# RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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

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**NOTE: Due to the Thanksgiving holiday, *RTO Insider's* newsletter will take a break next week and return on Dec. 8. Keep up with the news in the meantime at *www.rtoinsider.com*.**

## FERC Proposes Requiring Variable Tx Line Ratings

*By Michael Brooks*

In an effort to improve the accuracy of U.S. transmission transfer capability, FERC on Thursday issued a proposal to require all transmission providers to implement seasonal and ambient-adjusted ratings (AAR) on their lines (*RM20-16*).

Such ratings are based on the predicted seasonal or forecasted air temperatures, allowing for more electricity to flow when the temperature is lower and, thus, reducing congestion and its costs.

Most transmission providers use static ratings that are only updated after equipment is upgraded. Static ratings tend to be very conservative and based on worst-case-scenario temperatures, often restricting power flow unnecessarily. Using ratings that vary by season is more accurate, but they still do not account for unexpected temperature fluctuations.

"Because ambient air temperatures are typically less extreme than worst-case assumptions, seasonal and static transmission line ratings typically indicate that there is less transmission system transfer capability available than the transmission system can actually provide," FERC staff told commissioners in a presentation during their monthly open meeting. "This increases congestion costs."

AARs' updates can vary in frequency from daily to every 15 minutes. According to FERC, AARs are already widely used in PJM and ERCOT; elsewhere in the U.S., static and seasonal ratings are the norm.

The commission's Notice of Proposed Rulemaking would require transmission owners to implement both seasonal ratings and AARs, with the former being used to evaluate long-term transmission service requests and the latter for near-term.

*Continued on page 8*



## Wide Support for FERC Carbon Pricing Statement

*By Michael Kuser and Rich Heidorn Jr.*

Ravenswood Generating Station, a 2,480-MW fossil fuel plant in New York City

FERC's proposed policy statement on carbon pricing won wide support in comments filed last week, although some stakeholders expressed doubts that it will spur states to adopt a $CO_2$ adder, suggesting regional, market-based clean energy standards (CES) may be more politically appealing.

*Continued on page 13*



There was more fallout in the First Energy and Commonwealth Edison bribery scandals last week as Ohio PUC Chair Sam Randazzo resigned after FBI agents raided his home and former ComEd CEO Anne Pramaggiore and three others were indicted in Illinois. Stories on p. 41, 42, and 43 | *PUCO / © RTO Insider*

### Also in this issue:

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**Editorial**

Editor-in-Chief / Co-Publisher
Rich Heidorn Jr. 202-577-9221

Deputy Editor / Daily
Michael Brooks
301-922-7687

Deputy Editor / Enterprise
Robert Mullin
503-715-6901

Art Director
Mitchell Parizer 718-613-9388

Associate Editor
Shawn McFarland 570-856-6738

Copy Editor/Production Editor
Rebecca Santana 770-862-6004

**CAISO/West** Correspondent
Hudson Sangree 916-747-3595

**ISO-NE** Correspondent
Jason York 860-977-7830

**MISO** Correspondent
Amanda Durish Cook 810-288-1847

**NYISO** Correspondent
Michael Kuser 802-681-5581

**PJM** Correspondent
Michael Yoder 717-344-4989

**SPP/ERCOT** Correspondent
Tom Kleckner 501-590-4077

**NERC/ERO** Correspondent
Holden Mann 205-370-7844

**Subscriptions**

Chief Operating Officer / Co-Publisher
Merry Eisner 240-401-7399

Account Executive
Kathy Henderson 301-928-1639

Account Manager
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Marketing Director
Margo Thomas 480-694-9341

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

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# In this week's issue

## American Council on Renewable Energy's Grid Forum

# FERC, DOE, Interior Seen as Keys to Biden Climate Plan

### *J&R + Endangerment Finding = Climate Policy?*

*By Rich Heidorn Jr.*

With a narrow Democratic lead in the House and Senate control in doubt, FERC and the departments of Energy (DOE) and Interior will have central roles in advancing President-elect Joe Biden's climate goals, speakers told the American Council on Renewable Energy's (ACORE) Grid Forum last week.

Rep. Sean Casten (D-Ill.), a former clean energy entrepreneur, said the "just and reasonable" clause in the 1935 Federal Power Act that created FERC was not limited to price.

"Couple that with [EPA's 2009 finding that $CO_2$ emissions endanger public health] and I think there is a very strong legal argument to be made that FERC has not only the authority, but the obligation, to factor carbon prices into the way they regulate power markets," said Casten, who serves on the House Select Committee on Climate Change and the New Democrat Coalition Climate Change Task Force.

"Pricing carbon doesn't provide any cash flow to government. That makes it hard to pass in a democratic body when everybody wants to play Santa," he said during a keynote speech. "But it makes it much easier to think about how to do that in the context of a FERC hearing that's saying let's examine all the equities here. FERC actually structurally is much better suited to deal with carbon policy. My hope is with a fully constituted FERC and a Biden White House, there's way to really do some things even if we still have a [Mitch] McConnell-led Senate." (See related story, *'No Time for Unicorns' on Climate Ill. Rep. Says.*)

### Fixing Order 1000

The Natural Resource Defense Council's John Moore said his top recommendation for the new administration is to have FERC advance a transmission rule that addresses the holes in Order 1000, "which everyone at this point knows has not fulfilled its promise."

Moore, director of the NRDC's Sustainable FERC program and Climate and Clean Energy program, cited "shortcomings in competition, in cost allocation, in siting large projects vs. small projects."

"There's a whole set of topics we could talk about there that I think a new FERC could really robustly address," Moore said in a discussion moderated by ACORE CEO Gregory Wetstone. "This is the best opportunity we've ever seen for DOE [and] the Department of Interior — especially with offshore wind permitting issues — to come together and work cooperatively with FERC on a shared agenda. I think that's true on a number of different issues, and it's true in a way that we have not seen with certainly any administration at least since I started [working on] this."

### 'Climate Change Lens'

Also participating in the discussion was Ana Unruh Cohen, staff director of the House Select Committee on Climate Crisis, who said every decision by the new administration "is going to go through a climate change lens."


John Moore, Sustainable FERC | *ACORE*

## 'No Time for Unicorns' on Climate, Ill. Rep Says

Rep. Sean Casten (D-Ill.) snaps a selfie with other members of the House Select Committee on the Climate Crisis, including from left, Chair Kathy Castor (D-Fla.), Rep. Joe Neguse (D-Colo.) and Buddy Carter (R-Ga.) | *House Select Committee on the Climate Crisis*

*By Rich Heidorn Jr.*

Rep. Sean Casten (D-Ill.), who previously worked as a clean energy consultant and co-founded a company that developed waste energy recovery plants, said his transition from the private sector to Congress in 2018 was "surreal."

"When I was running clean energy companies with a mission to profitably reduce greenhouse gas emissions we always prioritized the laws of thermodynamics over the laws of man. And in this new line of work, it is considered rare and exceptional to actually insist on what is scientifically necessary," Casten, who holds master's degrees in engineering management and biochemical engineering, told the American Council on Renewable Energy's (ACORE) Grid Forum last week. "For 30 years we have prioritized the politically possible over the scientifically necessary. We do not have another 30 years to wait."

### No Time for 'Unicorn Sales'

In a keynote speech, Casten called for *eliminating* the current $615 billion in annual fossil fuel subsidies, which he said "will unleash a ton of private capital."

Getting to net zero carbon emissions will require the U.S. to double the efficiency of its energy system (energy use per dollar of GDP), which would put the U.S. at Switzerland's level, he said.

The nation also needs "massive" research and development spending to decarbon-

# American Council on Renewable Energy's Grid Forum

"My expectation is that all the agencies that are responsible for making these long-term infrastructure siting decisions and permitting are going to put that through the climate scenarios that we know are real possibilities," she said.

Casten said he was encouraged by reports that the Biden administration will create a central clearinghouse for climate policy to ensure co-operation among FERC, EPA and DOE. Each of the agencies "do little corners of [climate policy and we need to] have them pitch together," Casten said. "We've got to prioritize climate change above all else and stop tolerating the excuses for why we can't act."

## Legislative Options Limited

During the campaign Biden outlined a $2 trillion plan to eliminate power sector carbon emissions by 2035 and make the U.S. the leader in electric vehicle production. But a Republican-controlled Senate and a narrower Democratic edge in the House would likely prevent him from winning approval of such a plan and diminish his ability to include incentives for renewable energy in a new economic recovery package.

Democrats still have a chance at winning effective control of the upper house, with two Senate races in Georgia headed to runoff elections on Jan. 5. Winning both seats would result in a 50-50 tie that would be broken by Vice President-elect Kamala Harris. (See *GOP Senate May Limit Biden Climate Ambitions*.)

## National Vision Needed

Moore said DOE should begin work immediately on "the HVDC moonshot" — a system of HVDC converter and inverter stations to link the interconnections and provide power for EV charging. He said the National Renewable Energy Laboratory and the other DOE labs

ACORE CEO Gregory Wetstone | *ACORE*

should help FERC identify "what the real needs are."

The Eastern and Western interconnection grid studies funded by the America Recovery and Reinvestment Act (ARRA) during the 2007-2009 recession "were great collaborations among many different interest groups that developed plans for … a lower carbon future," Moore said. "But they really didn't go anywhere because those plans were completely divorced from existing grid planning. So, I think the next round of grid studies needs to be linked to actionable outcomes through the existing regional transmission organizations and FERC. FERC and DOE could work on portfolio analysis, looking at the areas with the best resources around the country and thinking about what could be done there."

Biden could also ask FERC to create a new office of transmission planning and oversight "to get more cohesion and control over the planning process so we could integrate more of the Biden administration plans with the FERC-regulated entities of the RTOs," Moore said. "We need a more coordinated national system for doing this because the worst possible outcome is to have fights over eminent domain in local and regional projects that aren't really connected to a larger grid vision. That to me is a waste of time"

## Macro Grid Studies

During the conference, Americans for a Clean Energy Grid (ACEG) released an international *survey* of "macro grids," authored by two Iowa State University researchers, which shows that the U.S.' development of interregional transmission lags far behind that of China, India and the European Union. It followed an ACEG study in October that projected a macro grid that allowed transmission of cheap renewable energy throughout the Eastern Interconnection would create 6 million jobs, cut carbon emissions and save consumers more than $100 billion. (See *'Macro Grid' Study Promises Cost Savings, Emission Cuts*.)

The studies were part of the *Macro Grid Initiative*, a joint project of ACEG and ACORE *funded by* Microsoft founder Bill Gates' *Breakthrough Energy Ventures*, a $1 billion fund whose board members and investors *include* Amazon founder Jeff Bezos, former New York Mayor Michael Bloomberg, Virgin Group founder Richard Branson and LinkedIn founder Reid Hoffman.

"At the heart of this effort is the reality that the 15 states between the Rockies and Mississippi River account for 88% of the nation's [onshore] wind potential while 56% of our

ize industries. "If you can't say how you're going to make steel without metallurgical coke, if you can't say how you're going to make fertilizer without natural gas, you are not contributing to the conversation. You are selling the unicorn. We do not have time to be in the unicorn sales business."

## Energy Price Act

Casten has co-authored several pieces of legislation to address the challenge.

The *Energy Price Act* would clarify that FERC has the responsibility to ensure that public utilities take into account greenhouse gas emissions when setting their electricity rates. The bill, introduced *earlier this year*, has not seen any committee action. (See related story, *FERC, DOE, Interior Keys to Biden Climate Plan*.)

"The deployment of clean energy creates huge problems. … Namely, clean energy's too damn cheap. And every time we deploy a zero marginal cost generator on an electric grid that prices to the highest marginal cost generator, the price of power comes down and the investment thesis gradually erodes for building new assets. What happened to the nuclear industry happened to the cogen industry, and it's going to happen to the clean energy industry as well," Casten said.

"When I started my career you could get $60-$70 [/MWh] PPAs. Now you're lucky to get $20-25 [/MWh] on a spot price market."

"That creates an awesome problem: How do we better allocate … that economic gain of clean energy [so that it] flows appropriately between consumers and investors and flows to the right assets? What we developed in this Energy Price Act is basically a sense of the Congress resolution, but it was meant to be a shot across the bow … Several of the current [FERC] commissioners have privately been favorably disposed to our approach on that."

## Tradeable Performance Standard Act

Casten said the *Tradeable Performance Standard Act*, introduced last month, would eliminate about 40% of U.S. net greenhouse gas emissions by 2040 by creating tradeable emission allowances for the electric and industrial thermal energy sectors.

## American Council on Renewable Energy's Grid Forum

solar potential is located in that same area. Meanwhile, this region is home to less than a third of the projected 2050 electric demand," Wetstone explained. "Hence the obvious necessity of moving renewable power from the renewable resource rich part of the country to where the people live. We can do that with a macro grid. We can enhance grid resilience, lower costs and reduce carbon."

The House Climate committee endorsed the macro grid concept, although it referred to a "national super grid," Unruh Cohen said.

"To unleash the ambitious plans that the states and utilities already have to shift to clean energy, they really needed the support of an enhanced grid of new lines in some places to bring new resources to demand centers, but also upgrades on the existing footprint in other places to just be able to deal with the dynamism that we see in the grid now, [to] bring on storage, all of those things," Unruh Cohen said. "And of course, the very important task of resilience, both to climate impacts and other [threats]."

Moore said a larger grid will be needed to support the "tens of millions of distributed energy resources in the forms of cars, trucks and buildings that we see in our future."

He noted the growth of renewables in the last 20 years from a "niche" to the "huge" presence it now has in SPP, which boosted its record for wind energy with a new peak of 18,442 MW on Nov. 14.

### Dying on the Vine

Without substantial new transmission in MISO, Moore said, "most of the renewable energy projects are going to die on the vine. Sixty GW of solar and dozens of GW of wind projects are going to die on the vine if we don't get the grid and the complementary detailed cost allocation — who-pays rules — ready to go. We're really right now missing a great opportunity. I think some utilities are seeing that they're not going to be able to connect to the grid any of their clean energy through the mid-2020s if we don't start moving now." (See *MISO West Risks Becoming 'Dead Zone,' Stakeholders Warn*.)

Unruh Cohen said grid improvements "will be right in the mix as we put an infrastructure package together, and I think we can hopefully have some bipartisan support going forward."

"There are other good reasons to build a grid," Wetstone added, citing the National Commission on Grid Resilience's *report* in August that "has recommendations that are very sympatico" with those who want grid expansions to

Ana Unruh Cohen, House Select Committee on the Climate Crisis | *ACORE*

support climate efforts. Wetstone noted that the commission is co-chaired by Rep.-elect Darrell Issa, a California Republican who will return to Congress in January. (See related story, *Retired General Sounds Alarm on Grid Security*.)

"When you look at the maps where a lot of these projects are popping up, they don't look like they're all in red or blue districts. This is real in a way that we haven't seen in the past," said Moore. "So that, plus the COVID crisis, I think, could produce the best possible scenario for something to happen that's big."

In the meantime, he said, progress could be made through investment tax credits for transmission and by directing the federal power marketing agencies in the West — Bonneville Power Administration and the Western Area Power Administration — to use their authority to expand the grid.

Moore said the Senate Appropriations Committee bill for 2021 has a section on renewable energy grid integration that *includes* $10 million for the development of an "energyshed" model to address transmission constraints in renewable-rich areas based on Texas' Competitive Renewable Energy Zones (CREZ) buildout. "That's the kind of exciting thing you might see go through even while we're waiting for the big, comprehensive legislation," he said.

### Coalitions Needed

Unruh Cohen said passing energy legislation will require the kind of broad coalitions that backed the 2007 Energy Independence and Security Act and the Waxman-Markey cap-and-trade bill that cleared the House in 2009 but stalled in the Senate.

Bringing together "clean energy, the environmental community, agriculture — for both of those bills, having the farmers and ranchers who were benefitting from hosting renewable energy — was really critical to putting together a winning strategy," she said. ■

"It's an idea that we developed way back when RGGI was being negotiated. It essentially recognizes that if you're going to have a market you have to get paid to reduce carbon the exact same amount you pay to release it, and to recognize that there is always going to be political pressure to provide free allowances.

"We've got to get to greenhouse gas pricing, [but] most things that we use to describe carbon pricing fail a really simple market test, which is to say: Does the amount you pay to emit a ton of carbon equal the amount you receive if you reduce a ton of carbon? If you are going to go build a solar panel, a wind turbine or a geothermal plant and you can't identify a specific cash flow stream that you will realize for reducing that $CO_2$ [and] the guy building a coal plant can't identify a specific cash penalty, then it ain't a market."

### Uniform Reporting of Climate Risk

The Climate Risk Disclosure Act, which Casten introduced with Rep. Matt Cartwright (D-Pa.) and Sen. Elizabeth Warren (D-Mass.), *cleared* the House Financial Services Committee in July 2019 and had a hearing in the *Senate* Committee on Banking, Housing, and Urban Affairs on Nov. 17. It has 16 Senate co-sponsors and 35 House co-sponsors, all Democrats.

The bill would direct the SEC to develop a consistent set of standards to quantify exposure to, or hedging against, climate risk. Casten likened it to "a FASB for ESG," referring to the Financial Accounting Standards Board, which sets the Generally Accepted Accounting Principles (GAAP) rules for public U.S. companies, and environmental, social and corporate governance — ways to measure a company's sustainability and societal impact.

A related bill *sponsored with* Sen. Brian Schatz (D-Hawaii), the Climate Change Financial Risk Act, would direct the Federal Reserve to conduct stress tests on large financial institutions to measure their resilience to climate-related financial risk.

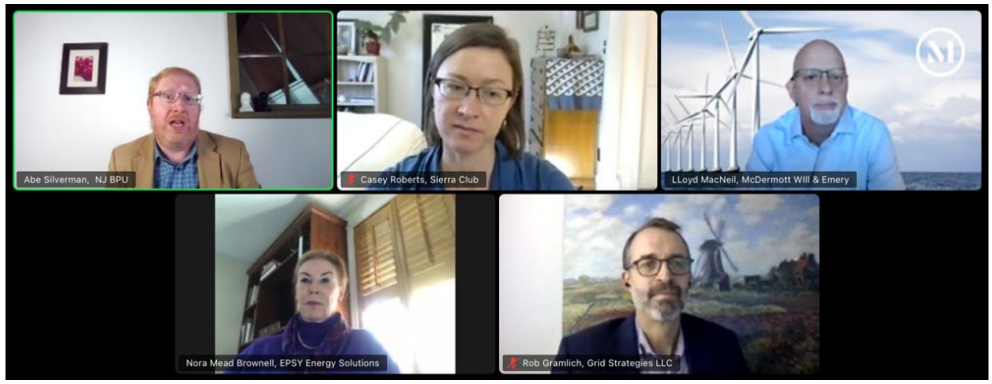
"There's lots of subjectivity in financial liabilities, but there are consistent ways that they get reported. And as long as everybody understands that, then [they can price] capital accordingly," Casten said. Currently, he said, "it's hard to argue that markets are efficiently allocating capital." ■

## American Council on Renewable Energy's Grid Forum

# Overheard at ACORE Virtual Grid Forum

The American Council on Renewable Energy (ACORE) held its 2020 Virtual Grid Forum last week. The two-day event examined the role of regulators, grid operators, electric service providers and the renewable sector as states progress toward their clean energy goals. It also explored the policy and regulatory issues and technology challenges associated with integrating increasingly high penetrations of renewable electricity on the grid.

Following is some of what we heard.




Clockwise from top left to right: Abe Silverman, New Jersey Board of Public Utilities; Casey Roberts, Sierra Club; Lloyd MacNeil, McDermott Will & Emery; Rob Gramlich, Grid Strategies; and Nora Mead Brownell, EPSY Energy Solutions | *ACORE*

### Tackling MOPR Issues

During a panel on capacity market design and the future of resource adequacy Nov. 17, panelists discussed at length the minimum offer price rule (MOPR) as a symptom of outdated design.

Grid Strategies President Rob Gramlich said several states have threatened to back out of capacity markets and that MOPR is not viewed as a "long-term, sustainable approach," according to PJM, which is "trying to get back into a way that works with states rather than contravening [their] wishes and goals."

Abe Silverman, general counsel for the New Jersey Board of Public Utilities, said that clean energy policies "are non-negotiable in New Jersey, and we're not backing off; we're not slowing down." Silverman noted New Jersey is also "very active" in current MOPR litigation.

"I think we see MOPR as a symptom of a market design that's about 20 years out of date," Silverman said. "These markets were put into place in the early 2000s, and they were great at optimizing cost and maximizing reliability. … They're very effective at that, but they haven't been tweaked a lot."

Silverman said "fundamentally" the question should be: What are these markets doing for states?

"We're putting band-aids on band-aids, and MOPR is the ultimate band-aid, and it's not a good one," Silverman said.

Former FERC Commissioner and Pacific Gas and Electric board Chair Nora Mead Brownell added that capacity markets were supposed to be "a short-term solution." According to Brownell, another quick fix is additional responsibilities for the RTOs, which have created administrative solutions like MOPR.

"They're going to be imperfect," Brownell said. "We can dance on the head of a pin all we want. At some point, there's going to have to be compromises."

Brownell said that it needs to be clear that if RTOs are going to have a stakeholder process, "You don't get everything you want. You look for everything you need. How do we get to a place where we are more market-driven, rather than these endless, litigated, imperfect administrative solutions?"

Silverman said New Jersey also has an ongoing proceeding about whether it should take back resource adequacy from PJM.

"It's about MOPR, frankly, but it's also about cost and achieving our clean energy goals faster and at the least cost to our consumers," Silverman said. "We look to California as obviously the gold standard for driving a clean energy agenda. But it is daunting, and it's an amazing thing that they've done that their reliability has been so good while they've been pioneering so many different new technologies and driving the investment."

### ERCOT Example

"Probably the best part of the ERCOT market is that it does allow, or encourages, consumers to moderate their energy behavior," Silverman said.

Silverman added there is no default service provider in ERCOT, which makes "all things become possible because you have third-party suppliers … who have a million customers so that they can make those kinds of long-term hedging arrangements." Silverman said most New Jersey customers stay with the default service provider, which was included in restructuring the state's markets.

"ERCOT took that very bold step 20 years ago of forcing the baby birdie out of the nest, and other states were not willing to go that direction," Silverman said.

Brownell said she agreed with Silverman that ERCOT took a bold step, but it also had "very strong political and business leaders who made the decision to go to markets fully and stuck with it; they didn't back off."

"It's unbelievable to me in this day and age, and this isn't this isn't a knock on New Jersey, [that] the Northeast largely hasn't deployed [smart] meters and acts as if it needs, you know, one more death-by-pilot [program]. What don't we know about the value of meters and the data that they produce? It's a mystery to me."

Sierra Club Senior Attorney Casey Roberts said it's tough to get other states to make that ERCOT-type leap. She said PJM recently approved more revenue being recovered through energy and ancillary services (EAS) and less through the capacity market.

"Because of the way the capacity market works as a missing money mechanism, that [decline in capacity costs] should naturally happen as you increase the energy revenues, but less is coming through the capacity market" Roberts said. "So it's going to be a more slow and painful transition without that kind of the political and business leadership that Nora was talking about. There is already the framework in place to move away from mandatory capacity markets, or at least reduce their relevance in those Eastern markets."

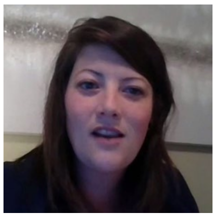
Gramlich said it does not have to be an all-or-nothing approach. There can be incremental shifts to have more EAS revenue relative to the

## American Council on Renewable Energy's Grid Forum

capacity market with design changes over time.

Roberts added that FERC needs to lead on market design as "people just get stuck in their corners and don't see how a series of tradeoffs could ultimately lead to a more optimal design."

### Supporting Renewable Expansion


Heather Curlee, Wilson, Sonsini, Goodrich, & Rosati | *ACORE*

A panel on Nov. 17 led by Heather Curlee, senior counsel of Wilson, Sonsini, Goodrich, & Rosati, explored the concept of establishing power markets to support the expansion of renewable resources.


Robert Stoddard, Berkeley Research Group | *ACORE*

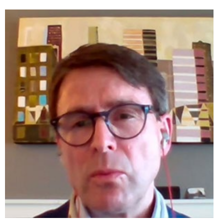
Robert Stoddard, managing director of Berkeley Research Group, was asked if expanding RTOs and ISOs would be the right approach for continued renewable integration into the system. Stoddard said markets have performed "extremely well" in helping attract and retain investment in a way that has been "sensibly done" and conducted at the risk of the investors instead of ratepayers.

When RTOs and ISOs were created in their current form by FERC Order 2000 in 1999, Stoddard said, it was done as a response to concerns that utilities owning generation and controlling the transmission lines led to "no nondiscriminatory open access to the grid." Innovation had to come from the utilities, Stoddard said, leaving little room for innovation or risk-taking from outside investors.

Stoddard said markets can create conditions for innovation, and there are many functions of RTOs and ISOs to ensure the open access that allows outside companies to come forward and take risks. He said markets operate through prices, and the prices tell people what is valuable and allow an innovator to look for changes in generation or transmission to create value.

The challenge with RTOs and ISOs, Stoddard said, has been figuring out the best way to put together market prices with the necessity of long-term planning.

"The RTO markets are really good at wresting all of the small efficiencies out of day-to-day operations," Stoddard said. "Where we've had bigger challenges is [in whether] these markets provide the long-term signals not only for generation, but wise transmission expansion."


Joe Hoerner, Pacific Power | *ACORE*

Joe Hoerner, senior vice president of regional grid solutions for Portland, Ore.-based Pacific Power, was asked how carbon pricing fits in to help accommodate existing or future state renewable energy goals and whether more transmission is needed to integrate renewables on the West Coast.

Hoerner said CAISO has been "struggling with" the best way to approach carbon pricing. Absent a standardized approach to carbon pricing, a "hodge-podge approach" to pricing could lead to unintended consequences, he said.

As more solar resources are being built in the Southwest, Hoerner said, there are "a lot of eggs in one basket" in the renewable generation mix. He said the reliance on solar is starting to create reliability concerns.

"There's not enough transmission to make that connection and build that new backbone throughout the West to interconnect all of the solar resources," Hoerner said. "You really do need to diversify; you need to be able to get to those different assets, and you need the transmission to be able to interconnect all of that"

The panelists were also asked if RTO membership should be mandated on a federal level to create more efficient markets.

Stoddard said the market would work more efficiently if there was mandatory RTO membership, but efficiency would come at some costs. He said one of the biggest sacrifices would come with the loss of local control and oversight of long-term planning.

"A well-designed integrated resource plan is a great thing, but it does put a lot of risk on ratepayers," Stoddard said.

Bob Helton of ERCOT's Technical Advisory Committee said he agreed with Stoddard's description of an RTO mandate, saying states presently get to "pick their own poison" when it comes to deciding whether to join an RTO or ISO or to go out on their own.


Bob Helton, ENGIE | *ACORE*

Helton said there are pros and cons to each idea, but it's a decision best made on a local level rather than a dictate from above.

"It would be hard for me to say to mandate anything on anybody at this point," Helton said.

Hoerner said he doesn't think RTO membership should be mandated. He said decisions for a "pursuit of perfection" toward a market design can lead to a market implosion and cause more problems.

"When you mandate something, there's the risk that it gets jammed in or doesn't get designed properly, and you end up with something that isn't well-functioning," Hoerner said. ■

*— Jason York and Michael Yoder*

Clockwise from top left to right: Robert Stoddard of Berkeley Research Group; Heather Curlee, of Wilson, Sonsini, Goodrich, & Rosati; Bob Helton of ENGIE; and Joe Hoerner of Pacific Power | *ACORE*

## FERC/Federal News

# FERC Proposes Requiring Variable Tx Line Ratings

Continued from page 1

It would also require RTOs and ISOs to allow TOs to update their line ratings at least hourly to allow them to use a method more accurate than AARs: dynamic line ratings (DLRs). These take into account many other factors in addition to temperature, such as wind speed, precipitation, humidity, cloud cover and solar intensity, allowing for a much more accurate rating.

FERC staff said that it did not seek to require the use of DLR devices because of the challenges and costs of installing them. But they also said the provision in the NOPR may encourage TOs to begin testing their use. “This proposed requirement seeks to remove this barrier to adoption of these more accurate line ratings.”

The proposal comes nearly a year after a staff-led technical conference on the use of AARs and DLRs. Many transmission company representatives who spoke there recommended against such a proposal, saying that a one-size-fits-all approach was inappropriate. (See *FERC Considering Tx Line Rating Rules*.)

