

# RTO Insider

**YOUR EYES AND EARS ON THE ORGANIZED ELECTRIC MARKETS**

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

**ERCOT**

## **ERCOT Demand Exceeds 82 GW for 1st Time** (p.14)

**FERC & Federal**

### **Dems Introduce Bill on Transmission Planning, RTO Transparency** (p.3)

House Subcommittee Considers Advanced Nuclear Bills (p.5)

**MISO**

### **Stakeholders Puzzled by MISO Transmission Service Requirements for Battery Storage** (p.18)

MISO Aims for Manageable Interconnection Queue (p.19)

**CAISO/West**

### **CAISO Board OKs Plan to Admit Subscriber-funded Tx Lines** (p.10)

**PJM**

### **PJM Recounts Emergency Conditions, Actions in Elliott Report** (p.30)

# RTO Insider

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

## Editorial

Editor-in-Chief / Co-Publisher

[Rich Heidorn Jr.](#)

Senior Vice President

[Ken Sands](#)

Deputy Editor /  
Daily

[Michael Brooks](#)

Deputy Editor /  
Enterprise

[Robert Mullin](#)

Creative Director

[Mitchell Parizer](#)

New York/New England Bureau Chief

[John Cropley](#)

Midwest Bureau Chief

[John Funk](#)

Mid-Atlantic Bureau Chief

[K Kaufmann](#)

Associate Editor

[Shawn McFarland](#)

Copy Editor /  
Production Editor

[Patrick Hopkins](#)

Copy Editor /  
Production Editor

[Jack Bingham](#)

CAISO/West Correspondent

[Hudson Sangree](#)

D.C. Correspondent

[James Downing](#)

ERCOT/SPP Correspondent

[Tom Kleckner](#)

ISO-NE Correspondent

[Jon Lamson](#)

MISO Correspondent

[Amanda Durish Cook](#)

NYISO Correspondent

[John Norris](#)

PJM Correspondent

[Devin Leith-Yessian](#)

NERC/ERO Correspondent

[Holden Mann](#)

## Sales & Marketing

Chief Operating Officer / Co-Publisher

[Merry Eisner](#)

Senior Vice President

[Adam Schaffer](#)

Account Manager

[Jake Rudisill](#)

Account Manager

[Kathy Henderson](#)

Account Manager

[Phaedra Welker](#)

Customer Success Manager

[Dan Ingold](#)

Marketing Manager

[Eau Rikhotso](#)

Assistant to the Publisher

[Tri Bui](#)

RTO Insider LLC

10837 Deborah Drive

Potomac, MD 20854

(301) 658-6885

See additional details and our Subscriber Agreement at [rtoinsider.com](http://rtoinsider.com).

## In this week's issue

### FERC/Federal

Dems Introduce Bill on Interregional Tx Planning, RTO Transparency ..... 3  
 House Committee Considers Bills to Advance New Nuclear Designs..... 5  
 IRA Gets US Emissions Close to Pledged Levels, Report Finds ..... 6  
 Overheard at NARUC Summer Policy Summit 2023 ..... 7

### CAISO/West

CAISO Board OKs Plan to Admit Subscriber-funded Tx Lines..... 10  
 Ramping Shortfall Sparks CAISO's 1st Summer Emergency..... 12  
 WEIM Withdraws Change to Base Schedule Deadline ..... 13

### ERCOT

ERCOT Demand Exceeds 82 GW for 1st Time ..... 14

### ISO-NE

FERC Accepts Results of ISO-NE FCA 17 ..... 15  
 No Shortfall Anticipated for Summer of 2027, ISO-NE Says ..... 16

### MISO

Stakeholders Puzzled by MISO Tx Service Requirements for  
 Battery Storage..... 18  
 MISO Aims for MW Limits, Tripled Fees, Automatic Penalties to  
 Achieve Manageable Queue..... 19  
 MISO Creating Means to Gauge System Impacts of  
 DER Interconnections..... 20  
 FERC OKs Incentives for Republic Transmission on MISO's 1st  
 Competitive LRTP Project ..... 21  
 MISO Trims Minnesota Line Route in JTIQ Portfolio..... 22  
 MISO Convening Task Team to Shore up Credit Policy ..... 23  
 MISO Preps for Heat Wave, Anticipates Annual Demand Peak ..... 24

### NYISO

New York Seeks to Define 'Zero Emissions' ..... 25  
 FERC Seeks More Info on NYISO DER Aggregation Proposal..... 27  
 NYISO Operating Committee Briefs ..... 28

### PJM

PJM Recounts Emergency Conditions, Actions in Elliott Report ..... 30  
 PJM Promises to Work with Ohio Legislators on Cost Allocation ..... 32  
 Maryland Climate Report Lays out Pathways to Achieving Goals ..... 33  
 DC Circuit Sides with FERC on Alleviating Spiking Prices in Virginia..... 35  
 PJM MRC/MC Preview..... 36  
 PJM Updates Risk Analysis; Stakeholders Present Revised CIFP Proposals .37

### SPP

REAL Team Endorses Winter Resource Requirement ..... 39

### Briefs

Company Briefs..... 41  
 Federal Briefs..... 41  
 State Briefs ..... 42

## FERC/Federal News



# Dems Introduce Bill on Interregional Tx Planning, RTO Transparency

## Sponsors Tout Updating Transmission Network; Bill Would also Improve Transparency

By Devin Leith-Yessian

Congressional Democrats on Thursday reintroduced [legislation](#) that would require FERC to establish interregional and interconnection-wide transmission planning processes and increase transparency requirements for RTOs.

Sen. Edward Markey (D-Mass.) introduced the bill to the Senate, saying the Connecting Hard-to-reach Areas with Renewably Generated Energy (CHARGE) Act would aid the development of transmission needed to bring clean energy onto the grid. Reps. Alexandria Ocasio-Cortez (D-N.Y.) and Greg Casar (D-Texas) introduced the bill in the House.

“While there has been rapid growth of renewable energy resources and skyrocketing public demand for clean energy, there is not nearly enough capacity in our power lines to bridge the gap between clean power and the cities and towns that need it. The CHARGE Act changes that,” Markey said in a [statement](#) announcing the legislation.



Sen. Ed Markey | Sen. Ed Markey via Twitter

### Interregional Transmission Planning

The legislation would require FERC to engage in interregional and interconnection-wide transmission planning at least every four years and consider the benefits of a potential project, including reduced energy and ancillary service costs, access to generation in neighboring regions, delivery of renewable energy, and improvements to grid flexibility and reliability. FERC would also be required to consider the potential of grid-enhancing technologies (GETs), such as dynamic line rating and storage-as-transmission.

Developers of interregional projects could submit costs to FERC for recovery, with cost allocation based on the project’s benefits. The bill would seek to avoid cost allocation mechanisms that might discourage energy efficiency, demand response, storage and distributed resources.

The bill would also change the cost allocation for new interconnections to prohibit utilities from requiring generation developers to bear the full — or a disproportionate — cost for network upgrades needed to connect their projects to the grid. Instead, FERC would encourage the creation of cost-sharing models that allocate costs based on the “broad set of benefits and beneficiaries for any network upgrades.”

The legislation would require RTOs to establish independent transmission monitors to oversee planning and operations and look for inefficiencies and practices that may contribute to unreasonable rates for consumers. The monitors would also review project costs, identify where non-wire or interregional project alternatives may be most cost-effective and provide guidance to transmission owners on operations, planning and cost allocation.

FERC would be required to create an Office of Transmission to review projects submitted by utilities in accordance with regional and interregional transmission planning processes. The office would also investigate ways to alleviate interconnection queue backlogs and explore opportunities to improve transmission planning and use GETs.

Ocasio-Cortez and Casar highlighted the importance of new transmission for developing renewable energy and addressing climate change.

“Our patchwork transmission system is blocking billions of dollars in new renewable deployment,” Ocasio-Cortez said. “This same transmission system is also increasingly vulnerable to widespread power outages in nearly every part of the country. The CHARGE Act is the key to updating this transmission network

so we can plan for and meet the growing demand for grid resilience and renewable energy across the U.S.”

“As the climate crisis worsens, we must do everything we can to increase grid reliability across the country. That’s why we must pass the CHARGE Act,” Casar said. “Every single family should be able to rely on their utilities.”

### Increased Transparency Requirements

The bill would introduce several transparency requirements for RTOs and the commission, including stakeholder meetings being recorded and transcribed, records of votes being public and RTOs being subject to the Freedom of Information Act.

A 30-member advisory committee would be established by FERC to provide recommendations on the governance and oversight of RTOs and their stakeholder processes, with the goals of promoting competition, reliability and affordability in transmission planning. The committee would also consider improvements that could be made to transparency and decision-making in non-RTO regions.

Consumer organizations would be granted full voting and participation rights in stakeholder meetings, and RTOs would be required to provide intervenor compensation for public



# FERC/Federal News



interest participation in RTO processes.

A handful of the transparency provisions mirror state initiatives relating to RTO governance. A bill introduced in the Maryland House of Delegates this year would have required utilities participating in stakeholder meetings to report their votes to the state each year. (See *Maryland Bill Would Require Utilities to Report Votes at PJM.*)

Additionally, the West Virginia Public Service Commission in March filed a complaint with FERC seeking access to PJM’s Member Liaison Committee, which is only open to voting members. (See *W. Va. PSC Files Complaint over PJM Meeting Policy.*)

Under the Markey bill, FERC and utilities would be required to coordinate with EPA and the Energy Information Administration to create a public database with hourly operating data for generators including fuel type, marginal greenhouse gas emissions per megawatt-hour and other attributes updated as close to real time as possible.

The legislation would direct the National Academies of Sciences, Engineering and Medicine to work with EPA, DOE and FERC to draft a public report identifying the effects on consumers of procuring energy competitively outside of utilities in markets administered

by RTOs or other independent organizations compared with noncompetitive models. The study would account for factors such as cost savings, improved grid reliability and GHG emissions.

## Public Interest and Climate Organizations Endorse Bill

Several climate and consumer advocacy groups endorsed the bill, including the American Council on Renewable Energy (ACORE), Americans for a Clean Energy Grid (ACEG), the Natural Resources Defense Council and Public Citizen.

“Our clean energy transition depends on building new high-capacity transmission lines. We need legislation that will accelerate this development, unlocking new domestic energy resources and making sure the lights stay on during severe weather episodes like the intense heat waves we’ve experienced across America this summer,” said ACEG Executive Director Christina Hayes.

Tyson Slocum, director of Public Citizen’s Energy Program, said the bill’s transparency and transmission monitor requirements would ensure that transmission development proceeds with consumer protections built in.

“Among many other accomplishments, the

legislation would impose needed transparency standards, public accountability and governance reform for America’s private RTO grid operators, including subjecting them to the federal Freedom of Information Act; empower the public and energy justice communities with access to resources to participate in FERC and RTO proceedings by requiring FERC’s Office of Public Participation to provide intervenor funding, and; ensure the electric transmission buildout maximizes consumer protections through a new independent transmission monitor,” he said in a statement.

ACORE President Gregory Wetstone said the bill would establish critical provisions around interregional planning and would promote reliability by establishing minimum transfer requirements between transmission planning regions during severe weather.

“This legislation lays the groundwork for the construction of critical interstate transmission lines. The bill also reforms participant funding, a crucial step to help bring more clean energy resources onto the grid, and establishes a sorely needed mandate for a minimum transfer capacity between grid planning regions that will bolster reliability and better enable our electric power system to withstand increasingly frequent extreme weather events,” he said. ■

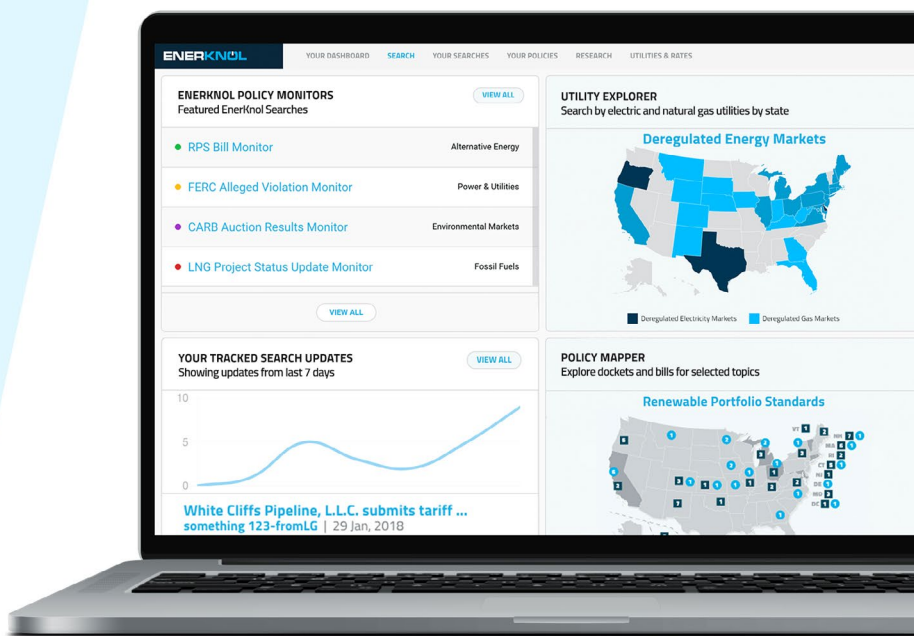
## ENERKNOL

# Our users don't have FOMO.

Don't miss out on real-time regulatory and legislative updates with EnerKnol, the comprehensive platform of US Energy Policy data.

START DISCOVERING TODAY

BEGIN YOUR FREE 7-DAY TRIAL AT ENERKNOL.COM



20+ Million Filings at Your Fingertips • One-Click Tracking  
Automated Real-time Updates • Proprietary Research

# FERC/Federal News



## House Committee Considers Bills to Advance New Nuclear Designs *Reliance on Russian Fuel a Major Issue*

By James Downing

The House Energy and Commerce Subcommittee on Energy, Climate and Grid Security took testimony last week on 15 bills aimed at promoting advanced nuclear plants.

“Our goal is to advance durable and bipartisan policies that will expand nuclear energy and its many benefits for the nation,” said subcommittee Chair Jeff Duncan (R-S.C.). “Policies that make sense for the regulation of nuclear power today, and the new technology is expected to seek licensing and deployment in the coming years.”

Ranking Member Diana DeGette (D-Colo.) said the U.S. can be both a leader in new nuclear technology and regulations that ensure its safety. The Nuclear Regulatory Commission is expected to start formally processing new applications for new reactor designs in the coming years, but it needs to staff up to get that work done efficiently and effectively, while one-third of its staff is eligible for retirement.

“This expected attrition, in addition to the anticipated increase in reactor applications, creates a challenge for the NRC as it completes this work,” DeGette said. “And that’s why I introduced the Strengthening the NRC Workforce *Act* of 2023.”

The bill would authorize the NRC chair to make hires when the agency is generally short-staffed or needs to replace key employees. The bill is modeled on similar legislation that Congress approved for FERC in 2020, and Democrats also support another *bill* that would set up an Office of Participation at NRC, which again is modeled on FERC’s office.

Michael Goff, principal deputy assistant secretary

of the Department of Energy’s Office of Nuclear Energy, said his agency has no opinion on any of the bills the committee is considering — but the Biden administration shares some of the same goals as the legislators.

“The Biden-Harris administration is prioritizing activities that keep the existing fleet of nuclear power plants in operation, that deploy advanced reactor technologies, that secure and sustain the nuclear fuel cycle, and that expand international nuclear energy cooperation,” Goff said.

Nuclear energy is important to getting the grid to zero emissions by 2035 and the overall economy to net zero by 2050, he said.

### Strategic Investments

A major issue now is that the U.S. nuclear industry is still highly dependent on Russia for fuel, getting 24% of its uranium from there last year despite its invasion of Ukraine, Goff said. Combined with imports from Kazakhstan and Uzbekistan, countries in Russia’s sphere of influence provide about half of the total nuclear fuel in the U.S., Rep. Bob Latta (R-Ohio) said.

“Expanding our domestic fuel capacity will require strategic investments coupled with import restrictions that protect those investments well into the future,” Goff said. “We must act swiftly to support domestic enrichment capabilities and prepare our industry for this transition. The department welcomes the opportunity to work with Congress to address this national security vulnerability.”

The NRC is gearing up to review new reactor designs and expects four applications to actually start building new plants, and if those are successful, it will take more applications going forward, said agency Executive Director

of Operations Dan Dorman.

“As industry is developing new and advanced reactor designs, our staff is reviewing pre-application materials and submitted applications commensurate with the risk and safety significance of the proposed technology,” Dorman said.

NRC staff has submitted a pending proposal that would update the regulators’ review process to deal with the new designs, but some on the committee and in the industry have questioned whether it goes far enough.

“It’s not at all clear that NRC is performing its safety mission and service to the broader mission to enable nuclear energy,” Duncan said.

NRC staff talk about its mission as “enabling the safe and secure use of nuclear technology,” and the agency has been working to consider risks of different proposals up front so the proper amount of resources can be applied in different cases, Dorman said.

“There’s one critical point that I hope that this committee will take away from my testimony today: It is that we are not going to develop an innovative advanced nuclear sector capable of meeting our energy security and climate objectives if we don’t fix the Nuclear Regulatory Commission,” said Breakthrough Institute Executive Director Ted Nordhaus.

Congress has long recognized the importance of nuclear plants to the country’s economic welfare, but the regulatory agency is more narrowly focused on the safety of the plants themselves, he added. NRC should be legally required to consider the overall impact of electric generation and its impact on public health and the carbon intensity of the economy, Nordhaus said.

Good Energy Collective Deputy Director Jackie Toth supports new reactor designs but cautioned Congress about making legislative changes to the NRC’s mission. Changes to a trusted safety regulator just when its activity is ramping up significantly threaten to undermine public confidence in the NRC, she said.

“The cultural changes at the commission that may be necessary to meet this moment and increase the timeliness and efficiency of its activities will depend more on the resonance and strength of commission leadership and the availability of resources for staff than on a change in mission,” Toth said. ■



Representatives hear testimony from NRC Executive Director of Operations Dan Dorman and Department of Energy Deputy Assistant Secretary Michael Goff. | *House Energy and Commerce Committee*

# FERC/Federal News



## IRA Gets US Emissions Close to Pledged Levels, Report Finds

### Additional Policies Needed for Further Cuts

By James Downing

The U.S.' current policies have it on course to cut emissions by 32 to 51% below 2005 levels by 2035, which is an improvement over previous years but still short of its pledges under the international Paris Agreement, the Rhodium Group said in a [report](#) released Thursday.

The country is on track to get to 29 to 42% cuts by 2030, while the Paris Agreement calls for cuts of 50 to 52% by that year.

Rhodium Group releases a version of its "Taking Stock" report every year, and this year it has the benefit of a better understanding of how the Inflation Reduction Act is going to be implemented. The law has Rhodium predicting the power sector will see the largest declines in greenhouse gas emissions in its history of tracking emissions.

"The power sector in particular looks quite different in 2035 compared to today, with zero- and low-emitting power plants making up 63 to 87% of all generation that year, up from around 40% in 2022," the report said. "Electric vehicles also continue their rapid growth, and, taken together, this progress on decarbonization also reduces household energy bills by an average of \$2,200 to \$2,400 per year in 2035

from 2022 levels."

Getting there will be challenging, with the country needing to add 32 to 92 GW per year of wind and solar, while its actual annual record is roughly at the very bottom of that range. That level of deployment "faces headwinds in nearly every direction," with more work to be done on the supply chain, interconnection, transmission, siting and an expanded workforce.

