 2014.

Supplies have been depleted by a series of weather events. February's freeze in Texas lifted demand while clogging wells with ice. June and July were the hottest on record and drought out West dried up hydropower production, which meant more gas than normal was needed to power air conditioners. Late last month Hurricane Ida forced nearly all the Gulf of Mexico's gas output offline. More than a third of the Gulf's gas production remained shut as of Friday, according to the U.S. Bureau of Safety and Environmental Enforcement.

More: The Wall Street Journal

#### **Ørsted Appoints New CEO of Onshore**



pointed Neil

CEO of its Onshore business and placed him on the executive committee, effective Sept. 15.

O'Donovan had acted as interim CEO since Declan Flanagan retired from the position on Aug. 3. O'Donovan had served as COO of Onshore since 2018.

O'Donovan will be based in Dublin and also will work from Onshore's other locations, leading the continued expansion in the U.S. and Europe.

More: Ørsted

### **Federal Briefs**

### **BLM Extends Scoping Period for Idaho Wind Project**



The Bureau of Land Management (BLM) last week announced it has extended the public scoping period on Idaho's 1-GW Lava Ridge Wind

Energy Project by 30 days and will accept public input by Oct. 20.

The wider feedback will enable BLM to address concerns related to the potential impacts of the proposed development and mitigation measures.

LS Power affiliate Magic Valley Energy has proposed installation of up to 400 wind turbines across a 73,000-acre site of public lands in Jerome, Lincoln and Minidoka counties. The project also involves the construction of seven substations, collector and transmission lines and a battery storage facility.

More: Renewables Now

### BLM HQ to Move Back to Washington, D.C.

The Bureau of Land Management's headquarters will move back to Washington, D.C., from Grand Junction, Colo., the Biden administration announced last week.

However, Grand Junction will serve as the BLM's "official western headquarters," according to the Interior Department.

The Trump administration announced in July 2019 that the BLM's headquarters would be moved to Grand Junction to be closer to the 245 million acres of public lands it oversees. The Biden administration said the relocation "failed to deliver promised jobs across the West and drove hundreds of people out of the agency."

More: The Colorado Sun

### Glick Names Burdick as Director of the Office of Enforcement

FERC Chairman Rich Glick last week appointed Janel Burdick as the director of



the commission's Office of Enforcement.

Burdick has been at FERC since July 2009 when she joined the commission's Office of Enforcement as an energy industry analyst.

Prior to joining FERC, Burdick served as a commodities product controller and commodities settlement analyst for Barclays Capital, and she was a commissioned officer in the U.S. Navy.

More: FERC

### NRC Approves Texas Nuclear Dump **Despite Opposition**

The Nuclear Regulatory Commission last week issued a license to Orano CIS and its joint venture partner, Waste Control Specialists, to establish a nuclear repository in the Permian Basin oil fields for as much as 40,000 metric tons of radioactive waste.

The venture, known as Interim Storage

The Andrews County Commissioners' Court previously had backed the plan as a means of diversifying the area's economy but reversed course earlier this year and voted unanimously to oppose the project. Texas Gov. Greg Abbott also recently signed a law that attempts to block the project from moving forward.

More: Bloomberg

#### Solar Installations Soar in Q2

A report compiled by Wood Mackenzie and the Solar Energy Industries Association found that 5.7 GW of solar power were installed in the second quarter — a 45% increase over the same period last year. The figure also represents the single largest amount in any second quarter on record.

In the first six months of the year, solar power comprised more than half of new electrical capacity added, at 56%. Residential solar installations increased 2% from the first guarter of 2021 and 46% from the second quarter of 2020.

More: The Hill

#### **TVA Gives Up Construction Permit for Bellefonte Nuclear Plant**

Nearly 47 years after construction began on the Bellefonte Nuclear Power Plant in Alabama, the Tennessee Valley Authority last week gave up its construction permit for the unfinished nuclear plant and abandoned any plans to complete the facility.

TVA notified the Nuclear Regulatory Commission that it would not renew its regulatory permit after a federal court agreed to cancel the proposed sale of the plant to an investment group that had hoped to complete the two pressurized water reactors and operate the facility.

Franklin Haney, whose Nuclear Development LLC agreed to buy the plant five years ago, was unable to transfer the permit from TVA before a judge ruled that TVA could cancel the sale. While Haney could appeal the ruling, TVA is moving to abandon the nuclear generation option.

More: Chattanooga Times Free Press

### **UN Warns of 'Catastrophic Pathway'** With Current Climate Pledges

The global average temperature will rise 2.7 degrees Celsius by century's end even if all countries meet their promised emissions cuts, the United Nations said in a report last week, while also saying "the

world is on a catastrophic pathway."

Greenhouse gas emissions are poised to grow by 16% during this decade compared with 2010 levels, even as the latest research indicates that emissions need to decrease by at least 25% by 2030 to avert the worst impacts of global warming.

A recent analysis by Climate Action Tracker found that no major emitters have a climate pledge in keeping with the 1.5-degree target. Several countries, including Britain and the European Union, are close. The United States is not.

More: The New York Times

#### US, EU Pursuing Deal to Slash **Methane Emissions**

The United States and the European Union have agreed to cut methane emissions by 33% by 2030 and are pushing other major economies to join them, according to documents.

The pact comes as Washington, D.C. and Brussels seek to galvanize other major economies ahead of a world summit to address climate change in Glasgow, Scotland, in November.

Methane is the biggest cause of climate change after carbon dioxide.

More: Reuters

## **State Briefs**

### **ARIZONA**

### SRP Board OKs Expansion of **Gas-burning Plant**

The Salt River Project (SRP) Board of Directors last week voted 8-6 in favor of a \$953 million expansion of the Coolidge Generating Station after hearing hours of testimony dominated by opposition to the project.