But it seems FERC was convinced by the testimony of, among others, PJM Independent Market Monitor Joe Bowring and Michael Chiasson of Potomac Economics, the Monitor for ERCOT, ISO-NE, MISO and NYISO. They lambasted TOs for having such inaccurate ratings and their lack of transparency around how they determine them.

To address their latter criticism, FERC proposed requiring TOs to share their ratings and methodologies with RTO/ISO market monitors. “Such information sharing would increase situational awareness and improve the ability to verify the accuracy of transmission line ratings,” staff said.

Comments on the NOPR are due 60 days after its publication in the *Federal Register*. If approved, TOs would be required to prioritize implementing AARs on historically congested lines, defined as lines that have been congested in the last five years. Those lines would need to have their AARs in place within a year; all other lines would be given two years.

Commissioners Neil Chatterjee and Richard Glick were enthusiastic about the proposal.

“If finalized today’s proposed rulemaking will produce substantial benefits to consumers by simply ensuring line ratings are more accurate,” said Chatterjee, who as chair had initiated the proceeding that led to the NOPR.

“Most people will tell you we need a substantial amount of new transmission capacity, and I definitely agree,” Glick said. “But we should also strive to operate the current grid more efficiently to ensure that we squeeze more out of current assets while, of course, not impairing grid reliability. The NOPR would take us a substantial step in the right direction.”

**“This proposed requirement seeks to remove this barrier to adoption of these more accurate line ratings.”**

—FERC

Even Chairman James Danly — who rarely makes any comments at all and did not make an opening statement during his first open meeting as chair — chimed in, though he did not indicate how he felt about the proposal itself. “I have no questions [for staff]. I’ll just say that I think this is a very important issue, and I encourage everybody to comment and file so that we get the most robust record we can.”

As part of the NOPR, the commission is also seeking comment on whether it should require transmission providers to use unique emergency ratings. ■

| © RTO Insider

## FERC/Federal News

# FERC Nominees Clements, Christie Advance to Full Senate

### *Barrasso to Become Top Republican on Energy Committee*

*By Michael Brooks*

The Senate Energy and Natural Resources Committee on Wednesday voted to advance President Trump's nominees for FERC, Allison Clements and Mark Christie, for consideration by the full upper house.

The committee met briefly and approved the nominees by a swift voice vote. Republican Sens. John Barrasso (Wyo.), Steve Daines (Mont.), John Hoeven (N.D.), Mike Lee (Utah) and Cindy Hyde-Smith (Miss.) voted against Clements, a Democrat and energy policy adviser for the Energy Foundation. Sen. Mazie Hirono (D-Hawaii) voted against Christie, a Republican and chair of the Virginia State Corporation Commission.

Trump nominated them in late July, and they appeared before the committee to answer questions Sept. 16. (See *FERC Nominees Bob and Weave Through Senate Hearing*.) Clements would fill the seat left open by the departure of Cheryl LaFleur in August 2019, while Christie would take the place of Bernard McNamee, who departed Sept. 4. If confirmed, Clements' term would end in June 2024 and Christie's in June 2025, and Republicans would hold a 3-2 majority on the commission up to the departure of Commissioner of Neil Chatterjee, whose term ends June 30.


President Trump's nominees to FERC, Virginia SCC Chair Mark Christie and Energy Foundation consultant Allison Clements, are sworn in before their confirmation hearing Sept. 16. | *Senate ENR Committee*

But whether the Senate will even vote on the nominations before the end of the year is unknown. If not, Trump would need to resubmit them before his term ends Jan. 20. This would add even more uncertainty for FERC, as party control of the Senate next year depends on two runoff elections in Georgia on Jan. 5. If they win, Democrats may want to wait until President-elect Joe Biden takes office and install another Democrat instead of Christie.

The runoff elections will also decide who chairs the ENR Committee, but regardless of which party wins, it will not be current Chair Lisa Murkowski (R-Alaska); Senate rules prohibit any senator from chairing or being the ranking member of any one committee for more than six years.

Barrasso, currently chair of the Environment and Public Works Committee, *announced* Wednesday that he would take over as the top Republican of the ENR Committee. If Democrats win in January, current ranking member Joe Manchin (D-W.Va.) is in line to be the next chair. Manchin's colleague from West Virginia, Sen. Shelley Moore Capito, is next in line as the top Republican on the EPW Committee. ■

## FERC/Federal News

# FERC Rejects Challenges on PURPA Changes

### *Glick: PURPA 'Gutted' by FERC*

*By Rich Heidorn Jr.*

FERC on Thursday rejected challenges to its July order revising how it enforces the Public Utility Regulatory Policies Act but granted clarification on several points (*RM19-15-001, AD16-16-001*).

Order 872 allowed state regulatory commissions more flexibility in how they establish avoided-cost rates for qualifying facilities and said they could require the rates to vary over the span of a QF's contract. It also modified the "1-mile rule" and reduced the rebuttable presumption for nondiscriminatory access to power markets, from 20 MW to 5 MW, for small power production, but not cogeneration, facilities. (See *FERC Issues Final Rule to 'Modernize' PURPA*.)

Numerous stakeholders requested rehearing on Aug. 17, including California's three investor-owned utilities, the Electric Power Supply Association, the Northwest and Intermountain Independent Power Producers Association, the Sierra Club, the Sustainable FERC Project and the Solar Energy Industries Association.

The requests were automatically denied when the commission failed to act within 30 days. In Thursday's order, FERC explained why the challengers were wrong while also offering some clarifications. The order was supported by Chair James Danly and Commissioner Neil Chatterjee, both Republicans, but opposed by Commissioner Richard Glick, a Democrat, who had dissented in July.

### 'Tiered' Pricing, Variable Energy Rates

The commission rejected a request by Pacific Gas and Electric, San Diego Gas & Electric and Southern California Edison to clarify that it is no longer commission policy to permit states to subsidize QFs by the use of "tiered" avoided costs — the costs of a subset of facilities from which a state has mandated purchases or facilities that meet state requirements such as use of renewable fuel.

"PURPA neither requires nor prohibits states from establishing tiered procurement (and thus tiered pricing), such as California does," the commission said.

FERC granted SEIA's request for clarification that a state may only use variable rates to set avoided energy costs if the utility has fulfilled its obligations to disclose avoided-cost data as required under PURPA regulations.

FERC ruled in 2016 that Entergy did not have to purchase power from Occidental Chemical's Taft plant in Louisiana because the PURPA generator had unconstrained transmission access and could sell its output in the MISO wholesale market. | *Occidental Chemical*

"We do not find the disclosure of such information unreasonable as the commission's PURPA regulations already require its disclosure," FERC said. "In addition, although electric utilities are required to disclose this data generally, it is especially important when a state has selected the fixed capacity/variable energy rate construct to ensure that QFs have this data from the purchasing electric utility to provide transparency with regard to a utility's avoided costs."

### Competitive Solicitations

The commission also clarified the rules regarding the use of competitive solicitations to set QF rates.

"If a competitive solicitation is not conducted in accordance with the requirements of the final rule guidelines, then an aggrieved entity may challenge the competitive solicitation before the commission or in the appropriate fora," FERC said.

Order 872 allows competitive solicitations as long as they are the result of a transparent process open to all sources, conducted at regular intervals and overseen by an independent administrator.

### Rebuttable Presumption of Separate Sites

The commission offered clarification on several aspects of its requirement that the capacity of all small power production facilities "located at the same site" not exceed 80 MW.

"If a hydroelectric generating facility is more than a mile apart (but less than 10 miles apart) from an affiliated facility, yet on the same impoundment, the rebuttable presumption would be that they are at separate sites. We further clarify that, although the second sentence of footnote 769 [in Order 872] suggested that a hydroelectric generating facility in this circumstance was free to seek waiver (most likely in order to eliminate any uncertainty as to its status), it would be unlikely that any such a facility would, in practice, need to request such waiver."

It also clarified that "the factors that may be used by an applicant to pre-emptively defend against rebuttal include the example factors identified in … paragraph 509 of the final rule."

Paragraph 509 cited "physical characteristics, including such common characteristics as: infrastructure, property ownership, property leases, control facilities" and "whether the facilities in question are: owned or controlled by the same person(s) or affiliated persons(s), operated and maintained by the same or affiliated entity(ies)."

### Rebuttable Presumption of Nondiscriminatory Access to Markets

FERC declined to rule on the argument by wind developer One Energy Enterprises that a behind-the-meter distributed energy resource's primary purpose is to generate

Continued on page 12

## FERC/Federal News

# FERC Stands by 10.02% ROE

*By Amanda Durish Cook*


| MISO

Transmission owners will continue to receive a 10.02% return on equity, FERC said last week, rejecting several complaints from consumer organizations and one of its own commissioners.

The commission adopted the figure in May, determining it through a discounted cash flow model (DCFM), capital asset pricing model and risk premium model (RPM). (See *FERC Ups MISO TO ROE, Reverses Stance on Models*.)

With the exception of correcting typographical errors on inputs to the RPM, FERC said in an order Thursday that it stands by the ROE it established under a longstanding MISO docket (*EL14-12-015, EL15-45-014*).

The commission said it will move ahead with dividing the overall zone of reasonableness into equal thirds instead of using a quartile approach. Several industrial customers, cooperatives, public service commissions and consumer advocates said the framework creates an overly broad zone of reasonableness. The Louisiana Public Service Commission said it leaves "very little space between ROEs that are presumptively just and reasonable and ROEs that are excluded as low-end outliers."

FERC said the zone of reasonableness' bottom eighth and top eighth are nevertheless "potentially lawful ROEs."

The groups also said FERC's use of an 80% weighting of the short-term growth rate and a 20% weighting on the long-term growth rate under the DCFM was arbitrary and unexplained. But the commission responded that it has "broad discretion in its weighting choice."

FERC also brushed off the Louisiana PSC, which lambasted the RPM as a model that "would not be relied on by an investor to determine the cost of equity, does not use a long time period [and] involves numerous judgement calls, and the output of the method does not produce a range of just and reasonable ROEs."

"The risk premium model has a strong theoretical basis. We continue to find that the defects of the risk premium model do not outweigh the benefits of model diversity and reduced volatility resulting from the averaging of more models," FERC said.

The commission said it will continue to use a test that regards a company as a high-end outlier if its estimated equity cost is more than 200% of the median of the zone of reasonableness. The PSC contended that FERC raised the threshold so high that it rendered the high-end outlier test "essentially useless." The commission originally set the high-end outlier at 150% of the median.

"The high-end outlier test is an objective test to identify proxy group ROEs that are irrationally or anomalously high because, for example, they are the result of atypical circumstances that are unrepresentative of the subject utility's risk profile or are otherwise likely to be in error," FERC wrote. "We again note that the high-end outlier test is the first, but not the only, method for screening a high-end result from the proxy group."

FirstEnergy and the Edison Electric Institute tried for a broad rehearing of the order, but FERC said the two lacked standing because they were not parties to the proceedings. It also said the order was only regarding the changes it made to the ROE methodology since prescribing a 9.88% ROE in late 2019. (See *TOs Challenge New MISO ROE Rules*.)

EEI argued it "actively participated" in the commission's Notice of Inquiry proceeding regarding its base ROE policy, but that "it was not reasonably foreseeable that the commission would establish a new methodology for analyzing base ROEs" under a seven-year old MISO docket. Based on the commission's reasoning, EEI said it would have to "intervene in all company-specific rate filings" to make sure it is able to participate in orders in the event that FERC "unexpectedly" uses a company-specific order to make policy for all jurisdictional public utilities.

Several TOs were also perturbed last year that the commission would use a MISO proceeding from 2013 as a platform to set policy when it had already collected opinions on adjusting ROE through an NOI.

MISO has had a chameleon-like ROE since 2013, when industrial customers argued that the 12.38% rate that TOs were collecting was too high. In 2016, FERC lowered the rate to 10.32% after its remanded ruling in an ISO-NE case set the zone of reasonableness at 7.03 to 11.74%.

The PSC pointed out that FERC contradicted itself in its reasoning when it switched from a 9.88% ROE and two financial models in late 2019 to a 10.02% ROE and three models in May.

### Glick Chides Again

FERC Commissioner Richard Glick also condemned the commission's longstanding indecision on a just and reasonable ROE and its framing of the issue as more science than art. He again partially dissented on the latest ROE order.

"For more than a decade now, the commission has struggled with the fact that its longstanding ROE methodology produces cost-of-equity estimates well below the ROEs it permitted public utilities to collect in the years before the Great Recession," he said.

While he agreed that a 10.02% ROE is just and reasonable, Glick said FERC was not being open and transparent about what guides its decisions.

# FERC/Federal News

"The experience of the last decade has made it hard to believe that the commission's history of fiddling with its ROE models is a purely technocratic exercise in financial modeling rather than a concern about the output of those models, i.e., the ROE itself," he said. "If the commission has concerns about the ROE produced by the various models on which it relies, we ought to come right out and say so rather than papering those concerns over with hundreds of pages worth of discussion about dividend yields, growth rates, proxy groups and the like."

Glick added that FERC's "about-face" on using the RPM was indefensible and admitted he wasn't sold on its use. He said that no court or commission precedent "has endorsed the proposition that every point within the zone of reasonableness established by the commission's financial models must be presumptively just and reasonable."

He said again that the commission should order refunds to all ratepayers who paid the 12.38% ROE rate that it later deemed excessive. By granting refunds for a period from November 2013 to February 2015, but not from February 2015 to May 2016, Glick said FERC was relying on a "bizarre and overly complex interpretation" of an "otherwise straightforward statute." (See "Sharp Rebuke from Glick," *FERC Ups MISO TO ROE, Reverses Stance on Models*.)

Glick said, however, he would back the ROE result to bring badly needed constancy to transmission-investment decisions.

"ROE is an area where stability is paramount and, in an effort to bring stability to what has been a particularly turbulent aspect of the commission's authority, I can support an outcome that is just and reasonable even if it might not be the most just and reasonable," he said. "All approaches to setting ROEs have their shortcomings, but the worst outcome by far is to continually fiddle with those approaches, undermining the certainty and predictability that help transmission owners make long-term investments.

"If the commission is going to purport to rely entirely on financial models to evaluate and set ROEs, it has to take those models at face value without second-guessing them when it does not like the results," Glick said. "Otherwise, we're going to end up promoting full employment for energy lawyers rather than a stable investment climate for transmission owners." ■

# FERC Rejects Challenges on PURPA Changes

## *Glick: PURPA 'Gutted' by FERC*

Continued from page 10

electricity for its host and any potential sale is secondary like cogeneration facilities.

But it clarified that behind-the-meter DERs such as municipal solid waste facilities and biogas facilities may argue that having "'a predominant purpose other than selling electricity which would warrant the small power QF being treated similarly to cogenerators' … supports their argument that they lack nondiscriminatory access to markets."

"We will rule on any such arguments on a case-by-case basis taking into account the specific facts of the DER making the argument," the commission said.

It also granted a request for clarification "that the list of factors in section 18 CFR 292.309(c) that small power production facilities between 5 and 20 MW can point to in seeking to rebut the presumption that they have nondiscriminatory access was not — but should be — added to 18 CFR 292.309(e) that applies to QFs in ISO-NE, MISO, NYISO and PJM, and also to 18 CFR 292.309(f) that applies to QFs in ERCOT. In order to avoid confusion, we hereby incorporate the factors listed in 18 CFR 292.309(c) into both (e) and (f)."

### Glick's Dissent

Commissioner Glick opposed Thursday's ruling, saying during the monthly open meeting that the commission's record was "insufficient to support several of the key changes" in Order 872. Glick said he requested a technical conference to create such a record but was denied by former Chair Chatterjee.

Glick said the commission "is administratively gutting PURPA" in response to utilities and others who had been unsuccessful in getting Congress to revise the law, which was last amended in 2005.

"It doesn't matter whether you believe PURPA offers substantial benefits or whether you think it's bad public policy," he said. "The fact is these are matters for our elected representatives in Congress to decide. We should not be using our regulatory authority just because some might be frustrated by Congress' inaction."

The rulemaking eliminates QFs' guarantee of obtaining a fixed-term, fixed-rate contract, undermining their ability to obtain financing, Glick said. "At the same time, utilities in vertically integrated states can depend on the guarantee that their ratepayers will pay for a generating plant over the life of the facility," he said. "How is that not discrimination?"

Danly and Chatterjee, however, said claims that the rulemaking discriminates against QFs are "based on the incorrect assumption that electric utilities have not been required to lower their energy rates as prices have declined. The commission found, to the contrary, that utilities typically charge their customers cost-based rates, and, as their fuel and purchased power costs have declined, they typically have been required to provide corresponding reductions in the energy portion of their rates to their customers. …

"Requiring QF avoided-cost energy rates to likewise change as purchasing electric utilities' avoided energy costs change does not create a discriminatory difference, but rather puts QF rates on par with utility rates," they added.

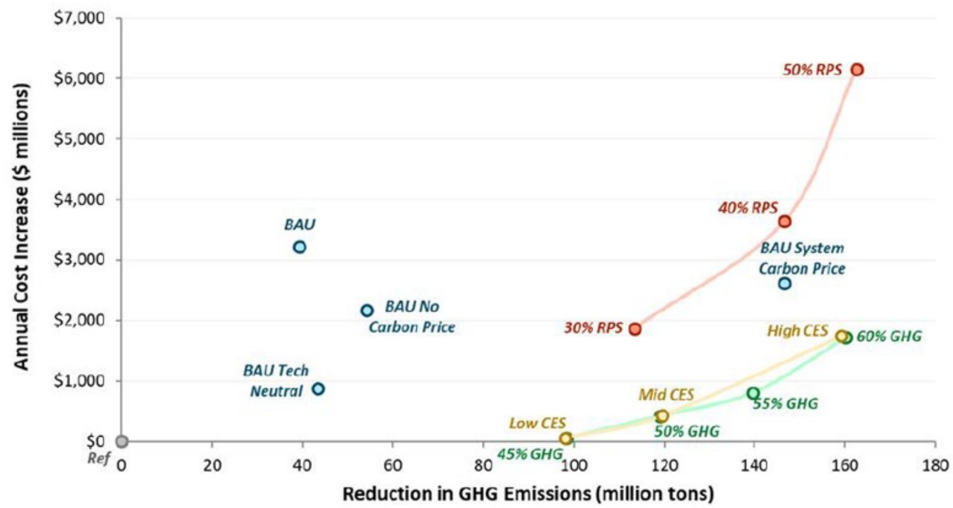
Glick also criticized the commission for presumptively authorizing states to use LMPs to set avoided costs, "even though LMP may not fully represent the utility's avoided costs. This leaves utility generation with a distinct advantage — exactly the opposite of the role Congress intended PURPA to play."

Danly and Chatterjee rejected arguments that precedent prohibits establishing a rebuttable presumption that LMP reflects avoided costs for as-available energy.

"Because LMP is likely to reflect the true marginal cost of energy in the vast majority of cases … it is 'so probable that it is sensible and timesaving to assume' that LMP for a particular utility is an appropriate measure of the utility's avoided costs for as-available energy, unless disproven in a particular case," they said. "We leave open for specific cases to determine the appropriateness of using a particular LMP such that a QF could rebut the presumption that LMP is appropriate." ■

# Wide Support for FERC Carbon Pricing Statement

Continued from page 1




A recent study on PJM's decarbonization options concluded that the most cost-effective policies for reducing carbon emissions are those that directly target $CO_2$ by placing a price on carbon or limiting electricity-sector emissions. | *Energy and Environmental Economics*

Other commenters raised jurisdictional questions, with commenters disagreeing on FERC's role in mitigating "leakage" or evaluating the efficiency of the programs that may be submitted.

FERC's Oct. 15 proposal invited states to introduce carbon pricing in organized wholesale electricity markets but said the commission has no authority to initiate such programs itself (*AD20-14*). (See *FERC: Send Us Your Carbon Pricing Plans*.)

More than 40 companies, grid operators, interest groups and coalitions of state officials filed substantive comments; only a handful opposed the proposal outright.

"Establishing an ISO/RTO carbon pricing mechanism is the most durable and effective way to address climate concerns and facilitate an evolving resource mix while maintaining the integrity and reliability of the organized wholesale electricity markets," the Electric Power Supply Association said.

The Natural Gas Supply Association said FERC should broaden the statement to apply to both organized and non-organized markets.

Even the American Petroleum Institute expressed thanks for "the clarity, direction and deference from FERC to the RTOs/ISOs."

"Properly designed carbon pricing can be one fuel- and technology-neutral tool to reduce emissions and deploy newer, cleaner sources of electricity," API said.

## Opponents

But coal lobbying group America's Power (formerly the American Coalition for Clean Coal Electricity) said FERC should withdraw the policy statement and terminate the docket, saying a carbon price would undermine reliability by accelerating coal retirements. "By encouraging RTOs/ISOs to establish wholesale market rules that incorporate state-determined carbon prices, the commission might be deemed to impermissibly seek to do indirectly what it cannot do directly, which is to influence states to adopt carbon pricing," it said. It noted that 39 states do not price carbon.

A coalition of conservative groups, including Americans for Prosperity, Americans for Tax Reform and the Competitive Enterprise Institute also opposed the proposal, saying "FERC should not rush forward with a blanket endorsement of ill-conceived, top-down climate policies that have been demonstrated to be costly, ineffective, regressive and consistently rejected by the American people."

The groups said they agree with FERC Chair James Danly, who dissented in the 2-1 vote in favor of the policy statement, calling it "unnecessary and unwise."

Instead, they said, the commission should investigate "existing, hidden carbon taxes" in current state subsidies and mandates for carbon-free power.

"Adding a carbon price on top of the mélange of subsidies would further erode the concept of competition in a level playing field for all generation resources," they said. "There is no evidence to suggest that the carbon pricing schemes identified by FERC in the policy statement have been — or will be — accompanied by the elimination of inefficient, market-distorting government interventions that constitute a significant, nontransparent price in the status quo."

The New England States Committee on Electricity (NESCOE) also reiterated its opposition to "a new, incremental carbon price" on top of the Regional Greenhouse Gas Initiative (RGGI).

NESCOE said it was open to the idea of a forward clean energy market and supported evaluation of a related proposal for an "integrated clean capacity market" in a Nov. 2 *memo* to ISO-NE's Board of Directors. It urged the commission "not to create any barriers that could inhibit these collaborative processes."

The Electricity Consumers Resource Council (ELCON), which represents large industrial consumers, said the proposed policy statement was premature because only one of the 32 panelists at the commission's Sept. 30 technical conference on carbon pricing represented consumers. (See *FERC Urged to Embrace Carbon Pricing*.)

ELCON said the policy statement focused on the potential benefits of carbon pricing but ignored potential costs. "Carbon pricing would only improve economic efficiency if it were to effectively replace the carbon-related subsidies, mandates and regulations that apply to the electricity sector," it said. It also said FERC should only accept a carbon pricing or cap-and-trade proposal that returns the revenues in full to consumers.

## RTOs, Regional Differences

PJM, CAISO, NYISO and MISO all said they would work with the commission on the policy.

MISO said that although it "takes no issue with the commission's analysis of its jurisdiction" to review an RTO proposal incorporating state carbon prices, FERC "should refrain from nudging RTOs towards specific carbon pricing proposals and instead should allow such proposals to emerge organically, through the stakeholder process, to accommodate member goals and specific state policies."

# FERC/Federal News

MISO and the PJM Power Providers Group (P3) also called for FERC to allow for regional differences in proposals. "Failure to accommodate regional flexibilities and priorities would create an increased burden on member companies and may discourage future RTO membership," the RTO said.

P3 said the commission should "retain flexibility to respond to different flavors of carbon pricing in different regions of the country. New England and PJM could easily develop different proposals related to carbon pricing, yet both could be considered just and reasonable."

P3 also noted that Pennsylvania is considering joining New Jersey, Delaware, Maryland and Virginia as members of RGGI and that Illinois Gov. J.B. Pritzker has endorsed a carbon price in his state. "If Pennsylvania and Illinois begin to price carbon, 70% of the installed capacity in PJM will be subject to a price on carbon emissions. This would be a significant change from just two years ago," P3 said.

The Independent Power Producers of New York said the commission should adopt the policy statement "as soon as possible to encourage the state of New York and adjacent RTOs to establish a carbon price that can be incorporated into the NYISO's and adjacent RTOs' wholesale energy market."

"IPPNY believes that carbon pricing is a critical step to resolve the growing tension between the state's efforts to meet its clean energy goals and the efficient functioning of the competitive wholesale markets," it added.

Consumer advocates for D.C., Delaware, Illinois, Maryland, New Jersey and Pennsylvania said the commission should evaluate proposed pricing schemes individually and include consumer representation at any future technical conference or workshop. "It is axiomatic that a carbon pricing proposal that is just and reasonable for ISO New England or MISO is not necessarily just and reasonable for PJM consumers or markets," they said.

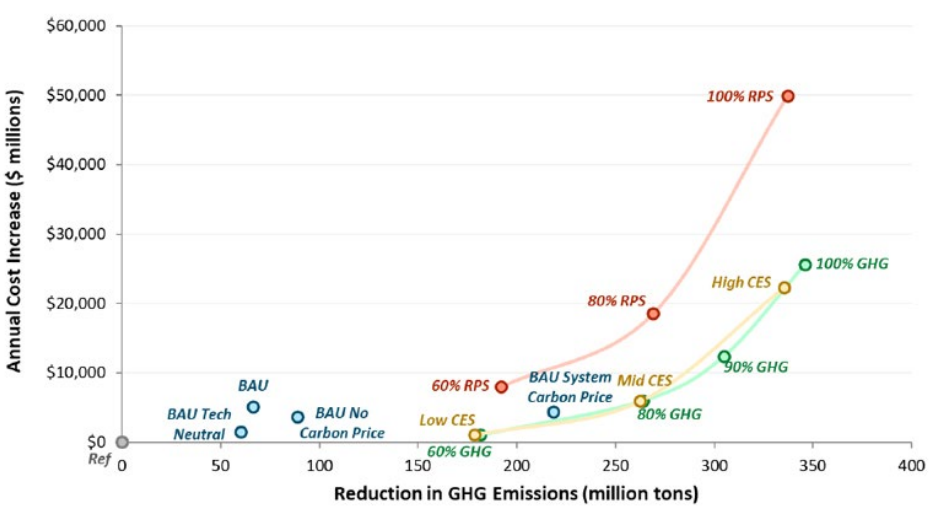
But the Real Estate Roundtable said the commission "should foster national uniformity that avoids a patchwork of different state and local carbon protocols."

"If 50 states and scores of local jurisdictions are left to their own devices to craft their own approaches to measure and price carbon, havoc would ensue," it said. FERC should "advance greater national uniformity in carbon measurement" by promoting use of data in EPA's Emissions and Generation Resource Integrated Database."

"Fair and equitable determinations of who produces 'more' or 'less' carbon — and who should pay 'more' or 'less' — necessarily depend upon common practices to quantify [greenhouse gas] emissions, convert fuel sources to carbon and affix a price per ton of emissions," it said.

## Disparate Treatment of State Programs?

Several commenters challenged what it saw as an inconsistency between FERC's openness to carbon pricing while it is imposing mitigation measures on existing state efforts to decarbonize, including its controversial expansion of PJM's minimum offer price rule (MOPR).




A clean energy standard can be almost as effective as direct carbon regulation if it distinguishes between fossil generators with different carbon intensities, according to Energy and Environmental Economics. Policies such as renewable portfolio standards have significantly higher costs because they do little to accelerate coal retirements, retain economic nuclear generation or incentivize energy efficiency. | *Energy and Environmental Economics*

Public interest organizations including the Union of Concerned Scientists (UCS) and the Natural Resources Defense Council's Sustainable FERC Project said the commission was wrong to treat carbon pricing differently from renewable energy credits (RECs), which the commission says produce "unreasonable price distortions" in wholesale markets.

"FERC cannot justify different treatment for state policies that seek to address environmental and public health harms through either imposing costs or conferring benefits," they said. "Taxes and supports are equal but opposite measures. … Both are economic policy tools intended to move a market away from the equilibrium it would have achieved absent policy intervention."

NRG Energy said carbon pricing is not the only way to incorporate state climate policies in wholesale markets and that FERC should also encourage the development of regional clean energy markets. It noted that trade in compliance-based credits totaled $4.4 billion from 2014 to 2018 in PJM alone, more than three times the $1.4 billion generated by the RGGI carbon-allowance market over the same period.

The company cited a *study* published last month by Energy and Environmental Economics (E3), saying it found "a well designed regional CES can rival the economic efficiency of a regional carbon price. The report concluded either a regional CES or a carbon price could eliminate one-third of PJM system emissions by 2030 at a cost of $3.60/ton and two-thirds by 2050 at a cost of $22.60/ton. That would save $3.2 billion annually in 2030 and $12.6 billion in 2050, compared with the current practice of individual states' renewable portfolio standards and CES policies lacking a regional market, E3 said. (See *Study Recommends Carbon Price for PJM*.)