"Without the IRA, cost competitiveness would be one of the primary barriers to clean energy deployment," Rhodium said.

While new wind and solar had proven to be cost-competitive with new natural gas before the law, they also have to compete with existing fossil fuel generators, which are either partially or entirely depreciated.

"But if cost is less of a barrier, all the other headwinds remain," Rhodium said. "Until now, relatively less attention has been paid to these other challenges because cost was front and center. That means policy solutions for overcoming these barriers are less developed and have less political momentum."

Rhodium estimates "economically rational" deployment of renewables, which means some

of those other headwinds are not fully taken into account in the report. The group said it planned to tackle them more completely in future research.

Taking into account announced retirements and future economic decision-making by generators, Rhodium expects the trend of coal plant retirements to accelerate in the coming years, averaging 22 to 23 GW from 2023 to 2025, compared to 12 GW over the past five years. The trend slows down in later years because of a much smaller coal fleet.

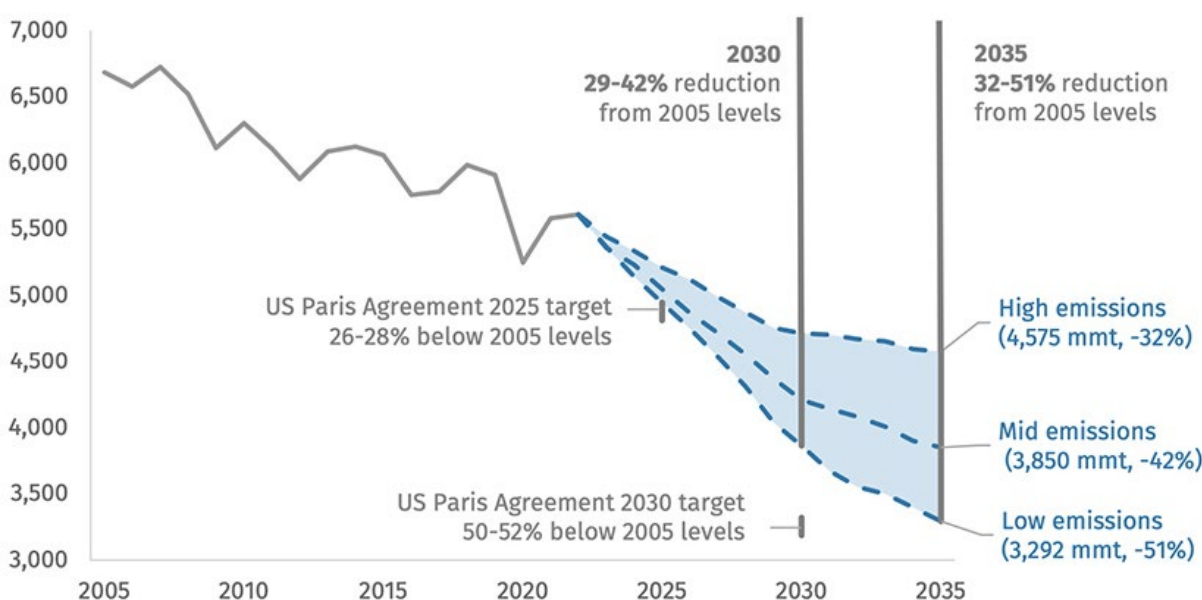
"Additions of combined cycle and peaker gas plants also accelerate into the 2030s in the mid- and high-emissions cases," the paper said. "But gas capacity growth is effectively flat through 2030 in the low emissions case and then starts to decline in the early 2030s."

The paper's power sector emissions projections include the impact of federal incentives from the IRA such as the extended clean energy tax credits; tax credits for nuclear, carbon capture and storage; current EPA rules such as the Mercury and Air Toxics Standards; and state policies such as renewable portfolio standards and offshore wind mandates.

EPA's proposed power plant rule to limit greenhouse gases would require a mix of carbon capture retrofits, hydrogen blending, natural gas co-firing, federally enforceable retirement decisions and capacity factor limitations. The agency has yet to take comments on its proposal, which is likely to change before it is finalized. (See [EPA Proposes New Emissions Standards for Power Plants.](#))

"We generally adopt EPA's proposed phase-in schedule and the stringency of emissions reductions, but we offer a high degree of flexibility for states to create and submit plans for achieving equivalent levels of emissions reductions," Rhodium said. ■

Net million metric tons (mmt) of CO<sub>2</sub>-equivalent (CO<sub>2</sub>e)



Rhodium Group estimates emission declines based on current policies. | Rhodium Group



## FERC/Federal News



# Overheard at NARUC Summer Policy Summit 2023

## Industry Panel Offers Sobering View of Reliability Challenges

AUSTIN, Texas — The National Association of Regulatory Utility Commissioners' annual Summer Policy Summit attracted more than 1,000 state and federal regulators and their staffs; industry representatives; consumer advocates; and other stakeholders July 16-19 for discussions on understanding and preparing for the grid challenges that lie ahead.

NERC's recent *summer reliability assessment* lent considerable fodder to the discussions, with its warning that extreme weather, plant retirements and transmission outages have made supply shortfalls more likely across much of the U.S. The report also stressed the need to maintain and expand a dispatchable baseload generation fleet to keep pace with the higher demands that electrification and climate change are placing on the grid. (See *West, Texas, Midwest at Risk of Summer Shortfalls, NERC Says*.)

Speaking on a panel discussing the reliability challenges, Stan Connally, Southern Co.'s executive vice president of operations, said shrinking reserve margins are complicating the task of balancing clean energy with affordability.

"Frankly, I think one of the risks as we move forward here is we let those priorities get out of balance," he said. "It's just important that we continue having these reliability conversations, because at the end of the day, and in these very, very extreme conditions, our customers need us to have the lights on. Air conditioning matters, right?"

"Resource adequacy is a big deal. Shrinking reserve margins are something we have to pay attention to around resource adequacy," Connally added. "We have an aging fleet. We also have a growing solar base. ... Mixing that all together to ensure resource adequacy for the long term has to be center stage of our planning."

Fellow panelist Stacey Doré, Vistra's chief strategy and sustainability officer, said her company's diversified fleet gives it a unique advantage in achieving balance between reliability, affordability and sustainability.

"We do see near-term reliability risks because we think that the projections show that thermal generation is going to be retiring at a faster pace than we can make up for with other assets in the long term," she said. "We're all trying to get to the place where we have enough carbon-free, reliable generation to



Southern Co.'s Stan Connally shares his thoughts on shrinking reserve margins as Vistra's Stacey Doré listens. | © RTO Insider LLC

replace those thermal assets ... but the pace at which that is happening is not keeping up with the pace at which thermal assets are retiring."

SPP COO Lanny Nickell said the transition to renewables and decarbonization will continue to take place, "whether or not you like it." With clean energy goals set for 2050 and progress to be made by 2030, he said he used to be more worried about 2030 than 2050.

"Unfortunately, over the last several months, I'm no longer as worried about 2030 as I am about right now," Nickell said. "Our analysis has indicated there's a growing amount of risk that we can't sustain. We've seen about 8,000 MW of thermal generation retired over the last seven, eight years. In that same time frame, we've seen about 24,000 MW of wind generation added. That sounds like a pretty good tradeoff. It hasn't been, and our loss-of-load expectation studies that we have to perform every other year are indicating an increased risk associated with that transition.

"It may sound like we're three Chicken Littles up here trying to scare everybody, but there are solutions. It's just a lot of these solutions will take time to see the full effect," he added.

Nickell reminded the audience that trans-

mission is "an important tool in the toolkit" and offered resilience as an example. Instead of valuing transmission for its reliability and production cost savings through reduced congestion, he said, grid operators should also realize the importance of shipping energy across their seams.

"After Winter Storm Uri, we came to realize that resilience has got to be one of those measures," he said, noting that when the storm took thermal resources offline in February 2021, SPP was able to meet 14% of its demand with imports from MISO and PJM. "We were importing on a transmission system that's never seen this much energy flow across it ... because we had strong interconnections throughout much of the East and to the West. That's the value of resilience. It's like insurance. You don't really want to have to use it, but man, you're thankful when you have it."

### Valuing Energy Efficiency

Speaking on a panel debating extreme weather's reliability implications, former FERC and Texas regulatory staffer Alison Silverstein pointed out that energy efficiency doesn't need to be accredited for effective load-carrying capability (ELCC) "because it doesn't break down."

# FERC/Federal News



Alison Silverstein |  
© RTO Insider LLC

She said that with an “intentional strategic demand response,” the industry will be able to take advantage of two areas that have “important synergistic effects” for the wind and solar fleet.

“With the right choices and energy efficiency and demand response, you are bringing down the peak overall,” Silverstein said. “With the amount that you need to fill in the evening as the wind is ramping up and the solar is dropping, you have less of a gap to fill out every hour. The more we can do to make our homes and buildings more energy efficient, the less we have to do in terms of that kind of ramping and the less vulnerable we are to the ELCC for this kind of thorough plan.”

Texas established the nation’s first energy efficiency resource standard (EERS) in 1999 by requiring utilities to achieve a specified amount of energy efficiency savings annually. It has since been leapfrogged by 26 other states and now has the weakest EERS in the country, according to a 2021 [white paper](#) by the American Council for an Energy-Efficient Economy.

Silverstein posited that the state’s roughly 4 million poorly insulated homes, more than a

third of the total stock, is one reason ERCOT has been able to meet record demand this summer. (See [ERCOT Demand Exceeds 82 GW for 1st Time.](#))

“It’s because 45% of Texans are low income and energy insecure. They are setting their thermostats at unsafe levels,” she said. “They are doing voluntary conservation of electricity, not because they’re trying to be good public citizens for the reliability of the grid, but because they can’t afford to consume enough electricity to stay comfortable. If they were able to consume more electricity, our demand would be significantly higher, and [ERCOT CEO] Pablo [Vegas] is going to be pacing the back of the control room.”

## Remembering the 2003 Blackout

NARUC President Michael Caron, a commissioner on the Connecticut Public Utilities Regulatory Authority, kicked off the summit by moderating a panel marking the 20-year anniversary of the 2003 Northeast Blackout. The memories of that day still linger with the panelists.

“I think about this every day and before I go to bed at night, which explains the bags [under my eyes]. It was terrifying,” NERC CEO Jim Robb said. “I never thought I would be in the role that I am today.”

Texas Public Utility Commissioner Jimmy Glotfelty was on vacation camping with his family and several others in New Mexico, having just helped stand up an electricity office in the U.S. Department of Energy. Like other government officials, he left D.C. for much of the month. Fortunately, he had access to the camp site’s “communications center,” a closet with one phone and a fax machine.

“I spent the next two and a half days in that phone booth on phone calls with folks from NERC, our [National] Labs, folks from the White House and in Canada, trying to figure out how we would do this investigation, which we’ve never done before and had no real understanding of how to jumpstart it,” Glotfelty said. “We found the path forward that really started the Monday after the blackout, sending teams out to the utilities, out to the ISOs, to NERC, and put a plan together to really study what happened. So, we had all sorts of phone calls back and forth, and it was an interesting place to be for the biggest blackout in North American history.”

Suede Kelly was in FERC’s library the day of the blackout preparing for a Senate hearing on her nomination to be a commissioner.

“You felt disbelief at first and then shock and horror, and then a realization that I was soon to join an institution that was amazingly well prepared to try and do something about this,” she said.

An interim report identified the cause — a software bug that left operators unaware they had to shed load after transmission lines drooping into vegetation caused the initial outage — but did not make any recommendations. That came early in 2004 from an independent commission formed by President George W. Bush and Canadian Prime Minister Jean Chrétien.

The report team ran into a late roadblock when the Canadians said the final report had to be translated into French.

“How long will that take?” Glotfelty remembered asking. “Three weeks.’ We said, ‘No way.’ We ended up getting support from the State Department, which translated the report in two days.”

The report and the Energy Policy Act of 2005 led to numerous changes in the industry. Most important, it gave greater authority to NERC to enforce standards that had previously been treated as guidelines. It also led to changes in how operators handled transmission outages.

“The greatest thing we did was shed load,” Glotfelty said, referring to ERCOT’s response during the 2021 winter storm that almost



Texas PUC Commissioner Jimmy Glotfelty (left) shares his memories of the 2003 Northeast Blackout as FERC Commissioner James Danly waits his turn. | © RTO Insider LLC



# FERC/Federal News



brought the Texas grid to its knees. “What happened in 2003 was the wrong action. System operators were scared to shed load. They figured they would get fired or their companies would get beat up by their regulators.

“In Texas, we did that. People still got fired, but we saved the system,” he added. “We saved 30 days of economic and human suffering by shedding load and making sure the transmission system stayed viable. So that was really an important understanding from the 2003 blackout.”

Asked whether the country might see another blackout like the one 20 years ago, Robb said, “I feel generally quite good about how the risks of 20 years ago were addressed.” Indeed, his organization’s recent State of Reliability *report* found that the North American bulk power system generally remains highly reliable and resilient.

“If you look at the performance of the electric grid as we define it from a reliability perspective, we have made substantial improvements, but the risk profile continues to grow,” Robb added, pointing to renewables’ growing share of the fuel mix. “We are working with our partners — NARUC, the gas sector, the technology sector — to try to figure out how we can solve these issues that nobody can solve with an edict. There’s been a lot of evolution of the model that was created, but I think we should all be extraordinarily [confident].”

## Will EPA Rule Accelerate Change?

EPA’s recent proposed regulations to reduce carbon emissions from fossil-fired power plants under Section 111 of the Clean Air Act would set nationwide standards on plants based on whether they are new or existing, their fuel type, frequency of usage, capacity and how long they plan to operate. (See [EPA Proposes New Emissions Standards for Power Plants](#).)

Naturally, the proposal has raised concerns within the industry.

“We are the reliability watchdogs for North America, and we don’t dissect the particularities of this rule,” said NERC’s Fritz Hirst, director of legislative and regulatory affairs. He compared his agency to the Night’s Watch, which protects the main setting of the television series “Game of Thrones” but holds no allegiance to any of the show’s feuding kings and lords.

“Our role was to provide this common good, but I think it is kind of obvious to say that this rule will continue to accelerate the pace of change,” Hirst said. “In NERC’s view, managing



Ric O’Connell, GridLab | © RTO Insider LLC

the pace of change is the central challenge for reliability.”

In the short term, natural gas will continue to be a primary fuel source, GridLab Executive Director Ric O’Connell said.

“Natural gas just a couple of decades ago was kind of a hobby fuel, right? It was the summer-peaking fuel,” he said. “Natural gas has really come from kind of the sidelines ... now it is 40% of our electric generation. The electric system is the largest user of the gas system, and we haven’t really changed the way we contract and think about delivery of gas. It’s now a year-round baseload fuel, and in the winter, it’s really competing with other uses like heating.”

Emily Sanford Fisher, Edison Electric Institute’s executive vice president of clean energy, said with coal fuel’s use down to less than 20% of the nation’s fuel mix, non-emitting resources (renewables and nuclear) account for more than 40% of electricity consumption.

“The industry is in a different spot,” Fisher said, noting that about 50 of EEI’s members have made voluntary commitments to reduce their emissions to zero or net zero, albeit “not on the time frame that EPA puts out.”

“That means that we are generally in agreement about where the industry is headed, and this is really a question about pace and timing and the role of technology,” Fisher said. “Interestingly, all of the conversation in 2014-2015 was about coal. All of the conversation today is really about the role of natural gas, and that reflects this change in our generation mix. You can see from the rule that EPA is pretty concerned about our reliance on gas, and we’d like to make sure that it puts some bumpers

around how much gas generation remains a part of our mix.”

## Time is Now for Nuclear

One month after taking the stage during Edison Electric Institute’s thought leadership forum to promote nuclear energy’s role in a carbon-free future, Julie Kozeracki, a senior adviser with the Department of Energy’s Loan Programs Office, returned to Austin to highlight advanced nuclear reactors. (See “Nuclear Needs a Breakthrough,” *Overheard at EEI 2023*.)

Kozeracki said she has been leading a DOE initiative on nuclear commercialization that has resulted in a report, “*Pathways to Commercial Liftoff: Advanced Nuclear*.” It says advanced nuclear technologies, such as Gen III+ reactors similar to conventional generators and Gen IV reactors that use novel fuels, provide a “proven option” to supply the 550 to 770 GW of additional clean, firm capacity necessary to reach net zero.

“We see there being a need for 200 GW of new nuclear capacity, in addition to the roughly 100 GW we have operating today,” Kozeracki said. “That’s because in any decarbonization scenario, we see there being a need for upwards of 700 or 800 GW of clean, firm capacity. Because regardless of whether you build a ton of renewables or a crazy amount of renewables, you need some firm capacity to help balance the intermittency of renewable generation. And nuclear is one of the only options proven at scale.”

She put in a plug for small modular reactors, saying they can provide more certainty of hitting cost targets and will likely play an important role in the early scale-up. Kozeracki said commitments for new nuclear are needed as soon as possible.

“The time to start on that was yesterday,” she said. “The choices in front of us are not between new nuclear, which could feel risky or expensive, because your other options are also going to be risky and expensive. It’s really important to recognize that nuclear has a vital role to play in getting to decarbonization at scale, and anything we can do to start those conversations and those decisions sooner is going to be really critical for getting us on the path there.

“Everyone keeps saying that they want to be fourth, and they would like someone else to go first, second or third. But you can’t have a fourth reactor if folks don’t sign up for one, two and three.” ■

— Tom Kleckner

# CAISO/West News

## CAISO Board OKs Plan to Admit Subscriber-funded Tx Lines

### TransWest Express Poised to be ISO's 1st 'Subscriber PTO' Member

By Robert Mullin

CAISO's Board of Governors on Thursday approved a proposal that will allow transmission projects outside California to join the ISO under a new subscriber-funded model that avoids allocating costs to ISO load-serving entities.