Opponents focused on carbon emissions, while SRP officials said the planned additional generators' quick-start capability would give the utility flexibility to include more wind and solar power.

More: The Associated Press

### **IDAHO**

### Boise to Have 100% Clean Energy by 2023

Boise Mayor Lauren McLean announced



last week via Twitter that the city is on track to have 100% clean energy by 2023 seven years ahead of its original target.

Several other cities have made commitments

to move toward cleaner energy, including Meridian, Idaho Falls, Pocatello, Ketchum, Hailey and Bellevue, as well as Ada and Blaine Counties.

More: Idaho News

### INDIANA

### **Madison County Enacts Moratorium on Large-scale Solar Projects**

The Madison County Plan Commission last week voted unanimously to approve a moratorium on large-scale solar projects. The moratorium duration would be six months.



or until a new county solar ordinance is adopted.

The county board of commissioners must vote on the recommendation before it can take effect and can either amend the recommendation or accept it as presented.

The previous moratorium expired in July.

More: The Herald Bulletin

### **KANSAS**

### **Reno Commission Approves** Moratorium on Wind Projects

The Reno County Commission last week

agreed to issue a 90-day moratorium on the development of commercial wind farms and look at banning them in the zoned areas of the county.

The board also directed county planning commission and planning staff to draft regulations creating an overlay zone to regulate wind development in unzoned parts of the county. The motions required public hearings on both proposals, which the commission will take up on Dec. 27.

More: The Hutchinson News

### **LOUISIANA**

### **New Orleans Council President Opening Investigation into Entergy**



New Orleans City Council President Helena Moreno last week said she will launch an investigation into Entergy New Orleans' handling of the city's electric power infrastructure. She said the company

must be held accountable and it may be time to break its monopoly in the city.

Entergy's system collapsed during Hurricane Ida, plunging the city into a week-long blackout.

According to a source familiar with Moreno's plans, the study would be conducted by an outside entity and would be an "independent assessment" of alternatives to the current system, including municipally owned and consumer owned power systems, as well as "retail competition." Part of Moreno's goal is to "accelerate" the public debate over how the city's power infrastructure is managed and operated, and to involve the public from the outset.

More: Gambit

### **MISSISSIPPI**

### **Covington County Solar Project Approved**



The Public Service Commission last week approved a \$5.25 million solar

energy project by Cooperative Energy in conjunction with MS Solar 4.

The approval allows Cooperative Energy to construct, maintain and operate two transmission lines and a switching station to provide a point of interconnection for a 96-MW solar facility to be constructed by

MS Solar 4.

The project should be completed by June 2022.

More: WHLT

### NORTH DAKOTA

### **Stark County Begins Wind Development Moratorium**

Stark County Commissioners last week voted unanimously to approve a moratorium halting energy development in the county for nine months.

While the moratorium places a hurdle in the path of Marathon and One Energy's proposed wind project, the city of Dickinson is considering steps that would see the city assume legal jurisdiction over development at the Marathon Refinery. Commissioner Carla Arthaud said that Marathon and One Energy have acted in bad faith with the county and its citizens, and is concerned that the city could open a pathway for the project to move forward.

The new moratorium comes after a previous moratorium, passed seeking to halt the construction or development of wind turbines within the county, was challenged by Marathon and One Energy as an "arbitrary, capricious and unreasonable" decision, "not supported by substantial evidence." Commissioners rescinded the first moratorium but directed the county planning and zoning director to draft a new, legally sound moratorium.

More: The Dickinson Press

### OHIO

### Mark Center Solar Project Approved

The Power Siting Board last week approved a 110-MW solar project in Mark Township on about 655 acres.

Candela, the firm developing the project, is proposing an \$11.5 million investment, using tax credits through taxpayer-funded subsidies.

More: The Crescent-News

### **OKLAHOMA**

### **Supreme Court Tosses Lawsuit** Seeking Corp. Commissioner's Ouster

The Supreme Court last week unanimously agreed to dismiss a lawsuit seeking to remove Corporation Commissioner Todd Hiett from office.

Attorneys who brought the case, officially called a Writ of Quo Warranto, argued that Hiett should have been forced to resign because he is on the board of SpiritBank, a business that can be affected by the commission's decisions. The bank underwrites commission-required surety bonds for oil and gas operators from time to time, and commissioners are sometimes asked to revoke those bonds as part of regulatory enforcement actions.

Hiett repeatedly has said he isn't involved in the bank's surety bond decisions for oil and gas operators and does not participate in commission votes where potential revocations of surety bonds issued by Spirit-Bank are considered as part of the agency's regulatory regime.

More: The Oklahoman

### VIRGINIA

#### Appalachian Power Asks for Another Rate Increase



Appalachian Power last week asked the Corporation Commission for another rate in-

crease, this one to recover the rising prices of coal and natural gas, which generate more than 80% of its electricity.

If approved, the increase will add \$3 to the average monthly bill. Combined with other increases over the past year, the bill for a home that consumes 1,000 kWh of electricity per month could go up by \$25.

More: The Roanoke Times

#### **Dominion to Partner on Solar Project** in Coalfields



Dominion Energy last week announced plans to repurpose

1,200 acres of the former Red Onion surface mine and surrounding properties for the 50-MW Highlands Solar project. The company will partner with The Nature Conservancy.

The project will be developed within The Nature Conservancy's Cumberland Forest Project, a land conservation initiative launched in 2019.

Construction could begin in 2024 or 2025, subject to review and approval from regulators.

More: The Associated Press



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