Advanced Energy Economy also urged FERC to avoid disrupting the markets for RECs and similar instruments for compensating clean energy generation. "Numerous states have expressed frustration with the misalignment of the wholesale markets with their state policy requirements and have stated that while they would prefer to leverage the benefits of broader regional wholesale markets to achieve those requirements, they will abandon wholesale market structures if necessary, AEE said.

## Cost-benefit Analysis, Section 206 Authority

UCS and Sustainable FERC also said the commission would be overstepping its authority by opining on the efficiency of a particular

# FERC/Federal News

program. "In designing their policies, state legislators and regulators may consider matters far beyond and outside of FERC's authority and jurisdiction," they said. "In regulating power plants and protecting the public health and welfare, states are fully within their authority to consider environmental justice, land use, labor, economic development, environmental quality, aesthetics and nearly limitless other criteria. In contrast, FERC must limit its decision making to factors related to wholesale rates."

But the right-leaning R Street Institute said FERC should amend its policy to consider the "net benefits" of carbon pricing regimes "to ensure costs are accounted for."

"The decisional criteria should at least explicitly require a thorough process for evaluating economic efficiency and whether the proposal harmonizes state energy policy with wholesale market operation, which have been identified in the literature as key conditions to deem rates 'just and reasonable' under" the Federal Power Act, R Street said. "Some of the measures of accomplishing this — such as the benefits methodology of avoiding the social cost of emissions — are outside of the commission's scope, but it can require that economic techniques must generally comport with the peer-reviewed literature."

R Street also said the commission should "add an explicit statement that a uniform, FERC-imposed carbon price under [FPA] Section 206 is off the table."

But the American Council on Renewable Energy said that FERC's authority to proactively implement carbon prices under Section 206 warrants further examination. That issue should be decided based on "analysis of the particular facts and circumstances of any future Section 206 complaints lodged by the public or the commission," it said.

## Leakage

There also were disagreements over what FERC's role should be in addressing carbon "leakage" between states with different energy policies.

Exelon said FERC should require development of leakage mitigation rules and convene workshops to help work through policy issues.

"Among other things, RTO/ISOs must consider and resolve issues related to how the carbon price will be determined and updated, how the carbon price will interact with the market, and how to mitigate leakage and ensure price transparency," Exelon said. "These issues take time to work through RTO/ISO stakeholder processes, particularly if there is no explicit commission obligation. For example, NYISO has been working with its stakeholders to develop a carbon adder mechanism for several years, and despite the significant efforts and progress of NYISO, its staff and numerous stakeholders, that proposal has yet to be approved and filed."

Winning consensus is even more difficult in multistate RTOs, Exelon said. "While PJM recognizes that the expanded mitigation required under the commission's recent MOPR orders is not a sensible long-term path forward for accommodating state policy mechanisms in PJM, support for the status quo remains, and little meaningful work has been done in PJM towards implementing carbon pricing."

Exelon said it is unclear whether the policy statement "will have much, if any, impact on RTO/ISO prioritization of this issue. Therefore, if the commission agrees that carbon pricing is a sensible part of any path forward, it needs to go beyond merely providing 'encouragement' in a policy statement."

But attorneys general for Massachusetts, California, Delaware, Maryland, Michigan, Minnesota, New Mexico, Pennsylvania, Rhode Island, Wisconsin and D.C. said "the commission need not, and should not, declare general positions on the design elements of state programs that are plainly within states' jurisdiction, such as the manner by which state policymakers determine carbon prices, the transparency of those prices to program participants and the design of any measures to address leakage."

Researchers for D.C.-based think tank *Resources for the Future* said the issue of emissions leakage should not be a factor in determining if a carbon price proposal is just and reasonable. "It is up to the state that establishes a carbon pricing policy to decide whether it is willing to accept the environmental leakage associated with its efforts to limit carbon emissions," they *said*.

## Jurisdiction

Independent power producer Calpine said market clearing settlement rules under carbon pricing may raise new jurisdictional questions.

"The treatment of electricity imports from resources in a state that has chosen to impose no carbon price or compliance costs into an RTO/ISO in which member states do impose a carbon price or compliance costs may present jurisdictional questions that were not squarely before the Supreme Court" in 2016's *FERC v. EPSA*, which upheld FERC's jurisdiction over demand response, Calpine said. (See *Supreme Court Upholds FERC Jurisdiction over DR*.)

The company also sought to ensure a continued role for natural gas, the fuel used in most of its generating plants. "To support decarbonization and electrification, credible analytical and academic studies have shown that retention of modern, highly efficient, natural gas-fired generation at capacity levels similar to or even greater than present levels is also required to ensure grid reliability. Thus, natural gas generation is an enabler, not an impediment, of economy-wide decarbonization." ■

| State | RPS/CES Target Year | RPS/CES Target (% of sales) | Solar Carveout (% of sales) | Onshore Wind Carveout (% of sales) | Offshore Wind Carveout (GW) |
|---|---|---|---|---|---|
| District of Columbia | 2032 | 100% | 5.5% | | |
| Delaware | 2026 | 25% | 3.5% | | |
| Illinois | 2026 | 25% | 1.5% | 1.0% | |
| Maryland | 2030 | 50% | 14.5% | | 1.2 GW |
| Michigan | 2021 | 15% | | | |
| North Carolina | 2021 | 13% | | | |
| New Jersey | 2030 | 50% | 2.21% | | 7.5 GW |
| Pennsylvania | 2021 | 8% | 0.5% | | |
| Virginia | 2050 | 100% | | | 5.2 GW |

PJM states use a range of policies to promote renewable energy, reduce GHG emissions and support specific technologies and plants, such as several nuclear and coal-fired generators. | *Energy and Environmental Economics*

CAISO/West News

# CPUC Tries to Head off Summer Blackouts

By Hudson Sangree

The California Public Utilities Commission opened a proceeding Thursday to help prevent energy emergencies next summer like those that occurred in August and September.

The *rulemaking* is intended to identify and institute near-term measures that could limit energy consumption and boost generation during heat waves that strain the Western grid. California's rolling blackouts in mid-August were the first since the energy crisis of 2000/01. (See *CAISO Blames Blackouts on Inadequate Resources, CPUC*.)

"Through this proceeding we will identify measures that can be implemented as soon as possible to address reliability for next summer," Commissioner Liane Randolph said. The CPUC, CAISO and the California Energy Commission (CEC) are working together to ensure reliability going forward, she continued.

Load-serving entities under the CPUC's jurisdiction are procuring 2,400 MW of new capacity to come online by summer. But the CPUC said additional measures, including enhanced demand response programs, are needed to ensure the state has enough energy to meet demand and maintain reserves intended to prevent a larger grid failure.

The rulemaking will consider compensating customers for switching to back-up generators during times of strained supply. It will try to reach more residents through advertising and social media to urge them to conserve energy during heat waves. And it will seek increased capacity from the state's investor-owned utilities by retrofitting generators and increasing efficiency for greater output.

The measures must be approved by April 2021 so they can be implemented by the summer, the CPUC said.

A preliminary root-cause analysis of the August blackouts by the CPUC, CAISO and the CEC recommended that the CPUC update its resource and reliability planning targets to account for extreme heat waves and expedite the development of resources that can come online by summer. (See *CAISO Says Constrained Tx Contributed to Blackouts*.)

The retirement of fossil-fuel plants and switch to renewable energy left the state short of capacity as solar power waned in the evenings during the summer heat waves. More storage for renewable resources is needed to compensate for shortfalls, CAISO and the CPUC said.

"With respect to updating resource and reliability planning targets to increase supply and account for the state's transitioning energy mix, this [order instituting rulemaking] will evaluate whether it is possible to increase the month-ahead RA procurement requirement, outside of the current multi-year process, using information provided in the prospective summer assessment report," the commission's decision said.

After the blackouts of Aug. 14-15, CAISO reported that large amounts of electricity had been exported on those days. The root-cause report acknowledged the error.

"Under-scheduling of load [by LSEs' scheduling coordinators] and convergence bidding clearing net supply signaled that more exports were supportable."

Some critics, including former CPUC president Loretta Lynch, questioned why the ISO had allowed the exports to occur. (See *Former CPUC President Calls for CAISO Probe*.)

The CPUC said it will address the issue in its rulemaking.

"For purposes of determining when capacity can be exported from the CAISO-controlled grid, particularly during reliability events, a resource that provides RA capacity can be tagged such that it would not be exported during these critical times," it said. ■


CPUC headquarters in San Francisco | © *RTO Insider*

# Initiative Seeks to Fuel Use of Green Hydrogen in West

*By Robert Mullin*

The push to develop green hydrogen in North America got a boost last week with the announcement of a new program to hasten development of the clean-burning, renewable fuel for use in the Western Interconnection.

A joint effort of the National Association of State Energy Officials (NASEO), Western Interstate Energy Board (WIEB) and the Green Hydrogen Coalition (GHC), the Western Green Hydrogen Initiative seeks "to assist interested states and partners in advancing and accelerating deployment of green hydrogen infrastructure in the Western region for the benefit of the region's economy and environment," according to the GHC.

The initiative will look to engage the Western U.S. states and Canadian provinces.

Laura Nelson, Green Hydrogen Coalition | *Green Hydrogen Coalition*

"We are here to unveil the first-ever-of-its-kind collaboration around green hydrogen … [a] public-private partnership to really create an action-focused initiative to bring together energy officials, public utility commissions, developers and other key stakeholders to accelerate progress for green hydrogen throughout the West," GHC Executive Director Laura Nelson said Nov. 17, the first day of the Green Hydrogen Visions for the West Virtual Conference.

"I like to say this will be a template for the United States and — really — beyond," said Nelson, a former energy adviser in the Utah governor's office.

The initiative also has the backing of Mitsubishi Power, which won a contract to convert Utah's 1,900-MW coal-fired Intermountain Power Plant into an 845-MW natural gas plant capable of burning a mixture of gas and hydrogen by 2025, with the goal of eventually using only hydrogen as a fuel source. The plant is operated by the Los Angeles Department of Water and Power and generates power for 29 municipalities in Southern California and Utah.

"We are really excited about this. From our point of view, we've been participating in decarbonizing the U.S. power sector for the past 20 years," Mitsubishi Power Americas CEO Paul Browning said, noting that the sector's carbon emissions are down about 40% from 2000 levels, the result of replacing coal-fired generation with a combination of natural gas and renewables.

Browning said that when his company asked the question of what would then replace natural gas to achieve future emission reductions, it landed on the combination of renewables and energy storage. And although Mitsubishi has made heavy investments in battery storage, Browning said use of lithium-ion batteries for longer-duration energy storage will be "prohibitively expensive," even with expected cost reductions.

"In that application of longer-duration energy storage, we believe that green hydrogen is far and away the most affordable solution today and is going to become increasing affordable over time," Browning said. "Three years ago, we decided we were all in on winning the order to supply gas turbines to the Intermountain Power Plant, because we saw it as a first step in many, many more green hydrogen projects to come."

"The Mitsubishi offices have led in clean energy opportunities for decades, and I think the potential opportunities in this area for the West, and frankly around the entire nation, are enormous," NASEO Executive Director David Terry said. He recalled that nearly 20 years ago, NASEO was involved in early research and development efforts around green hydrogen and that "it's exciting to see that come full circle to a real market opportunity now to provide solutions to states' energy challenges."

## 'Intelligent Tinkering'

In a press release Nov. 17, GHC said, "Green hydrogen can help avoid uneconomic grid buildout, prevent renewable curtailment, repurpose existing infrastructure, reduce greenhouse gases and air pollution, reduce agricultural and municipal waste, and diversify fuels for multiple sectors from steel production to aviation."

Green hydrogen development in the West has so far been minimal, it said. "To enable investments at scale, green hydrogen must be compensated for the many benefits it provides."

To advance that goal, GHC laid out five key objectives for the initiative:

- Coordinating and leveraging state, federal and industry R&D and green hydrogen demonstration projects "to guide priorities and scale commercial technology options."
- Addressing regulatory, policy and commercial barriers hindering the scaled production and use of green hydrogen.
- Supporting "regional grid and gas sector modeling efforts to inform coordinated state policy actions and investment for green hydrogen utilizing existing energy infrastructure."
- Identifying "education and workforce opportunities that support the transition to a local and resilient green hydrogen energy system."
- Assisting states in "developing hydrogen storage and utilization roadmaps to advance innovation and expand opportunities for low-cost renewable energy to produce, use and store green hydrogen."

"It's an amazing initiative, and great results are coming to an energy future that I think is here," Terry said.

WIEB Executive Director Maury Galbraith waxed philosophical about the potential key role for green hydrogen in transitioning to a carbon-free grid while maintaining reliability. He likened the Western Interconnection to "a living machine" in that it is "constantly evolving."

"We cannot simply stop the machine and start all over again. The machine must operate as we improve it," Galbraith said.

Quoting conservationist Aldo Leopold's statement, "To keep every cog and wheel is the first precaution of intelligent tinkering," Galbraith cautioned that the industry is currently discarding parts of the Western bulk electric system "at a rapid pace."

"Whether you believe this is a good thing or a bad thing, I think we can all agree it is a risky thing," he said, adding that his role as the head of WIEB "is to ensure that we tinker intelligently."

"One point seems clear to me: A large-scale, dispatchable, clean source of electric generating capacity would be a tremendous help. Green hydrogen is a clean fuel source that can be potentially used in combustion turbines to provide this electric generating capacity," Galbraith said.

"Is green hydrogen electric generation the technology that will be selected in the evolution of the bulk electric system? I do not know — that depends on a lot of factors. Is it an intelligent step to take as we tinker with the bulk electric system? Yes, without a doubt." ■

# CAISO Governors Honor Olsen

## *Board Adopts Hybrid Resource Rules*

*By Hudson Sangree*

The CAISO Board of Governors praised the work of retiring colleague David Olsen on Wednesday and adopted the second part of a plan to speed the interconnection of storage resources to avoid future blackouts.

The governors and new CEO Elliot Mainzer recognized former Chair Olsen for his efforts to bring renewable power into the mainstream over the past four decades, including nearly nine years on the CAISO board.

"You are truly a titan in the energy field," Chair Angelina Galiteva said. "Your wisdom, dedication and commitment to the decarbonization of the grid … especially to elevating the ISO to an international and global leader in the field of integrating renewables … is greatly appreciated and cherished."

Mainzer read a resolution from the governors honoring Olsen and presented him, in an online meeting, with a commemorative plaque. The resolution recognized Olsen's many achievements, including ushering in an era of corporate sustainability as president of Patagonia in the late-1990s. He led the outdoor-gear company's carbon-reduction efforts, making it the first U.S. corporation to get its electricity from wind and solar power. (See *Ex-CAISO Board Chair to Retire*.)


David Olsen, CAISO | *© RTO Insider*

Olsen, 74, served as CAISO board chair from February 2018 to Oct. 1. Earlier this month, he announced he would retire Nov. 30 with more than a year left in his term.

"I'll be 75 years old soon and have been on the CAISO board for almost nine years," Olsen said in an email. "That's long enough on both fronts."

### Hybrid Resources Initiative

The board unanimously approved the second *phase* of CAISO's hybrid resources initiative, letting co-located storage and generation resources operate under a single resource ID.

"The hybrid model allows for the underlying resources to be managed by the resource operator as opposed to the ISO," CAISO COO Mark Rothleder said in a memo to the board. New provisions would allow hybrid resources to provide energy and ancillary services, he said.


David Olsen's colleagues on the CAISO Board of Governors presented him with this plaque at his last meeting before retirement. | *CAISO*

"The proposal also includes a dynamic limit tool that will enable the resource operators to communicate their maximum and minimum operating limits to the ISO in real time," Rothleder wrote. "This tool will help the ISO ensure it is issuing feasible dispatches to hybrid resources participating in the market."

The board approved the first phase of the hybrid resources initiative in July. It laid out new rules for co-located resources that operate under separate resource IDs for dispatch purposes. FERC approved those Tariff changes Thursday, allowing them to take effect in December. (See related story, *FERC Accepts CAISO Co-Located Resources Plan*.) The ISO's second-phase proposal also requires FERC approval.

Both phases are intended to better integrate storage coupled with solar and wind generation. CAISO needs thousands of megawatts of storage to transition to 100% clean energy by 2045, as state law requires. It has about 200 MW of storage now.

In the near term, the ISO is urgently trying to interconnect more storage before summer 2021. Resource shortfalls next summer are forecasted to exceed those in August and September, when CAISO declared energy emergencies, including rolling blackouts, in mid-August. ■

# Struggling PG&E Nabs CMS Energy's CEO

*By Amanda Durish Cook*

CMS Energy CEO Patti Poppe will depart the Michigan-based electric and natural gas utility to become CEO of California's besieged PG&E Corp., the companies announced Wednesday morning.

Poppe will step down Dec. 1 after four years as CMS' president and CEO and six more years in various other leadership positions at the company. She will replace PG&E's interim CEO, William Smith, on Jan. 4. Poppe will join the boards of directors at PG&E and Pacific Gas and Electric; Smith will remain on both boards following her arrival.

CMS' executive vice president of operations, Garrick Rochow, will succeed Poppe.

"Since 2011, I have considered CMS Energy as my home and my co-workers as my family, and I will miss everyone immensely," Poppe said in a *press release*. "Garrick is a world-class leader and will continue to deliver on the triple bottom line of people, planet and prosperity, as we have for many years now."

"I am honored to have the opportunity to lead a company with amazing co-workers who make a difference every day for our customers, investors and the communities we serve," Rochow said in the release. "I look forward to continuing our strong operational and financial performance while creating an environment that keeps our customers and co-workers safe, reflects our culture and is inclusive and respectful of everyone."


CMS Energy CEO Patti Poppe | *Whirlpool*

"You can count on CMS Energy to have consistent and predictable performance because of our strong succession planning and the quality of our executive team. I wish Patti the best of luck," said John Russell, chairman of CMS' board.

## Challenges Ahead in Cali

Poppe recognized that she faces a daunting task in becoming the fourth CEO in three years to take the helm of California's largest utility. PG&E has been dogged in recent years by bankruptcy, devastating wildfires and mishandled power shutoffs that left 2 million residents in the dark in 2019. It surfaced from bankruptcy in June, but not before giving wildfire victims a 22% equity stake in the company under a settlement. (See *PG&E Trying to Move Forward from Bankruptcy*.)

"PG&E has the privilege of powering one of the world's largest economies and the opportunity to help lead the state's clean energy future. It also faces significant challenges. I am eager to get to know the PG&E team and to join in the critical work of strengthening PG&E for California's next generation and earning back the community's trust," she *said*.

PG&E said its board appointed Poppe "following a broad national search that looked at candidates both inside and outside of the utility and energy industries."

"Patti is an exceptional leader with the experience, drive and character to lead PG&E through its next chapter. She knows the utility industry top to bottom and has a deep understanding of what it takes to provide safe, reliable, affordable and clean energy to millions of customers," PG&E Chairman Robert Flexon said in a statement. "We all recognize that PG&E must continue to improve, adapt and become more resilient to the changing climate. As the leader of Michigan's largest utility, Patti has embraced technology and put the company on a course to achieving its ambitious clean energy goals while maintaining steady and safe performance, prioritizing customer service and advancing workplace equity."

The news had a contrasting effect on the companies' respective stocks Wednesday morning. PG&E shares perked up, but CMS shares drooped.


Garrick Rochow, CMS | *CMS Energy*

Smith said he had "every confidence Patti will hit the ground running and lead PG&E forward."

"She is incredibly smart, knows the operations side of this business, and brings to her work curiosity, dedication and warmth. These qualities will serve her well as she brings PG&E into the future. I look forward to introducing Patti to our talented workforce, welcoming her to California and working closely with her in the years ahead," he said.

Poppe has been uncharacteristically candid about her pivot from supporting coal to embracing environmentally friendly energy. (See *Consumers Energy Accelerates Zero-carbon Target*.) Under her watch, CMS subsidiary Consumers Energy accelerated its target to achieve net-zero carbon emissions from 2050 to 2040, putting the utility on track to achieve that goal a decade earlier than most of its peers in the industry.

She often invokes her grandchildren in *comments* about the importance of combating climate change, expressing hope that she will be able to tell them that climate change is something people used to worry over. ■

## CAISO/West News

# FERC Accepts CAISO Co-located Resources Plan

## *ISO Hopes Measure Will Speed Connection of Generation with Battery Storage*

*By Hudson Sangree*

| 174 Power Global

FERC on Thursday approved a CAISO plan meant to allow co-located resources, such as solar arrays with battery storage, to connect to the grid more quickly and seamlessly in the coming months (*ER20-2890*).

CAISO had asked FERC to speed approval of the measure to head off projected resource shortfalls next summer like those that plagued California in August and September, when the state ran short of electricity during Western heat waves as solar and wind dropped offline at night.

California had insufficient storage of renewable resources to cover the shortfalls, but CAISO has about 20 GW of storage in its interconnection queue and wants to bring part of it online before the next hot spell.

"The proposed Tariff revisions are initial steps toward developing more robust rules and models to integrate co-located resources and hybrid resources and optimize their performance," FERC said in its decision.

The co-located resource proposal is part of CAISO's hybrid resources stakeholder *initiative*, which includes a second phase dealing with hybrid resources. The ISO's Board of Governors adopted the second phase Thursday. (See related story, *CAISO Governors Honor Olsen*.)

The co-located plan governs generation and storage resources that share a single point of interconnection but have separate IDs, allowing CAISO to dispatch the resources individually. The rule changes take effect in December.

The second-phase proposal would dispatch solar or wind plus storage as a single unit. It is scheduled for implementation in October 2021. CAISO management decided to implement the co-located plan first because it involves relatively familiar procedures. The ISO said the hybrid resources plan is more complex and requires additional time for planning. (See *CAISO Adopts Co-located Resources Plan*.)

Among the changes FERC approved Thursday are market rules to ensure resources that share the same interconnection point do not exceed its limits. The Tariff changes also require wind and solar resources paired with storage to provide CAISO with data that allow for better generation forecasting based on weather. ■

## CAISO/West News

# Oregon PUC Plans Take on Decarbonization

*By Robert Mullin*

A special public meeting of the Oregon Public Utility Commission last week illustrated the complexity of issues and interests at play for utility regulators charged with putting a state decarbonization plan into practice.

The PUC convened an online meeting Thursday to hear stakeholder comments on a raft of draft work plans to implement portions of *Executive Order 20-04*, which Gov. Kate Brown issued in March to direct state agencies to take measures to reduce and regulate Oregon's greenhouse gas emissions.

Brown's order aligns with an Oregon law that requires the state to reduce GHG emissions to 45% below the 1990 level by 2035 and at least 80% by 2045.

Oregon PUC Chair Megan Decker | *Oregon PUC*

More than 120 people tuned into Thursday's meeting, including representatives of electric and natural gas utilities, renewable and environmental advocacy groups, labor organizations and Native American tribes. "You may notice from the number of participants in this webinar that this is a topic that a lot of people care about," PUC Chair Megan Decker said in opening the meeting.

The draft work plans, developed by PUC staff and still subject to commission approval, cover three broad themes.

The first theme, "GHG Reduction Activities," is broken down into three subsets: Utility Planning, Utility Services and Activities, and Transportation Electrification. The objective of the Utility Planning work plan, according to a PUC *document*, is "to identify, prioritize and deploy strategies to enhance and refine our existing least-cost, least-risk framework to ensure energy utilities are focusing their systemwide resource strategies on making rapid, large-scale and sustained progress to meet GHG reduction goals."

The Utility Planning work plan, slated for adoption in the second quarter of 2021, contains a number of ambitious first-year priorities, including:

- Updating utility integrated resource plan guidelines to include GHG costs and risks. Existing guidelines state that IRPs "must be consistent with the long-run public interest as expressed in Oregon and federal energy policies." The changes would include having IRPs reflect utilities' risks and costs of missing EO 20-24 targets and requiring IRPs to comprehensively assess the use of carbon-free resources — including on the distribution grid — in portfolio analysis.
- Incorporating the social cost of carbon (SCC) into future IRPs.
- Identifying and exploring approaches to carbon pricing.
- Incorporating the SCC — or a carbon price — into utility avoided-cost filings, including those regarding energy efficiency and Public Utility Regulatory Policies Act resources.
- Considering GHG-related risks in the utility procurement process.
- Evaluating the effectiveness of a current voluntary program, established under a 2013 state law, to reduce GHG emissions from natural gas utilities. No projects have been developed under the program.

### 'New Area for the PUC'

The Utility Services and Activities work plan seeks to "prioritize actions that streamline and modernize safe, reliable methods to connect clean resources — from renewables to demand-side management, to the electric and natural gas systems — and appropriately value their system contributions, especially when deployed to support low- to moderate-income customers."

The plan also promotes the use of community-wide "green tariffs" to assist communities in their efforts to exceed the state's renewable portfolio standard and use 100% renewable energy.

The Transportation Electrification (TE) work plan establishes near-term objectives for conducting research and enacting policies to underpin a new investment framework for utilities and other stakeholders.

The plan seeks to:

- prioritize TE investments within distribution planning;
- collaborate on new rate schedules and tariffs that encourage TE and efficient charging of electrical vehicles, and that benefit all ratepayers, including "impacted" communities;
- engage stakeholders to improve the PUC's TE planning guidelines to streamline utility processes and clarify cost-recovery standards; and
- commence "a new robust data collection process into market transformation indicators to be tracked by the utilities and shared annually with the OPUC."

"This plan really emphasizes consistent development of an investment approach," Sarah Hall, the PUC's resource and programs development manager, said during Thursday's meeting.

"Just as an overall philosophy, this is a new area for the PUC, and we have to be open to a lot of learning and flexibility around new ideas," Chair Decker said.

### 'All About Inclusiveness'

The second theme, "Impacted Communities," looks to address the "disproportionate effect" of climate change on communities that have been historically underrepresented in public processes. The objective of the work plan is to go beyond protecting those communities and ensure they are engaged in measures to reduce GHGs — and actually derive benefit from those measures.

PUC Director of Policy Robin Freeman said a "major component" of the work plan is the hiring of a new diversity, equity and inclusion (DEI) program director to give the PUC a point of contact with those communities. The commission expects to fill the position in December.

The position is part of the work plan's broader objective to transform the PUC's structure and operations, including expansion of a recently formed "low-income roundtable" to help increase staff awareness of issues affecting vulnerable ratepayers. The plan would also see the PUC create new tools to quantify the energy burden of Oregon residents and improve utility reporting of disconnections. It will additionally strive to fulfill Gov. Brown's objective to engage electricity customers and communities to ensure that GHG reduction goals provide widespread benefits.

"I'm starting to see that equity is part of everything that we're doing," Decker said.

In its current iteration, the Wildfire Prevention and Mitigation work plan — which falls under the third theme — is less detailed than the other plans. Lori Koho, the PUC's utility safety, reliability and security division administrator,

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said that in light of the wildfires that ravaged Oregon in early September, staff wanted to defer rulemaking until it could engage the broader community.

"We wanted that process to be open, and so, that's a key part of what we've tried to put in our work plan — is to make sure there are steps all along the way for different parties to provide input and be a part of this because communication is so key," Koho said.

The work plan envisions the PUC holding a series of workshops and town hall meetings to discuss requirements for utility wildfire mitigation plans. It also foresees further development of the Oregon Wildfire and Electric Collaborative to share best practices on mitigation.

"It's all about inclusiveness," Koho said.

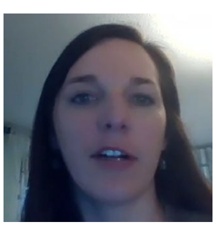
## 'Elephant in the Room'

Stakeholders speaking at Thursday's meeting praised PUC staff for the level of detail in the draft work plans. But a number of them pointed to what they called one shortcoming: an unclear picture of the future of natural gas use in Oregon — despite the inclusion in the work plan of a fact-finding effort related to decarbonization of the gas sector.

Bob Jenks, Oregon Citizens' Utility Board | *Oregon PUC*

Bob Jenks, executive director of the Oregon Citizens' Utility Board (CUB) said that under EO 20-24's cap-and-reduce program, natural gas emissions must decline by about 50% from 2017 levels by 2035. Instead, they are currently rising.

"I sort of look at the gap between the growing line of emissions we're on right now and the declining line that we need to be on as a financial risk to customers," Jenks said.



Meredith Connolly, Climate Solutions | *Oregon PUC*

"I think the elephant in the room is the future role of natural gas — which is more accurately known as fossil gas — in our electricity grid and in the direct use of our homes," said Meredith Connolly, Oregon director with Climate Solutions.