Board members praised the "subscriber participating transmission operator" (PTO) proposal, which is intended to help California tap clean energy resources in other parts of the West to meet its ambitious greenhouse gas reduction goals while reducing financial risks associat-

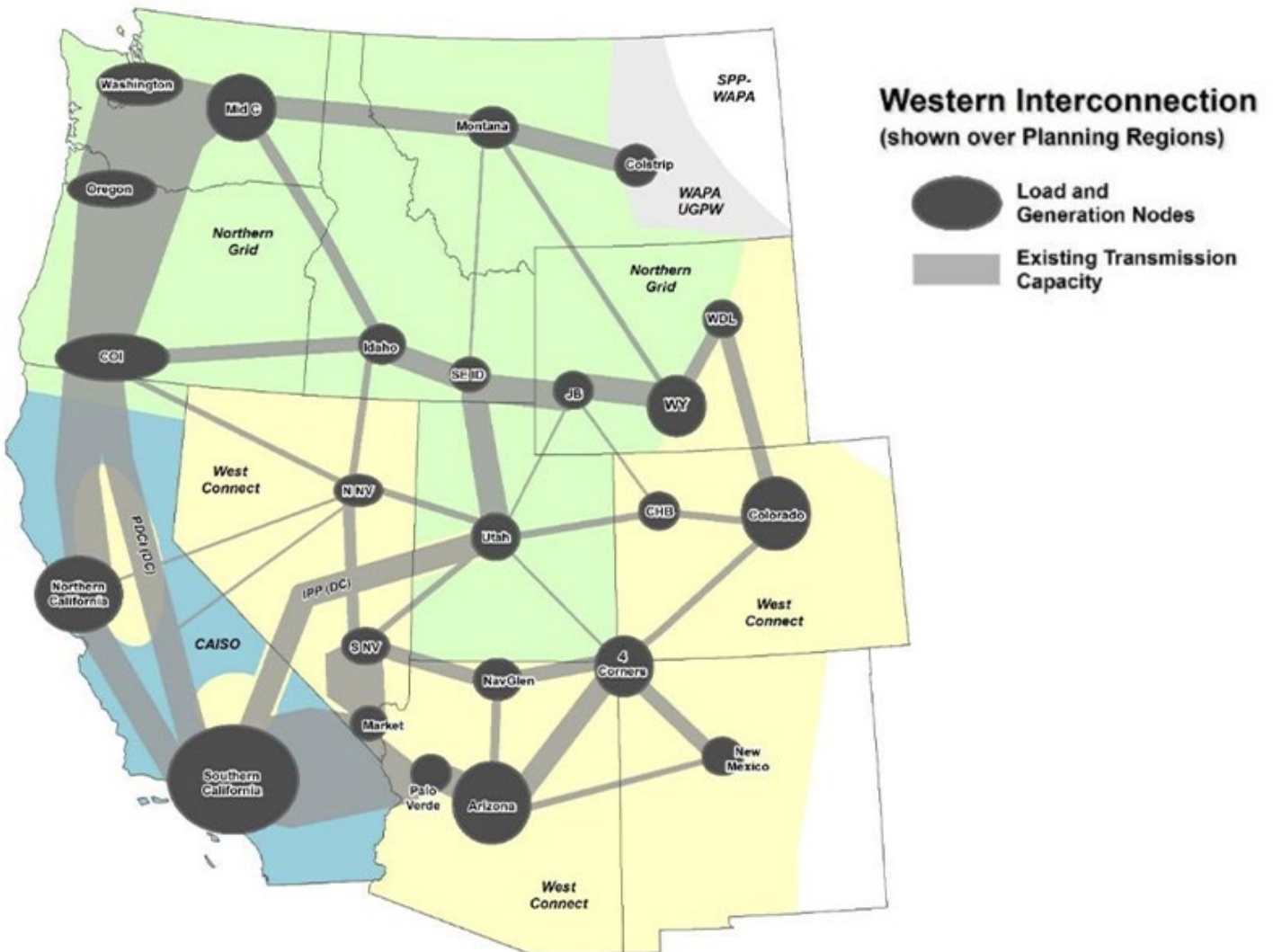
ed with new transmission. *Modeling* from the California Public Utilities Commission (CPUC) shows the state will need to acquire more than 4,800 MW of new out-of-state wind resources to hit its midcentury targets.

"I've been here five years. Other than adopting the day-ahead market, I'm trying to think of something as big, and I can't, so thank you for this elegant solution," board Chair Mary Leslie told the CAISO executives who *presented* the plan during Thursday's monthly board meeting.

"This continues ISO leadership," Governor

Angelina Galiteva said. "We were leaders with policy-driven transmission, and now this as well, so I hope we're successful. I'm actually confident that we will be."

Under the proposal, the developer of a transmission project not selected in CAISO's transmission planning process will have the ability to solicit generator customers to subscribe to service on a line designed to deliver energy into California. The project could then turn operational authority for the line over to the ISO, joining the balancing authority area as a "subscriber PTO" not eligible to recover their costs under the ISO's transmission access



CAISO expects its new subscriber PTO model will help California tap clean resources in other parts of the West and improve interconnectivity throughout the region. | CAISO

# CAISO/West News

charge (TAC).

The proposal calls for subscribers to have priority use of the line and be exempt from CAISO transmission and congestion costs, including the TAC. Non-subscribers would be required to pay to use the line at a FERC-approved rate that does not exceed the TAC.

The plan would also require subscribing generators to pay the ISO's existing PTOs to cover upfront costs for any system upgrades needed to facilitate the new lines' interconnection into California, but they would be reimbursed for those costs over the following five years. Any future network upgrades associated with future generation interconnection or transmission planning requirements would "be recovered by the subscriber PTO through a cost-of-service rate approved by FERC," the ISO said.

According to Deb Le Vine, CAISO's director of infrastructure contracts and management, the ISO will study integration of proposed subscriber lines through its transmission interconnection process. She told the board that the grid operator will "set a higher bar" for including subscriber PTO lines in its 20-year transmission base case than it does for lines chosen through the planning process.

"We don't want to put it into our base case prematurely, assuming that the line is there, and start making solutions based on the line being there," Le Vine said.

To be included in the base case, she said, a subscriber PTO must execute a transmission applicant agreement with the ISO; have its subscribing generators complete interconnection agreements; and provide the grid operator with a notice to proceed.

Subscribing generators that go through the transmission planning process would be ex-

empt from the ISO's separate — and currently lengthy — generator interconnection process.

"Obviously, this is a brand-new service," Le Vine said. "We're trying to meet the needs of California, [and] we're trying to come up with solutions that allow load-serving entities to better determine the best-fit portfolios. And we're trying to use the existing functionality that the ISO already has in its toolkit, and therefore have minimal changes needed to our systems."

Le Vine said that in allowing for interconnections to other parts of the West, the model will help improve the performance of the proposed extended day-ahead market in CAISO's Western Energy Imbalance Market, support resource adequacy and "enhance resilience on the grid."

## 'The Best Wind'

The subscriber PTO model already has one participant waiting in the wings: the proposed TransWest Express transmission project, a 700-mile line designed to carry 3,000 MW of wind energy from Wyoming to Nevada, where it will connect to the CAISO grid.

In March, FERC approved an agreement that would allow TransWest to continue its efforts to become a CAISO PTO under the model, pending the commission's approval of the ISO's proposal. Among other things, the agreement allowed TransWest's subscriber, the Power Company of Wyoming — owner of a 3,000-MW wind farm being constructed in south-central Wyoming — to be studied under the ISO's generator interconnection queue cluster 15, starting April 1. (See [FERC Ok's CAISO-TransWest Move Toward PTO Status.](#))

Speaking during the board meeting Thursday, David Fuller, TransWest director of business development, said, "Not only will the [sub-

scriber] PTO model access new resources, it will access the best wind resources in the continental United States — from Wyoming. ... This model allows the LSEs and the ratepayers in California to leverage private investment to bring this resource to California, and probably do it sooner and cheaper than other ways and all without increasing the TAC."

Neil Millar, CAISO vice president of transmission planning and infrastructure development, also pointed to how the model reduces risk for California by making developers such as TransWest responsible for attracting subscribers and ensuring the financial viability of their projects.

"Without that, the project wouldn't move forward, and the ISO is basically kept whole because we're not supporting the cost of the TransWest Express project itself," Millar said.

CAISO CEO Elliot Mainzer emphasized how the model will assist in the "huge lift" facing California, which will need to bring on about 7,000 MW of new clean resources every year for the next two decades to meet its mid-century GHG targets. He said the procurement orders stemming from the state's integrated resource plan show the need to acquire "a significant fraction" of the state's needed resources and transmission from out of state "in terms of reaching total supply and for the diversification benefits in terms of reliability and affordability."

"The subscriber participating transmission owner model is our effort to work with developers out of state to create additional optionality for the utilities inside California," Mainzer said.

CAISO expects to file the subscriber PTO proposal with FERC in September and anticipates a decision in November. ■

## West news from our other channels



[Mixed Views on Impact of Ariz. Climate Alliance Membership](#)

NetZero  
Insider



[Cap-and-trade Driving up Washington Gasoline Prices, Critics Say](#)

NetZero  
Insider



[Inslee Defends Cap-and-Trade Against Critics](#)

NetZero  
Insider

RTO Insider subscribers have access to two stories each monthly from NetZero and ERO Insider.



## CAISO/West News

# Ramping Shortfall Sparks CAISO's 1st Summer Emergency

## CEO Praises New Resources, Coordination for Grid Holding up

By Robert Mullin

CAISO issued its first energy emergency alert (EEA) of the summer Thursday evening after coming up short on the ramping capacity needed to meet its peak net load as solar output rolled off its system during sunset.

The California grid operator declared an EEA-1 at 7:30 p.m. PT on a day marked by largely normal summer temperatures in most of the state's population centers, as well as an elevated but relatively moderate system peak load of 42,266 MW, which occurred at 6:30 p.m. An EEA-1 represents the lowest level of grid emergency, called by the ISO when it confronts capacity shortages after all available resources either are in use or have been committed to use, prompting the need for conservation.

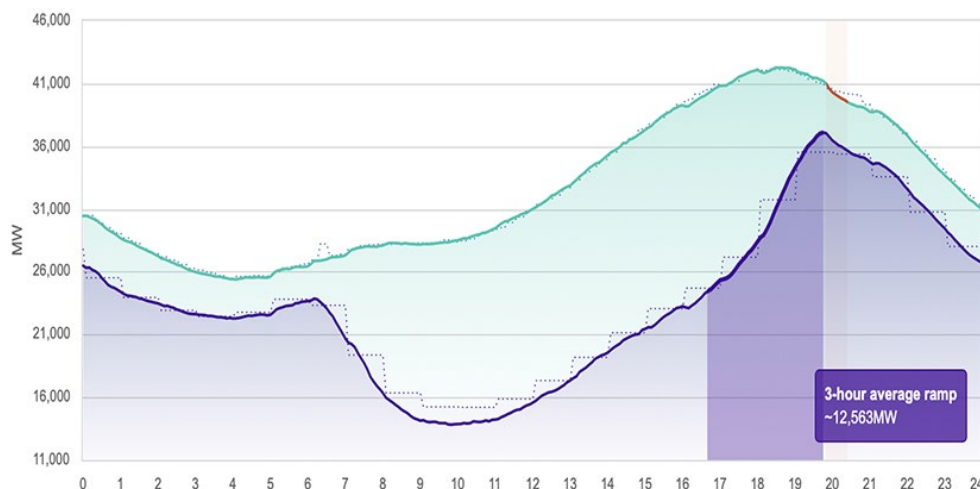
CAISO data shows that the ISO's net load — total system load minus output from wind and solar — began to exceed the ISO's day-ahead forecasts at about 6:40 p.m. By 7:50 p.m., as system load tapered to 40,989 MW, net load simultaneously rose to its daily peak of 37,038 MW, exceeding the day-ahead net load forecast of 35,533 MW for that five-minute interval.

"The market went into the hour a bit thin on the interchange while net demand was increasing," CAISO spokesperson Anne Gonzales told *RTO Insider*. "The amount of energy available within the hour was not as robust during net load peak as solar ramped off the system, compared to other similar days. As a result, within the hour, the market was not moving enough resources to balance supply and demand while solar was ramping down."

CAISO called on demand response resources beginning at the 7:50 p.m. interval, quickly reducing net load to levels closer to forecast. The EEA-1 was concluded at 8:30 p.m.

"As soon as the operators became aware of the situation, they manually dispatched additional generation, deployed some demand response programs available to them and made adjustments in the market to increase energy output and the EEA-1 was soon canceled," Gonzales said.

The role of imports in the emergency remains an open question. While much of California saw moderate weather that day, neighboring areas in the Southwest continued to endure a record-setting heat wave accompanied by high



● Hour-ahead forecast   
 ● Demand   
 ● Day-ahead net forecast  
● Net demand   
 ■ Demand response event

CAISO called on demand response just before 8 p.m. on July 20 as net load exceeded forecasts and the ISO faced a shortage of ramping resources. | CAISO

electricity demand.

Asked whether "thin" conditions on the interchange indicated that imports into the ISO were lower than expected during the event, Gonzales said, "We're still doing analysis on that. Demand came in slightly higher than forecast and more energy was needed for about an hour during the net peak load. We will know more after market analysis, however."

Gonzales said the emergency would cause CAISO to make "adjustments going into the net peak hours to account for this going forward," but added that it did not expect to issue a flex alert, EEA watch or call for restricted maintenance operations over the weekend.

Real-time prices during the event surged to around \$250/MWh at nodes across the ISO, after hovering around \$30/MWh and lower in the preceding intervals.

The EEA-1 occurred about a week after CAISO announced that it this year hit a 5,000-MW milestone for installed battery capacity, reaching 5,600 MW on July 1. California has

moved aggressively to install additional batteries to help meet evening ramps, and the ISO expects to bring on an additional 2,000 MW in the next couple of months, CEO Elliot Mainzer said Wednesday during the joint meeting of the CAISO Board of Governors and Western Energy Imbalance Market's Governing Body.

During that joint meeting, Mainzer also lauded the performance of CAISO and the wider West for managing challenging conditions in the face of widespread and persistent heat.

"Fortunately, notwithstanding a few local challenges, I think the overall grid has held up well, which I think points to certainly a lot of work within California and across the West on resource adequacy, bringing new resources onboard. Obviously outstanding hydro conditions inside California, and a tremendous amount of operational coordination and communication coordination around the region" also helped, Mainzer said.

"Of course, we have a lot of summer left. Ever vigilant, ever watchful," he added. ■

## CAISO/West News

# WEIM Withdraws Change to Base Schedule Deadline

*Implementation was Contingent on Accommodating with Flexible Ramping Refinements*

By Robert Mullin

CAISO's Western Energy Imbalance Market (WEIM) last week took the unusual step of rescinding a rule change and associated functionality that it never actually implemented.

At their monthly joint meeting Thursday, the WEIM Governing Body and the CAISO Board of Governors approved an ISO staff request to withdraw a 2020 tariff revision that would have shifted the WEIM's market deadline for submitting base schedules from 40 minutes before a delivery hour (T-40) to 30 minutes (T-30) before. The shorter timeline was intended to accommodate energy products in Bonneville Power Administration (BPA) power purchase agreements that can be scheduled after the T-40 deadline. BPA joined the WEIM in 2022. (See [CAISO Floats EIM Base Schedule Rule Changes](#).)

CAISO's implementation of the request was always contingent on the ISO's ability to

accommodate the change without compromising its performance in solving the real-time market, Danny Johnson, ISO market design sector manager, explained to the two governing boards.

But Johnson said testing showed CAISO "is unable to support this functionality when considered in conjunction with other real-time market enhancements," specifically the flexible ramping product refinements that went live in the market in February.

"That initiative ... increases both the reliability and the efficiency of the real-time markets through procuring flexible deliverable capacity to meet net load uncertainty, and implementing that functionality required additional computational time," he said. "Once that was implemented, we determined we would not be also able to implement a base schedule submission deadline at T-30."

By that time, the ISO had also determined that BPA could fully participate in the WEIM with-

out instituting the scheduling changes.

"We largely attribute their ability to participate successfully to the tagging and scheduling practices of BPA's WEIM neighbors," Johnson said.

Johnson said BPA was disappointed when CAISO signaled its intent to withdraw the rule change, but also understood the technical constraints around implementing it.

In comments to CAISO, NV Energy said it had hoped to use the additional time created by the T-30 deadline to manage the variability of the net load uncertainty now included in the WEIM resource sufficiency evaluation done ahead of every delivery hour. But the utility also did not object to withdrawal of the rule change.

"Management recognizes this concern, and we're committing to [working] with both NVE and all stakeholders to better understand the concerns on the newly implemented net load uncertainty requirements," Johnson said. ■



The Western EIM approved the T-30 base schedule submission rule in 2020 to accommodate energy products provided by the Bonneville Power Administration. | © RTO Insider LLC



## ERCOT News



# ERCOT Demand Exceeds 82 GW for 1st Time

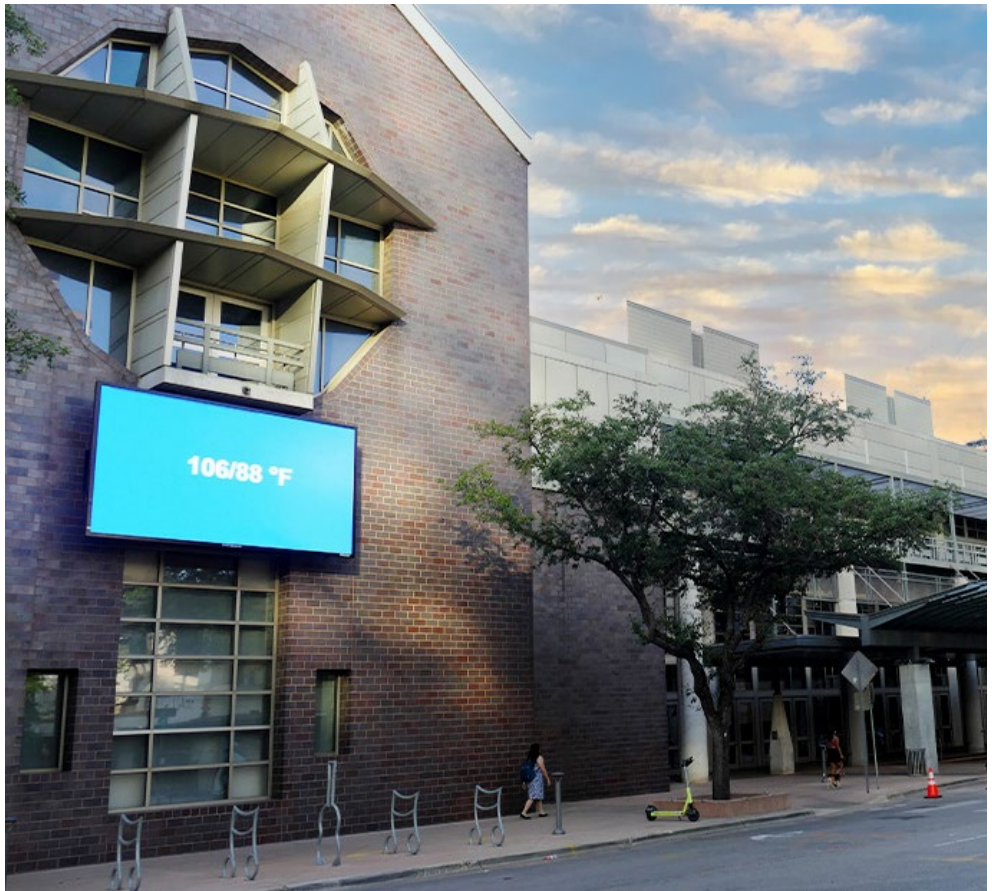
AUSTIN, Texas — “Welcome to the heat dome, y’all,” Austin-based energy consultant Alison Silverstein said during a panel discussion at NARUC’s Summer Policy Summit last week, acknowledging the sizzling temperatures outside that had the Texas capital city under an excessive heat warning until 8 p.m.

Temperatures in Austin topped out at 105 degrees Fahrenheit on July 18, helping ERCOT to again set a record for hourly peak demand when load averaged 82.03 GW during the hour ending at 4 p.m. That broke the record set the previous day when demand averaged 81.91 GW during the 6 p.m. hour.

Demand averaged 82.54 GW during the hour ending at 5 p.m., raising the previous high. Average prices were less than \$30/MWh, a sign that congestion was not an issue.

Temperatures are forecast to remain above 100 F in much of the state this week.

The record came on the last day of ERCOT’s third weather watch of the season. The grid operator says it’s continuing to operate the grid conservatively and bringing generating resources online early in case of sudden changes in generation or demand. With the new peak, its hourly average demand now has exceeded 80 GW 23 times this summer. It reached that mark once last year.



Weather forecast at Austin’s Convention Center July 18 | © RTO Insider LLC

— Tom Kleckner

## Save your obstacle courses for weekend Mud Runs.

Getting the information you need shouldn’t wear you out.