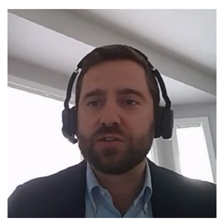
Connolly noted that a recent biennial report from the Oregon Department of Energy showed that combined natural gas use in electricity generation and buildings is now the second biggest source of the state's GHG emissions behind transportation fuels.

"We see these rapidly accelerating building electrification trends in California and Washington and Vancouver, B.C. — those are coming to Oregon, and they're going to happen very quickly here, and that's a good thing for our health and climate and people's pocketbooks," Connolly said.

Max Greene, Renewable Northwest | *Oregon PUC*

Max Greene, regulatory and policy director at Renewable Northwest, also encouraged the PUC to look at the costs and risks of using natural gas for electricity generation and home use.

Zachary Kravitz, director of rates and regulatory affairs at NW Natural, Oregon's largest gas utility, said that while his company understands the PUC's desire for the fact-finding mission around gas, "we support a data-driven effort that considers costs, resource adequacy and customer choice in that fact-finding."



Zachary Kravitz, NW Natural | *Oregon PUC*

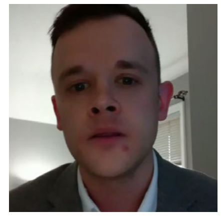
Kravitz also said that direct use of natural gas accounts for about 6% of Oregon's total GHG emissions. Normalized for weather, those emissions have grown less than 1% per year on average over the last 20 years, while use per customer has "fallen significantly," he said.

"And now that we're moving forward under [Oregon Senate Bill] 98 to secure renewable natural gas and hopefully hydrogen, we expect our emissions to start decreasing, and this is before considering the impacts of this executive order," Kravitz said. (See *Initiative Seeks to Fuel Use of Green Hydrogen in West*.)

Commissioner Letha Tawney said the comments about natural gas made her think about the course the commission previously charted around the risks related to utility ownership of coal-fired generation.

"I think CUB in many ways started us down that path, and we see them again raising the important question, echoed by many other stakeholders, around long-term risk, and I hear the tension you're articulating, and I would encourage us not to discount what happens when you begin to really engage around those risks," Tawney said.

## Workforce Impact



Chris Hewitt, Oregon and Southern Idaho District Council of Laborers | *Oregon PUC*

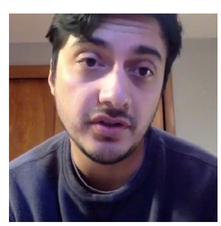
Two commenters pointed to the deep implications of decarbonization for sections of the state's workforce. Chris Hewitt, political director with the Oregon and Southern Idaho District Council of Laborers, spoke on behalf of the group's 4,000 members who perform skilled work throughout the construction industry, including working for contractors on "traditional" energy projects such as gas pipeline construction and transmission upgrades.

"Our members live in the communities where they work, and they reflect the increasing diversity of our region, and for decades Oregon has relied on laborers and other trades workers to perform high-quality, safe work on projects that provide vital family-wage jobs," many of which are located in rural areas, Hewitt said.

Many of those jobs enjoy negotiated wage packages that exceed $45/hour, Hewitt said. "By contrast, when we look at construction labor wage rates we've seen advertised for renewable projects today, those are commonly advertised between $12 and $18/hour, which is a significant difference."

Hewitt said his group appreciates the ongoing efforts to mitigate climate effects, but "a rapid energy transition has really too often left workers behind and resulted in economic dislocation" without providing workforce transition plans or "explicit standards" for jobs in the expanding renewables sector.

"Unfortunately, it doesn't seem that this work plan today as drafted includes much reference to that, and we hope that there's room for that in the conversation. We also hope that this process can recognize workers who build and maintain our energy sector as an impacted community and as a stakeholder moving forward."



Ranfis Villatoro, BlueGreen Alliance | *Oregon PUC*

Ranfis Villatoro, Oregon state policy

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coordinator with the Blue-Green Alliance, agreed that workers should be considered "impacted communities" under the work plans and emphasized the importance of aligning work standards with climate goals.

Villatoro said that on the path to decarbonization, "there's always the potential for workers to be displaced and with a lack of clarity of how workers are retrained or transitioned into new workspaces, but it doesn't have to be that way."

"I think there's more work for us to think about in the labor questions," Tawney said.

### Utility Response

Oregon's two investor-owned electric utilities threw their support behind the work plans.

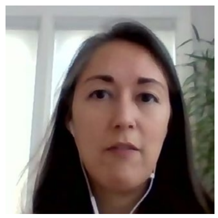
Karla Wenzel, PGE | *Oregon PUC*

"We think the plans and the work ahead of us fits well with our corporate strategy to accelerate decarbonization in our own operations and in our role offering customers products and services that help attain the state's goals and assist customers in achieving theirs for transportation electrification and clean, green energy to power their homes and businesses," said Karla Wenzel, manager of regulatory policy and strategy at Portland General Electric.

Wenzel said PGE looks forward to "working with and learning from" the PUC's new DEI program director "as we support more inclusive engagement and more intentionality in including impacted communities."

She cautioned that the work plans "are ambitious and a heavy lift," with "aggressive" schedules that warrant flexibility, "given limited resources and the need to balance existing and growing regulatory work."

"We appreciate the fact that these are not detailed plans and will require refinement of the actions and activities and potentially resetting of priorities," Wenzel said.

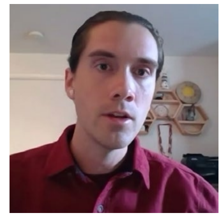


Etta Lockey, PacifiCorp | *Oregon PUC*

Etta Lockey, vice president of regulation at PacifiCorp, agreed that work plans are "a lot to tackle" but appreciated that the plans acknowledged the potential need to refine processes "as we go."

"Oregon is not alone in grappling with many of these issues," Lockey said. "PacifiCorp is having similar conversations in many of its jurisdictions, particularly around issues of impacted and underserved communities. We're very interested in how this discussion plays out in Oregon, and we're very encouraged by the commission's pursuit of somebody dedicated within the commission to work on these issues, and we look forward to engaging with that new role and the workstreams associated with it."

Mark Petrie, vice chair of the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians, spoke on behalf of Oregon's most historically underserved communities. He noted that he had recently worked with the tribe to pass a resolution supporting research into offshore wind energy.



Mark Petrie, Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians | *Oregon PUC*

"I just wanted to highlight two goals we have with that resolution and to emphasize that it's essential that this new use of ocean energy be developed in such a way as to minimize any potential effects on cultural and natural resources to the tribe ocean environment and its other responsible ocean users," Petrie said. "The tribe wishes to ensure that offshore wind projects and benefits thereof are coordinated with tribal, state and local leadership and priorities to maximize the benefits from this sector."

Wrapping up the meeting, Commissioner Mark Thompson expressed excitement at the number of new people he has not worked with previously as a member of the PUC.

Oregon PUC Commissioner Mark Thompson | *Oregon PUC*

"Sometimes we can probably kid ourselves and say our work is so complex that you have to be almost an expert to be able to engage in it and be understood. But I think some of the comments today — well, all of them — really prove that's not the case," Thompson said. ■

## ERCOT News

# Texas PUC Briefs

### Commission Threatens TNMP with 'Comprehensive' Rate Case

The Texas Public Utility Commission last week threatened Texas-New Mexico Power (TNMP) with a "comprehensive" rate case if the utility didn't remove proposed Tariff language from a proceeding before the commission.

The PUC in August approved TNMP's settlement agreement for an annual increase of $14.29 million in its distribution cost recovery factor (DCRF). Two months later, it filed in the same docket revisions to its wholesale Tariff for transmission service to correct errors in it (*50731*).

On Nov. 6, energy storage developer Broad Reach Power filed for relief from TNMP's distribution service charges being assessed to wholesale storage entities as a result of the utility's proposed correction. Broad Reach said the changes tucked into TNMP's proposed correction were "inconsistent" with commission rules and applicable legal standards and asked the PUC for declaratory and injunctive relief and a rulemaking to address the issues (*51501*).

The developer found a sympathetic ear in PUC Chair DeAnn Walker.

"DCRF proceedings are meant to provide periodic changes to rates to cover distribution investment. This is not what occurred in this instance," Walker said during the commission's open meeting Thursday. "The manner in which TNMP chose to try to address it in filing a new Tariff two months later does not comply with the commission's order. They should have filed a new case to change the Tariff back to what it should have been.

"Now we have pending this new docket, which sets forth various alternatives, none of which I believe the commission has the legal ability to implement, except maybe the rulemaking. We have two dockets that are spending a lot of the commission's time that are not our core mission."

TNMP's correction added language that would separately meter a storage facility from all other facilities and set the interconnection point at the distribution level.

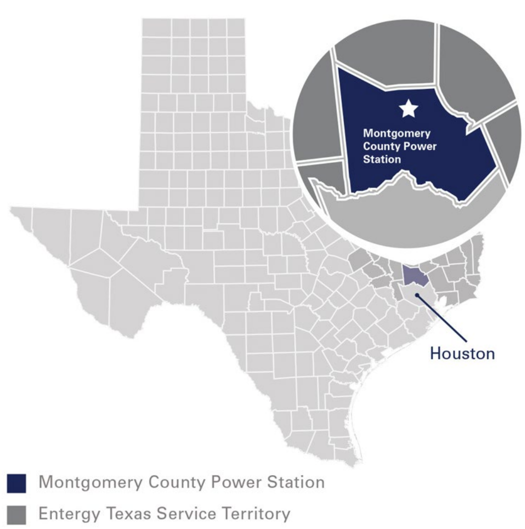
"The changes proposed to the Tariff for transmission service go well beyond the intent of the statue and the rules allowing a DCRF," Walker said. She suggested that TNMP and other parties in the Broad Reach proceeding file a petition by Dec. 8 that would remove the troublesome language. If not, she said, she would use the PUC's Dec. 17 open meeting to require TNMP to file a rate case to address the issue and any others "that may be out there."

"I want to be clear to all utilities that they are not to abuse the DRCF process or any of these other processes they have gotten through the legislature and through us to give them quick relief," Walker said.

She also had harsh words for other parties in the proceedings and PUC staff, saying the commission was caught off-guard by the dockets.

"In my view, the system failed the commissioners on this issue. [TNMP] should never have included this request in their application, and the other parties and staff should not have included this change in the Tariff," Walker said. "I do not believe based on the record of this case that the commissioners were in a position to identify the issue without the input from the parties and the staff. There's no way the three of us could have ever caught this issue and said, 'This shouldn't be in a DCRF.'"

"You can't sneak it through the way it was sneaked through here," Commissioner Arthur D'Andrea said. "It embarrasses me that I missed it. It's still our job. We still signed [the order]."




Entergy Texas' Montgomery County Power Station is north of Houston. | *Entergy Texas*

### Hearing on Proposed Entergy Rider

The commission agreed to hold a hearing in December or January on a proposed rider by Entergy Texas for a new gas-fired power plant north of Houston (*51381*).

Entergy in October *filed* a request for a generation cost recovery rider to begin recovering a return of and on its capital investment in the *Montgomery County Power Station*, a 993-MW, combined cycle natural gas plant near Willis. Entergy, which has said the plant's construction costs will be $937 million, is attempting to collect about $91 million annually from its Texas customers.

The plant was originally expected to be placed in service next June. Entergy now projects the in-service date to be moved up, leading to the PUC's decision to quickly hold a hearing on the rider.

Walker said she was concerned that in reviewing the case, the utility might have included costs in the rider "more appropriately defined" as operations and maintenance costs.

"I want to be clear to Entergy that they better scrub before the hearing any costs they are requesting," Walker said. "If they are getting a rider with inappropriate carrying costs, they will have to refund those amounts, and they will have to refund them with carrying costs."

The plant's expenses and costs will be part of a future rate case, she said.

Texas Industrial Energy Consumers, the Office of Public Utility Counsel and a coalition of Houston-area cities all requested the PUC hold a hearing on Entergy's application.

### Staff File Enforcement Report

PUC staff filed its annual *report* on customer complaints and enforcement activities on Nov. 10, listing 6,805 electric complaints during fiscal year 2020. According to the report, staff opened 152 investigations and closed 110, approving orders that resulted in $2.2 million in administrative penalties and $225,000 in refunds.

The commission recently ended Texas Reliability Entity's reliability monitor contract for the ERCOT market. The PUC pointed to the nearly $1.9 million in penalties in five years for noncompliance with reliability-related regional rules as evidence that it wasn't getting its money's worth. (See *PUC Cancels Texas RE as ERCOT's Reliability Monitor*.) ■

*— Tom Kleckner*

## ERCOT News

# ERCOT Technical Advisory Committee Briefs

### RTC, Energy Storage Task Forces Finalize RRs

ERCOT task forces working on market improvements and integrating energy storage resources (ESRs) brought the results of more than a year's worth of work to last week's Technical Advisory Committee, resulting in a "mountain" of change requests for its approval.

"We have a skinny upfront update, but a fat appendix," said ERCOT's Matt Mereness, chair of the Real-Time Co-optimization Task Force (RTCTF), referring to seven Nodal Protocol revision requests (NPRRs) and two other changes the team brought forward.

The changes represent two years of work encompassing 33 meetings. Underscoring the task force's effectiveness, the change requests engendered little discussion at the Protocol Revision Subcommittee, where they were easily approved before being sent on to the TAC.

"There was no real discussion at PRS because the task force did such a great job of reaching consensus," said the subcommittee's chair, Oncor's Martha Henson.

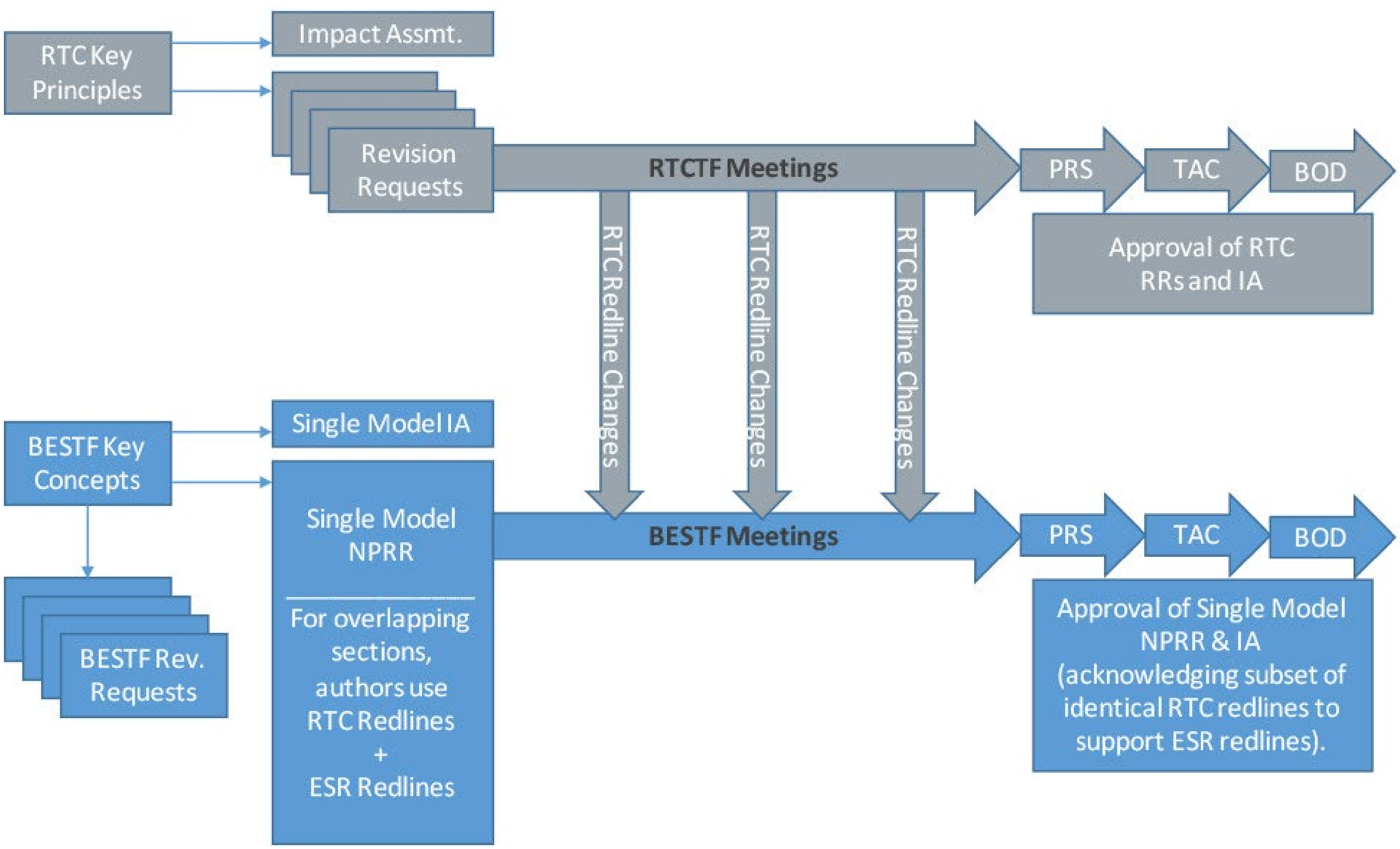
The RTCTF drafted the change requests after first developing the key principles for adding the real-time co-optimization (RTC) tool, which procures both energy and ancillary services every five minutes, to the market. ERCOT is still projecting it will cost $50 million to $55 million to add RTC. (See *ERCOT Stakeholders Dig into Real-Time Co-optimization*.)

The TAC also considered a pair of NPRRs from the Battery Energy Storage Task Force (BESTF), which has been working to integrate ESRs and distribution generation resources into ERCOT's systems. The changes, along with the RTCTF's, were placed on the combination ballot, which was approved unanimously in a single vote. The measures will now go before the Board of Directors on Dec. 8 for final approval.

The BESTF has settled on a "single-model" approach to energy storage, where the battery is represented as a single resource. ERCOT currently uses a "combo model," with the battery represented as a generation resource and a controllable load resource.

The task forces' work has been combined with a third major project, ERCOT's upgrade of its energy management system (EMS), as part of the grid operator's Passport Program. ERCOT is aligning the three initiatives to be finalized in 2024, transforming the market into one of the "most sophisticated market designs in the world."

Mereness said the RTCTF will continue




ERCOT's plan to harmonize the Real-Time Co-optimization and Battery Energy Storage task forces | *ERCOT*

# ERCOT News

the support Passport's next phase in 2021, engaging TAC members on policy and analysis items, supporting details and market participant needs. Updates will be provided to the committee before every board meeting.

## REPs, NOIEs Debate Revision Change

Stakeholder discussion of an NPRR related to the wholesale market laid open a bit of friction between retail electric providers (REPs) and non-opt-in entities (NOIEs), those municipalities, cooperatives and river authorities that do not offer customer choice in the competitive retail market.

*NPRR1055* would give ERCOT the discretion to accept for good cause late submissions of NOIEs' attestations that they own or control their generation resources serving as a source resource node, or that the resource has a contractual commitment for capacity and/or energy with the NOIE. The attestation allows ERCOT to certify congestion-hedging instruments granted to NOIEs.

The change also requires ERCOT to post a market notice by Sept. 1 of each year, reminding NOIEs of the annual deadline.

The NPRR would amend portions of *NPRR929* by requiring ERCOT to post a market notice by Sept. 1 each year that reminds NOIEs of the annual deadline. NPRR929 was approved last year and added new criteria for determining whether a point-to-point (PTP) obligation with links to an option bid is eligible to be awarded based on the resource's current operating plan status at the bid source's node. It also required the NOIEs to submit their attestations by Oct. 1 to offer their PTP obligations in the day-ahead market.

The TAC failed to approve a motion to deny NPRR1055 by a vote of 5-18 with six abstentions. The motion to approve passed 19-6 with four abstentions.

At issue is that a number of NOIEs missed this year's attestation deadline, prompting staff to draft NPRR1055. That raised hackles among the REPs, which noted that it is rare for stakeholders to consider protocol language to accommodate a missed deadline.

"I don't quite understand ERCOT filing a protocol change for someone missing a market deadline," said Direct Energy's Sandy Morris, using an example of her company being denied a waiver to file digital certificates late following Hurricane Harvey.

"This brings big questions in my mind about why the affected NOIEs would have filed their own NPRR," Demand Control 2's Shannon McClendon said. "Obviously, [an NPRR] has a lot more weight when it comes from ERCOT."

Kenan Ögelman, ERCOT's vice president of commercial operations, said the protocols do not allow good-cause exemptions for late submissions, but that in reviewing NPRR929's functional merits, dates and the circumstances, staff realized they could write an NPRR "giving us discretion."

"We would not want to exercise that without consulting with the stakeholder process and TAC," Ögelman said. "The Oct. 1 date, from my reading and understanding of 929, was in there for ERCOT to finish some work, which we realized we could still complete in time for the 2021 auction. We wanted to communicate to the market we could still meet all the obligations described in 929 and take these late submittals. When I read 929, I do not see any intent that the Oct. 1 date was supposed to be some kind of a barrier, other than to allow ERCOT time to work through this."

Asked by a market participant to name the NOIEs that missed the deadline, Ögelman demurred.

"I'll describe it this way: Both numerically and by volume, 50% of the NOIES got the things in on time. Approximately 50% did not," he said. "The composition of the NOIEs unable to submit on time were both large and small NOIEs."

Saying he was sympathetic to REPs "not getting their mulligan" and issues of fairness, CPS Energy's David Kee brought up the Public Utility Commission's COVID-19 Electricity Relief Program, which allowed retailers to recover the cost of suspending disconnections for residential customers.

"The REPs did get pretty good help from the PUC with the COVID relief program. I didn't hear from REPs saying anything when the NOIEs didn't get help," he said. "I hope we as stakeholders can support NOIEs in this request so we can all work together on this moving forward."

"We are comfortable with doing so, assuming it is limited," Reliant Energy Retail Services' Bill Barnes said. "We do remain concerned and ask that ERCOT and all stakeholders assure this is a one-off event and will be scrutinized in the future."

## ERCOT to Stay Virtual Through January

ERCOT's Kristi Hobbs, who is responsible for enterprise risk management, told the committee that large, in-person meetings at the grid operator's facilities will be restricted "for some portion" of 2021.

"Given current trends, we'll definitely remain virtual for January, and we don't expect a shift for February either," she said.

Speaking on the eight-month anniversary of staff's mandatory work-at-home order, Hobbs said that order has been extended to January and likely February.

"Some days, it feels like forever," Hobbs said, "but we've all been so busy, it's gone by quickly."

She said Austin, Texas-based ERCOT is working with an epidemiologist and continues to monitor local and state trends. The grid operator hasn't issued an official COVID-19 notice since a market advisory in May, but Hobbs said the next check-in will take place in January.

Local health officials on Thursday *raised* Austin's risk-based guidelines for the coronavirus based on an increase in new cases and a 7% positivity rate.

## New Interconnection Process for Sub-10-MW Generators

Members endorsed a change to the Planning Guide (*PGRR082*) that creates a new interconnection process for generators and modifications less than 10 MW, despite an initial investment of $700,000 to 900,000 and annual operations and maintenance costs of about $500,000.

Barnes, the PGRR's sponsor, said, "We think this process is extremely important."

PGRR082 will enable ERCOT to track the small generators through the interconnection process and perform any needed studies before the projects are included in the network operations model. The change extends the interconnection process to distribution-connected resources and settlement-only generators (SOGs) and clarifies the roles of ERCOT and transmission and/or distribution service providers.

The measure was voted on separately from the combination ballot because a pair of industrial consumers said they would abstain. It passed 27-0.

The TAC unanimously approved the combination ballot, which included a white paper related to *Southern Cross Transmission*, a proposed HVDC line in East Texas that would ship more than 2 GW of energy between the Texas grid and Southeastern markets. (See "Members Debate Southern Cross' Bid to be Merchant DC Tie Operator," *ERCOT Technical Advisory Committee Briefs: Feb. 22, 2018*.)

In the document, staff determined they will need to impose restrictions on DC tie flows when ERCOT determines that system conditions in near or real time cannot accommodate the ties' scheduled ramp. The board last month approved NPRR999, which will revise the protocols by creating a section related to ramp limitations on DC ties. The revision is intended to clarify that when the grid operator determines system conditions show insufficient ramp capability to meet the sum of all DC ties' scheduled ramp, it will curtail schedules on a last-in, first-out basis.

The ballot's approval resulted in TAC's endorsement of staff's proposal to change the minimum responsive reserve service's primary frequency response limit next year based on updates to NERC's BAL-003 Interconnection Frequency Response Obligation assessment for 2021. Staff also recommended a change in each of the methodologies used for computing non-spinning and regulation reserves to account for installed solar capacity's growth.

The combination ballot also included 16 NPRRs, a change to the Commercial Operations Market Guide (COPMGRR), four revisions to the Nodal Operating Guide (NOGRRs), an Other Binding Document (OBDRR) modification, two PGRRs and single changes to the Resource Registration Guide (RRGRR) and Verifiable Cost Manual (VCMRR):

- *NPRR1001*: clarifies that ERCOT will issue an "emergency notice" when it is operating in an "emergency condition," but issuing an "operating condition notice," advisory" or "watch" does not mean that ERCOT is operating in an "emergency condition."
- *NPRR1007*: updates the ERCOT system's management activities in the protocols to address changes associated with RTC's implementation.
- *NPRR1008*: Updates day-ahead operations in the protocols to address changes associated with RTC's implementation.
- *NPRR1009*: updates transmission security analysis and reliability unit commitment to address changes associated with RTC's implementation.
- *NPRR1010*: updates the adjustment period and real-time operations in the protocols to address changes associated with RTC's implementation.
- *NPRR1011*: updates performance monitoring in the protocols to address changes associated with RTC's implementation.
- *NPRR1012*: updates settlement and billing in the protocols to address changes associated with RTC's implementation.
- *NPRR1013*: updates the protected information provisions, definitions and acronyms, market participants' registration and qualification, and market suspension and restart in the protocols to address changes associated with RTC's implementation.
- *NPRR1014*: enables ESRs' integration into the ERCOT core systems as a single-model resource, replacing the existing "combination model" paradigm where ESRs are treated as two resources: a generation resource and a controllable-load resource. This NPRR will be implemented simultaneously with other RTC-related changes and with the upgrade to the ERCOT EMS in 2024.
- *NPRR1026*: establishes rules for and enables self-limiting facilities' integration into the ERCOT markets and core systems.
- *NPRR1029*: enables DC-coupled resources' (defined as an ESR type required to follow all rules associated with ESRs in addition to meeting this change's requirement) integration into ERCOT's core systems. The NPRR applies to both the current combo model era and the future single model era.
- *NPRR1039*: removes the defined term "market information system public area" from the protocols and replaces it with "ERCOT website."
- *NPRR1042*: adjusts the planned capacity in the Capacity, Demand and Reserves report to remove previously mothballed or retired generation resources that may be repowered but do not have an owner that intends to operate them.
- *NPRR1043*: clarifies that ESRs' withdrawn charging load (excluding auxiliary load) will be settled based on the nodal price similar to its injections, even if the ESR does not seek or cannot qualify for wholesale storage load (WSL) treatment by replacing the term "ESR load that is not WSL" with the defined term, "non-WSL ESR charging load." The latter load will be priced at nodal but, unlike ESRs receiving WSL treatment, will be subject to applicable load ratio share-based charges.
- *NPRR1046*: removes additional uses of "dynamically scheduled resource" to align with *NPRR1000*.
- *NPRR1047*: consolidates gray-box language related to *NPRR973* and *NPRR1016*.
- *COPMGRR048*: removes the defined term "market information system public area" in the protocols and replaces it with "ERCOT website" and removes references to the "ERCOT market information list."
- *NOGRR207*: clarifies that ERCOT's issuance of an "operating condition notice," "advisory" or "watch" does not mean that ERCOT is operating in an emergency condition.
- *NOGRR211*: updates language related to supplemental ancillary service markets, ancillary service deployment, and ancillary service responsibilities and obligations to address changes associated with RTC's implementation.
- *NOGRR217*: removes the defined term "market information system public area" in the protocols and replaces it with "ERCOT website."
- *NOGRR220*: replaces existing gray-box language with *NOGRR212*'s revisions.
- *OBDRR020*: updates the methodology for setting maximum shadow prices for network and power balance constraints to address changes associated with RTC's implementation.
- *PGRR081*: describes how self-limiting facilities will be evaluated in the generation resource interconnection or change request process.
- *PGRR084*: removes the defined term "market information system public area" in the protocols and replaces it with "ERCOT website."
- *RRGRR023*: establishes provisions and requirements in the guide for ESRs that are identical to those already in place for generation resources and SOGs.
- *VCMRR030*: removes the defined term "market information system public area" in the protocols and replaces it with "ERCOT website." ■

*— Tom Kleckner*

# Overheard at the Texas Energy Summit

## Red Texas a Global Leader in Green Energy

Texas may still be a red state on election day, but it's producing a lot of green for renewable energy developers and their hosts, several panelists said during the virtual Texas Energy Summit last week.

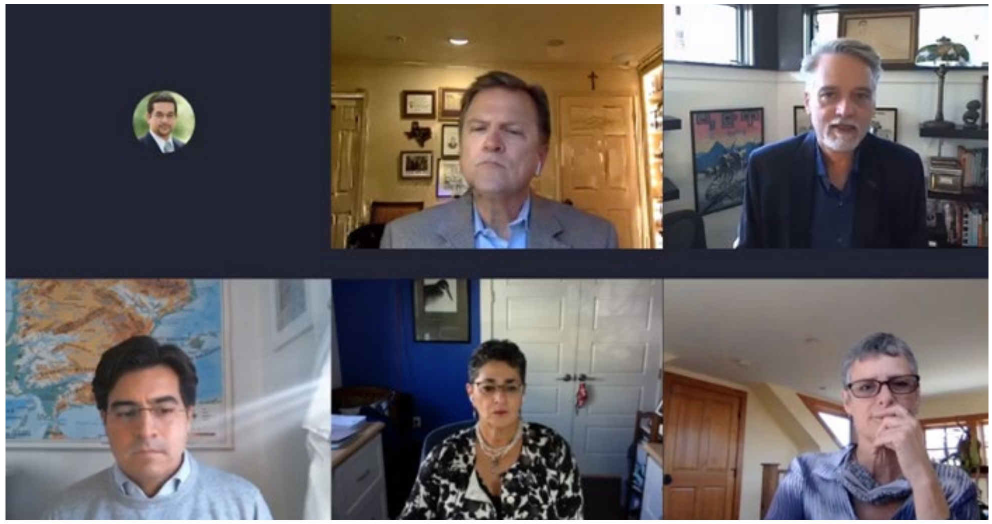
Former FERC Chairman Pat Wood III, a Republican who also chaired the Texas Public Utility Commission from 1995 to 2001, recalled a time when the state's wind energy numbers were in the triple figures and it had a renewable portfolio standard of only 2,000 MW. Now, he noted, renewable energy's nameplate capacity is almost half of the 74 GW of energy the state consumes on a hot day.

"To start from nothing, offering little more than a big welcome mat known as the RPS … the good Lord blessed us with resources," Wood, now CEO of the Hunt Energy Network, said during the event by Texas A&M's Energy Systems Laboratory (ESL), which attracted 550 participants over five days. "The culture change isn't as big as people on the coasts like to think. It's been bipartisan all the way. It's just been fascinating to see the grassroots leadership. It's not being driven by a government mandate to buy so much renewable power. Renewable power plants are cheaper or just as cheap as traditional power plants."

"Republicans love to see head-to-head competition. They love to see competitive markets," said Charles Hernick, vice president of policy and advocacy for Citizens for Responsible Energy Solutions. "We're at a point where renewables, even without tax credits and subsidies, can outperform gas anywhere in the country. It's a remarkable tipping point. It seems like every day there's another company making a proclamation to go to 100% renewable energy by 2040 or 2050. They can purchase renewables and do it cheaper than almost any other resource."

Wood and energy consultant Alison Silverstein credited ERCOT's energy-only market for part of Texas' success with renewables. The recently added operating reserve demand curve leads to higher prices when energy is scarce, avoiding the uplift policies found in other markets.

"If it gets really scarce, there'll be a little administrative adder to make that price dearer to the customer, which, of course, encourages demand response," Wood said. "We're not paying for this big slug of unused capacity."



Clockwise from top middle, former FERC Chair Pat Wood, Houston Chronicle's Chris Tomlinson, State Sen. Sarah Eckhardt, consultant Alison Silverstein and Charles Hernick, Citizens for Responsibel Energy Solutions, discuss coming energy issues. | *Texas Energy Summit*

Silverstein, an adviser to Wood at both the PUC and FERC, said Texas is unlikely to adopt a PJM-style capacity market. "The logs are rolling in the other direction," she said. "The reason Texas and ERCOT is one of the few places where that adder will work is [because] we have a single regulator. Our regulators and politicians spent the last decade resisting the temptation to panic. They've been willing to let the market set prices and let the market to respond. It's a unique political aspect we've been fortunate to have, or we would have been stuck with too many polluting coal and gas plants."

"The United Kingdom, Spain, Portugal and Texas," Wood said, ticking off some of the world's renewable leaders. "It's going to be fun to have Texas be a leader in clean energy for a change."

## Dems Introduce Climate Plan

As a lawyer without a scientific background, Texas Rep. Gina Hinojosa (D) admitted she has found greenhouse gas emissions to be an "overwhelming" issue. But she said that didn't stop her from using her office to find "the best minds on this issue" and draft the "*Texas Climate Plan*."

State Rep. Gina Hinojosa | *Gina Hinojosa For State Representative*

Representatives from the House Democratic Caucus' Special Committee on Clean Air, Clean Water and Climate Change introduced the plan in October. It includes targets to reduce greenhouse gas emissions, disaster resilience strategies, a timeline to end routine flaring at oil and gas wells, and planning to ensure a just transition for affected workers.

The plan also has two pieces of legislation. The Modern Infrastructure Act proposes investments in grid capacity and resilience, electric vehicle charging stations, battery storage and electrification of mass transit. The Protections over Pollution Act seeks to strengthen agency enforcement and improve transparency "so Texas can build a culture of proactive compliance," Hinojosa said.

Were it a country, Hinojosa noted, Texas would rank seventh globally in carbon emissions, just before Brazil. "Any plan for the United States to reduce greenhouse gas emissions needs to have a large Texas component," she said, emphasizing the word "large."

"If the power sector is getting cleaner, can we electrify other sectors?" asked Michael Webber, ENGIE's chief science and technology officer. "Market forces are still driving that transition to electrification. There's more bipartisan collaboration at the local level."

The transportation sector is the state's largest producer of carbon emissions, Hinojosa said, noting that EV purchases in Texas have grown 254% over the last three years.

"Market forces, right?" Hinojosa said. EVs are

# ERCOT News

"more fun and zippy, and they're also more efficient," Hinojosa said. "You cannot underestimate the economic opportunities that come with the transitioning energy economy. If there's not political pressure of the system, you're not going to get there."

## Clean-energy Transition Underway

For some, that transition is already here. Speaking during a different panel, Southwestern Public Service President David Hudson highlighted his company's recent *announcement* that it will convert a three-unit, 1,018-MW coal-fired generating facility northeast of Amarillo to natural gas by 2025.

Why the change? Economics.

"We will spend $59 million to convert to gas. If we were to put scrubbers on these units, it would cost hundreds of millions of dollars. The analysis was simple," Hudson said.

SPS is also upping its investment in renewables. The company has about 1.5 GW of wind capacity in its Texas and New Mexico footprints, but that number will increase when the 522-MW Sagamore Wind Project in New Mexico is energized by year-end.

"We're reducing our reliance on coal. Once Sagamore is completed, we'll be in the upper 40s [percentage] of our energy coming from renewables," Hudson said. "Wind energy, with the production tax credits, is extremely beneficial to retail customers. It has lowered costs, especially [during] the first 10 years of the tax credits. We are going to be doing some major transitions through the 2020s."

"Natural gas and wind are replacing coal," said Beth Garza, ERCOT's former market monitor, now a senior fellow with think tank R Street Institute. About the same time SPS made its announcement, American Electric Power said it too would be converting a coal plant to gas and retiring a second plant. The AEP and SPS retirements will remove 2.5 GW of coal-fired generation from the state's fuel mix.

Solar energy has joined wind as a growing fuel source in Texas. | *El Paso Electric*

In 2019, ERCOT got about 20% of its power from coal and another 20% from wind and solar, with gas and nuclear responsible for the remainder. "In 2020, I fully expect wind and solar will provide a substantially larger contribution than coal," Garza said. Indeed, through October, wind and solar were responsible for 24.25% of ERCOT's fuel mix, with coal at 17.44%.

Matthew Crosby, Ørsted's director of policy and regulatory affairs, said the loss of coal plants is not an issue in Texas, with its ample renewable resources.

"We could build plants that sit on the front yards of retired coal plants," he said. "We're also talking about tremendous resource potential, particularly in wind and solar in the [Rio Grande] Valley, and bringing that resource to Houston and North Texas. Expanding existing transmission lines is a way to unlock more development in the state."

"To remain an energy leader, we must absolutely embrace clean-energy technologies and make that shift," Texas Sen. Sarah Eckhardt (D) said. "We need to be making the shift now, or we won't be the leader anymore. We'll be stuck with old technologies, and the market will have moved on without us."

"Texas can get rich moving into a low-carbon future," Webber said. "Coal's going to disappear unless we try to save it."

## Renewables Pay Off Big for Texas

Texas has long enjoyed the economic benefits of the oil and gas industry. Petrochemical facilities dot the state's coast, and drilling rigs can be found in both rural and urban areas. The *Permanent University Fund* uses land leased to oil and gas companies to help fund its flagship schools, the University of Texas and Texas A&M.

"Rural Texans are really the leaders of the pack," Wood said. "For many years, those residents got royalty payments for using their land for oil and gas extraction. Sometimes they would get an easement for transmission lines. More and more, those royalty payments are for solar and wind leases."

And the payments add up. According to a recent *study* by UT energy researcher Joshua Rhodes on renewable energy's economic impact on rural Texas, the current fleet of utility-scale wind and solar projects will generate between $4.7 billion and $5.7 billion in tax revenue to local communities over its lifetime.

Landowners along the breezy Gulf Coast could receive $22.8 million over a 25-year lease to operate a 100-MW wind farm and $33 million for a 35-year lease. Those in West Texas, where the winds are strongest when prices are cheaper, could collect about $16.2 million for a 25-year lease and $24 million for a 35-year lease.

Rose Benavidez, president of the Starr County Industrial Foundation in the Rio Grande Valley, said renewables have boosted her community, which has struggled with high unemployment and poverty rates. About half the county's 64,000 residents are below the poverty line, and its per capita income of $7,069 is the third lowest in the U.S.

With local ranch land not being used because of drought conditions, Benavidez said the community focused on recruiting a wind project to the area. It found a willing developer in Duke Energy Renewables, which built the 910-MW Los Vientos facility in five phases.

"Right off the bat, it created a couple of millionaires in our community," she said. "[The landowners] could still keep their land, graze their animals and have a secure revenue source for 10 or 20 years. Within a matter of five years, we've been able to bring in $2 billion in investment in solar and wind projects into a community that could only dream of having billions of dollars."

Duke now has four wind facilities in the county, the latest being the 200-MW Mesteño Windpower project. Sammons Renewable Energy has added the 238-MW Rio Bravo wind project.

"A few years ago, the community was in the red. Now it has surplus dollars," Benavidez said. "It couldn't have been more timely because in 2020, that's allowed us to focus on the COVID response and recovery without tapping the excess funds."

And the rest of the state benefits from the renewable energy production.

"We've seen so many companies come to the state because they've seen how easy it is to buy wind and solar energy," Rhodes said.

"A lot of things are working well for the industry," said Susan Sloan, vice president of state affairs for the American Wind Energy Association. "Texas' growth is also bringing additional demand. Investors are ready to invest, developers are ready to develop, and customers are ready to buy." ■

*— Tom Kleckner*

## ISO-NE News

# CEOs Discuss Challenges of NE Decarbonization

By Jason York

Four electricity industry CEOs last week discussed the "challenges and opportunities," as former FERC Chair Cheryl LaFleur put it, of decarbonization in the New England power sector over the next three decades.

Cheryl LaFleur, ISO-NE | *FERC*

The panel Nov. 16 followed a keynote speech by former U.S. Energy Secretary Ernest Moniz at the virtual New England Energy Summit, hosted by the New England Power Generators Association. Moniz presented a study co-authored by his Energy Futures Initiative (EFI) and Energy and Environmental Economics (E3), which detailed how the electricity system could meet the challenges of growing demand and reducing economy-wide greenhouse gas emissions to nearly zero by 2050. (See *Study Outlines Challenges of Decarbonizing New England*.)

Alicia Barton, FirstLight Power | *FirstLight Power*

FirstLight Power CEO Alicia Barton said the study "put some provocative and important ideas on the table for us to consider as market participants, policymakers and thought leaders … about how we transition toward this net-zero target by midcentury." There are "very difficult conversations ahead" about the evolution of market structures, she said.

"I think we have to acknowledge that neither our market construct nor the set of policies we have on the books at the state or federal level today gets us anywhere near hitting those targets or seeing any of those scenarios that were just presented [in the study] play out," Barton said. "Our track record has been that it takes us a very long amount of time to implement market rule changes and policy changes actually to facilitate those transitions."

Moderator LaFleur, now serving on ISO-NE's Board of Directors, said that while 2050 seems "a long time away," when it comes to designing new market rules, "it's not a long way at all in the electric world."

Scott Hall, Great River Hydro | *Great River Hydro*

Great River Hydro CEO Scott Hall said to reach its 2050 decarbonization goals, New England needs to implement regulatory and statutory policies that maintain and enhance existing resources and provide opportunities to put new resources into place. Hall said he supports "a simple, transparent carbon market" that the RTO has suggested because it offers stability from an investment standpoint.

Thad Hill, Calpine | *Calpine*

Calpine CEO Thad Hill said that "reliability will matter even more" as the economy decarbonizes.

"The gas fleet in New England today is not an inhibitor of decarbonization; it's an enabler," Hill said, echoing comments his company made in FERC's carbon pricing docket. (See related story, *Wide Support for FERC Carbon Pricing Statement*.) "We're going to have a lot more renewables, as the study showed, which is a good thing, and dispatchable assets [will be] run far less, which was also a good thing."

Paul Segal, LS Power | *LS Power*

LS Power CEO Paul Segal said that he "would take the view that on the one hand, we're talking about the need for all of this incremental dispatchable generation over time. On the other hand, we have the lowest capacity pricing that we've probably had since this market was created." He added that "overly aggressive developers who make certain promises, without adequate penalties on the other side," can overbuild and suppress prices.

"This is where I think it's incumbent, whether you look at it as the grid operator or the regulator, to take steps to clean things up in markets, so that folks like us can make good decisions," he said. "It's not too long ago that we cleared a multiyear capacity award at around $9.55 … and now we're looking at situations where between $2 and $4 is clearing, and it is unclear to me how capital will flow into this market in that type of environment." ■

## ISO-NE News

# FERC Defends CASPR Order

### *CASPR 'Failing Miserably,' Glick Says*

*By Jason York*

FERC on Thursday defended its Competitive Auctions with Sponsored Policy Resources (CASPR) order, which permitted ISO-NE to create a two-stage capacity auction to accommodate state renewable energy procurements (*ER18-619*).

The commission voted 2-1 along party lines, with Republicans James Danly, newly installed as chair, and Neil Chatterjee, recently demoted from it, affirming the March 2018 order and addressing complaints in numerous rehearing requests. The rehearing requests were automatically denied when the commission failed to act within 30 days. In the meantime, the Sierra Club, Natural Resources Defense Council, RENEW Northeast and the Conservation Law Foundation *petitioned* the D.C. Circuit Court of Appeals on Aug. 31 to review FERC's decision.

Filing as "Clean Energy Advocates," the groups had said that rather than attempting the "impossible and misguided" effort to create a "pure" market free from the impacts of state policy choices, FERC should reject CASPR as not just and reasonable.

FERC said it continued "to find the economic principles underlying CASPR to be sound" and agreed with the RTO's recommendation to prioritize the preservation of a competitive Forward Capacity Auction price to ensure investor confidence. That helps sustain resource adequacy, the commission said, after weighing the cost of excess capacity that could result by exempting sponsored-policy resources (SPRs) from the minimum offer price rule (MOPR).

The commission also reiterated that ISO-NE did not propose eliminating the MOPR as applied to SPRs.

FERC also rejected the groups' request that it at least reinstate the 200-MW renewable technology resource (RTR) exemption.

"ISO-NE has justified phasing out the renewables exemption because this administratively based mechanism conflicts with and potentially undermines CASPR's market-based approach," the commission said. "Implementing a perpetual, annual 200-MW 'backstop' would exacerbate this situation, as renewable resources would tend to favor the exemption approach to entering the FCM [Forward Capacity Market], potentially diminishing a well functioning and robust substitution auction."


FERC headquarters | © *RTO Insider*

## Glick Dissents

Democrat Richard Glick dissented, as he had on the 2018 order. (See *Split FERC Approves ISO-NE CASPR Plan*.)

Glick — who may become commission chair under the Biden administration — said he does not believe that CASPR "is a just and reasonable means of accommodating state public policies" in the FCM.

"The record demonstrates that CASPR is failing miserably at accommodating those policies," he said during the monthly open meeting.

"Although CASPR had some theoretical appeal, the nearly three years since the commission accepted the filing have made clear that, in practice, CASPR simply is not up to the task of accommodating the New England states' efforts to decarbonize their electricity sector and address the threat of climate change," Glick said in his 13-page dissent. "It is time to go back to the drawing board. ...

"Electricity markets are, and always have been, the product of public policy," Glick said. "Pretending otherwise or trying to mitigate our way to a market free from the effects of certain public policies will only harm customers, create needless federal-state tensions and undermine faith in the regional markets whose development has been this commission's crowning achievement. We must move beyond the MOPR."

Glick added that he recognized reforming electricity markets to manage the ongoing transition to a clean energy future is a complicated question, and "the right answer will likely vary among the different RTOs."

"But that is all the more reason to begin putting those structures in place now, rather than searching for ways to keep MOPR-based approaches on life support," Glick said.

Glick added that he does not believe that the current FCM is working for ISO-NE.

"In New England, as in the other Eastern RTOs, it has become clear that the principles and assumptions that underlay the creation of the current capacity market constructs no longer hold," Glick said. "In particular, the days when the procurement of a single, undifferentiated 'capacity' product could serve as an effective guide for efficient resource entry and exit are over."

Glick said concerns about "consequences that resource entry and exit decisions have for climate change, among other things, are likely to play a more important role in resource entry and exit than the FCM clearing price," especially in New England.

"It is past time for the resource adequacy paradigms to evolve accordingly," Glick said. The longer FERC "waits to take those inevitable steps, the more harm it will do to RTO markets and the customers we are supposed to protect."

"It will eventually require that all the relevant elements of an RTO — including not just the resource adequacy construct, but also the procurement of energy and ancillary services, as well as the planning and development of new transmission facilities — work in concert to accommodate the changing electricity sector," Glick said. "That will be no mean feat." ■

# Overheard at the CPES Fall Conference: CEO Viewpoints


Clockwise from top left: Gordon van Welie, ISO-NE; Janet Besser, SEPA; Alicia Barton, FirstLight Power; and Curt Morgan, Vistra Energy. | *CPES*

Three energy industry CEOs shared their thoughts on New England's electric transformation last week at the Connecticut Power and Energy Society's virtual fall conference. "The Future of Energy" featured Gordon van Welie of ISO-NE, FirstLight Power's Alicia Barton and Curt Morgan of Vistra.

Here is some of what they discussed with moderator Janet Besser of the Smart Electric Power Alliance at the session, the first of a two-part panel on building toward a decarbonized future.

## Seeking Simplicity

Asked how the COVID-19 pandemic has affected plans for decarbonization, Morgan said he has seen "an acceleration" and "leap forward," especially from an environmental, social and governance (ESG) investment standpoint.

Van Welie said that "aspirations have accelerated" around decarbonization, although the pandemic has complicated in-person conversations.

"My concern is, can we find a way to simplify rather than making things even more complex? I say that from the perspective of the person who's going to have to build the software to make all of this work and build the market designs."

Carbon pricing is a simple solution, according to van Welie.

"It'll be like pouring magic sauce all over the market in terms of making sure that it achieves both" reliability and clean energy goals, van Welie said. "What I do fear is that we're going to turn away from that because it's politically not feasible, and we will come up with some monstrously complex solution to a problem, which is going to take a long time to figure out [that] it's not going to work that well."

Barton, who joined FirstLight in August after stints at the New York State Energy Research and Development Authority and the Massachusetts Clean Energy Center, said she supports "the power of competitive markets." But she said states have been clear that their clean-energy goals "are not being advanced by the system we have today."

Morgan said California offered a cautionary tale. The state "got climate change ahead of reliability, and it came back to bite them."

"I was getting calls from high-up people inside of California wanting to know [if] we could bring [online] a 70-year-old gas-and-oil plant that had been sitting dormant for 20 years," Morgan said. "You can't do that in summer over two weeks. You have to plan for these things."

> **"What I do fear is that we're going to turn away from [carbon pricing] because it's politically not feasible, and we will come up with some monstrously complex solution."**
>
> —Gordon van Welie, CEO, ISO-NE

## ISO-NE News

Morgan added that "we cannot be stuck in the middle between a competitive market and a pseudo-regulated market, where people are being subsidized for certain types of resources and those subsidies are being used to suppress price to affect capacity price payments. Then [generators will] never get that investment [back]."

### Thoughts on MOPR

What is worrisome to van Welie is "it takes a while to design these markets and take them through the regulatory process before you build the software to operate them."

"Speed is of the essence here. We can't sit on our hands for 10 years and then wake up in 2030. So, we do need to move swiftly," van Welie said.

Barton said, "We have to listen very carefully to what the states are saying, and they've expressed real concerns about some of the options.

"If we don't take that seriously, internalize that and then — as the collective set of generators, capital providers, grid operators that are responsible for delivering the outcomes — put something forward that they can understand does achieve their long-term goals, then we've all failed," Barton said.

Voters have expressed a clear desire for action on climate change, she said, and "an electricity mix that is different than the one that we have today, which is clear in the policies that you see being advanced by Democratic governors and Republican governors, like the ones in New England."

"Unfortunately, we are short of that right now; we don't have consensus, but that's where we're all going to need to roll up our sleeves and keep at it," Barton said.

Morgan, who has spent nearly 40 years in the energy industry, said he would like to see the minimum offer price rule (MOPR) go away. "We are big proponents of that happening," Morgan said. "We've signed on to getting rid of the MOPR in PJM, which has been highly controversial, but you cannot do it unless you allow competitive markets to work. I've looked at all these different ideas, clean-energy standards and carbon pricing, and carbon pricing is the most efficient and effective way to get it done."

The New England States Committee on Electricity (NESCOE) opposes a carbon price on top of the Regional Greenhouse Gas Initiative (RGGI). NESCOE, which has called for governance *reforms* at ISO-NE, said it was open to the idea of a forward clean energy market and supported the evaluation of a related proposal for an "integrated clean capacity market" in a Nov. 2 *memo* to ISO-NE's Board of Directors.

"We have to respect what the states want, and I think they don't want carbon pricing at this point beyond what they're doing in RGGI," van Welie said. "They also don't want the minimum offer price rule, so if we have to find a way to remove the [MOPR], then the question that comes into focus is, what are we going to do with the missing money that then is triggered by the removal of the minimum offer price rule? That is not clear to me. There are limited options on the table for solving that, and I think we need to focus hard on that problem."

Barton said she also has real concerns about eliminating MOPR "without something adequate to replace it." She added that market structure should deliver outcomes that both policymakers and the people they represent "want to see" and additionally creates a stable investment environment for companies like FirstLight Power and Vistra Energy.

> **"We cannot be stuck in the middle between a competitive market, and a pseudo-regulated market, where people are being subsidized."**
>
> —Curt Morgan, CEO , Vistra Energy

"It's a real challenge. We shouldn't sugarcoat it," Barton said. "If we do not have sufficient signals to stimulate the investments needed to maintain reliability, as well as following through the imperative to meet the state clean energy targets, we certainly are at risk of failing on both, and that's why we've got we've got to bridge this conversation sooner rather than later."

The second part of the decarbonization discussion is *scheduled* for Dec. 15. It will feature energy and environmental policy leaders from Connecticut, Massachusetts, Rhode Island and Maine discussing their strategies for achieving state goals. ■

*— Jason York*

## MISO News

# MISO Says Communication Key to DER Order

By Amanda Durish Cook

Seeking to open communication channels with their distribution utilities, MISO staff held a special workshop last week to prepare for FERC Order 2222.

Kristin Swenson, MISO's distributed energy resource program director, said the grid operator needs better collaboration with distribution system operators to comply with the order, which allows DER aggregators to compete in organized wholesale electric markets. To do that MISO will need access information typically reserved for distribution utilities.

Swenson said during the workshop Nov. 17 that MISO's new DER task force, created to navigate Order 2222 compliance, will begin meeting in January. (See *MISO Embarks on Order 2222 Work*.)

"The hope is we begin to have an idea in March, a conceptual design, so we can come to stakeholders with, 'Here's what we think we should do. What do you think?'" Swenson said. She said MISO would like to have a proposal by June that the legal team can prepare for a July filing.

"Any time we alter our Tariff, we have to cross-check the whole Tariff to make sure we inadvertently didn't change any meanings," Swenson said.

Per Order 2222, MISO will create a "coordination framework" to guide interaction with relevant electric retail regulatory authorities, distribution utilities and DER aggregators — including both documented procedures and operating agreements.

"It's OK that we don't know what the plan will be right now," Swenson said. "The control systems, while there are a lot of cool ones out there, haven't been widely adopted yet."

MISO has compiled a draft *list* of the information it might need to collect before opening its markets to DER aggregators. While the grid operator envisions amassing data on obvious items like inverter type and settings, maximum capacity, weather, possible operating modes and historical production data, it may also collect more obscure data such as remote-control capabilities and tree cover or building shadows that could obstruct solar panels. MISO said it is interested in refining the list with distribution utilities.

Staff said they need more information from distribution utilities before they can form a conceptual design for DER market participation.

"We're very interested in distribution operations expertise," Swenson said.

| MISO

The RTO would like to know utilities' established standards of data collection from their DERs, the demand for interconnection to distribution systems, whether companies are selling DER services and whether they've experienced a "significant" number of non-solar DER requests such as batteries, electric vehicles or standby diesel generator sets.

Swenson said staff are also looking for information on how distribution utilities forecast DER growth. MISO doesn't currently include DERs in its planning models.

Swenson said as MISO's DER program manager, she's often asked how many such resources the footprint will add. She said her answer is usually "not satisfactory" to members: The RTO doesn't know.

"Because DER additions are not driven like traditional generation, it's hard to forecast," Swenson said. She said MISO is experiencing a steady increase in distributed generation assets in its footprint and expects the trend to accelerate with Order 2222.

Distribution representatives said gathering that information would be no easy feat, requiring conversations with multiple employees and executives.

"Other ISOs have said you have to start with operational coordination. We can create the best market design in the world, but without operational coordination none of this will work," Swenson said. "Obviously, Order 2222 envisions a world with more DERs, but without coordination we will have something that no one wants to participate in."

Stakeholders asked whether MISO would grandfather existing DERs already connected to distribution systems in its footprint.

Managing Assistant General Counsel Michael Kessler said state jurisdictions retain authority under Order 2222, so grandfathering will most likely be left to states and applicable distribution companies.

Swenson said the DER participation models put forth by California and New York are helpful only to a point, reminding stakeholders that those ISOs answer to just one set of state regulators.

"MISO is obviously a multistate RTO. There are many parties involved," she said. "We'd like some standardization; at least from MISO's perspective, it's far easier." ■

## MISO News

# COVID Merits More Time to Secure Land for Wind Dev

*By Amanda Durish Cook*

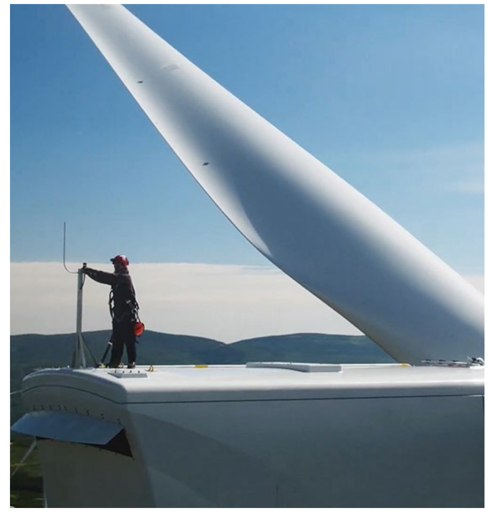
A San Francisco-based renewable developer will get more time to prove it has secured enough land for its proposed wind farm in MISO East because of emergency conditions created by the COVID-19 pandemic, FERC ruled Thursday.