### *ERO Insider. Stay informed.*

Staying on top of cybersecurity alerts and new reliability standards is a mighty challenge. That’s why you subscribe to *ERO Insider*, your eyes and ears on electric reliability. Offering comprehensive, timely, unbiased reporting and analysis from inside the room at NERC and Regional Entity meetings, *ERO Insider* makes it easy for you to be prepared. Whatever the future brings.

**ERO**  
Insider



## ISO-NE News

# FERC Accepts Results of ISO-NE FCA 17

By Jon Lamson

FERC accepted the results of ISO-NE's Forward Capacity Auction 17 last week, ruling that the issues raised by a group of climate activists are outside the scope of the proceeding (ER23-1435).

ISO-NE held FCA 17 in March of this year, procuring resources for the capacity commitment period that extends from June 2026 through May 2027. A group of climate and environmental organizations including No Coal No Gas, 350 Mass, Lexington Climate Action Network and the Berkshire Environmental Action Team, along with 149 individuals, submitted comments protesting the auction, arguing that the design of the auction favors fossil fuels over renewables.

"ISO-NE's Forward Capacity Market structure, particularly the continued payments to fossil fuel generators, poses extreme risk to ratepayers, the climate and grid reliability," No Coal No Gas wrote in its initial comments. "FCA 17 awards hundreds of millions of ratepayer dollars to keep the oldest, dirtiest, least economical fossil fuel powered generators online for use as peaker plants. By propping up these failing fossil fuel powered generators as stand-by peaker plants and sending bonus payments to base load generators, ISO-NE is preventing a just transition on our dime."

Meanwhile, ISO-NE argued that it conducted the auction in accordance with its tariff with no preference toward any type of resource, and that complaints about the structural design of the FCM are outside the scope of the FERC proceeding.



The Mystic Generating Station in Everett, Mass. | Fletcher6, CC BY-SA 3.0, via Wikimedia Commons

"We're governed by federal law that requires our markets to be open to all resources that can provide the required services," an ISO-NE spokesperson told *RTO Insider*. "These payments are not subsidies, but rather the result of a competitive market in which all resources compete to provide grid services at the lowest cost."

Answering ISO-NE's arguments, No Coal No Gas wrote that the public has not been provided with adequate opportunity to engage with and give input on the FCA process. No Coal No Gas disputed the results of the prior two auctions (ER21-1226 and ER22-1417), while FERC ruled both times the issues raised are beyond the scope of the proceedings.

"Community stakeholders have an extremely limited ability to contribute to the commission's responsibilities regarding the administration of our electric grid, and the ISO wishes to bar comments appropriately filed through one of our only opportunities to so contribute as outside the scope of the proceedings," the

No Coal No Gas coalition wrote, adding that the one ISO-NE forum dedicated to public engagement, the Consumer Liaison Group, has no direct effect on RTO policy.

FERC again sided with ISO-NE for FCA 17, agreeing with the RTO that the issues raised about payments to fossil fuel resources are outside the proceeding's scope.

"No party has argued or provided evidence that ISO-NE failed to conduct FCA 17 in accordance with its tariff," FERC wrote. "The protests of NCNG, other organizations and *pro se* commenters raise issues that are outside the scope of this proceeding because they do not bear on the sole question here — namely, whether ISO-NE conducted FCA 17 in accordance with its own tariff rules. Instead, these protests focus on the FCM market design, as NCNG itself recognizes when it urges ISO-NE and the commission to redesign the FCM to focus primarily on climate change in its decision-making." ■

Save your acrobatics  
for Cirque du Soleil.



Jumping through hoops was never really your thing anyway.

NetZero Insider. Stay informed.

NetZero  
Insider

NECA  
NATIONAL ELECTRICAL AND COMMUNITY ASSOCIATION



Register NOW!

2023 FUELS CONFERENCE

The University of Massachusetts Club  
One Beacon Street, Boston, MA  
Monday, September 18, 2023 | 8 am to 5 pm  
Networking Reception to Follow

Save your 10 to 1  
odds for Vegas.



You never want to chance too much in this market.

ERO Insider. Stay informed.

ERO  
Insider

# ISO-NE News

## No Shortfall Anticipated for Summer of 2027, ISO-NE Says

### Everett Marine Terminal's Effect is Point of Contention

By Jon Lamson

No energy shortfall is anticipated for the summer of 2027, ISO-NE told the NEPOOL Reliability and Transmission committees on Wednesday, adding that some reserve shortfall appeared in just one of the worst-case scenarios modeled.

The results are part of ISO-NE's ongoing study with the Electric Power Research Institute looking at how extreme weather affects grid reliability, taking into account how climate change is projected to affect the probability and magnitude of extreme weather. The RTO noted that the expected growth of utility-scale and behind-the-meter solar, offshore wind and storage all contributed to minimizing reliability risks.

While results indicated the New England Clean Energy Connect transmission line would help reduce reserve shortfall in the worst case studied, the RTO found the presence of the Everett Marine Terminal (EMT) did not significantly impact the reserve shortfall.

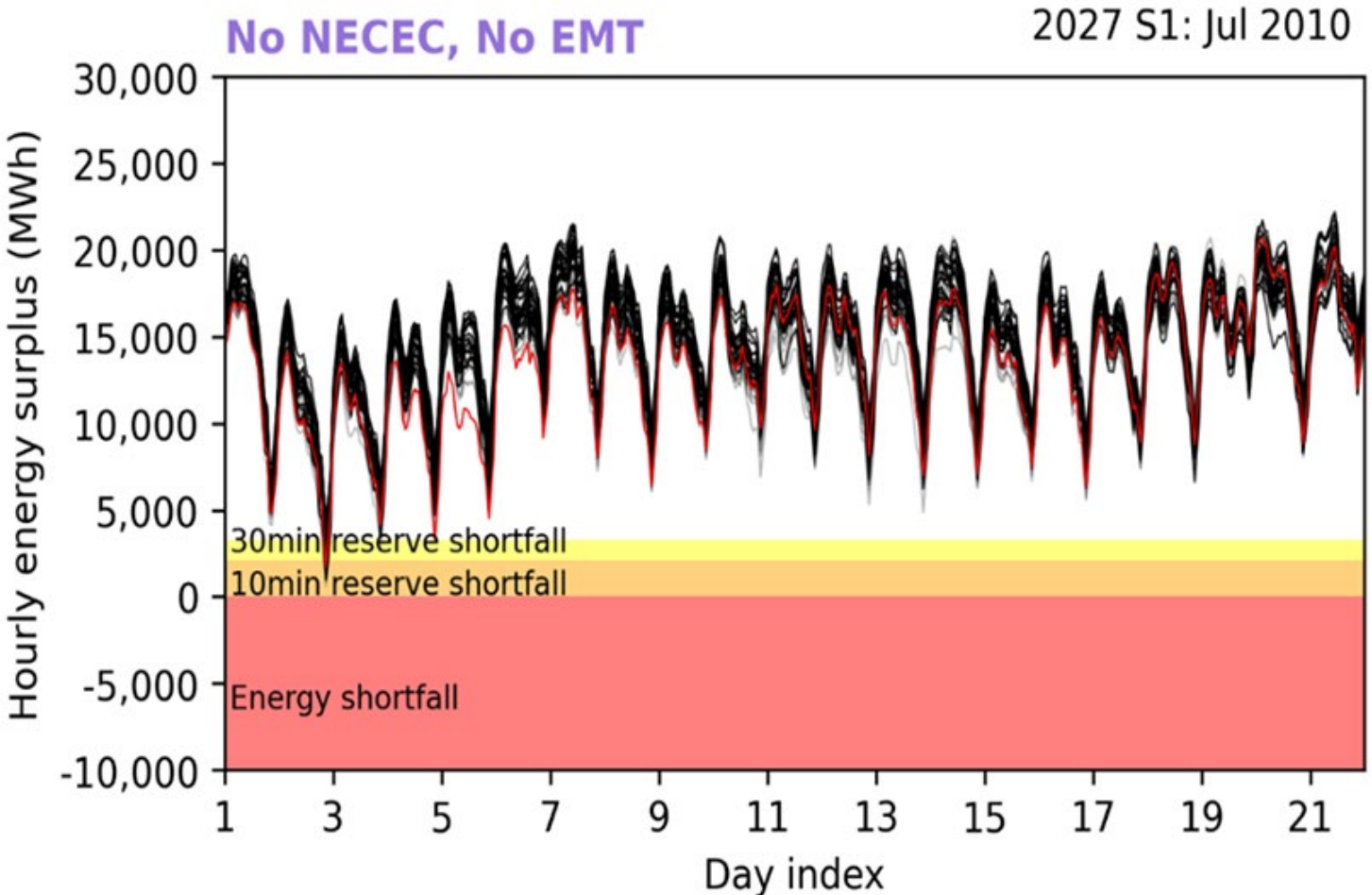
"Results with and without EMT are similar, as there is minimal depletion of stored fuels in any cases," said Stephen George of ISO-NE, adding the reserve shortfall seen in the study was manageable. "Cases where reserve shortfalls occur are representative of capacity deficiency conditions, which are managed through ISO's Operating Procedure No. 4 (OP-4), Actions During a Capacity Deficiency."

Aaron Patterson of The NorthBridge Group, representing Constellation Energy, the owner of both EMT and the Mystic Generating

Station, EMT's main customer, criticized how the winter iteration of the study modeled the availability of LNG with and without EMT. (See [Limited Exposure to Supply Shortfall for ISO-NE During Extreme Weather.](#))

"The results of the ISO-NE/EPRI study with respect to the impact of EMT retirement are not credible," Patterson said. "The assumption that the retirement of EMT would have no impact on regional LNG stocks over the course of a winter event is not supported by any data or analysis, and a review of history and the demonstrated capabilities of EMT compared to other facilities suggest that it is not accurate."

Patterson said the ISO-NE assumption that the loss of Everett wouldn't significantly affect the amount of LNG available to the region



Summer 2027 energy adequacy under extreme weather scenario without Everett Marine Terminal or New England Clean Energy Connect | ISO-NE



## ISO-NE News

“drives the general conclusion of the study with respect to EMT that retirement of EMT has no material impact on regional electric reliability during extreme winter events.”

While ISO-NE’s modeling assumed the two other LNG facilities servicing the region would be able to make up for the loss of EMT, Constellation argued this assumption is overly optimistic.

Patterson said Everett historically has had an LNG inventory of 6 Bcf during the coldest 21-day periods of the past five years, equating to almost 60% of the available LNG projected by ISO-NE’s 2027 modeling.

“Given this outsize contribution from EMT, the unsupported assumption that the other two facilities would be able to effectively more than double their assumed contribution to LNG stocks without EMT is not credible,” Patterson said.

ISO-NE argued that the LNG assumptions used in the study are reasonable, noting they ran the winter analysis with a range of LNG inventories, including a low LNG scenario that

reduced the starting inventory by 3 Bcf (from 6.5 to 3.5 Bcf total).

The study’s results for the winter of 2032 likely will be shared at the Reliability Committee meeting in August, while the summer 2032 results likely will be available in September, ISO-NE said.

### Increased Regional Network Service Costs

David Burnham of Eversource told the committees the projected regional network service (RNS) costs for the next five years likely will increase annually by approximately \$10/kW-year. RNS costs are projected to reach \$196/kW-year by 2028, compared to \$141.6 expected for 2023.

RNS costs are the costs of transmission service paid by transmission customers in New England. For 2023, asset condition projects made up more than \$570 million of the \$1.3 billion in total projected regional costs, while regional system plan projects are expected to cost more than \$540 million. In 2024, asset

condition costs are expected to increase to \$890 million, while system plan projects are anticipated to cost more than \$300 million, with total costs nearing \$1.4 billion.

### Eversource Project Costs Rise

Eversource presented to the committees about a series of ongoing projects, including a *group of projects* in the Greater Boston area, which have ballooned in cost to \$921 million, compared to the original 2017 estimate of \$572 million.

The utility company cited unanticipated underground interferences, work hour restrictions, soil management and groundwater treatment costs, and material costs as the drivers of the increase.

Eversource also presented on a series of *projects* in Eastern Connecticut, including upgrades at several substations and rebuilds of multiple 115-kV lines. The company requested a total transmission cost allocation of nearly \$200 million, with the final components of the projects to be active by fall of this year. ■



Have an opinion on electric policy you'd like to share?

Submit a Stakeholder Soapbox Op-Ed

See [rtoinsider.com/soapbox](https://rtoinsider.com/soapbox) for editorial guidelines.



## MISO News

# Stakeholders Puzzled by MISO Tx Service Requirements for Battery Storage

By Amanda Durish Cook

CARMEL, Ind. — MISO stakeholders are trying to figure out what transmission service requirements the grid operator has in place for battery storage that charges from the grid.

Stakeholders have asked MISO to clear up its transmission service requirement process for incoming battery storage that intends to charge from the grid. They said there are inconsistencies and ambiguous language between MISO's business practice manuals and tariff as to whether battery storage needs to secure yearly, firm point-to-point transmission service for storage, or non-firm service. MISO maintains that storage that charges from the grid is required to obtain long-term, firm, point-to-point service, not the interruptible network service option.

At a Planning Advisory Committee meeting Wednesday, WEC Energy Group's Chris Plante outlined stakeholder concerns that MISO's

interpretation that storage should acquire point-to-point service is overly restrictive compared to FERC requirements and "severely limits the value" of energy storage resources.

FERC's Order 841 requires that "applicable transmission charges" should apply when a storage resource is charging from the grid to resell energy later.

Several storage developers agreed that MISO's reading of Order 841 will hurt their bottom lines. Some argued that storage charging behavior is similar to load, and that storage resources already naturally avoid charging during periods of peak demand. Multiple stakeholders said MISO needs storage to help combat deepening capacity shortage risks down the road. (See [OMS-MISO RA Survey Signals Potential for 9-GW Shortfall by 2028](#).)

Plante raised the issue during multiple spring planning meetings. He said he thought MISO's business practice manuals are light on author-

ity when standalone battery storage connects to the transmission system and intends to charge from the grid.

Plante said MISO's rules are vague on whether MISO's non-firm Network Integration Transmission Service could fulfill the requirements of Order 841. He also said it's unclear as to whether MISO's interconnection process for storage resources considers its transmission service requirements. Finally, he said MISO is ambiguous as to whether transmission service requirements apply to storage connected to the distribution system.

MISO's Planning Advisory Committee members agreed to take up the issue for discussion at future meetings.

"If we're going to be relying on batteries as a large source of our generating fleet in the future, then it will have to charge in areas that are different from what we have today," MISO's Andy Witmeier said. ■



| NextEra Energy

# MISO News

## MISO Aims for MW Limits, Tripled Fees, Automatic Penalties to Achieve Manageable Queue

*Stakeholders Express Concerns; MISO May Revise*

By Amanda Durish Cook

CARMEL, Ind. — MISO is proposing an approximate 73-GW annual limit on project proposals, tripled entry fees, more ironclad land requirements and escalating penalty charges in its quest to oust speculative projects and lighten its gridlocked interconnection queue.

MISO shopped six new rules Wednesday to limit the interconnection requests it will accept and under what circumstances developers can withdraw project proposals. (See [MISO Committed to Crackdown on Interconnection Queue Submittals, Departures](#).) The package of rules includes introducing an escalating, automatic penalty upon withdrawal of project proposals, imposing a 60%-of-peak-annual-load megawatt limit on the total number of new requests per year and enacting a 10% cap of that total size limit on the projects individual developers can submit annually.

“We do not want to slow the energy transition down, but the more projects you have in your queue, the longer it takes to study them,” Director of Resource Utilization Andy Witmeier said at a Planning Advisory Committee (PAC) meeting Wednesday.

Witmeier said MISO considers a queue that adds 73 GW of annual projects more achievable in terms of reliability studies. Last year, MISO received about 171 GW of interconnection applications. As of last month, MISO’s interconnection queue contained 1,412 active generation projects totaling almost 241 GW. Historically, more than 70% of interconnection requests never complete MISO’s queue.

MISO is waiting to file for and receive [FERC](#) approval on the proposal before it closes its currently open-ended 2023 queue application window. It hopes to wrap up accepting applications by the end of the year, later than its usual September deadline. Witmeier said if MISO kicks off studies before it has the new restrictions in place, it could be hit with as much as 200 GW in new generator interconnection requests.

“MISO only has an approximate 121-GW peak load. Where are we going to put those additional megawatts? We’ll have to shove them off on our neighbors. We have to set some type of limit so we can get a proper-sized queue and have realistic studies,” he said.

But Witmeier said he had “concerns that FERC



| DTE Energy

isn’t going to go for” MISO’s proposed cap on individual developers because of the potential for discriminatory treatment. MISO proposed an annual cap of 60% of its average 121-GW peak load (73 GW) and that individual developers be limited to 10% of the total, or 7,300 MW. Witmeier said MISO likely will have to create an attestation form for developers where they verify parent companies or subsidiary status to enforce such a cap.

Invenergy’s Sophia Dossin said her company is “deeply concerned” over the proposed megawatt limits, saying it would set the stage for a lottery where the most prepared developers’ projects could be barred from consideration. Others agreed that MISO’s megawatt limits could affect the market forces of renewable energy development.

Witmeier said MISO likely will hike its \$4,000/MW first milestone fee to \$12,000/MW. The second milestone fee is set to be \$1,000/MW or 20% of the cost of identified network upgrades, whichever is greater. The third milestone fee would be at least \$1,000/MW or 30% of network upgrades.

“We think the [Inflation Reduction Act] has changed the dynamics of our interconnection queue,” Witmeier said, adding that MISO hasn’t increased the milestone fees it charges developers since 2017.

MISO is proposing to use its larger, second milestone fee as the basis for a new, automatic penalty schedule for interconnection customers who withdraw projects. MISO is proposing to keep 10% of the first milestone payment if projects are removed before the start of the queue’s definitive planning phase, 25% of the

payment if projects drop out at the queue’s first decision point, 50% at the second decision point, 75% during the queue’s final phase and 100% at generator interconnection agreements (GIAs) and beyond.

Witmeier said the penalty schedule relies on an expanded definition of withdrawn projects’ harm on lower-queued projects. He said MISO will use the pool of money it collects to spread among other generation projects, some of which were banking on sharing network upgrade costs with the dropouts. He said the move should cut down on the instances of cascading project withdrawals in the queue.

Witmeier also said MISO will require interconnection customers to secure 50% site control from generator site to point of interconnection upon application and 100% site control to the point of interconnection before developers can negotiate GIAs.

“If you don’t have site control at the time of GIA, you are not a viable project,” he said.

Witmeier said the megawatt limit on individual developers might only serve as a “backstop” against an unmanageably large queue because MISO is creating a more exclusive club of projects that line up in the first place through higher fees and stricter land requirements.

MISO retained Charles River Associates to conduct an independent review of MISO’s recommendations, Witmeier said. He said while the review is still ongoing, the firm has initially deemed the set of rules to be reasonable.

However, Witmeier said if stakeholders are adamantly opposed to one of the new rules, MISO will consider lowering dollar amounts or adjusting requirements.

“We don’t know how each of these levers will impact the queue. There’s no way to know. Interconnection customers aren’t Goldilocks,” Witmeier said in response to stakeholders’ questions on how the queue might look emerging from the changes.