The commission granted Pattern Energy Wind Development's waiver request of MISO generation interconnection procedures on the grounds that the ongoing pandemic hampered property plans for the Uplands Wind Project, a 600-MW wind farm in southern Wisconsin. The waiver will buy Pattern an extension on MISO's current Nov. 27 deadline to prove site control and the Jan. 25 deadline for the grid operator to review site control submissions (*ER21-30*).

The Uplands project is part of the 2020 MISO East cycle of project hopefuls working their way through the RTO's interconnection queue set to begin study on Feb. 24. Pattern submitted the project under two separate interconnection requests in June in order to connect it to both American Transmission Co.'s 345-kV Hill Valley-to-Cardinal line and the 345-kV Hill Valley substation.

Pattern said it experienced "business interruptions and delays in the land acquisition process caused by governmental orders, health and safety concerns and illness of key personnel resulting from COVID-19."

The company said that even with business restrictions enacted in Wisconsin from March through May, its agents were able to "sign several thousand acres of land, despite not being able to take any in-person meetings." However, Pattern said its title specialist became "severely ill in late July/early August 2020, and a land agent was hospitalized for an extended period in late August 2020." The illnesses "made it difficult to maintain the consistent dialogue necessary to negotiate a land easement and then register the easement with the local authority," Pattern said. The company said despite conducting outdoor meetings with township boards, landowners and nonprofits, it simply lost too much time to "establish site control for 30,000 acres of land by Nov. 27, 2020."



| *Pattern Energy*

FERC said Pattern's existing 15,000 acres of site control showed that the developer has made "reasonable efforts to satisfy MISO's site control requirements in a timely manner."

MISO said it also supported Pattern's request for extension. ■

## MISO News

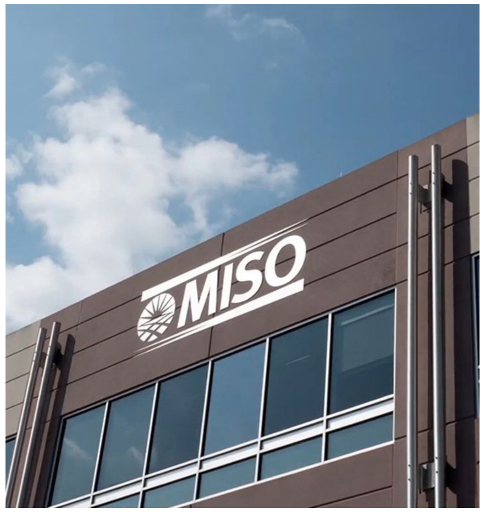
# FERC: No Need for Waiver on MISO Make-whole Payments

*By Amanda Durish Cook*

FERC said last week that MISO does not need a waiver of its Tariff requirements in order to provide Entergy Texas with make-whole payments.

The commission decided MISO is free to determine whether to give Entergy about $4,000 in make-whole payments for a late 2018 manual redispatch of its Sabine 5 natural gas plant without FERC approval. The commission dismissed the waiver request as unnecessary (ER20-1901).

The Sabine facility initially had a day-ahead volume award of 450 MW with a ramp rate of 3 MW/minute. According to MISO, its system dispatched the unit below its day-ahead volume to only 191 MW at 6 p.m. A few minutes later, the grid operator manually redispatched Sabine 5 to return to its day-ahead schedule volume, which took the plant three five-minute intervals to reach. MISO then denied Entergy day-ahead margin assurance payments for the three intervals while the plant was ramping.




| MISO

The RTO said its system is currently incapable of taking a resource's offered ramp rate into consideration during a manual redispatch setpoint directive. It also said its rules don't allow it to pay out day-ahead margin assurance compensation based on after-the-fact adjustments to manual redispatch setpoint instructions.

Entergy sought informal alternative dispute resolution over the partially paid ramping intervals. MISO concluded it should reimburse the utility $4,064.74, the amount it would have received had it been allowed day-ahead margin assurance payments for the three intervals in question.

The RTO said Entergy "should not be harmed for following MISO's instructions" but that it needed to seek a Tariff waiver in order to issue the payment.

The commission disagreed, saying MISO is authorized to make the payment without a waiver.

"After reviewing MISO's filing and Tariff, we find that it is not necessary to revise, alter or waive any provision of the Tariff to implement the ADR determination. Instead, consistent with the ADR determination, MISO can update the manual redispatch setpoint ... instructions to take into account a resource's offered ramp rate for resettlement purposes," FERC said. ■

## NYISO News

# NYISO, Others Rebut MOPR Complaint to FERC

*By Michael Kuser*

NYISO and sympathetic intervenors last week filed comments urging FERC to reject a request that it require the ISO to implement a "clean" minimum offer price rule (MOPR) that applies to all subsidized resources throughout the New York Control Area with limited exceptions.

The comments came in response to an Oct. 14 *complaint* by the owners of two natural gas-fired plants in the Hudson Valley, the 1,177-MW Cricket Valley Energy Center (CVEC) in Dover and the 635-MW Empire Generating facility in Rensselaer (EL21-7).

The complainants requested fast-track processing and the issuance of an order on or before Dec. 31 finding that NYISO's market rules are unduly discriminatory "because they fail to address price suppression" in the installed capacity spot market auctions resulting from resources receiving out-of-market payments.

They asked the commission to require NYISO to implement a clean MOPR, "as it did when confronted with the same problem in PJM." (See *FERC Acts on PJM MOPR Filing*.)

NYISO said that New York's support for some resources is not resulting in price suppression because conditions in NYISO differ from those in PJM when it instituted a MOPR in 2018.

The complainants' "price suppression claims are overstated, one-sided and incomplete," and they try to use their concerns regarding the potential price effects of zero emission credits (ZECs) to sweep away buyer-side mitigation (BSM) rules that have nothing to do with ZECs, NYISO said.

In their complaint, CVEC and Empire pointed to the commission's "standard solution" precedent, which found that FERC will rely on a MOPR as its standard practice for dealing with subsidized resources. But NYISO said their interpretation of that policy is "overly simplistic, inconsistent with earlier rulings (including the 'standard solution' precedent itself), and an impermissible collateral attack on settled commission determinations."

The complainants failed to meet their burden of proof, NYSIO said in urging the commission not to grant the requested relief or take any other action in the proceeding.

"In the alternative, and at a minimum, the commission should reject the clean MOPR because imposing it on New York would be unjust and unreasonable,... would result in over-mitigation and would artificially increase capacity prices. The clean MOPR was designed to work with PJM's three-year ahead forward auctions, not the NYISO's 'prompt' seasonal and monthly auctions," the ISO said.

NYISO referred to a separate but concurring *comment* from its Market Monitoring Unit, Potomac Economics, which said "complainants have not come close to meeting their burden of proof to show that the existing BSM Framework is unjust and unreasonable... [and the] recommended clean MOPR would result in inefficiently higher prices because it would selectively address out-of-market state actions that increase supply while conspicuously ignoring those that decrease supply."

An aerial shot of the 1,177-MW Cricket Valley Energy Center in Dover, NY | *Advanced Power*

### Supporting Voices

The Independent Power Producers of New York (IPPNY) and the Electric Power Supply Association (EPSA) supported the complaint.

IPPNY said New York's decision to require retail electricity customers to "pay a higher price for zero-carbon energy sources than is reflected in the competitive wholesale electricity market price suppresses wholesale market prices below efficient levels," suggesting instead a carbon pricing program.

Carbon pricing would help achieve the state's clean energy goals, maintain the competitive market, and lessen the incidence of mitigation issues, thus avoiding unnecessary litigation, IPPNY said, noting its previous testimony to the commission. (See "RTOs, Regional Differences," *Wide Support for FERC Carbon Pricing Statement*.)

IPPNY also noted that wholesale energy prices in New York currently include some value for carbon emissions because the state participates in the Regional Greenhouse Gas Initiative (RGGI).

EPSA also urged NYISO to finalize its carbon pricing proposal or face prospective implementation of a clean MOPR-type mitigation to protect the wholesale market.

"Expanding mitigation may be necessary if a market-based alternative is not finalized by the state and the ISO, though competitive suppliers want to see markets move beyond this approach," EPSA said. "The possibility of expanding mitigation to protect the wholesale market should serve as a clear indicator to New York that a comprehensive carbon pricing approach is the necessary next step ... [to] integrate emerging environmental goals as seamlessly as possible."

Commissioner Richard Glick last month dissented from the commission's decision not to exempt commercial demand response programs from NYISO's BSM rules, saying the rules "that were once intended only as a means of preventing the exercise of market power have evolved into a scheme for propping up prices, freezing in place the current resource mix, and blocking states' exercise of their authority over resource decision making." (See *FERC: NY DR Program Not Exempt from Offer Floor Rule*.)

### Subsidies for All

The New York Public Service Commission and the New York State Energy Research

# NYISO News

and Development Authority (NYSERDA) also rebutted the complaint, joined by the Utility Intervention Unit of the state's Department of State, the City of New York, the Municipal Electric Utilities Association of New York, and Multiple Intervenors, a coalition of large industrial, commercial and institutional energy customers.

Complainants have not established a valid factual or legal basis for the granting of their request, and NYISO's markets are functioning well, are competitive and are producing just and reasonable results, the PSC and its partners said.

A group of "Clean Energy Parties" urged the commission to allow stakeholders to work through NYISO's governance process and the PSC's resource adequacy proceeding to explore ways to integrate policy with the ISO's capacity market design.

The group included the Sustainable FERC Project; the Natural Resources Defense Council; Sierra Club; American Wind Energy Association; Alliance for Clean Energy New York; and Advanced Energy Economy and relied on a Brattle Group *report* on resource adequacy in New York.

Expanding NYISO's BSM rules as requested in the complaint would result in almost 3,900 MW of redundant gas- and oil-fired plants clearing the capacity market over the next decade that otherwise would have been replaced by state policy resources, the protest said.

The 635-MW Empire Generating facility in Rensselaer, NY | *Empire*

The Brattle Group researchers "estimate the total cost to New York consumers of the MOPR expansion sought by this complaint at $1.3 billion annually by 2030. Rarely do consumers get so little for so much," Clean Energy Partners said.

Public Citizen noted that CVEC, while attacking what it claims to be unfair subsidies provided to zero emission resources, has received over $100 million in property tax breaks from Dutchess County.

"Again, Cricket Valley's claim that zero emission resources receive unfair subsidies ignores their own nine figure subsidy courtesy of New York taxpayers," the watchdog group said.

Public Citizen criticized complainants for asserting that the identities of minority share owners of CVEC, partner-owners of Switzerland-based Advanced Power, are "highly sensitive commercial information that is not generally available to the public," while the company's public *website* lists the individuals.

"When Cricket Valley cannot recognize the distinction between 'highly sensitive commercial information' and freely-available information on a public web site, then it is unsurprising the company is struggling to earn income in excess of its costs and debt service," Public Citizen said. ■

# NYPSC OKs First Rate Increases Since COVID Outbreak

*By Michael Kuser*

The New York Public Service Commission on Thursday ruled on its first major electric rate case since the pandemic struck in March, approving three-year phased increases totaling $219 million for New York State Electric and Gas (NYSEG) and $74 million for Rochester Gas and Electric (RG&E).

The commission said "notable increases" for customers are effective from April 17, 2020 to April 30, 2023. Specifically, NYSEG electric delivery rates will increase by $45.7 million (6.1% of delivery revenues) in year one, $84.8 million (10.6% of delivery revenues) in year two and $88.6 million (9.9% of delivery revenues) in year three.

RG&E electric delivery rates will increase by $15.2 million (3.4% of delivery revenues) in year one, $28.1 million (6.3% of delivery revenues) in year two and $30.7 million (6.2% of delivery revenues) in year three (*19-E-0378*; *19-E-0380*).

The commission said it decided the case in light of the state's Climate Leadership and Community Protection Act (*CLCPA*), which requires that 70% of electricity generation come from renewable resources by 2030, and of the COVID-19 pandemic that led Gov. Andrew Cuomo on March 7 to declare a state of emergency, which remains in effect.

The commission said the first-year increases are much lower than originally requested by the utilities, both subsidiaries of Avangrid, the U.S. arm of Spanish energy giant Iberdrola. Special pandemic-related provisions include $30 million in emergency relief funds to provide immediate $100 utility bill credits to vulnerable customers and continued suspension of service disconnections and late payment fees.

A downed tree in Flower Hill, Long Island, following Tropical Storm Isaias on August 4, 2020

NYSEG's gas delivery rates will decrease by $0.5 million (0.3% of delivery revenues) the first year but increased by $3.4 million (1.7%) in the second year and by $5.3 million (2.5%) in year three. RG&E's gas delivery rates will decrease by $1.1 million (0.6% of revenues) in year one and increase by $0.9 million (0.5%) and $3.9 million (2.1%) in the succeeding years.

Commissioner Diane Burman delivered the only dissenting vote, expressing concerns about the ratemaking process, the "huge" rate increases that will be necessary to accommodate CLCPA and the more cautious economic outlook due to renewed COVID-19 activity.

"I am now uncomfortable in voting for this rate case ... Staff has focused on helping ratepayers... but the process has not been good, has been herky-jerky," Burman said. "In the first major rate case decided in this time, incorporating COVID impacts ... the evidentiary record is not there."

The commission said the rate plans call for capital spending to improve service, with approximately $2.5 billion of investments in the companies' electric systems to replace aging infrastructure ($1.6 billion at NYSEG and $871 million at RG&E). Overall vegetation management spending will increase from $30 million to $57 million for NYSEG's electric business, and companies will add over 500 full-time employees, including 150 linemen and 55 apprentice linemen specifically intended to improve storm recovery responses.

## Utilities Must 'Show Cause' on Isaias Response

The Department of Public Service (DPS) concluded an investigation into four of the state's largest utilities alleged faulty preparation for and response to Tropical Storm Isaias in August, which affected nearly a million New Yorkers on Long Island, in New York City and in the central and lower Hudson River Valley.

The PSC opened a proceeding against three of them to show cause, leaving treatment of the fourth, PSEG Long Island, to its regulator, the Long Island Power Authority (*20-E-0586*).

Con Edison, Orange and Rockland (O&R) and Central Hudson now face potential penalties totaling $137 million, with Con Edison and O&R also facing potential license revocation, as threatened by Gov. Cuomo after the storm.

DPS investigators identified numerous apparent violations related to storm classifications, storm restoration staffing and assessment, call center staffing and response, and communications.

The utilities have 10 days to respond to recommendations on how to improve their response and restoration efforts, and 30 days to respond regarding a potential penalty action. Con Edison faces $102.3 million in penalties for 33 apparent violations, O&R faces $19 million for 38 apparent violations, and Central Hudson $16 million for 32 apparent violations.

Commissioner John Howard said weather forecasting is imprecise and that regulators must grapple with how much utility preparation is needed and at what cost.

"If we come out of this proceeding with a more gold-plated and much more expensive system that will deal with not completely rare, but not constant problems, it's important that we don't overpay," Howard said.

The Con Ed meteorologist indicated there was a 50/50 chance of major damage being caused by this storm system, so the question becomes, "What is the prudent guess?" he said.

"Is it 50/50? Or is it 20%? At what point is that correct balance?" Howard said. "Customers in a very leafy suburban setting cannot expect the same security of service as people living in a city or more urban environment with better protected infrastructure."

Rory Lancman, DPS' newly appointed special counsel for ratepayer protection, will hold public forums and submit evidence to the PSC on any harm the utilities' failures allegedly caused residents, businesses and localities.

The PSC also initiated a show cause proceeding against Con Edison for several outages in New York City in the summer of 2019, particularly a Manhattan outage on July 13 that affected 73,000 customers on the West Side and began with an electrical fault in a distribution cable, and an outage in Brooklyn a week later that was due to an electrical fault associated with a failed splice (*20-E-0587*). (See *Con Ed Earnings Drop; Blackout Fines Loom*.) ■

# NYISO Management Committee Briefs

## Board Reaches Decision on Demand Curve Reset

NYISO CEO Richard Dewey informed the Management Committee on Wednesday that the ISO's Board of Directors met Nov. 17 and approved the 2021 budget, 2020 Reliability Needs Assessment (RNA), and the parameters, methodologies and assumptions for the 2021-2025 capacity market demand curve reset.

"I'm not at liberty to disclose the details of demand curve reset decision at this time, but that will become public Nov. 30 when we make the filing with FERC," Dewey said.

The MC in October had endorsed a technical fix to the 2017-2021 reset to address an error in the model used to estimate net energy and ancillary services revenues for a hypothetical peaking plant. (See "Fix Endorsed on Demand Curve Reset," *NYISO Management Committee Briefs: Oct. 28, 2020*.)

In addition, the current surge in COVID-19 cases throughout much of the country has prompted the ISO to extend remote working until at least April 1, 2021, Dewey said. Given the impossibility of the ISO holding its annual appreciation dinner, Dewey closed by lauding the productivity and value of the stakeholder process, and publicly thanking the chairs and vice chairs of the various committees and working groups.

The committee also approved officer certification changes, hybrid storage facilities, meter services, and pricing of fast-start resources and ancillary services, as endorsed by the Business Issues Committee. (See *NYISO OKs Changes on Hybrid, Fast Start Resources, TCCs*.)

## Winter Capacity, Preparedness Look Good

The 2020-2021 Winter Capacity *Assessment* showed that for projected baseline forecast peak conditions and expected performance of the transmission system, generation and pipeline infrastructure, NYISO expects to meet reliability criteria throughout the coming winter.

The ISO's base-case analysis projected a 9,638-MW capacity margin for 50/50 peak winter conditions and a 8,309-MW capacity margin for 90/10 peak winter conditions.

"It's not completely surprising that we have these large capacity surpluses; we're still a summer-peaking system," Vice President of Operations Wes Yeomans said. "The winter peak load forecast numbers have been pretty flat for the past five to seven years but will likely be rising with the expected increase in electrification in New York."

Subtracting gas-only units with interruptible supply while retaining only units with firm gas supplies, the margins drop "significantly" to a 3,118-MW margin for 90/10 conditions, Yeomans noted.

Significant changes compared to last year include the additions of the 1,177-MW Cricket Valley Energy Center and the 126-MW Cassadaga Wind project, and the retirements of the 1,299-MW Indian Point 2, 655-MW Somerset, 52-MW West Babylon 4 and 169 MW in dependable maximum net capability adjustments, he said.

Continuing forced transmission outages include the 345-kV "B" and "C" lines between New York City and New Jersey, and the 230-kV Moses-Adirondack lines being rebuilt by the New York Power Authority, which can be brought back online within 48 hours.

Seasonal generator fuel surveys show that oil-burning units have sufficient start-of-winter inventories and arrangements for replacement fuel, Yeomans said.

NYISO has coordinated with many generating stations, "remotely this year due to COVID-19," to discuss past winter operations and preparations for upcoming winter, including generation testing, preventative maintenance, fuel capabilities and fuel-switching capabilities, he said.

The ISO also participated in winter preparation efforts with NERC, state agencies, other ISOs/RTOs and gas industry personnel, and 96% of the respondents to the annual Generator Fuel and Emissions Reporting survey indicated precautionary measures are in place for the upcoming winter.

Regarding gas-electric coordination, a communications protocol is in place with state agencies to improve the speed and efficiency of generator requests to state agencies for emissions waivers if needed for reliability. "We've used it a couple times, and it's worked very well," Yeomans said. ■

*— Michael Kuser*

**2019-20 & 2020-21 Winter Capacity Assessment & Comparison**

| Line | Item | 2019-20 Baseline Forecast | 2019-20 90th Percentile Forecast | 2020-21 Baseline Forecast | 2020-21 90th Percentile Forecast |
|---|---|---|---|---|---|
| 1a | Winter Generation Capacity[1] | 41,815 | 41,815 | 40,943 | 40,943 |
| 1b | SCR - ICAP Values | 853 | 853 | 839 | 839 |
| 1c | Net Purchases & Sales | 678 | 678 | 496 | 496 |
| 1 | Total Capacity Resources | 43,346 | 43,346 | 42,277 | 42,277 |
| 2 | Assumed Unavailable Capacity (Gen + SCR) | -5,703 | -5,703 | -5,889 | -5,889 |
| 3 = 1 + 2 | Net Capacity Resources | 37,643 | 37,643 | 36,388 | 36,388 |
| 4 | Peak Load Forecast | 24,123 | 25,724 | 24,130 | 25,459 |
| 5 | Operating Reserve Requirement | 2,620 | 2,620 | 2,620 | 2,620 |
| 6 = 4+5 | Total Capacity Requirement | 26,743 | 28,344 | 26,750 | 28,079 |
| 7 = 3 - 6 | Capacity Margin | 10,900 | 9,299 | 9,638 | 8,309 |

1. Reflects the 2020 Gold Book existing capacity with projected and actual deactivations and additions during 2020-21
2. Derates: 1,263 MW for wind, 383 MW for Hydro, 2,646 MW for thermal units, 67 MW for other renewables and 277 MW for SCRs

During last year's Dec. 19, 2019, winter peak load, actual peak load was 23,253 MW, and the weather-adjusted peak was 24,123 MW. | *NYISO*

# NJ Scrutinizing JCP&L over FirstEnergy Bribe Probe

By Rich Heidorn Jr.


FBI agents raided the home of Ohio Public Utilities Commission Chair Sam Randazzo on Nov. 16. | *WSYX*

The New Jersey Board of Public Utilities *voted* Wednesday to hold a public hearing on Jersey Central Power & Light in response to the ongoing bribery scandal involving its parent, FirstEnergy.

The BPU acted two days after FBI agents *raided* the home of Public Utilities Commission of Ohio Chair Sam Randazzo and several weeks after S&P Global and Fitch Ratings downgraded the credit rating of FirstEnergy and its subsidiaries, including JCP&L. (See related story, *PUCO Chair Randazzo Resigns*.)

In July, federal prosecutors alleged FirstEnergy spent $61 million in bribes, "dark money" campaign contributions and advertising to elect the speaker of the Ohio House of Representatives and allies in return for their support of House Bill 6, which provided $1.5 billion in subsidies for the utility's struggling nuclear plants.

On Oct. 29, FirstEnergy announced it had fired CEO Charles Jones and two others following an internal review related to "government investigations." On Nov. 8, the company released its top lawyer and chief ethics officer. (See *Chief Ethics, Legal Officers 'Separate' from FirstEnergy*.)

S&P said it dropped FirstEnergy and JCP&L to BB+ from BBB as a result of the alleged scheme.

"The two-notch downgrade reflects the termination of the company's CEO, Chuck Jones, and two other executives for violating company policies and its code of conduct. We view the severity of these violations at the highest level within the company as demonstrative of insufficient internal controls and a cultural weakness," S&P wrote in announcing its Oct. 30 downgrade. "We view these violations as significantly outside of industry norms and, in our view, represent a material deficiency in the company's governance."

On the same day, Fitch downgraded FirstEnergy and FirstEnergy Transmission's long-term issuer default ratings (IDR) to BBB- from BBB and JCP&L's long- and short-term IDRs.

Moody's Investors Service has not changed its ratings but put FirstEnergy and JCP&L on a negative credit watch.

## Mitigation Plan

The downgrades required JCP&L to provide the BPU with a mitigation plan for shoring up its rating.

The board said it will receive written comments until Dec. 4 on the mitigation plan. It set a public hearing for Dec. 11, when it will hear from JCP&L and "determine the appropriateness of any additional board action to protect" ratepayers.

BPU Chief Economist Ben Witherell recommended the hearing "to be comprehensive and transparent in its review of the company's mitigation plan and to assess the company's ability to successfully implement an appropriate mitigation plan."

"I don't think we have all the information we want yet," he said. "The New Jersey subsidiary is financially solid. However, the parent company's risks do weigh on that. … Issues at the parent company are very significant."

BPU President Joseph Fiordaliso said, "The situation is very serious.

"I was in communication with the acting CEO of FirstEnergy, [Steven Strah] … and he assured me that the internal investigation is just as aggressive as the investigation from external sources."

Commissioner Bob Gordon noted that the BPU had recently ordered an audit of JCP&L. "It's really important that it go beyond the numbers, beyond the financial audit. It needs to be an audit of operational effectiveness and organizational design; incentive systems; reporting relationships. It really needs to be a management audit, not simply to assure us that it's a creditworthy organization." ■


Ohio Gov. Mike DeWine told a press conference he had no information that the chair of the Public Utilities Commission was the target of the FBI investigation. | *WCMH-TV*

## PJM News

# PUCO Chair Randazzo Resigns

*By Michael Yoder*

Public Utilities Commission of Ohio Chair Sam Randazzo resigned Friday, less than a week after the FBI raided his home in Columbus.

Randazzo, who has served as the chair of the PUCO since he was appointed by Gov. Mike DeWine (R) in 2019, made the announcement in a *letter* sent to the governor.

The move came one day after FirstEnergy *told* the U.S. Securities and Exchange Commission that it made a $4 million payment to an "entity associated with an individual who subsequently was appointed to a full-time role as an Ohio government official directly involved in regulating" companies regarding "distribution rates." FirstEnergy said the payment led to the firing of three of its executives, including former CEO Charles Jones. (See *Chief Ethics, Legal Officers 'Separate' from FirstEnergy*.)

"At this time, it has not been determined if the payments were for the purposes represented within the consulting agreement," FirstEnergy said. The executives who were terminated "did not reasonably ensure that relevant information was communicated within our organization and not withheld from our independent directors, our Audit Committee and our independent auditor."

### Parting Words

In his letter, Randazzo mentioned both the FBI raid and the SEC filing as reasons for his resignation, saying the incidents could "fuel suspicions about and controversy over decisions I may render in my current capacity."

Ohio Gov. Mike DeWine | *Ohio Governor's Office*

"The events and news of this week have undoubtedly been disturbing or worse to many stakeholders who rightfully look to the Public Utilities Commission of Ohio, the Ohio Power Siting Board and me as the chair to act in the public interest within the statutory legal framework," Randazzo told DeWine. "In present times, when you, good sir, are valiantly battling to save Ohioans from the surging attack of COVID-19, there is no room or time for me to be a distraction."

DeWine, who appointed Randazzo in February 2019, announced the resignation during a Friday morning press conference. The governor confirmed reiterated that Randazzo said he felt he would be a distraction.

"I want to thank him for his work," DeWine said. "He has done very, very good work as chair."

At a press conference about the state's COVID-19 response Nov. 17, reporters asked DeWine whether Randazzo was the target of a federal investigation into an alleged scheme by FirstEnergy to bribe state officials, including former House Speaker Larry Householder (R).

"I have no reason to think he is a target," DeWine had said. "We're waiting for additional information, quite candidly."

Before joining PUCO, Randazzo was a partner at McNees, Wallace & Nurick and represented Industrial Energy Users-Ohio. According to an ethics statement, Randazzo has an ownership in two consulting businesses, including Sustainability Funding Alliance of Ohio, that did work for FirstEnergy Solutions (FES), FirstEnergy's former generation subsidiary. FES emerged from bankruptcy this year as an independent company, Energy Harbor.

Earlier this month, PUCO began an *audit* of FirstEnergy to see whether the company broke any laws or regulations regarding its interactions with FES.

In July, federal prosecutors alleged FirstEnergy spent $61 million in bribes, "dark money" campaign contributions and advertising to elect Householder and his allies in return for their support of House Bill 6, which provided $1.5 billion in subsidies for the utility's struggling nuclear plants. (See *Feds: FE Paid $61 Million in Bribes to Win Nuke Subsidy*.)

In his letter, Randazzo defended his tenure on the commission, saying that before he joined, its decisions were "better characterized as being the product of a rubber stamp than reasoned analysis and proper application of the law. Local interests were unnecessarily subordinated to the virtue-signaling demands of wind and solar farm developers, some of which were only interested in flipping their project."

Former PUCO Chair Sam Randazzo | *PUCO*

He also argued that PUCO had "taken on the runaway electric transmission service rate increases by proactive intervention and advocacy at the Federal Energy Regulatory Commission, a federal agency that has exclusive jurisdiction in this area and seems eager to give transmission utilities money for nothing.

"Prior to my arrival, this important work was not getting much if any attention, and the customer impacts of federal decisions on the price and availability of energy in Ohio were not getting their deserved attention," he said.

Also contained in the letter was parting advice for DeWine and his former colleagues.

"The worst out-of-market compensation abuses of the Strickland administration's electric security plan (ESP) statute, all of which were imposed on customers well prior to my arrival, have been mitigated or cut short where possible," he wrote. "The next step is, in my view, elimination of the ESP statute itself and focusing on the use of a proper competitive bidding process to set the generation supply price for retail electric customers not served by a competitive supplier."

He also called on the state legislature to rescind HB 6. ■

# Ex-ComEd CEO, Officials Charged in Ill. Bribery Scheme

*By Michael Yoder*

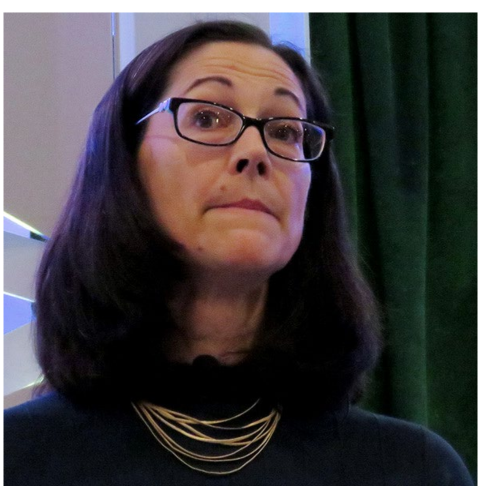
Several former Commonwealth Edison executives, including a former CEO, were indicted Wednesday in connection to the ongoing investigation into alleged bribes of Illinois House Speaker Michael Madigan (D) in return for legislation that increased the company's earnings and bailed out its money-losing nuclear plants.

Four individuals were charged with bribery conspiracy, bribery and willfully falsifying ComEd books and records in a 50-page *indictment* returned by a grand jury to the U.S. District Court in Chicago. The individuals indicted include:

- Anne Pramaggiore, 62, the former CEO of ComEd from 2012 to 2018 and later of parent company Exelon Utilities;
- John Hooker, 71, ComEd's executive vice president of legislative and external affairs from 2009 to 2012 who later worked as an external lobbyist for the utility;
- Michael McClain, 73, a lobbyist and consultant for ComEd and a former member of the Illinois House of Representatives from 1972 to 1983; and
- Jay Doherty, 67, the owner of Jay D. Doherty & Associates, which performed consulting services for ComEd from 2011 to 2019.

Investigators allege the four conspired with outside consultants to influence and reward a high-level elected official in Illinois to assist with the passage of legislation favorable to ComEd. The legislation included the 2011 Energy Infrastructure Modernization Act, which created a formula ratemaking process for the utility, and the 2016 Future Energy Jobs Act, which authorized subsidies for Exelon's Clinton and Quad Cities nuclear generators. (See *How ComEd Got its Way with Ill. Legislature*.)

ComEd's payments to Speaker Madigan's associates were allegedly funneled through third parties, including the firm of ComEd lobbyist Jay Doherty, pictured with Pramaggiore at the City Club of Chicago. | *WBEZ*


Former Exelon Utilities CEO Anne Pramaggiore | © *RTO Insider*

While Madigan is not named directly in the documents released Wednesday, the scheme allegedly revolved around what the *deferred prosecution agreement* released in July called "Public Official A," identified as the "speaker of the Illinois House of Representatives and the longest serving member of the House of Representatives." Madigan is the longest-serving leader of any state or federal legislature in U.S. history, having held the speaker title for all but two years since 1983.

ComEd agreed in July to pay a $200 million fine to settle the bribery allegations. Other lawsuits and indictments have resulted from the initial settlement, including a $450 million racketeering suit filed in August. (See *ComEd, Madigan Sued for $450M in Racketeering Suit*.)

The grand jury probe leading to the bribery charges brought about the retirement of Pramaggiore in October 2019, less than a week after the company disclosed it had received a subpoena seeking communications between Exelon and state Sen. Martin Sandoval, a Chicago Democrat whose home and offices were raided by FBI agents in September 2019. Sandoval's daughter was hired by ComEd during Pramaggiore's tenure.

## Indictment

According to the newest charges, efforts to influence and reward Madigan began around 2011 and continued through 2019. During that time, Madigan controlled what legislation was called for a vote in the Illinois House and "exerted substantial influence" over other lawmakers concerning legislation affecting ComEd.

The charges allege that the defendants conspired with Fidel Marquez, ComEd's former senior vice president for legislative and external affairs, along with other unnamed conspirators to influence and reward Madigan through the arranging of jobs and contracts for his political allies and workers, some of whom "performed little or no work" for ComEd.

Marquez pled guilty in September to a bribery conspiracy charge.

The defendants allegedly created false contracts, invoices and records within Exelon, ComEd and Exelon Business Services to disguise the true nature of some of the payments to circumvent ComEd's internal controls. The indictment also alleges that the defendants helped ComEd retain an unnamed outside law firm favored by Madigan as a political favor and to accept students into ComEd's internship program from Chicago's Ward 13, Madigan's political district.

Pramaggiore, Hooker, McClain and Doherty have yet to be arraigned. No charges have been filed against Madigan.

Wednesday's indictment was announced by John R. Lausch Jr., U.S. Attorney for the Northern District of Illinois; Emmerson Buie Jr., special agent-in-charge of the Chicago Field Office of the FBI; and Tamera Cantu, acting special agent-in-charge of the IRS Criminal Investigation Division in Chicago. ■

# NJ Asks PJM to Seek Bids for OSW Tx

## *1st State to Use 'State Agreement Approach' Under FERC Order 1000*

*By Rich Heidorn Jr.*

Signaling a move to the "transmission first" strategy, New Jersey regulators voted Wednesday to ask PJM to conduct a competitive solicitation for upgrades to connect 6,400 MW of offshore wind to the regional grid.

The New Jersey Board of Public Utilities unanimously *requested* that PJM integrate the state's OSW goals into the RTO's Regional Transmission Expansion Plan (RTEP) process under the "state agreement approach" — making it the first state do so since the approach was approved by the FERC under Order 1000. PJM expects to open a competitive solicitation window in the first quarter of 2021.

The approach allows states to seek transmission solutions to meet public policy needs, with costs of the upgrades allocated to state ratepayers. (See *PJM Dusts off 'State Agreement' Tx Approach*.) However, state officials emphasized that the BPU's agreement to execute a study agreement with PJM does not commit the state to paying anything.

"At the conclusion of the competitive solicitation window, expected in mid-2021, PJM will work with [BPU] staff to evaluate the submitted proposals. At that time, the board will be asked to determine whether any proposed transmission solutions will be selected through the state agreement approach," explained Joseph DeLosa, BPU's manager of regulatory affairs. "If the board decides no projects should be selected, the process will terminate without costs to ratepayers. Additionally, the board can terminate the ongoing study process or competitive solicitation at any time."

Gov. Phil Murphy has set a *goal* of 7,500 MW of OSW by 2035, but the BPU's request will not impact the state's first project, awarded to Ørsted's 1,100-MW Ocean Wind project, or its second solicitation, which is seeking 1,200 to 2,400 MW. Responses to the second solicitation will be accepted until Dec. 10, with an award expected in June 2021. (See *New Jersey BPU OKs 2nd Offshore Wind Solicitation*.)

For the first two projects, the BPU required generation developers to include transmission and connection to PJM in their proposals and to include the cost in the state's Offshore Wind Renewable Energy Certificate funding mechanism.

Although the second solicitation requires developers to address how their interconnection design could support the state's goals and how a proposed project would work with any future offshore transmission grid, developers were not required to coordinate in a shared approach.

The BPU acted based on information gathered at a technical conference in 2019 and the state's *Energy Master Plan*, which concluded that "coordinating transmission from multiple projects may lead to considerable ratepayer savings, better environmental outcomes, better grid stability and may significantly reduce permitting risk." (See *NJ Unveils Plan for 100% Clean Energy by 2050*.)

Officials have identified three "inter-related components" of an open-access offshore transmission facility:

- PJM Grid to Onshore Substations: This option would upgrade PJM's onshore regional transmission system to accommodate the increased power flows from OSW facilities. OSW developers would continue to be responsible for getting the power from the lease areas to the newly constructed or existing onshore substations. Solutions could include coordinated onshore "power corridors" that would deliver electricity to existing high-voltage transmission.
- Onshore Substations to Offshore Collector Platforms: This option would solicit bids from transmission developers to permit and construct the beach crossings and connect the new or existing onshore substations to new offshore collector stations. This option could be selected in addition to the first option, with OSW developers responsible for interconnection to the offshore collector platforms.
- Offshore Transmission "Backbone": This option would connect offshore collector stations to "network" multiple lease areas.

Based on a screening analysis to determine which substations were most suitable for a large injection of OSW, the BPU is asking PJM to develop needs for injecting 6,400 MW at four locations between 2028 and 2035:

- 900 MW at the 230-kV Cardiff substation in Southern New Jersey;
- 1,200 MW at the 230-kV Larrabee substation in Central New Jersey;
- 1,200 MW at the 500-kV Smithburg substation in Central New Jersey; and
- 3,100 MW at the 500-kV Deans substation in Northern New Jersey.

Rendering of proposed New Jersey Wind Port located at Lower Alloways Creek | *New Jersey Board of Public Utilities*

"While staff recommends that the board identify these as the most likely locations on the PJM system that will need reinforcement to accommodate 7,500 MW of offshore wind, staff also recommends that the board invite developers to propose particularly cost-v effective alternatives that may still meet the state's immediate policy goals, while deferring less cost-effective elements of the transmission expansion until a future transmission solicitation," the order says.

DeLosa said the 6,400 MW cited in Wednesday's order is "reflective of some uncertainty with the outstanding second solicitation. We're not sure where it's coming ashore yet because that window is currently open. So, we need to plan for the full 7,500 MW, inclusive of both the first and second solicitations."

### Cost Allocation

The BPU's move to the "transmission first" model — in which large-scale transmission facilities are built for anticipated generation — is intended to achieve economies of scale.

But staff acknowledged concerns that a coordinated transmission solution could increase commercial risk on generation developers by making their projects dependent on transmission constructed by third parties. The board "will have to address concerns regarding trans-

# PJM News

fer of commercial risk between transmission and generation developers prior to approving a final coordinated transmission solution," it said.

"Staff encourages entities bidding into the RTEP process to consider how their submitted cost caps and other binding obligations may relate to interconnection of qualified offshore wind generation developers. … Innovative proposals to address the commercial risks associated with delays in the construction of transmission facilities, on the one hand, or delays associated with construction of the offshore wind generators, on the other, should also be pursued."

Use of the state agreement approach also raises thorny cost allocation issues, as speakers told FERC during a technical conference last month. They said cost allocation rules don't properly assign costs to parties that will benefit from the additional offshore and onshore transmission that will be required for states to meet their clean energy goals and OSW targets. (See *FERC Pushed to Change Tx Rules for OSW*.)

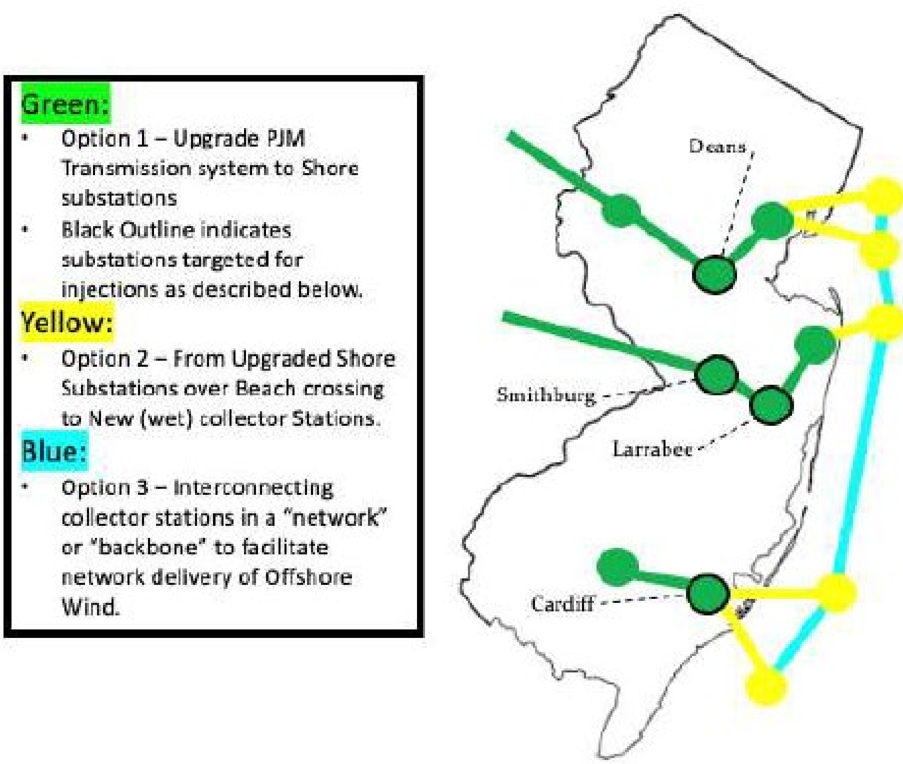
BPU General Counsel Abe Silverman said the board's action "is going to start a process where we go in and make a series of FERC filings with PJM" laying out cost allocation responsibilities.

"If … other states join and we end up with a regional grid, I think everybody is better off because that makes for more clean energy coming onto the grid and helps share the costs," he said at a press conference alongside PJM officials after the board meeting. "But that is a much longer-term process."

Ken Seiler, PJM's vice president of planning, called integrating New Jersey's public policy needs a "significant milestone" for the RTO's transmission planning process, which has traditionally focused on reliability. "It's very exciting to have generation to the east. We're traditionally a west-to-east flow type of system. … This is going to increase the reliability as well as the resilience for the PJM grid."

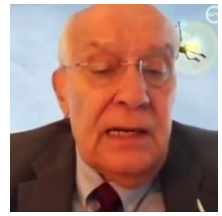
Asim Haque, PJM's vice president of state and member services, said the RTO is also working with its other coastal states on their OSW plans.

"PJM is not only working with individual states, but it's also working collectively with the coastal states as well to try and determine, similarly, what the best possible options are for the advancement of offshore wind individually and collectively. … That work will continue. We are going to continue to have those discussions with our coastal states."




New Jersey is considering three options for transmission to accommodate its offshore wind goals. | *New Jersey Board of Public Utilities*

## 'Exciting Stuff'



NJBPU President Joseph Fiordaliso | *New Jersey Board of Public Utilities*

"This is exciting stuff. It's not sexy like seeing a turbine out there [in the ocean], but it's getting us positioned well," BPU President Joseph Fiordaliso said at the board meeting, adding that "PJM has been tremendously helpful throughout this process.

"In the past, I have been critical of PJM. But PJM has done a wonderful job and, under new leadership, has really stepped up to the plate to be more than helpful to the states," he said, referring to CEO Manu Asthana, who joined the RTO in January.

Commissioner Dianne Solomon sounded a caution, noting that the state has not quantified the cost of the transmission.

"I would be remiss if I didn't point out that in the past, [PJM has] had a spotty record in evaluating transmission solutions that were least-cost for the state of New Jersey," she said.

Solomon also expressed concern about the costs of other programs the BPU has initiated to meet its goal of 100% clean energy by 2050. "It's not only wind, but we have a new energy-efficiency program; [electric vehicle] deployment; solar, wind and nuclear subsidies; [and] building electrification, not to mention … the cost to maintain and upgrade our existing infrastructure. So, at a time when our state faces an unprecedented financial crisis, and many residents are struggling to pay utility bills, it's imperative that we as economic regulators do a comprehensive analysis of all these components."

"Let's be happy today and optimistic that we're all moving in the right direction," Fiordaliso responded. "If the 98% of those scientists are just a little bit right, we have very few alternatives here in trying to mitigate the effects of climate change. … I'm not going to be around to see the dastardly effect of climate change. But my grandchildren are going to be."

Fiordaliso demurred when asked whether the BPU's recent collaboration with PJM on transmission had any impact on its deliberations over whether to leave the RTO's capacity market over the expanded minimum offer price rule.

"We haven't fully completed that investigation yet," he said. "It's big step and one we want to get right." ■

## PJM News

# PJM MRC/MC Briefs

## Markets and Reliability Committee

### DASR Endorsed

Stakeholders at last week's Markets and Reliability Committee meeting unanimously endorsed the final proposed changes to the *2021 day-ahead scheduling reserve (DASR)* requirement.

David Kimmel, senior engineer in performance compliance for PJM, said the final 2021 DASR requirement is 4.74%, slightly lower than the 2020 requirement of 5.07%.

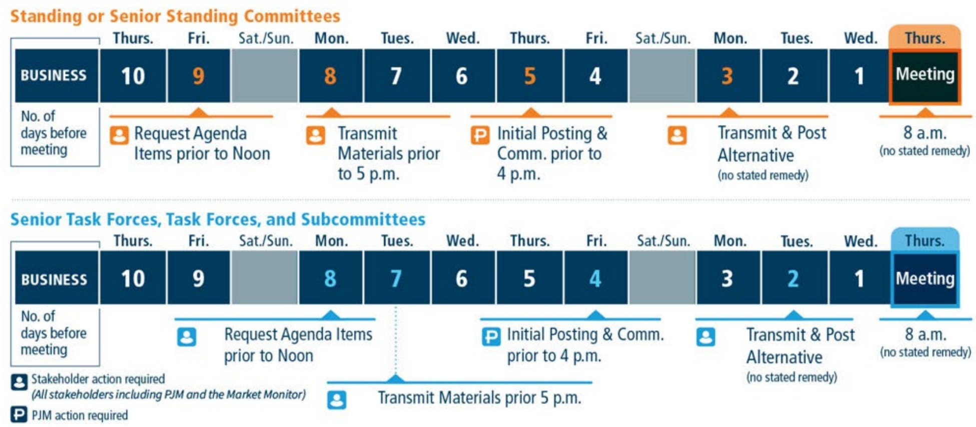
The DASR is the sum of the requirements for all zones within PJM and any additional reserves scheduled in response to a weather alert or other conservative operations. It is based on the under-forecasted load forecast error (LFE) of 2.16%, which is up 0.01% from last year, and the eDART forced outage component of 2.59%, down 0.33% from last year. The final 2021 DASR value will be incorporated into Manual 13. (See "Day-ahead Scheduling Reserve Endorsed," *PJM Operating Committee Briefs: Nov. 6, 2020*.)

### Consent Agenda

Several manual changes were endorsed through a vote on the consent agenda, with two stakeholders objecting to the changes and 20 abstaining.

The changes included:

- Updates to *Manual 3: Transmission Operations* incorporating clarifying changes resulting from its periodic review. (See "Manual Endorsements," *PJM Operating Committee Briefs: Nov. 6, 2020*.)
- Revisions to *Manual 3A: Energy Management System Model Updates and Quality Assurance* resulting from its periodic review. PJM said the changes include correcting grammatical mistakes and updating references to the behind-the-meter generation (BTMG) rules that took effect in September 2019. (See *"Manual First Reads," PJM OC Briefs: Oct. 8, 2020*.)
- Revisions to *Manual 10: Pre-Scheduling Operations* to incorporate clarifying changes resulting from its periodic review.
- Revisions to *Manual 11: Energy & Ancillary Services Market Operations* and *Manual 12: Balancing Operations* to address changes related to the five-minute dispatch and pricing from special sessions of the Market Implementation Committee. The revisions are designed to increase transparency and conform to the current PJM process for calculating LMPs as part of the *problem statement* regarding *five-minute dispatch and pricing*. (See "Manual 11 Revisions Endorsed," *PJM MIC Briefs: Nov. 5, 2020*.)
- Revisions to *Manual 14D: Generator Operational Requirements* to incorporate changes resulting from its periodic review. (See "Manual Changes Endorsed," *PJM OC Briefs: Oct. 8, 2020*.)
- A minor correction to *Manual 18: PJM Capacity Market* regarding an effective date for notifying pseudo-tied resource owners of their assigned locational deliverability area (LDA) prior to each delivery year. The revision was endorsed as a "quick fix" at the October MIC meeting following a discussion in which some members objected to the process and suggested further talks on lingering pseudo-tie issues. (See "Manual 18 Update," *PJM MIC Briefs: Oct. 7, 2020*.)




Posting timelines | *PJM*

## Members Committee

### Manual 34 Revisions

Members debated for more than an hour over revisions to *Manual 34* that emerged from discussion held for several months at the Stakeholder Process Forum.

Michele Greening of PJM reviewed the proposed *revisions* addressing stakeholder process updates at the Members Committee meeting. The review was originally listed on the agenda as a first read of the proposed changes, but several stakeholders objected to that description because red line language changes of Manual 34 were unavailable to examine.

Greening said PJM decided to take an extra month to make sure "due diligence" was done to make sure the proposed language was consistent with other language already in Manual 34.

"We felt it was timely to present the changes and bring additional awareness," Greening said. "It will at least give some transparency into what is coming in the red line language next month."

Greening said the proposed revisions were in five sections:

- Photography in Meetings: Members proposed requiring a written release be obtained from the subject of a photo prior to its publication.
- Motions and Amendments: Stakeholders proposed that an issue is collectively "owned" by the committee or group to which it is assigned. The change would allow the committee or group to take an issue directly to the MC for consideration if the issue is declined in the lower committee or group and other means have been exhausted. Greening said the right to bring an issue to the MC should be "exercised judiciously and only in exceptional circumstances," including a significant and immediate threat to reliability or a market failure.
- Preference for Status Quo: Stakeholders proposed incorporating an additional threshold for moving a proposal to a senior standing committee. The language change says a proposal must pass a simple majority voting threshold *and* be preferred over the status quo by more than a simple majority. Current rules that do not require a majority prefer the alternative over the status quo.

# PJM News

- Forums: Defines the term of "forum" as a stakeholder body created by a standing committee or a senior standing committee through a majority vote that is created to address topics and scope outlined in its issue charge or charter.
- Posting Timelines: The change would require "defined milestones" for when meeting materials must be provided to stakeholders. Meeting materials would have to be sent to PJM for standing or senior standing committees eight days before a meeting with the materials posted for viewing five days before. Current rules require materials to be presented three days before a meeting. Materials for senior task forces, task forces and subcommittees would have to be transmitted to PJM seven days before a meeting, and the initial posting of materials would take place four days before a meeting. There would be a provisional status and voting for consideration on an issue when the posting timelines are not met. At the start of a meeting, the committee or senior task force will vote whether to accept provisional items and amend the agenda to include them.

Greening said PJM plans on consolidating the separate revision sections into a single red line draft of Manual 34 and present it for a first read at the December MC meeting. Greening said an additional Stakeholder Process Forum meeting is scheduled for Dec. 7 to conduct a page turn of the red line changes.

Adrien Ford of Old Dominion Electric Cooperative said she wanted to make sure stakeholders were "really paying attention" to the presentation because of the number of changes proposed in Manual 34. Ford said members have been working for several months in subgroups of the Stakeholder Process Forum to develop the proposed revisions.

Calpine's David "Scarp" Scarpignato said discussions of possible manual changes at the Stakeholder Process Forum can be a valuable time saver by having the concepts fleshed out before being brought to the MC. But Scarp said he believes most of the working discussions on the changes should still be held at the MC and are too important to be left up to talks at a forum that has no process for voting.

"These are the rules at which the whole stakeholder process operates," Scarp said. "Everybody at the MC should be seeing that."

Dave Anders, PJM director of stakeholder affairs, said the RTO wanted to get the manual changes in front of a wider stakeholder body so members could have the opportunity to see what is proposed and delve into the changes more deeply in case they haven't participated at the Stakeholder Process Forum meetings. Anders said PJM wanted to get stakeholders "comfortable" before being asked to vote on anything even with the red line language unavailable.

Scarp said it wasn't clear from Greening's presentation what problems the Manual 34 changes attempt to solve. Scarp highlighted the "Motions and Amendments" section, saying a stakeholder can already go to the MC with an issue and was confused by what changes the language made to the existing rules.

"We should understand what the objective is and what problem you're trying to solve," Scarp said.

Greening said the details of the changes are contained in the red line language and will be spelled out more clearly at the Dec. 7 Stakeholder Process Forum meeting. She said she understood the challenge of debating important manual changes without seeing the language behind it.

Greg Poulos, executive director of the Consumer Advocates of the PJM States, requested that the manual sections be separated when a final vote is taken. Poulos said he worries that some of the language changes are creating additional complicated processes and will lead to "lengthy discussions of administrative matters" at the MC instead of the substance of the issue.

Poulos said Manual 34 threatens to become as lengthy and complicated as the "tax code," making it difficult to understand for those who have not been involved in the process for years.

"In the end, the important thing is we just vote," Poulos said. "Let us vote on the core items, and people can make a decision."

## Consent Agenda

Stakeholders approved two measures on the consent agenda with one member objecting:

- Revisions to *Manual 15: Cost Development Guidelines* resulting from its biennial periodic review process.
- *Endorsement* of the installed reserve margin (IRM) and forecast pool requirement (FPR) values included in the *2020 Reserve Requirement Study* results. PJM recommended an IRM of 14.4%, down from 14.8% in 2019. The FPR is essentially the same as 2019, at 1.0865 (8.65%) instead of 1.086 from the previous year. The study determines the IRM and FPR for 2021/22 through 2023/24 and establishes the initial values for 2024/25. The results are based on the 2020 capacity model, load model and capacity benefit of ties. (See "IRM Study Results Endorsed," *PJM MRC/MC Briefs: Oct. 29, 2020*.) ■

*— Michael Yoder*

| | Load Forecast Error Component 80th Percentile Absolute Error | | | | Forced Outage Rate Component All Forced Outage Tickets | | | | Day Ahead Scheduling |
|---|---|---|---|---|---|---|---|---|---|
| Season | 2018 | 2019 | 2020 | Rollup | 2018 | 2019 | 2020 | Rollup | Req. |
| Winter | 2.25% | 2.06% | 2.05% | 2.12% | 3.66% | 2.81% | 2.19% | 2.89% | 5.01% |
| Spring | 2.04% | 1.84% | 2.73% | 2.20% | 3.16% | 2.24% | 1.71% | 2.37% | 4.57% |
| Summer | 2.48% | 2.48% | 1.94% | 2.30% | 2.81% | 2.43% | 2.34% | 2.53% | 4.82% |
| Fall | 2.33% | 1.13% | 1.37% | 1.61% | 2.59% | 2.07% | 2.25% | 2.31% | 3.91% |
| Annual | | | | 2.16% | | | | 2.59% | 4.74% |

DASR requirement components | *PJM*

# PJM Sets BRA for May 2021

By Michael Yoder

PJM will hold the 2022/23 Base Residual Auction in May after being delayed since 2019 over FERC's expansion of the minimum offer price rule (MOPR).

The auction will take place from May 19-25 PJM said, and it will post the BRA results on June 2.

Pete Langbein of PJM *presented* the updated *schedule* for the 2022/2023 BRA and future auctions at last week's Markets and Reliability Committee meeting. Langbein said PJM determined the implementation of auction dates was appropriate after FERC's Nov. 12 order on the forward-looking energy and ancillary services (E&AS) offset calculation (*EL19-58-002*). (See *FERC Approves PJM Key Capacity Market Variable*.)

Langbein said the order on E&AS offset was the final piece to establish the timeline for the BRA and all the associated activities leading up to the auction.

"We received a relatively clean forward-looking energy and ancillary services offset order," Langbein said. "We feel confident that we can move forward with the actual BRA."

FERC's order required PJM to make a compliance filing within 15 days to use the average equivalent ability factor of all the nuclear resources in the RTO to represent a projected refueling outage. Several stakeholders had argued that using individual anticipated refueling schedules when determining nuclear resources' availability was inadequate.

Langbein said the commission provided PJM the red line Tariff language necessary to make the filing.

PJM has been working on a compressed BRA schedule since February when the RTO began sketching out its response to FERC's order expanding the MOPR. (See *PJM May Compress BRA Schedule over MOPR*.)

Since the BRA is scheduled to take place soon, Langbein said PJM had to cancel the first and second incremental auctions for both the 2022/23 and the 2023/24 delivery years. The 2023/24 BRA is scheduled to take place December 2021.

PJM also proposed canceling the first incremental auction for the 2024/25 delivery year in June 2022.

The incremental auction changes are based on the compressed BRA schedule, Langbein said, and PJM determined that a scheduled incremental auction will be canceled if its normally scheduled date has passed. PJM will also cancel a scheduled incremental auction if it falls within 10 months of the BRA for that delivery year, Langbein said. He continued that PJM will always conduct a third incremental auction.

PJM will use the January 2021 load forecast for the 2022/23 BRA and the most up-to-date load forecast in future BRAs, Langbein said.

"Our focus has really been on making sure we have all the dates established for the upcoming BRA, but we wanted to get out the subsequent BRA schedules as well," he said.

The future BRA dates are January 2023 for the 2025/26 delivery year; July 2023 (2026/27) and May 2024 (2027/28).

PJM plans on conducting the BRA six months after the results are posted from the prior BRA, Langbein said, before returning to its normal auction schedule for the 2027/28 delivery year.