Staff will again discuss the stricter queue entry and exit rules at the Aug. 30 PAC meeting. Also, MISO has said it will consider stakeholders’ ask for a special meeting on the suite of changes. Many said the 45-minute time slot MISO allotted on its July 19 PAC agenda for discussion of the proposal was insufficient. PAC leadership was forced to stop accepting stakeholders’ questions to MISO staff after the discussion exceeded two hours. ■



## MISO News

# MISO Creating Means to Gauge System Impacts of DER Interconnections

*MISO is Updating Manuals for Study, Doesn't Need FERC Permission to Add Process*

By Amanda Durish Cook

CARMEL, Ind. — MISO says it will add a study to its planning process early next year to identify transmission reliability issues caused by distributed energy resources.

The study will mimic the style of its affected system study process with other RTOs.

MISO said it will create a technical screening process for interconnecting DERs to test for reliability impacts to the bulk electric system. The grid operator said it will begin screening for when it will need to perform studies on interconnecting DERs in October and initiate the first DER affected system study cycle Feb. 22. MISO asked its transmission owners to submit information on the potential for DER injections at their substations by Dec. 1.

Speaking at the Planning Advisory Committee meeting Wednesday, MISO's Patrick Dalton said the RTO and its transmission owners will evaluate the need for a review of DERs when they can inject 5 MW of power at the

substation level during system peak load and if they can force a 1% change in line loading. Transmission owners will screen for the 5-MW injection capability, while MISO will ascertain whether the DERs could influence a 1% line-loading change.

If the DER is shown to impact both reliability criteria, MISO will issue a report that will trigger its existing facilities study and could lead to network upgrades.

"MISO has not identified reasons that a DER affected system study would trigger the need to open new regulatory proceedings or to modify existing state-based interconnection rules," Dalton said.

MISO is updating its business practice manuals to incorporate the new study. It said it doesn't require FERC permission to add the new study process.

ITC Holdings' Ruth Kloecker said many of MISO's transmission owners lack a "cohesive format" for communicating with distribution companies on DER reliability.

"I think that's a big problem for MISO kicking off these studies," she said. "We won't have the data that's necessary to do these studies."

MISO staff said it's important to move ahead with any information it can glean.

Meanwhile, MISO is also working on how it will incorporate more DER aggregations into its planning.

Currently, owners of DER aggregations aren't required to submit modeling information to MISO. The RTO may make modeling submittals mandatory for larger DER aggregations sometime beyond 2023.

MISO reports that members are providing more details on DERs than in the past. For 2022 modeling, MISO recorded 411 MW of DERs at 651 locations, up from 30 MW at just eight locations in 2019.

In April, Planning Modeling Manager Amanda Schiro said DER "volumes are low and scattered throughout the system," making planning impacts negligible thus far. ■



Great River Energy's corporate headquarters in Maple Grove, Minn. | Great River Energy



## MISO News

# FERC OKs Incentives for Republic Transmission on MISO's 1st Competitive LRTP Project

## Christie Voices Reservations over Incentives

By Amanda Durish Cook

FERC last week approved LS Power's request for rate incentives for the first competitive project surfacing from MISO's long-range transmission plan (LRTP).

The commission allowed LS Power's Republic Transmission an abandoned plant incentive if the \$77 million Hiple 345-kV line at the Indiana-Michigan border is canceled or abandoned for reasons beyond Republic's control (ER23-1924). The commission's approval elicited a rebuke of transmission rate incentives in general from Commissioner Mark Christie.

The Hiple line is the first competitively bid line segment to emerge from MISO's LRTP and could be taken from Republic through Indiana's new right of first refusal law, which gives incumbent developers the right to build projects recommended by RTOs. MISO awarded Republic the right to construction in June. (See [MISO Picks Republic Transmission for 1st LRTP Competitive Project](#).)

Republic acknowledged that its status as selected developer could be in jeopardy in its request for the abandoned plant incentive. It said it "faces risks from incumbent utility opposition to competitive transmission" and that "even though the law did not take effect until July 1, 2023, the incumbent transmission owner may litigate and oppose Republic's construction and ownership of the project in other ways."

Competitive developer NextEra Energy lost its bid to construct what would have been the first competitive transmission project in MISO South because of Texas' ROFR law. FERC recently denied NextEra's request for a stay on MISO's termination of the project. (See [FERC Briefs: Orders Addressing Arguments Raised on Rehearing](#).) NextEra last week filed a petition for review with the D.C. Circuit Court of Appeals.

Republic also said it faces uncertainty over "significant regulatory and permitting, financial and construction risks," including the unpredictability of the future fleet transition, which is the onus behind the line. The point of



Construction of the Huntley-Wilmarth transmission line project in Minnesota | Michels Corporation

interconnection with Michigan transmission developer METC at the Indiana-Michigan border also is uncertain and will be determined by the route approved by the Michigan Public Service Commission.

FERC said Republic "demonstrated a nexus between its requested incentive and its planned investment."

"We find that Republic has demonstrated that the Hiple project faces certain regulatory, environmental and siting risks that are beyond Republic's control and could lead to the Hiple project's abandonment," FERC said.

Christie said that while he agreed with FERC's decision, it is time to "revisit the array of incentives offered to transmission developers, including the abandoned plant incentive ... as well as the [construction work in progress] incentive and the RTO participation adder."

Christie said FERC granting rate incentives of late "has become nothing more than a check-

the-box exercise," with no real examination as to whether developers are shouldering substantial challenges and risks.

He said while the construction work in progress incentive "effectively makes consumers the bank" for transmission projects, the abandoned plant incentive forces them to be insurers as well.

"This incentive allows transmission developers to recover from consumers the costs of investments in projects that fail to materialize and thus do not benefit consumers," Christie wrote. He asked that FERC re-evaluate the incentives to "ensure that all the costs and risks associated with transmission construction are not unfairly inflicted on consumers while transmission developers and owners stand to gain all the financial reward."

Finally, Christie said he supported limiting the RTO participation adder to the "three years following a transmitting utility's initial membership in an RTO." ■

### Midwest news from our other channels



[Michigan Capital-area Utility Outlines \\$750M Plan to Reduce Emissions](#)

NetZero  
Insider

RTO Insider subscribers have access to two stories each monthly from NetZero and ERO Insider.

# MISO News

## MISO Trims Minnesota Line Route in JTIQ Portfolio

By Amanda Durish Cook

CARMEL, Ind. — MISO announced last week that it has shortened one of the 345-kV lines contained in its \$2-billion Joint Targeted Interconnection Queue (JTIQ) portfolio with SPP, which will lower costs.

At a Planning Advisory Committee meeting Wednesday, Director of Resource Utilization Andy Witmeier announced that MISO will replace the Brookings County-Lakefield 345-kV project in Minnesota with the shorter Lyons County-Lakefield 345-kV project. He said MISO was making the change because it approved Northern States Power’s proposal to install a second 345-kV circuit between the Brookings County and Lyon County substations in Minnesota for reliability reasons as part of the 2022 MISO Transmission Expansion Plan. That nearby project negates the need for a full-length line.

Witmeier said the “much shorter line, as the crow flies” represents a significant savings for customers. He said the new line will solve all the same constraints as the original design but with a better benefit-to-cost ratio. MISO has already performed economic and reliability analyses on the shorter route. Transmission owners Xcel Energy and ITC Holdings will still build the line.

Witmeier said the JTIQ portfolio, which was finalized in 2021, is subject to revisions as MISO and SPP perform their annual transmission planning. He also said since the revised line remains wholly in Minnesota, it won’t require a

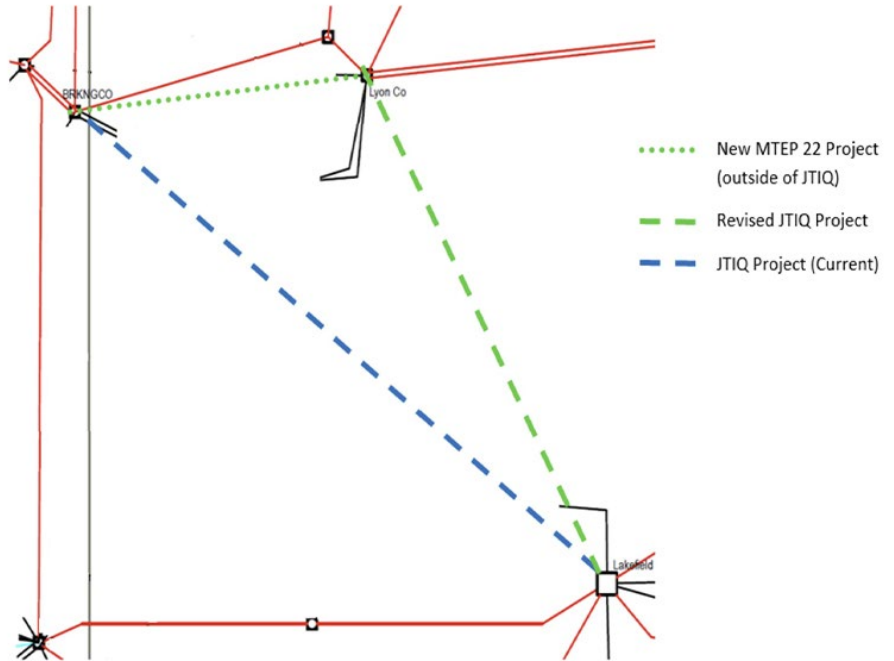


Diagram of the original and new JTIQ 345-kV projects | MISO

change in permitting jurisdiction.

MISO has yet to reveal how much ratepayers can expect to save on the shorter line. Last month, the RTOs announced that the portfolio’s cost estimate had nearly doubled to \$1.9 billion from a little more than \$1 billion in 2021 due to the rising cost of materials and labor and more accurate line route estimates.

(See *JTIQ Portfolio Cost Estimate Nearly Doubles to \$1.9B.*)

Witmeier said he didn’t think the more economical line would affect the states’ application for the JTIQ portfolio to receive up to a 50% funding match from the Dept. of Energy’s *Grid Resilience and Innovation Partnerships* program. ■



# MISO News

## MISO Convening Task Team to Shore up Credit Policy

### MISO May Make FERC Filings to Reinforce Credit Policy

By Amanda Durish Cook

CARMEL, Ind. — MISO said it will debut a task team dedicated to improving its credit policy as market participants experience more price volatility in the market and default risk grows.

Brian Brown, of MISO’s credit and risk management team, said MISO is in the process of forming the Credit Policy Enhancements Task Team, with meetings to begin in September. At the July 13 Market Subcommittee meeting, Brown said risky circumstances, such as widespread winter storms, are occurring more frequently and could give rise to “defaults or near-default situations.”

Brown said the task team will examine extreme weather events to see how MISO’s credit policy can be strengthened to discourage defaults. Brown said MISO will look at its minimum capitalization requirements to account for increased price volatility, review its estimated exposure calculations and credit requirements for virtual transactions, and explore the possibility of adding a minimum collateral requirement for all market participants — something MISO doesn’t have.

He also said MISO may update the bankruptcy language in its tariff to align with Federal Bankruptcy Code requirements and consider tariff language that allows MISO to implement flexible payment terms in the event of a marketwide event that causes “large, unexpected market charges.”

Brown said as a result of the task team’s work,



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

MISO may begin to make some FERC filings to reinforce its credit policy in the first quarter of 2024.

“We really hadn’t experienced any losses prior to 2021. What we’re noticing is there’s an increase in volatility in the markets. ... Frankly, we’ve got some scar tissue from dealing with some issues,” Brown said, referencing virtual traders who nearly defaulted and lost \$150,000 in the market in January 2021 and the market participants who lost \$38,000 related to the Brazos bankruptcy following Winter Storm Uri in February 2021. The storm

led to MISO making 140 margin calls totaling \$325 million. MISO makes margin calls when a market participant’s credit exposure is greater than the financial security and unsecured credit they have in place, and MISO requests additional collateral or reduced activity in its market.

MISO said it avoided defaults during the December 2022 winter storm, though it had to issue more than 100 credit exposure warnings. (See [MISO Defends Energy Exports During December Storm.](#)) ■

**TEXAS CLEAN ENERGY**

August 29 - 31, 2023 | Austin, TX

Get the Latest Insights on How Market Redesign Affects Opportunities in the Exploding Texas Clean Energy Industry!

**Register Now**

Save your acrobatics for Cirque du Soleil.

Jumping through hoops was never really your thing anyway.

**ERO Insider**

ERO Insider. Stay informed.

BUSINESS NETWORK for OFFSHORE WIND

**OSW POWER-TO-X SUMMIT**

AUGUST 24, 2023 HOUSTON

HOST SPONSOR **DNV**

**REGISTER TODAY**



## MISO News

# MISO Preps for Heat Wave, Anticipates Annual Demand Peak

By Amanda Durish Cook

MISO has enacted conservative operations orders, a hot weather alert and a capacity advisory for its Midwest region ahead of the season's first widespread heat wave set to bake much of the U.S. this week.

The grid operator said a combination of hot weather and load forecast uncertainty is forcing a conservative operations *declaration* Tuesday through Friday for MISO Midwest. The capacity advisory is effective beginning Wednesday "until further notice," per MISO.

The National Weather Service anticipates dangerous heat that has been simmering in the West, Texas and Florida will expand this week into the eastern two-thirds of the country, starting in the north-central states and Plains.

MISO has asked its generation and transmis-

sion owners to consider revoking or deferring maintenance outages. It also has asked generation owners to notify it of any fuel restrictions and environmental limitations of equipment. MISO said members should be prepared to enter maximum generation emergency procedures, which involve calling on load-modifying resources.

Spokesperson Brandon Morris said MISO and members are preparing for the extreme heat, which could drive 2023's annual peak demand in the footprint.

"The potential for higher-than-normal demand and tight operating conditions could lead to a system peak for the year. MISO issued alerts and advisories in anticipation of the heat wave to provide situational awareness and notify our members' utilities to prepare in case additional actions are needed to ensure

reliability," Morris said in an emailed statement to *RTO Insider*. "We are coordinating with our neighboring grid operators who expect similar conditions. Because of our large, diverse footprint, MISO has several options to obtain power and send it to where it is needed."

Ahead of the season, MISO predicted July would hold its greatest chance of enlisting the help of its load-modifying resources and leaning on neighbors for exports during blistering temperatures. (See *MISO: Little Firm Capacity to Spare This Summer*.)

MISO last issued conservative operations instructions in late June, when it struck a rough patch of storms and hot temperatures that also spawned capacity advisories and hot weather and severe weather alerts June 22-30. The RTO also issued a hot weather alert July 19-20 for much of its South region. ■



An Xcel Energy control room | Xcel Energy

## NYISO News

# New York Seeks to Define ‘Zero Emissions’

## Few Comments as PSC Weighs Broader Range of Resources

By John Cropley

New York regulators' first steps to broaden the path to a zero-emissions future have drawn limited response from stakeholders.

The New York Public Service Commission received only five comments on its May 18 [order](#) to begin filling the power generation gaps likely to arise in the transition away from fossil fuels. It is part of Case [15-E-0302](#), the PSC's implementation of a large-scale renewable energy program and a clean energy standard.

The issue is potentially contentious, as the order states that favored renewable technologies such as solar and wind may not provide enough power and that more controversial alternatives such as hydrogen, nuclear and biofuel may be needed.

But the issue is increasingly pressing: Less than two months after the PSC order, NYISO reported that the nation's largest city could face a reliability margin deficit of up to 446 MW as soon as summer 2025 because of a wave of mandated fossil generation retirements and the slow pace of replacement power coming online. (See [NYC to Fall 446 MW Short for 2025, NYISO Reports.](#))

Meanwhile, leaders are pushing to electrify the state to the greatest extent possible as they carry out the landmark Climate Leadership and Community Protection Act of 2019. But many renewable generation projects have been delayed or canceled, and the new generators that do come online are intermittent.

To start the process of addressing this, the PSC in its May 18 order asked stakeholders to

address a series of questions, including:

- how to define “zero emissions”;
- whether advanced nuclear power, long-duration storage, green hydrogen, renewable natural gas (RNG), carbon capture and sequestration, virtual power plants, distributed energy resources and demand response resources can be considered zero-emissions sources;
- what other resources should be considered;
- whether efforts to achieve zero emissions by the 2040 target should focus solely on resource adequacy or include a broader set of technologies that could be integrated into the transmission and distribution systems;
- whether lifecycle emissions should be



Hydrogen is among the technologies being examined as New York works to meet its zero-emissions goals. | Shutterstock



# NYISO News

considered when characterizing energy resources;

- how RNG should be considered, given the limited feedstocks in the state; and
- what re-examination and possible revision to the tiers of the Clean Energy Standard might be needed.

Some of these would seem to be red flags for environmental advocates and others who have pushed for climate mitigation measures in New York. But the only responses were from industry groups pitching their solutions, as well as from four members of the state Senate's Republican minority pressing their existing agenda of an all-of-the-above approach to the energy transition. This includes splitting atoms and burning various combustible matter, two solutions that are opposed by many in the environmental movement.

## Minority Report

Republican Sens. Mario Mattera, Tom O'Mara and Mark Walczyk, all members of the Energy and Telecommunications Committee, and Senate Minority Leader Robert Ortz said the state needs an all-hands-on-deck approach as it decarbonizes, because it will need nearly 100 GW of new generation by 2040.

They pointed out that solar's capacity factor is only about 14% in New York. Onshore wind is much higher, but still only 20 to 26%.

"Hydrogen, nuclear, renewable natural gas, bioenergy and sewer heat recovery provide more reliable sources of energy than wind and solar, as they would not be intermittent," they wrote. "To be clear, New York state cannot meet the mandates in the CLCPA by solely

focusing on wind and solar energy generation."

The senators urged the PSC to consider as zero-emissions all types of hydrogen — regardless of how it was generated. Non-green hydrogen generation is another target of environmental advocates.

## Making Gas

Berq RNG and Strategic Project Management submitted mostly identical comments with the American Biogas Council, urging the PSC to give greater consideration to the biogas sector as a means of achieving its goals.

They said New York does not use the full statewide potential of its waste-to-energy biogenic resources, such as landfills and manure lagoons.

Industry data show 191 active biogas systems in the state, they said, but indicate there is enough renewable methane available to power more than 500 systems. Buildout of these facilities is also a significant opportunity to divert organic waste from landfills and to reduce emissions of methane, they said.

They urged that "zero emissions" be defined to recognize any molecule and any system for converting it to energy that can deliver a lifecycle carbon emission profile of zero or below.

## Water Flow

The Low Impact Hydropower Institute urged that when totaling up lifecycle emissions, a leveled impact assessment be used, taking into account the project lifespan.

For example, it said, building a hydropower facility generates a high upfront emission impact, but its impact may be less when considered over its very long lifespan.

It noted that old and new energy resources alike, including hydropower, have exacerbated environmental justice concerns, but the process laid out by New York will begin to address that. It suggested New York look to Massachusetts, where regulations try to recognize not just renewable energy but also, in the case of hydropower, resources that reinvest in their natural surroundings in an accountable, annual and transparent manner that meets specific outcome requirements.

LIHI offered itself as a resource, saying its criteria have "helped facilitate healthy river flows, vibrant aquatic communities, and accessible recreational opportunities across the state and region."

## Pumped Hydro

Serium Energy Storage, which is pursuing development of closed-loop underground hydroelectric energy storage, pointed out what others have flagged: the need for large amounts of long-duration storage to maintain reliability in New York when the sun is not shining and the wind is not blowing.

Closed-loop pumped hydro is the perfect fit for several reasons, Serium said: It is a proven and mature technology; it has a more-than-100-year history in New York; it is compatible with carbon-reduction and environmental stewardship; and it does not face the limits that batteries do.

Serium said the major drawbacks of surface pumped hydro, including environmental impacts, are not an issue with the underground systems it proposes. The company asked the PSC to add hydroelectric storage to its "zero emissions" list, and to begin procurement soon, given its long timeframe for approval. ■

**2023 DCPSC SUPPLIER DIVERSITY HEARING**

Examining the District of Columbia's utility companies' use of diverse suppliers

PUBLIC SERVICE COMMISSION  
District of Columbia  
Your Energy. Your Voice.

**July 27, 2023  
3-4pm**

**REGISTER**





**Grid Infrastructure:  
Accelerating Deployment**

Washington DC  
December 5-6

**Register at  
[www.gridconnect.com](http://www.gridconnect.com)**

**HURRY!**  
Take advantage of early bird rates before October 25.

**gridCONNECT®  
2023**





**2023 ANNUAL  
U.S. - CANADA EXECUTIVE  
ENERGY CONFERENCE**

**NOVEMBER 1-2, 2023  
SEAPORT HOTEL, BOSTON**

**NECBC.ORG/PAGE/ENERGYCONFERENCE**



## NYISO News



# FERC Seeks More Info on NYISO DER Aggregation Proposal

*10-kW Minimum is Part of Focus; Response Due by Aug. 17*

FERC staff last week asked NYISO to provide additional detail on its proposed tariff revisions for integrating distributed energy resource aggregations into its markets, including a rationale for its 10-kW minimum (*ER23-2040*).

FERC's July 18 deficiency notice requested an explanation for the 10-kW threshold, "as opposed to another threshold," and asked whether the ISO's position would change once it deploys the automation features it is currently developing. State regulators and clean energy groups have protested the 10-kW minimum, which the ISO said was needed to save staff time reviewing aggregations for interconnection. (See *NYISO Defends DER Aggregation Proposal, 10-kW Minimum*.)

FERC's letter also sought detail on other revisions, including how long utilities would have to review DER reliability and safety study results and what the review would entail. Staff also asked what would constitute a "material modification" to a DER and how the ISO would conduct its aggregation derating process.

Additionally, FERC asked NYISO to justify its new DER metering and telemetry requirements, explain why it is appropriate to use certain reference levels for aggregations, and expand on its definitions related to the elimination of locational based marginal pricing and bid-based reference levels for aggregations.

NYISO must respond to FERC's letter by Aug. 17. ■

— John Norris



NYISO headquarters in Rensselaer, N.Y. | NYISO

### Northeast news from our other channels



*Maine Blows Past Heat Pump Installation Target*

NetZero  
Insider



*NYDPS Report Shows State Emissions Down Nearly 50M MT*

NetZero  
Insider



*Court Dismisses Environmental Justice Petitions Against Weymouth Compressor*

NetZero  
Insider



*OSW Industry Group Sees Growth Beyond Turbulence*

NetZero  
Insider

RTO Insider subscribers have access to two stories each monthly from NetZero and ERO Insider.



# NYISO News

## NYISO Operating Committee Briefs

### June Operations Report

NYISO *updated* the Operating Committee on Thursday that 89 MW of nameplate behind-the-meter solar was added onto the grid in June. The month's peak load was 22,867 MW and the minimum was 11,999 MW.

Mark Younger, president of Hudson Energy Economics, referred to the growing megawatts of energy storage resources in New York and asked what percentage of them can sell capacity resource interconnection service. (See "May Operations Report," *NYISO Operating Committee Briefs: June 22, 2023*.) CRIS rights are needed to take part in NYISO's capacity market and can be obtained either through a transfer from a facility with existing rights or from ISO deliverability studies.

Aaron Markham, NYISO vice president of operations, responded, "I believe only half is available to sell capacity."

Matt Cinadr, a power systems operations specialist with The E Cubed Co., asked whether NYISO has observed any issues with intermit-



© RTO Insider LLC

tent production and the amount of reserve fuel available.

Markham said, "we've definitely seen the levels of intermittent production increasing the volatility on the system, but at this point, it hasn't been a driver of any reserve shortages."

"As the amount of intermittents increases, however, I think we're definitely going to see greater magnitudes of error and need to procure some market products to help manage that going forward," he added.

### DER Manuals

The OC also approved six revised manuals *presented* by NYISO that will support the implementation of distributed energy resources in New York's markets.

These DER manuals include revisions to market procedures like ancillary services, control center requirements and emergency operations, and have been reviewed by all other applicable working or stakeholder groups. (See "DER Manual Updates," *NYISO Discovers Market Problem, Opens Confidential Investigation*.)

NYISO still anticipates these approved manuals will become effective in parallel with other related DER tariff and market models. ■

— John Norris

## Northeast news from our other channels



*Maine One Step Closer to OSW Research Lease*



*Energy Transition Costs Give NY Utility Commissioners Pause*



*Rhode Island Energy Rejects Revolution Wind 2 Proposal*



*Judge Dismisses Groundwater Lawsuit Against South Fork Wind*



*Avangrid, Utilities Reach Deal to Cancel Commonwealth Wind PPAs*



*NYC Housing Authority Wants a 120-Volt Stove Brought to Market*



*NJ Sues as NYC Congestion Scheme Takes Form*



RTO Insider subscribers have access to two stories each monthly from NetZero and ERO Insider.

## NYISO News



# DC Circuit Asked Again to Rule on NYISO's 17-year Amortization

The New York Public Service Commission on Monday petitioned the D.C. Circuit Court of Appeals to review FERC's approval of NYISO's proposal to use a 17-year amortization period in capacity auction demand curves (*ER21-502*).

NYISO proposed to move from a 20-year to amortization period — the assumed time that a hypothetical peaking plant is expected to be operational — to 17 years in response to state legislation that set strict net-zero requirements that are forcing fossil plants to retire sooner.

After rejecting it twice previously, FERC accepted the ISO's proposal in May on remand from the D.C. Circuit. (See *FERC Accepts NYISO's 17-Year Amortization Period Proposal*.) The commission's rejection had been challenged by the Independent Power Producers of New York.

"The unjustified shortening of the amortization period will needlessly increase capacity auction charges by hundreds of millions of dollars," the PSC said. The commission's decision "must be reversed because it fails to provide the requisite 'reasoned analysis.'"

The ISO's revisions were part of a suite of changes called the demand curve reset, which altered the assumptions and scope for capability years 2021/22 through 2024/25 to predict the volume of megawatts needed to meet demand.

— John Norris



D.C. Circuit Court of Appeals | D.C. Circuit Court of Appeals

## Save your 10 to 1 odds for Vegas.

You never want to chance too much in this market.

**NetZero Insider. Stay informed.**

Staying on top of the news and policy changes as the U.S. decarbonizes its economy is a mighty challenge. That's why you subscribe to *NetZero Insider*, your eyes and ears on climate policy and adaptation. Offering comprehensive, timely, unbiased reporting and analysis from Washington and the states, *NetZero Insider* makes it easy for you to be prepared. Whatever the future brings.

**NetZero  
Insider**



## PJM News



# PJM Recounts Emergency Conditions, Actions in Elliott Report

## Gas Plants Responsible for 70% of Generator Outages

By Devin Leith-Yessian

PJM last week released a *report* detailing a litany of emergency actions taken on Dec. 23 and 24 as a severe winter storm sent temperatures plunging across the region and containing new data on generation and market performance.

The RTO's analysis of the storm, commonly called Elliott, provides 30 recommended changes to forecasting, modeling, accreditation and market rules. It says that PJM was well positioned in the days leading up to the storm, but a series of unforeseen factors — including a sharper than expected drop in temperatures, an unprecedented amount of forced outages and abnormal consumer behavior around the holiday weekend — led to several emergency actions having to be taken to maintain reliability, including two blocks of performance assessment intervals (PAIs) in which generator underperformance led to \$1.8 billion in penalties.

“As documented in this report, PJM was prepared for the 2022/2023 winter, as well as Winter Storm Elliott, based on the information available, and conducted extensive preparations and communications with members, adjacent systems and the natural gas industry in advance of the storm, in addition to the regular steps PJM takes each year to prepare for winter,” the report said. “Despite numerous refinements to both the capacity market rules and winter preparation requirements that came out of the 2014 polar vortex, Winter Storm Uri in [February] 2021 and other recent examples of increasingly extreme weather patterns, Winter Storm Elliott created a convergence of

circumstances that strained the grid.”

### Recommendations

Many of the report's findings have guided PJM's recommended changes to the capacity market currently being considered under the Critical Issue Fast Path (CIFP) process, including shifting to a seasonal capacity market, an approach to risk modeling that lays more of the reliability focus on the winter and fuel security requirements. The timing of the report's release has been viewed as critical by many stakeholders participating in CIFP meetings, with voting on proposals scheduled for next month. (See *PJM Completes CIFP Presentation; Stakeholders Present Alternatives.*)

The recommendations outside the CIFP process include increasing education and training for members around emergency procedures and reporting requirements; evaluating the expected load reduction that a voltage reduction could yield as load composition changes; and exploring ways of increasing synchronized reserve performance through procurement practices, compensation and the amount procured.

The report also includes several recommendations related to the intersection between the electric and natural gas industry, such as aligning when gas generators are scheduled in PJM's markets and their fuel nomination cycles, as well as improvements to how they report unit-specific parameters to PJM to improve awareness of their availability. Those proposals are under discussion at the Electric-Gas Coordination Senior Task Force.

The report also states that PJM plans next

month to open a stakeholder discussion on whether the reserve market design, including prices and performance incentives, aligns with operational needs.

### Generator Performance

The forced outage rate for PJM capacity resources throughout the storm was one of the highest PJM has seen in a severe winter weather event, with 24% of resources being offline — exceeding the 22% forced outage rate seen during the polar vortex. Forced outages peaked at 46 GW at 7 a.m. on Dec. 24 and “remained at an unacceptably high level through Dec. 25.”

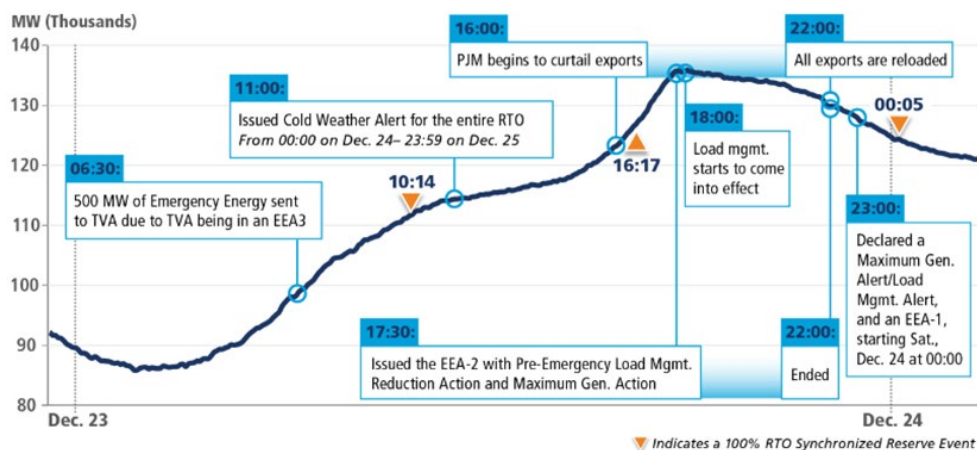
Many of the outages were not immediately reported, resulting in the RTO's operators being told the unit would not be able to operate when they attempted to dispatch the generator.

“While generators are required to provide updates on their operating parameters, including operating status, ramp times and fuel availability, in 92% of generator outages, PJM operators had an hour's notice or less — in most cases, PJM was informed of outages when dispatchers called generators to request them to turn on,” the report stated.

Gas-fired generators made up about 70% of the outages, with gas supply issues being the single largest cause, followed by freezing and problems with plant equipment.

Natural gas well freeze-offs were a major contributor to generators being offline, with production in Ohio halved and down by about 20% in Pennsylvania, with the impact particularly acute for larger gas generators that require a uniform supply of fuel at high pressure. The timing of the storm falling on a holiday weekend also meant that gas trading markets would not be open for a prolonged period, limiting the liquidity of fuel.

“Many gas buyers, especially [local distribution companies] and other customers with more predictable gas usage levels, purchase their gas supplies on Friday for the Saturday, Sunday and Monday gas days. Gas generators in many cases need to buy their gas supply each day of the weekend period based on their awarded or anticipated dispatch. With the majority of gas traded on Friday, the market for gas commodity can become less liquid, resulting in increased supply scarcity and potentially higher intraday gas prices,” the report said.



PJM detailed the emergency actions it took on Dec. 23 and 24 as a sharp drop in temperatures brought record-setting loads and forced outage rates. | PJM

# PJM News



Several portions of PJM's and stakeholders' CIFP proposals are centered around improving gas reliability by revising their accreditation and creating new fuel requirements. On July 10, PJM presented a proposed dual-fuel status for resources that can start and operate on a backup fuel with at least 48 hours of storage. It also discussed creating additional data reporting around whether gas generators have firm fuel or not and potentially reflecting that in their accreditation.

Coal resources made up about 16% of forced outages, largely because of issues with boilers.

Wind resources overperformed during the storm, contributing 13.7% of the bonus megawatts across the two PAIs, despite only making up 1.9% of installed capacity. Nuclear generators also exceeded their commitments, making up 34.5% of the bonus power while representing 17.7% of capacity.

The gas and coal units that did operate performed well throughout the emergency conditions, providing 29.2% and 17.3% of the bonus power.

Synchronized reserve resources also performed poorly throughout the storm. While the first deployment had a response rate of 86.4%, which PJM attributed in part to the short duration of that event, the average was 47.8% across the five deployments, some of which were hours long. PJM noted that deployments are uncommon, especially clustered in a short time frame.

"Five synchronized reserve events over a two-day period is extremely unusual. All five of the events on Dec. 23 and Dec. 24 exceeded 10 minutes in duration, which is again extraordinary. Since the start of 2021, there have been 47 synchronized reserve events, of which only 17 (36%) were more than 10 minutes in duration, and five of these 17 occurred during Winter Storm Elliott," the report said.

Demand response resources provided significantly less than curtailment service providers (CSPs) anticipated they could provide when called upon. When PJM dispatched 4,336 MW of DR on Dec. 23, providers estimated they could provide the full amount, but PJM's analysis of customer load data suggests that only 1.1 GW was delivered. When all available DR was dispatched leading up to the Dec. 24 morning peak, CSPs estimated they could deliver 7,400 MW of the 7,522 dispatched, but PJM said that only 2.4 GW was provided.

"The significant difference between the data provided to PJM about load curtailment capability and the actual performance clearly identify an opportunity and need to improve

the rules and processes regarding load management capability estimates," the report said.

## PJM Operations

In the days leading up to the storm, the conditions appeared to be within the norms that PJM had experienced in the past: Temperatures weren't forecast to be abnormal, and historically loads for the days leading up to Christmas had been overforecast. On the day before the storm's arrival, PJM increased its load forecast for Dec. 23 from 124.6 GW to 127 GW and procured additional capacity and reserves above what was cleared in the day-ahead market. Actual loads came in at 136 GW and were nearly 10 GW above forecast the following day at 131.1 GW.

While providing exports to the Tennessee Valley Authority and other neighbors, some of whom were in emergency conditions, PJM entered its first of four synchronized reserve deployments at 10:14 a.m. in part from numerous generators tripping offline and failing to start, causing the area control error (ACE) to fall. As loads ramped up substantially higher than expected for the Dec. 23 evening peak, many of the generators PJM attempted to dispatch were tripping offline or failing to start, with a rate of 1.8 GW per hour at 2 p.m.

"PJM found that it was unexpectedly and rapidly exhausting its operating and primary reserves because of the unexpected generator outages," the report said.

By 4 p.m. the ACE had fallen to nearly 3 GW, prompting PJM to begin curtailing exports. It also issued a pre-emergency load management reduction action to deploy DR resources and implemented a maximum generation action, directing generators to operate above their economic maximum outputs. This began the first block of PAIs, which would last five and a half hours, or 66 five-minute intervals.

PJM remained in emergency conditions until 11 p.m., but the nighttime load "valley" remained unprecedentedly high, 40 GW over the next highest valley in the past decade, limiting the ability for pumped hydro plants to be refilled. PJM provided some exports to neighbors that were in emergency conditions, and synchronized reserve events were called at 12:05, 2:23 and 4:23 a.m. on Dec. 24.

PJM began curtailing load again at 4 a.m. on Dec. 24 and issued a call for consumers to reduce their electric usage until at least 10 a.m. On top of forced outages, about 6 GW that was scheduled to come online for the morning peak failed to start and PJM re-entered emergency conditions at 4:20 a.m. with DR deployments and a maximum gener-

ation action five minutes later. At 4:52 a.m. it issued a voltage-reduction alert.

Approaching the morning peak at 8:30, which capped out at 130 GW of load, PJM was receiving emergency imports from NYISO and TVA, and Duke Carolinas and Duke Energy Progress were shedding load. The report states that forced outages around the morning peak amounted to 41 GW and 200 unit trips. PJM issued a voltage-reduction warning at 7:15 a.m. and remained in emergency conditions until it canceled the maximum generation action and DR deployment at 10 p.m.

At 4:58 a.m., an 850-MW generator tripped offline, causing the ACE to fall below 1,500 MW and prompting the start of a NERC Disturbance Control Standard (DCS) event, which requires that PJM recover ACE to at least 630 MW within 15 minutes. PJM called for an additional 500 MW of shared reserves from the Northeast Power Coordinating Council, having received 1 GW shortly before the start of the DCS, and was able to recover the ACE after 15 minutes and 52 seconds.

At the height of the emergency, the report said that if PJM lost emergency imports or another large generator tripped, a voltage-reduction action may have been necessary.

"If another large unit was lost or imports from NYISO into PJM were cut, PJM would have considered initiating a voltage-reduction action, which would have resulted in approximately 1,700 MW of relief. ... If necessary, this action would have been followed by a manual load dump warning to communicate load dump allocations to transmission owners," the report said.

Several complaints to FERC related to non-performance penalties accrued during the storm argue that PJM violated its tariff by continuing to export while implementing emergency procedures. The Elliott report laid out a series of instances in which PJM curtailed non-firm exports as conditions in the RTO worsened, but it stated that cutting all aid to its neighbors wouldn't have prevented PJM from entering emergency conditions and would have likely worsened emergencies in surrounding regions that were in load shed. (See [FERC Sends Elliott Complaints Against PJM to Settlement Judge](#).)

"Even if the operators had cut all non-firm exports, there would have been a deficit of at least 1,789 MW needed to satisfy PJM load and firm exports. Pre-emergency and emergency actions thus would have been necessary to satisfy capacity needs even if all non-firm exports had been cut," the report said. ■



## PJM News



# PJM Promises to Work with Ohio Legislators on Cost Allocation

## Legislators Wary of Ohioans Paying for Illinois-caused Changes

By James Downing

PJM CEO Manu Asthana thanked a group of Ohio legislators in a letter Friday for their “constructive engagement” on the cost allocation implications of Illinois’ climate policies that will require fossil plants to start shutting down starting in 2030. (See [Ohio Legislators Raise Concerns About Cost Impact of Illinois’ CEJA](#).)

Ohio House Public Utilities Committee Chair Dick Stein (R) and Senate Energy and Public Utilities Committee Chair Bill Reineke, along with 10 other colleagues, sent PJM a letter raising concerns about a preliminary estimate the RTO produced saying Illinois’ policy of retiring thermal power plants would lead to about \$2 billion in transmission upgrades. In the letter and in meetings with RTO staff, they asked for a more formal estimate, including the assumption that Ohio is left out of that cost allocation.