Langbein said some of the key pre-auction BRA dates for the 2022/23 delivery year include requests of winter capacity interconnection rights (CIRs) on Jan. 4 and the first-time fixed resource requirement (FRR) election on Jan. 18. Several activities will take place Jan. 19, he continued, including the generation state subsidy certification and the resource specific MOPR exception requests.

"We realize things are going to be a little tight with all the additional activities that normally go on prior to the start of the delivery year," Langbein said. "But it's the schedule we've come up with based on the timeline we have out there." ■

| Delivery Year | Original BRA schedule | | Revised BRA Schedule | IAs cancelled |
|---|---|---|---|---|
| 2022/2023 | May | 2019 | May 2021 | 1rst and 2nd |
| 2023/2024 | May | 2020 | December 2021 | 1rst and 2nd |
| 2024/2025 | May | 2021 | June 2022 | 1rst |
| 2025/2026 | May | 2022 | January 2023 | |
| 2026/2027 | May | 2023 | July 2023 | |
| 2027/2028 | May | 2024 | May 2024 | |

Indicates auction is back on schedule

Auction schedule | *PJM*

## PJM News

# PJM Official Reflects on COVID-19 Impacts

*By Michael Yoder*

With no end in sight to the COVID-19 pandemic, a top PJM official last week reflected on the ups and downs in the RTO's footprint since the March outbreak.

Asim Haque, PJM's vice president of state and member services, was speaking at Raab Associates' Energy Policy Roundtable in the PJM footprint on Wednesday, which featured panels on the consequences of COVID-19 on customers, energy markets and the continuing goals of clean energy reform.

Haque *said* it was important to provide the RTO's perspective on wholesale and regional dynamics from the pandemic while talking about the "sobering and almost surreal topic."

Haque said PJM takes seriously its responsibility for maintaining a reliable bulk power system for 65 million people, the importance of which has become more evident during the pandemic.

"Keeping the lights on is essential to supporting what could be described as a generally fragile economy, both local and national, as well as consumers who are more reliant than ever on reliable power delivery to their homes in order to work and do virtual schooling," Haque said.

PJM took cautious measures toward COVID-19 from the onset, Haque said, by sending employees home from its campus in early March, sequestering system operators and turning its training center into a third control room in case of an emergency or an internal outbreak of the virus. Haque said most PJM employees continue to work from home, and the RTO recently announced it will remain in the same conservative posture with the campus closed until at least June 2021.

Haque said the impacts on the wholesale energy market have been sizeable. By early May PJM saw considerable reductions in peak and overall energy usage, coming in at "double-digit percentages," as many businesses shut down. The market recovered somewhat in the summer as temperatures rose and restrictions eased in many states, he said. (See *PJM Analyzes Potential COVID-19 Generation Losses*.)

One of the biggest impacts for PJM has been in forecasting, as discussions continue between operators and stakeholders over the best forecasting models to use, Haque said.

"COVID-19 has surely thrown a wrench in the forecasting that we wouldn't have predicted in 2019," Haque said.

Haque said a silver lining from the pandemic would be the interactions and coordination between PJM and state agencies, leading to "cooperative, collaborative conversations."

Issues that typically wouldn't have been discussed before made their way to the forefront, he said, including weekly meetings with state regulatory agencies about the coordination of refueling nuclear plants and conversations around concepts like the definitions of essential personnel.

As the pandemic progressed, PJM shared market information to help state officials better understand potential impacts on consumers, Haque said.

PJM also began "taking cues from the states"

Asim Haque, PJM | *Raab Associates*

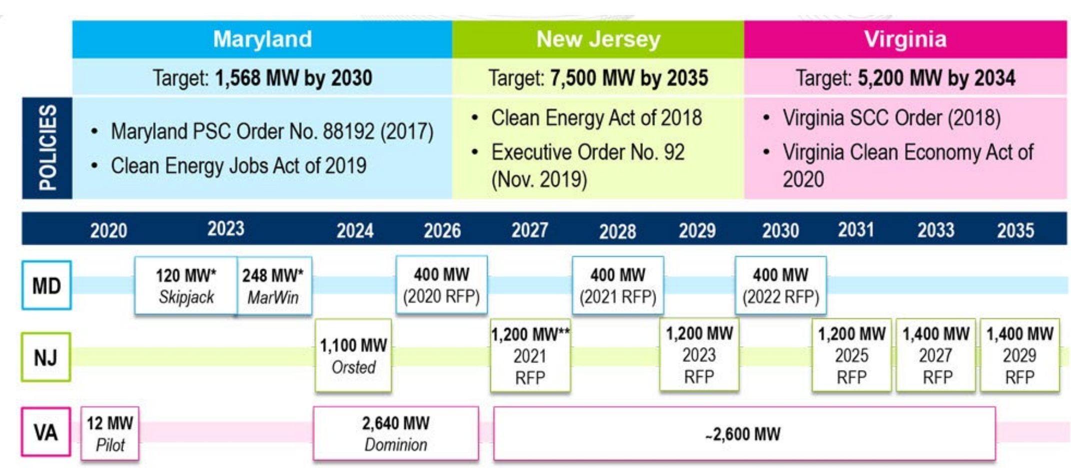
to ask how the RTO could help advance energy policy initiatives, Haque continued. He said 2020 began with the expectation that "robust legislative discussions" over "hefty policy matters" would occur during the year, but the pandemic thwarted many of those efforts.

PJM decided to launch its concept of a "state policy solutions" group to work directly with states on technical issues requiring the RTO's expertise, Haque said, noting that PJM has acknowledged the rapidly changing energy landscape and that it must evolve to work with states more closely to help advance energy policy objectives in the most effective way.

Haque highlighted PJM's efforts on offshore wind as an endeavor to assist states in formulating their policies. He said the pandemic did not slow the desire of PJM states to develop offshore wind, with coastal states having OSW targets exceeding 14,000 MW and more than 20 projects in PJM's interconnection queue. (See *Md., NC, Va. To Team up on Offshore Wind*.)

Another issue gaining momentum during the pandemic is FERC Order 2222 to facilitate the participation of DER in organized markets, Haque said. (See *FERC Opens RTO Markets to DER Aggregation*.)

"Order 2222 should reflect a new collaborative paradigm between PJM and the states," Haque said. "The FERC order actually mandates that there be a collaborative paradigm created by PJM, states and distribution utilities." ■




Offshore wind targets in PJM states | *PJM*

## SPP News

# FERC Rejects Rehearing on GridLiance 7-Factor Test

*By Tom Kleckner*

FERC last week denied GridLiance High Plains' rehearing request of an August order that said the company's transmission facilities must still pass Order 888's seven-factor test (*ER18-2358*).

The commission said it was unpersuaded by GridLiance's arguments and sustained its original decision, which was based on its response to a certified question from an administrative law judge presiding over settlement proceedings between GridLiance and Xcel Energy Services. FERC said that qualifying as a transmission facility under Attachment AI of SPP's Tariff does not eliminate the need to pass the seven-factor test.

Xcel protested GridLiance's inclusion of its Oklahoma Panhandle facilities in its annual transmission revenue requirement, saying they do not qualify for regional cost allocation under the Tariff and would result in a cost-shift to its Southwestern Public Service subsidiary, which shares the same transmission pricing zone. (See *GridLiance, Xcel Battle over Tx Qualifications*.)

In asking for rehearing, GridLiance argued that the August order was contrary to Order 888, designed to ensure fair access and market treatment for transmission customers. The independent transmission company said 888's seven-factor test was not intended as the exclusive test for determining which facilities are local distribution for jurisdictional purposes.

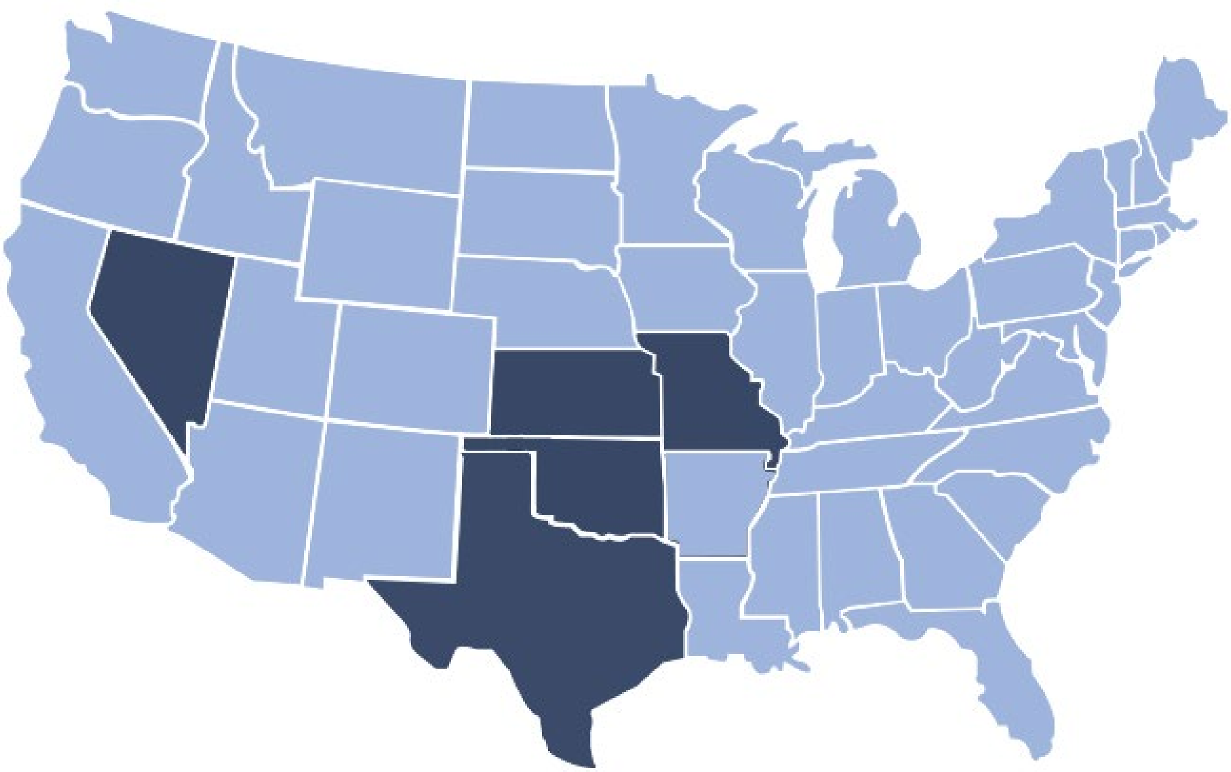
FERC established the test in 1996 to identify which facilities would be under the commission's jurisdiction and what facilities would remain under state jurisdiction in states using unbundled retail wheeling. The test says local distribution facilities are normally low voltage, in close proximity to retail customers and primarily radial. It also says that power flows into local distribution systems, rarely flowing out.

Gridliance also said the August order was inconsistent with another order issued three days later, in which FERC approved MISO's proposed Tariff revisions to incorporate criteria for classifying a storage facility as a transmission-only asset. The company said the commission's approval served as "an alternative test that itself is sufficient to identify [commission]-jurisdictional transmission" and noted that SPP's classification rules are more restrictive under the August order.

FERC responded that it viewed Attachment AI as "providing an initial screen to facilitate jurisdictional line drawing for facilities operated at or above 60 kV that will suffice to classify such facilities for inclusion under the SPP Tariff." The commission said an entity could seek a determination from FERC or state regulators to classify or declassify any facility by applying the seven-factor test.

The commission also found GridLiance's arguments regarding the MISO order to be irrelevant. It reminded the company that the certified question was in regards to the SPP Tariff's application of the seven-factor test, which had no bearing on classifying a storage facility under MISO's Tariff.

FERC said GridLiance did not cite any occasion where facilities meeting the Attachment AI criteria have been challenged and where the commission has declined to apply the seven-factor test. It said the entity's contention that the August order will "drastically increase the volume of disputed facilities within SPP" is speculative and unsupported and rejected its demand for a Section 206 proceeding under the Federal Power Act. ■



GridLiance has long-term agreements with transmission owners in Missouri, Oklahoma, Nevada, Texas and Kansas. | *GridLiance*

# Company Briefs

## Duke Energy Announces Leadership Changes

Duke Energy last week announced several leadership changes, including Preston Gillespie, the current senior vice president and chief nuclear officer, becoming senior vice president and chief generation officer, effective Dec. 1.

Gillespie will be responsible for integrating the company's nuclear, fossil, hydro and renewable generation strategies to support its target of net-zero carbon emissions by 2050. Kelvin Henderson, senior vice president of North Carolina nuclear operations, will replace Gillespie.

Duke promoted four other executives, most of whom are filling in the other vacated positions.

More: *Duke Energy*

## EPRI Chief Executive Howard to Become CEO Emeritus

The Electric Power Research Institute's (EPRI) board of directors last week voted unanimously to confer its chief executive, Mike Howard, with the designation of CEO Emeritus beginning Jan 1, 2021, when President Arshad Mansoor takes the helm. Howard said earlier this year he would retire Dec. 31.

EPRI Chairman Pedro Pizarro said the honor is in recognition of Howard's outstanding efforts and contributions to the company and the industry, which spans three decades and 10 years as CEO.

More: *EPRI*

## Leeward Renewable Energy Names CEO

Leeward Renewable Energy last week announced that, effective Nov. 1, Jason Allen had been promoted to the position of CEO. Allen has been acting as interim CEO since February.

Allen originally joined the company in 2017 as chief operating officer. Before joining Leeward, Allen served as vice president of operations at AltaGas.

More: *Leeward Renewable Energy*

## PGE Sets Aggressive Carbon-reduction Targets

Portland General Electric last week accelerated its carbon-reduction goals and will now aim to have net-zero greenhouse gas emissions across its operations by 2040.

As an interim goal, the company will focus on lowering emissions associated with power supplies to clients by 80% by 2030 as compared to 2010 levels. It will do so by shutting down coal-fired power capacity and adding more renewables.

More: *Renewables Now*

## Tesla to Join S&P 500 Index in December

Tesla will join the S&P 500 Index, effective Dec. 21, according to an announcement last week from S&P Global. The company has a market cap of nearly $387 billion.

To be eligible to join the S&P 500, a company must be based in the U.S., have a market capitalization of at least $8.2 billion, be highly liquid and have at least 50% of its shares available to the public. Shares were up more than 10% upon the news, according to Refinitiv.

More: *CNN Business*

## Utilities, Tesla Form Lobbying Group to Push EVs

Duke Energy, Pacific Gas and Electric, Consolidated Edison, Southern Co. and Vistra last week announced they have partnered with Tesla and Uber to form the Zero Emission Transportation Association to lobby the U.S. government to speed up the transition to electric vehicles.

The group is pushing for all-electric sales in the country by 2030 and increased financial incentives for EV buyers, as well as tougher vehicle emissions standards and government investment in charging stations.

"ZETA's formation recognizes a pivotal moment for national leadership and reflects the will of the growing clean transportation sector," said Joe Britton, executive director of the association. "The next decade will be critical in implementing federal policies that accelerate the transition to zero-emissions vehicles."

More: *Houston Chronicle*

# Federal Briefs

## US GHG Emissions Predicted to Drop to Lowest Level in 30 years

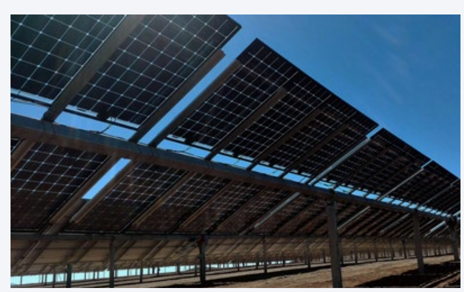
U.S. greenhouse gas emissions for this year are predicted to drop 9% to their lowest levels in three decades because of the COVID-19 pandemic, according to a study from BloombergNEF. It is the biggest yearly drop on record.

The study also said that if current trends continue, 2021 emissions will also be well below levels expected in a "pre-COVID world."

According to the study, U.S. greenhouse gas emissions have not been as low since 1983, when the economy was less than 40% of its current size.

More: *USA TODAY*

## Bifacial Solar Tariffs Back on After Court Ruling



The Court of International Trade last week reinstated tariffs on two-sided solar panels. In addition to expanding tariffs to include bifacial solar, the proclamation increased the tariff level to 18% in the fourth year of the duties.

The court said it was "not persuaded" by arguments that a presidential proclamation released in October, which withdrew the

Section 201 exclusion for bifacial panels, should be handled as part of an existing case challenging the Trade Representative's attempted withdrawal of the same exemption. That means the presidential proclamation can be implemented.

The tariffs are set to dissolve in early 2022, and it is unclear if President-elect Joe Biden will pursue their continuation.

More: *Greentech Media*

## 4th Circuit Blocks Mountain Valley from Wetland Construction

The 4th Circuit Court of Appeals last week temporarily blocked Mountain Valley Pipeline developers from doing construction across streams and wetlands in southern West Virginia and Virginia. The emergency order will remain in place until the court considers a full motion to stay.

Environmental groups appealed to the court to stop river and stream crossings after the Army Corps of Engineers reissued the project's permit on Sept. 25, allowing the natural gas pipeline to cross nearly 1,000 waterways in the two states.

The same panel of judges later denied another appeal by the environmental groups when it found that construction would not jeopardize two species of endangered fish in another location. The decision allows most work on the 303-mile pipeline to continue, although Mountain Valley is still barred from crossing most streams and wetlands in the Jefferson National Forest, pending further review.

More: *West Virginia Public Broadcasting*; *The Roanoke Times*

## Court Says Admin Must Factor Climate Change into Land Leases

The District Court for D.C. last week ruled the Bureau of Land Management neglected to properly weigh the impacts of climate change when conducting its environmental review tied to 304,000 acres of leased land in Wyoming.

With his ruling, District Judge **Rudolph Contreras** said federal regulators must conduct its environmental analysis again before oil and gas drilling can occur. According to Contreras, BLM's analysis fell short and did not comply with the National Environmental Policy Act when it leased the public land to developers.

Despite the setbacks, BLM plans to forge ahead on holding lease sales and open 383 parcels covering about 483,017 acres for oil and gas leasing in its first quarterly sale of 2021. The sale will take place the week of March 15.

More: *Casper Star-Tribune*

## Deal Revives Plan for Largest US Dam Demolition

PacifiCorp and Berkshire Hathaway reached a deal last week that, if approved by FERC, would pave the way for the largest dam demolition in the country's history.

If approved, the deal would revive plans to remove the four most southern hydroelectric dams on the Klamath River along the Oregon-California border and free the two companies from the aging dams. The dams have blocked hundreds of miles of potential salmon habitat and spawning grounds, while populations have dropped sharply in recent years.

More: *The Associated Press*

## NextEra Aims to Run Wisconsin's Last Nuclear Plant Through 2050

NextEra Energy last week submitted an application to the Nuclear Regulatory Commission seeking to add 20 years to the licenses for the 1,200-MW Point Beach Nuclear Plant and run it through 2050.

Spokesman Peter Robbins said the plant, which is Wisconsin's single-largest source of energy, will continue to provide benefits to consumers as the state strives toward Gov. Tony Evers' goal of carbon-free electricity by 2050.

An NRC spokesperson said the license application being reviewed would be available to the public in the coming weeks.

More: *Wisconsin State Journal*

## Progressives Urge Biden Away from Obama Energy Secretary

A coalition of more than 70 groups is urging President-elect Joe Biden not to include former Energy Secretary Ernest Moniz, who served with Biden under President Barack Obama, in his incoming administration.

In a letter, the groups argue that Moniz's "employment and financial ties situate him firmly in the revolving door between government and fossil fuel corporations."

The groups' opposition to Moniz stems from his connections to the fossil fuel industry. Moniz, who has served as a consultant for oil and gas company BP, supported an "all of the above" energy strategy with Obama that backed both fossil fuels and renewable energy. He also helped negotiate the Iran nuclear deal.

On Monday, Biden announced several picks for his cabinet and White House staff, but they did not include energy secretary. He did pick John Kerry, secretary of state under Obama, as special presidential envoy for climate. Kerry helped broker the Paris Agreement on climate change and also worked with Moniz on the Iran deal.

More: *Houston Chronicle*; *The Hill*

## TVA Suffers $185M Revenue Loss from Pandemic, Keeps CEO

The Tennessee Valley Authority last week reported $10.2 billion in total operating revenues on more than 151 billion kWh of electricity sales for fiscal year 2020, about $185 million lower than expected because of the COVID-19 pandemic.

Electricity sales were about 5% lower compared to the prior year because of an overall milder weather and impacts of the pandemic. Total operating revenues decreased about 9%, which was driven primarily by lower sales volume, lower effective base rates and lower fuel cost recovery revenues.

In other news, despite President Trump's appeal to cut the salary of CEO Jeff Lyash, the utility instead boosted his salary and performance bonuses by 15% to $3.8 million for fiscal year 2020. Lyash was also paid another $3.5 million in long-term pension benefits and one-time relocation payments.

More: *The Chattanoogan*; *Chattanooga Times Free Press*

# State Briefs

## ARIZONA

### ACC Asks APS to Cut Rates

Corporation Commissioner Lea Márquez Peterson last week called upon Arizona Public Service to substantially reduce its rates by about 25%.

The call for a decrease comes as APS seeks another $169 million annual increase in a pending rate case. APS' current rate is about 12 cents/kWh, while Peterson would like the company to shoot for 9 cents.

More: *The Arizona Republic*

## CALIFORNIA

### Geysers Power to Pay $2.1M over Alleged Fire System Violations

Geysers Power, a subsidiary of Calpine, last week said it will pay more than $2 million to the state to settle alleged violations related to fire protection systems at six of its power plants and be required to make upgrades to the involved facilities.

The state did not specify what problems were found with the systems, nor did it reveal any details about how the operator had fallen short of standards. The findings came from routine inspections at The Geysers in February and March 2018.

The $2.1 million will go into the state's general fund.

More: *The Press Democrat*

### Failed PG&E Power Line Blamed for Drum Fire

The Santa Barbara County Fire Department last week announced that a downed Pacific Gas and Electric power line was the cause of the Drum Fire on June 14.

According to Fire Department Spokesman Capt. Daniel Bertucelli, a team of investigators pinpointed the official cause as a power line that failed between two utility poles and fell to the ground, where electricity ignited surrounding vegetation. The fire went on to burn about 696 acres of wildland before firefighters got it under control.

A PG&E spokesman said the utility is conducting its own investigation and does not have access to the data investigators used, but he noted the company filed an electric incident report with the Public Utilities Commission on June 14.

More: *Santa Maria Times*

## COLORADO

### AQCC Wants to Expedite 3 Coal Plant Closures

The Air Quality Control Commission last week moved to order three coal-fired power plants to close by the end of 2028 to cut regional haze and meet greenhouse gas-reduction targets.

Tri-State, Xcel Energy and Platte River Power — the owners of the plants — had the closures slated for 2030, but the commission aims to push the date up by two years. The plants are Tri-State's Craig Unit 3, Platte River's Rawhide plant and Colorado Springs' Martin Drake Power Plant.

A final vote will take place in December.

More: *The Colorado Sun*

## MARYLAND

### Climate Commission Seeks More Ambitious Plan

In its annual report to Gov. **Larry Hogan** released last week, the Commission on Climate Change recommended the state reach at least a 50% reduction in greenhouse gas emissions by 2030 and achieve net-zero greenhouse gas emissions by 2045. Currently, the Greenhouse Gas Emissions Reduction Act requires the state achieve at least a 40% reduction by 2030.

While the report highlighted the state's effort to decarbonize new trucks, it did not recommend the state expand mass transit or seek to reduce the number of vehicles on the road.

The commission is responsible for advising the governor and General Assembly on ways to mitigate the impacts of climate change and is made up of members from various agencies, environmental groups, organized labor and businesses.

More: *Maryland Matters*

## MINNESOTA

### PUC Backs CenterPoint Plan for Renewable Natural Gas System

The Public Utilities Commission last week voted 5-0 to approve CenterPoint Energy's proposal to create a statewide supply system for renewable natural gas (RNG).

CenterPoint's plan allows prospective RNG producers to interconnect with its distribution network. The gas is produced by breaking down organic waste through anaerobic digestion. Once cleaned of impurities, it can be injected into existing natural gas pipelines.

The company said the supply system would not impact customer rates, as RNG producers will pay to connect to the pipelines.

More: *Star Tribune*

## MONTANA

### Gianforte Names Team to Recommend Leaders of DNRC, DEQ

Governor-elect **Greg Gianforte** this month released the names of people who will advise him on appointments to lead the Department of Environmental Quality and Department of Natural Resources and Conservation.

The list included people who are a part of or represent the coal, oil and gas, mining, ranching and lumber industries, as well as engineers, a former DNRC director and a big game conservation organization. However, it does not include an advocate for a clean environment, though it does include one person who served on the Environmental Quality Council.

"We can responsibly develop our abundant resources and simultaneously protect our environment, but for too long, state government has stood in the way with DNRC and DEQ serving as project-prevention departments. With the right leadership at these agencies, we can eliminate needless delays, streamline permitting processes, protect our environment and create more good-paying Montana jobs," Gianforte said.

More: *Independent Record*

# OHIO

## Ex-GOP Leader Says He Didn't Bribe Anyone

Former state Republican Party Chairman Matt Borges last week said he never bribed anyone, and his role in the FirstEnergy Solutions nuclear bailout scandal has been overstated.

"I did not break the law. I did not conspire to break the law. I did not intend to break the law. I was not aware of anyone else breaking the law if it was happening," Borges said.

Borges and four others were arrested on July 21 and later indicted with racketeering in connection with an alleged conspiracy to help House Speaker Larry Householder gain control of the House of Representatives, pass a law to subsidize nuclear plants and defend it against efforts to upend it. Borges claims he had no role in helping Householder and played little part in passing the bill. He was registered as a lobbyist for FirstEnergy Solutions, which owned two nuclear plants that stood to benefit from the bill, but he said he did not talk with lawmakers about the legislation.

More: *Cincinnati Enquirer*

# TEXAS

## Invenergy Announces 1.3-GW Series of Solar Projects

Invenergy

Invenergy last week announced it has started construction on the five-phase, 1,310-MW Samson Solar Energy Center that spans three counties.

The company has already secured offtake agreements with several cities and large corporations as phases of the project are set to come online in 2022 and 2023. The greatest portion (500 MW) of output will go to AT&T. Honda is the next largest at 200 MW. McDonald's will take 160 MW, the city of Bryan will take 150 MW and Google will take 100 MW. Home Depot and the cities of Denton and Garland are also each contracted for less than 100 MW.

More: *Greentech Media*

# UTAH

## Lawmakers Push to Block Cities from Banning Natural Gas

The Public Utilities, Energy, and Technology Interim Committee last week voted 12-4 to advance a measure that would stop cities from enacting rules to prohibit the use of natural gas in new homes.

Titled "Utility Permitting Amendments," the bill states "a municipality or county may not enact an ordinance, a resolution or a policy that prohibits, or has the effect of prohibiting, the connection or reconnection of a utility service to a customer based upon the type or source of energy to be delivered to the customer." Democratic committee members said they did not see the point of the bill because no city has proposed restricting access to natural gas.

The measure will be up for consideration during the upcoming legislative session.

More: *The Salt Lake Tribune*

# VIRGINIA

## Prince William County Commits to 100% Renewable Energy by 2035

The Prince William County Board of Supervisors last week voted 5-3 to pass the county's first climate resolution that pledges county government operations to source 100% of their energy from renewable sources by 2030, with the entire county to source 100% of its energy from similar sources by 2035.

The resolution also commits to reaching 100% carbon neutrality by 2050 across all industries.

More: *Food & Water Watch*

# WISCONSIN

## Federal Judge Allows Cardinal-Hickory Challenge to Proceed

U.S. District Judge **William Conley** last week partially denied the Public Service Commission's motion to dismiss a case brought forward by environmental groups seeking to block the Cardinal-Hickory Creek transmission line in the southwest part of the state.

Conley dismissed the PSC and Commissioner Ellen Nowak as defendants but found the plaintiffs have standing to argue that their constitutional due process rights were violated by the PSC's decision to authorize construction of the $492 million project. The groups claimed two commissioners had perceived conflicts of interest that tainted the decision to grant the permit, which ultimately gives the utility the right to take private property through eminent domain.

The PSC sought to have the case dismissed on the grounds that the 11th Amendment protects states and state agencies acting in their official capacity, but Conley found the commissioners play a direct role in defending and enforcing the permit, which he said precludes the claim of sovereign immunity. Construction is expected to start in 2021 barring a court injunction.

More: *Wisconsin State Journal*