“We appreciated the frank and open discussion regarding your concerns and your understanding of the limitations PJM faces in conducting exclusionary transmission studies,” Asthana wrote back. “The model that PJM uses for transmission analysis is not configured in a way that would let us exclude Ohio from the study results. The high-voltage transmission system is an interstate system, and electrons travel without consideration for state boundaries.”

Asthana said PJM is working to reform its markets and transmission planning, and in that effort, it hopes to better understand the impacts of federal and state policies on its system. “PJM pledges to work with Ohio policymakers to keep you fully informed of the transmission project development and cost allocation implications of our ongoing planning efforts related to this dynamic system.”

The Ohio legislators had written that the state has had success with PJM’s competitive



PJM CEO Manu Asthana | © RTO Insider LLC

markets, and Stein repeated that assertion in an interview with *RTO Insider* last week. But he said his constituents and others should not have to pay for the impacts of another state’s policies.

“Ohio residents — and Pennsylvania and other surrounding states that are going to have to feed that power to them — shouldn’t be responsible for a policy another state makes that is that costly across the region,” Stein said.

Stein said he and his colleagues would continue to work with stakeholders in other states to ensure that reliability and affordability are maintained as the grid becomes more clean.

Illinois is not the only state shifting away from fossil fuel power plants to cleaner generation, the latter of which is exclusively being paid for by those state’s ratepayers. That new, renewable generation is going to add cheap power to the grid, which would tend to lower wholesale prices everywhere in PJM.

Those wholesale price impacts are part of the calculus going forward, but Stein said another concern is the capacity market and its continued ability to keep dispatchable generation that Ohio plans to keep using online. One option Stein said is off the table is state subsidies for those dispatchable plants, as the Ohio legislature does not want a repeat of House Bill 6, which was influenced by a bribery scheme by FirstEnergy. (See [Former Ohio House Speaker Householder Sentenced to 20 Years in Prison](#).)

“All we’re trying to do is make sure we advocate for what we think is good policies here for Ohio; obviously, the people in Illinois are advocating [for] what they think the people in Illinois want,” Stein said. “And it really puts the most pressure on PJM because somehow they’ve got to bring all these elements together and make everybody happy. And as we well know, sometimes that’s not easy, if at all possible.” ■

### Mid-Atlantic news from our other channels



[NJ Sets Advanced Clean Cars II Proposal in Motion](#)

NetZero  
Insider



[NJ Rejects Solar Bids as Too Expensive](#)

NetZero  
Insider

RTO Insider subscribers have access to two stories each monthly from NetZero and ERO Insider.

# PJM News



## Maryland Climate Report Lays out Pathways to Achieving Goals

By K Kaufmann

To cut its greenhouse gas emissions 60% below 2006 levels by 2031, Maryland will need to grow solar and wind generation 500% across the state, while pushing for early closure of natural gas plants and convincing the 11 other states in the Regional Greenhouse Gas Initiative (RGGI) to up their emission-reduction targets to 100% by 2045.

Those ambitious goals are just a few of a long list of actions the state could take to reach the GHG reduction and clean energy targets set out in the Climate Solutions Now Act (SB 528) passed in 2022, according to the *Maryland Climate Pathway* report released recently by the state's Department of the Environment (MDE). (See *Md. General Assembly Sends Climate Solutions Bill to Hogan*.)

The 60% cut is an interim step toward the law's goal for Maryland to slash GHG emissions to net-zero by 2045, one of the most ambitious climate goals in the country. Another provision of the law required MDE to draft a plan for implementing the CSNA, to be submitted to the governor and General Assembly by June 30.

The Center for Global Sustainability at the University of Maryland College Park authored the report, which was released on June 30, kicking off a comment period and a series of live and virtual public hearings. The first live public hearing is scheduled for today at Bowie State University in Bowie.

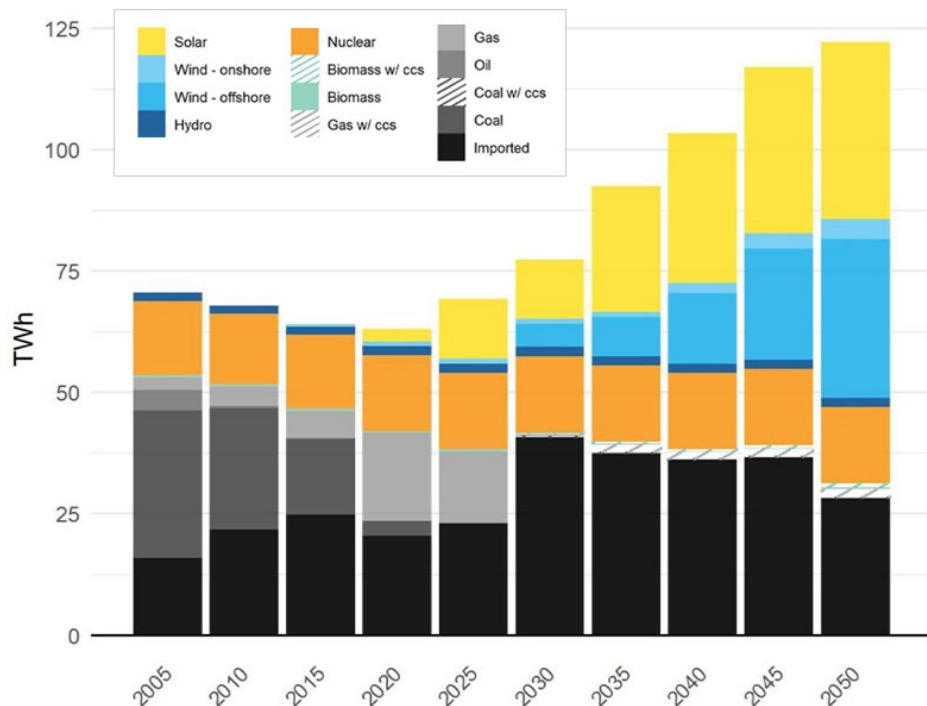
A final virtual hearing is scheduled for Sept. 26, and a final report is due by year-end.

Gov. Wes Moore (D) hailed the report as a "science-based path" and "a major step forward in addressing the historic challenges we face when it comes to our climate goals."

"The report outlines a host of options to not only help address climate change, but also to help create a new center for industry in Maryland that will promote equity, ensure economic benefit and make Maryland a world leader in sustainable practices for generations to come," Moore said.

"The integrity of the report is strong," Kim Coble, executive director of the Maryland League of Conservation Voters, agreed, while stressing the 118-page document is neither a policy statement nor a final set of decisions or recommendations.

"It was never meant to be a policy statement,"



Electricity generation mix in Maryland over time in Maryland's Climate Pathway, including imported electricity from the PJM grid | MDE/CGS

Coble said. "It says, 'Here are pathways to get to this very ambitious reduction goal. ... You can do this; you can do that; you can accelerate here.'"

Accelerated action by lawmakers and others will be critical, Coble said. The report notes that Maryland already is halfway to the 60% target, with GHG emissions down 36.7 million metric tons (MMT) as of 2020. But the report says that even if all the CSNA's provisions, along with other existing state policies, are fully implemented, Maryland still will fall short of the 2031 target by about 10.6 MMT.

Filling that gap will require new policy actions that may or may not be politically or economically feasible, says Michael Powell, an environmental lawyer at Gordon Feinblatt, who previously served as principal counsel for MDE.

For example, the report calls for new standards requiring zero-emission home appliances and all-electric new construction, goals that Powell says may be overly ambitious, given the diverse demographics and political leanings across different regions in the state.

"People seem a little more willing to look at heat pumps in new construction, but there seems to be very strong resistance to giving up

gas stoves," he said.

Other potential steps on the report's pathway to the 60% cut in GHG emissions include:

- creating an in-state, economy-wide cap-and-invest program, in addition to RGGI;
- shifting the passenger vehicle fleet and medium- and heavy-duty trucking fleet to zero-emission vehicles via implementation of California's Advanced Clean Cars II rule, which Moore adopted earlier this year, and the clean trucks targets set in the Clean Trucks Act signed into law in April;
- updating the state's building codes and setting new building performance standards;
- shifting the electricity Maryland imports to clean power by getting RGGI to set a 100% emissions reduction goal by 2045; and
- leveraging the green hydrogen and carbon capture tax credits in the Inflation Reduction Act to develop alternative fuels and energy sources in the state.

Under the Advanced Clean Cars II rule, all new light-duty and passenger vehicles sold in the state will need to be zero-emission by the 2035 model year. The Clean Trucks Act calls



# PJM News



for MDE to set regulations for increasing sales of zero-emissions trucks by Dec. 1, 2023, but also to perform a needs assessment report by Dec. 1, 2024.

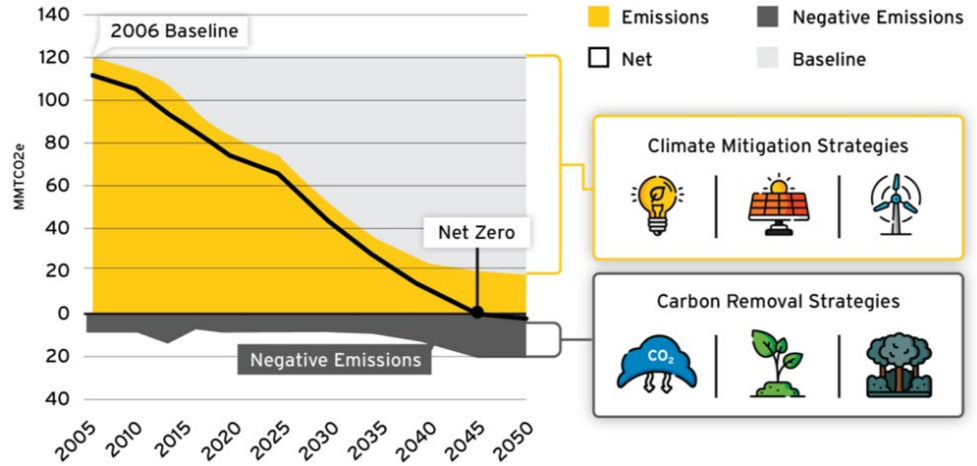
## Possible, not Probable

A major concern about the report is its lack of specificity on how its ambitious goals will be achieved, what the price tag will be and how those costs will be allocated.

For example, Powell pointed to considerable obstacles to decarbonizing imported power, which accounts for about 40% of its electric power, according to the U.S. Energy Information Administration.

Beyond PJM's massive interconnection queue — which stands around 290 GW, most of which is renewable energy and storage — Powell sees growing opposition to utility-scale solar across the state, a trend that is occurring across the country.

“Pile those one on top of the other, [and] it means that utility-scale solar is actually down in the state,” he said. “The plan calls for PJM [states] to adopt a net-zero target. Looking at the political landscape, I think that’s a real challenge.”



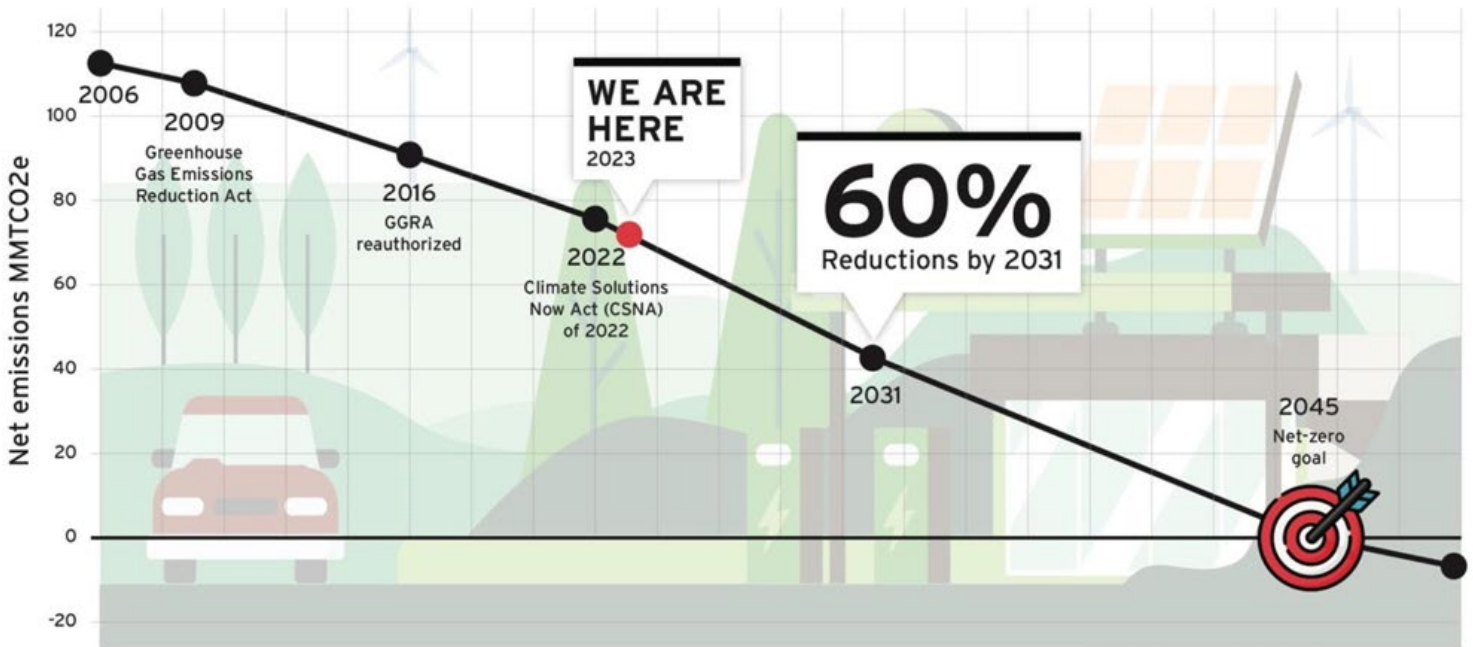
Emissions trajectory to reach Maryland's net-zero target in 2045 | MDE/CGS

Coble also noted that the report makes some faulty assumptions about current levels of renewable energy adoption in the state. The state's current renewable portfolio standard — calling for 50% of the state's power to be renewable by 2030 — includes a 14.5% carve-out for solar. But according to the Solar Energy Industries Association, solar now provides only 5.17% of the state's power.

Powell sees the goals set out in the report as possible, but maybe not probable.

“We need to find out, is the General Assembly willing to put the kind of funding and incentives for some of the proposals in the report?” he asked. “Because I personally do not believe that private enterprise can achieve those goals without a lot of state funding.”

Coble said another key factor will be “courageous leadership from our elected officials, from this administration. Courageous leadership is going to make or break the success of this, more than anything else.” ■



Timeline with milestones set by Maryland for achieving climate goals | MDE/CGS

## PJM News



# DC Circuit Sides with FERC on Alleviating Spiking Prices in Virginia

By James Downing

The D.C. Circuit Court of Appeals on Friday upheld a FERC decision suspending the application of PJM's transmission constraint penalty factor (TCPF) after it led to spiking prices that could not be addressed on Virginia's Northern Neck Peninsula (22-1090).

The TCPF caused prices to spike on the peninsula in the Chesapeake Bay after a transmission line was taken out of service early last year so that the local grid could be upgraded. Cheaper generation or demand response were not available in the area to offset its impact, so PJM requested that it suspend the rule in this case as the higher prices were incapable of eliciting any kind of market response.

FERC approved PJM's request, with a dissent from Commissioner James Danly. Energy trading firm Citadel FNGE appealed the decision to the D.C. Circuit. Judge Justin Walker (a Trump appointee) dissented from the majority in the case, saying the court should have remanded it to the commission. (See [FERC Approves Pause of PJM Tx Constraint Penalty Factor in Va.](#))

PJM has since changed the rule so that the TCPF will be suspended automatically in similar circumstances going forward. (See [FERC Approves PJM Proposal to Reduce Congestion Penalty During Grid Upgrades.](#))

Chief Judge Sri Srinivasan and Judge Patricia Millet (both Obama appointees) sided with FERC, saying it was reasonable to suspend the rule, which is meant to get a market response that would ultimately solve the congestion at issue.

"Because application of the penalty factor increased costs for consumers without a commensurate benefit, the commission reasonably found that its application in this context was unjust and unreasonable," the court said.

The TCPF represents the maximum cost that PJM will incur to resolve the problem causing congestion, with an algorithm seeking the least-cost way to relieve congestion, which if not available leads to prices of \$2,000/MWh.

With the transmission line out, the peninsula's customers could only be served by two other transmission lines and a set of combustion turbine units.

"That lack of available resources caused the local marginal price to fluctuate drastically in times of congestion," the court said. "For example, even when the turbine units were

fully operating in the early morning hours, they were insufficient to prevent congestion, so the penalty factor kicked in."

Local solar plus those combustion turbines were able to mitigate prices when the sun was out, but the penalty factor was unable to send consistent or reliable signs about whether an investment or response to the congestion was needed.

"Material short-term investments would not occur, PJM explained, because new resources would not come online until after the Lanexa line upgrade was completed," the court said. "At that point, the demand for the newly placed resource would evaporate."

Citadel challenged PJM, saying that the RTO failed to prove a link between the temporary \$2,000/MWh prices and what consumers in the area actually paid. It also argued that PJM failed to prove that nothing could respond to the price signals and argued suspending the rule would inject regulatory uncertainty into the market.

The court said FERC was not required to show that the spiking congestion costs would impact retail rates because the Federal Power Act only refers to the unjustness and unreasonableness of rates.

"The commission concluded that increased prices on one side of the balance without any value on the other side of the scale — all pain and no gain — were unjust and unreasonable," the court said.

While customers pay a zonal rate, the higher congestion costs would go into that calculation, leading to overall higher rates, and Citadel failed to show any offsetting impacts, it added.

The firm also argued that the suspension would harm the financial transmission rights market, in which it participates.

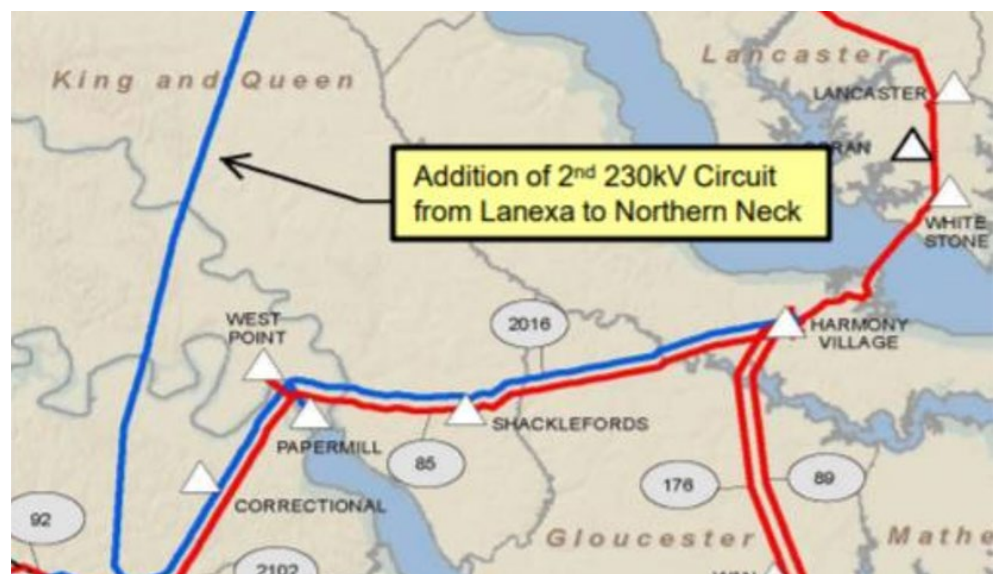
"But the temporary suspension of the penalty factor in one geographically unique area does not stop financial firms from benefiting from congestion pricing," the court said. "Financial firms will still receive congestion costs, albeit less in one small part of the grid, during the temporary suspension of the penalty factor."

### Walker's Dissent

Judge Walker said the court should have remanded the order to FERC for further proceedings, with Citadel's arguments having convinced him. Transmission expansion was sped up after FERC's order, which Citadel argued showed that the constraint was working.

"Yet when FERC was later given evidence that the penalty factor was incentivizing transmission investment, FERC moved the goalposts," Walker said. "Instead of reasoning, as it had before, that the rate was providing no benefit, FERC instead said any benefit it provided wasn't big enough."

That shift in standards was arbitrary and capricious, so the order should have been remanded, he added. ■



A map PJM filed with FERC showing the transmission construction work that led to the spiking prices in the case. | PJM



# PJM News



## PJM MRC/MC Preview

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

*RTO Insider* will be covering the discussions and votes. See next week's newsletter for a full report.

### Markets and Reliability Committee

#### Consent Agenda (9:05-9:10)

The committee will be asked to endorse as part of its consent agenda:

B. proposed *conforming revisions* to a slate of manuals and PJM practices addressing the interconnection process overhaul approved by FERC last year (*ER22-2110*). (See "Manual Revisions for Interconnection Process Overhaul Sent to MRC," *PJM OC Briefs: July 13, 2023*.)

C. proposed *revisions* to Manual 13: Emergency Operations resulting from its periodic review.

#### Endorsements (9:10-9:25)

##### 1. NERC TPL-001-5.1 Manual 14B Revisions (9:10-9:25)

PJM's Stanley Sliwa will present proposed *revisions* to Manual 14B: PJM Region Transmission Planning Process to conform to NERC's TPL-001-5.1 standard. The proposal was endorsed by the Planning Committee earlier this month through the quick-fix process, which allows for a problem statement, issue charge and solution to be brought concurrently and voted on in the first meeting. (See "Stakeholders Endorse Quick Fix Manual Revisions to Conform to NERC Standards," *PJM PC/TEAC Briefs: July 11, 2023*.)

The committee will be asked to endorse the proposed manual revisions upon first read.

### Members Committee

#### Consent Agenda (11:35-11:40)

The committee will be asked to endorse as part of its consent agenda:

B. proposed clarifying *revisions* to PJM's tariff, Operating Agreement and Reliability Assurance Agreement, which were approved by the

Governing Documents Enhancements and Clarifications Subcommittee in April.

C. a proposed *solution* and corresponding tariff revisions related to calculating the smooth supply curves for the Base Residual Auctions. The changes are meant to clarify that PJM will only publish smooth supply curves following BRAs and not Incremental Auctions. (See "Stakeholders Approve Tariff Clarification on Smooth Supply Curves," *PJM MRC/MC Briefs: June 22, 2023*.)

Issue Tracking: *BRA Smooth Supply Curves*

#### Endorsements (11:40-11:55)

##### 1. IROL-CIP Cost Recovery (11:40-11:55)

PJM's Darrell Frogg will present a *proposal* to create a cost-of-service mechanism for generators designated as critical to the derivation of an interconnected reliability operating limit under NERC's Critical Infrastructure Protection standards. (See "MRC Endorses IROL-CIP Cost Recovery," *PJM MRC/MC Briefs: June 22, 2023*.)

Issue Charge: *IROL-CIP Cost Recovery* ■

— Devin Leith-Yessian

## National/Federal news from our other channels

- 

Biden Admin. to Auction First OSW Leases in the Gulf of Mexico


- 

X-energy, Energy Northwest to Develop up to 12 SMR Nukes


- 

Summit Showcases New Technologies to Accelerate Industrial Decarb


- 

Industry Cool on Revised Winter Weather Standards


- 

NERC Committee Takes Action on Standards Projects


- 

NERC's Cancel Details Grid Threats to House Energy Subcommittee



*RTO Insider* subscribers have access to two stories each monthly from *NetZero* and *ERO Insider*.

# PJM News



## PJM Updates Risk Analysis; Stakeholders Present Revised CIFP Proposals

*Daymark-EKPC Proposal Aims to Incentivize Performance, Preserve Long-term Resource Viability*

By Devin Leith-Yessian

Stakeholders discussed new proposals to revise PJM’s capacity market and discussed updates to the RTO’s risk modeling methodology during a meeting of the Critical Issue Fast Path (CIFP) process July 17.

The meeting included a second proposal from Daymark Energy Advisors and the East Kentucky Power Cooperative (EKPC) that would modify PJM’s proposal and a presentation from American Municipal Power (AMP) that suggested several changes to the Independent Market Monitor’s proposal.

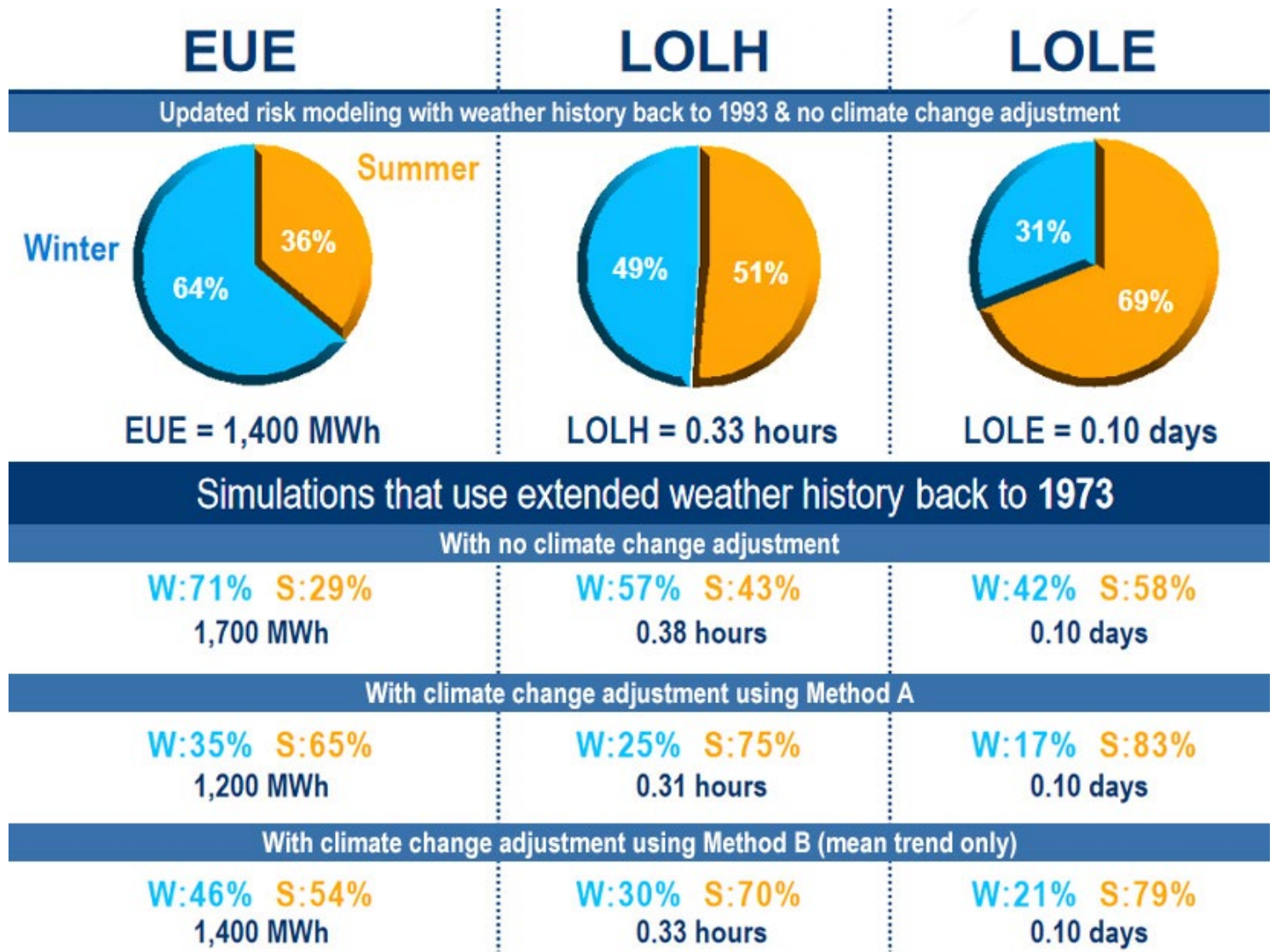
Daymark CEO Marc Montalvo described its second *joint package* with EKPC as a trimmed-down version of the PJM proposal, with changes including retaining the annual Base Residual Auction structure instead of moving to a seasonal auction and preserving the fixed resource requirement structure. (See “Daymark and EKPC Propose Base and Emergency Capacity,” *PJM Completes CIFP Presentation; Stakeholders Present Alternatives.*)

While the proposal retains PJM’s proposed marginal effective load-carrying capability (ELCC) accreditation model, Montalvo said it’s not the preferred long-term solution for a forward market structure as more renewables

come online.

The proposal would use an hourly reimbursement model that would pay resources for the capacity they provide in each hour of a delivery year, meaning that they would offer their committed capacity into the real-time and day-ahead markets and follow dispatch. Generators would not be paid for their capacity for hours in which they do not do so.

Natural gas resources that have an offer in the markets but are called on too late to nominate for fuel according to the gas pipeline procurement timelines would retain their capacity commitment. Montalvo said the interaction between the gas and electric timelines are an



PJM updated its risk analysis figures, showing an shift back toward risk being concentrated in the summer. | PJM



## PJM News



operational issue and ensuring that dispatch doesn't conflict would be PJM's responsibility.

Resources would be able to engage in bilateral contracts to meet their capacity obligations and would be expected to do so when prolonged outages are anticipated.

Montalvo said the objective in drafting the proposal was to create a penalty framework that incentivizes performance without jeopardizing the viability of long-term resources when they're assessed.

### AMP Suggests Changes to Monitor Package

AMP's Lynn Horning gave an *overview* of several changes the organization believes would build on the sustainable capacity market design proposed by the Monitor.

AMP has its own CIPF proposal that would create subannual accreditation and replace the Capacity Performance penalty construct with a reward and penalty system built around testing performance and providing "pay as you go" capacity payments. (See "AMP Seeks Subannual Accreditation," *PJM Stakeholders Refine CIPF Capacity Market Proposals*.)

Horning said the Monitor's proposal has the benefit of focusing on defining demand for each hour and matching that with adequate load. It also includes locational elements and simplifies the auction clearing process. She said the Monitor's proposal to create a new accreditation model, the modified equivalent availability factor, is also preferable to PJM's marginal ELCC approach because it avoids the

latter's interactive effects and improving the focus on real-time operations.

The changes to the Monitor's proposal made by AMP include allowing natural gas generators to submit start, notification and minimum run time parameters on a shorter time frame based on pipeline conditions and to permit them to reflect a wider breadth of costs related to pipeline service in capacity or energy offers.

The AMP proposal also calls for retaining energy efficiency resources in the capacity market — the Monitor's package would remove them — and differentiating the availability of demand- and supply-side demand response resources.

Planned capacity resources would be required to notify PJM if they plan to submit an offer in the BRA prior to the posting of the planning parameters for that delivery year, which has been a topic of stakeholder discussion since the absence of planned resources in the 2024/25 BRA was attributed to PJM delaying the release of auction results last year. Resources that do not indicate that they plan to participate in the auction would be permitted to offer only energy bids. (See *FERC OKs PJM Proposal to Revise Capacity Auction Rules*.)

AMP also called for a second CIPF phase to discuss holding BRAs closer to their associated delivery year, creating a subannual procurement system with time-of-day procurement assessments and exploring additional ways of creating comparability between the capacity market and FRR systems.

### PJM Updates Risk Analysis Figures

PJM also presented *updated* reliability risk modeling figures, aiming to capture a broader range of threats to reliability and evaluate the differences between how an expected unserved energy (EUE) method of deriving the requirement would capture risk and the status quo loss-of-load expectation. (See *PJM Continues CIPF Discussion of Seasonal Capacity Market Proposal*.)

The new data pare back the preliminary findings PJM presented at the May 30 CIPF meeting, which showed a sharp shift in risk toward winter, particularly under the EUE model. While the new data still have risk concentrated in the winter, the season now makes up only about 64% of the risk under the baseline model, rather than the 96% in the preliminary data.

The presentation also included three additional models that include a longer historical weather lookback — going back 50 years instead of 30 — and two adding in climate change adjustments as well. The longer historical lookback increases the winter risk to 71%, but the two climate change variants both swing risk back to being predominantly in the summer.

Method A, which results in the higher summer risk, estimates the trend that climate change is having on seasonal minimum, mean and maximum temperatures to create adjustments that are applied to historical temperatures to consider how past weather would manifest under future climate conditions. Method B follows the same system, but only for mean temperatures. ■

# Save your 10 to 1 odds for Vegas.

You never want to chance too much in this market.

**ERO Insider. Stay informed.**

Staying on top of cybersecurity alerts and new reliability standards is a mighty challenge. That's why you subscribe to *ERO Insider*, your eyes and ears on electric reliability. Offering comprehensive, timely, unbiased reporting and analysis from inside the room at NERC and Regional Entity meetings, *ERO Insider* makes it easy for you to be prepared. Whatever the future brings.



## SPP News

# REAL Team Endorses Winter Resource Requirement

## Stakeholder Group Digging Deep into Resource Adequacy Issues

By Tom Kleckner

AUSTIN, Texas — Texas commissioner Will McAdams, chair of SPP's Resource and Energy Adequacy Leadership (REAL) Team, set the tone from the outset when he shed his blazer and rolled up his sleeves as the group gathered for its meeting Wednesday.

"It's July in Texas. Let's get started," he said.

For the next nine hours of what McAdams called a "crusher" of a meeting, the REAL Team discussed issues ranging from flexibility and ramp associated with capacity obligations to maintenance outages and their effect on capacity obligations. A central theme emerged around how SPP compensates load-responsible entities for availability or penalizes them for lack of availability during critical hours.

"It's a lot of ships that we hope are moving in the same direction now, but it's a lot to coordinate," McAdams told fellow commissioners during an open meeting the following day.

The team met its first objective when it endorsed a winter resource adequacy requirement (RAR) approved recently by the RTO's Markets and Operations Policy Committee. The revision request (*RR549*) will go before SPP's state regulators and its Board of Directors this week for final consideration. (See "Members Endorse Winter Resource Adequacy Requirement for 2024-25," *SPP Markets and Operations Policy Committee Briefs: July 10-11, 2023*.)

The measure applies the same level of validation, study and assessment requirements to the winter season (December through March) that is applied to the summer season, including a deficiency payment for capacity shortfalls. It also assigns an annual deficiency payment to prevent duplicate payments for the same capacity within an annual timeframe.

RR549 is not without its detractors. It barely met MOPC's approval threshold and cleared the REAL Team with two votes to spare, 9-5. Members removed one of two revisions added during the MOPC discussion over confidentiality concerns.

The measure is effective for the 2024/25 winter season (December through March).

"It was a hairy deal," McAdams told the Texas Public Utility Commission. "It's a real shootout. Just trying to provide the mechanisms that ensure resource adequacy is not an easy thing.



OPPD's Colton Kennedy (center) briefs the REAL Team on Supply Adequacy Working Group's projects | © RTO Insider LLC

These are not easy decisions."

SPP's board and state regulators created the REAL Team, comprised of 14 independent directors, members, and regulators and their staff, earlier this year. The team has been meeting every three weeks since May. (See *SPP's REAL Team Swings Into Action*.)

"I think the REAL Team is a bit of a fusion center," McAdams told *RTO Insider* after the team's first in-person meeting in May. "It's bringing together corporate members, components of the Members Committee, the stakeholder components of SPP together with [Regional State Committee] leadership as well as board leadership ... so that topics can be flagged and, frankly, polled to a degree in terms of resistance to certain staff recommendations and or support."

The team has created sub-groups focused on resource adequacy, markets and operations. They will lean heavily on the Supply Adequacy Working Group (SAWG), which has primary responsibility for nine of the 11 objectives assigned to the REAL Team.

Its next milestone comes in October, when it plans to consider a ramping capacity require-

ment, begin addressing the footprint's need for reliability attributes in the resource mix and endorse tariff changes — *RR554* and *RR568*, respectively — that codify performance-based accreditation (PBA) and effective load carrying capacity (ELCC) policies.

The SAWG is developing both tariff revisions. It has created limitations for catastrophic exemptions that apply to all resource types that will sunset after 10 years of historical data from the units. The working group also has simplified the ELCC tiers by using a two-tiered approach with firm and non-firm transmission service.

More important, the SAWG has prepared a system methodology for upcoming loss-of-load expectation and ELCC studies that evaluates the collective reliability contribution of all ELCC resources to ensure they are correctly accredited.

SPP is responding to FERC's recent order admitting it had mistakenly approved the RTO's proposal to use an ELCC methodology to accredit wind and solar resources based on historical performance. The commission has granted renewable developers a rehearing of



# SPP News

its original order. (See [FERC Grants Rehearing of SPP Capacity Accreditation Proposal](#).)

The grid operator's Market Monitoring Unit said it had equity and accountability concerns over the PBA and ELCC. It recommended measuring individual performance in the PBA process against the top 3% net peak load and including all outages, whether forced maintenance or out-of-management control, in the accreditation processes.

The MMU offered two recommendations it said would improve reliability that left one commission staffer shaking his head: the PBA measurement against the top 3% net load and implementing a true-up process at the end of each season.

Keith Collins, vice president of market monitoring, shared an event his team picked up just before July 4, when SPP had issued a resource advisory and then a conservative operations call. He said the MMU became aware of several hundred megawatts of resources, accredited for the summer, that were on outages because of staffing issues.

"They were aware ... that whatever they were going to do was going to be accounted for in performance-based accreditation, and they did it anyway," Collins said. "If we want to think of the incentives and what we're doing to keep people from making those decisions and contributing to a reliable system, particularly when we need it the most, then we're not there yet — because they did it anyway."

SPP's continued integration of renewable resources over conventional or thermal resources has created operational uncertainty and shortened the staff's ability to commit resources, according to C.J. Brown, director of system operations. On Sunday, the RTO issued a resource advisory because of high loads, load and variable energy forecast uncertainty, and resource outages; it is at least the sixth resource of conservative operations advisory SPP had called since April.

"Those are very challenging and stressful situations," he said. "You feel like every one thing you give up could put you into a situation where you're not able to cover a certain percentage of uncertainty. We have to do that leading up to and including real time, and that starts as much as seven days out. Typically, about four days out is our longest lead time when a decision has to be made, but that's just a continual process these days."

"Two years ago, we might have made that decision two or three times a year," Brown added. "Now it seems like it's every other week."



Keith Collins explains Market Monitoring Unit's view on accreditation proposals. | © RTO Insider LLC

To maintain current levels of capacity until sufficient resource adequacy measures are in place, staff are developing policies — likely including some form of system support resource or reliability must-run contracts used by other grid operators — that "strongly encourage" generation owners to reconsider and postpone retirements. Based on utilities' integrated resource plans and information gleaned through the transmission process, SPP expects 6.5 GW of gas- and coal-fired resources to retire by 2030.

The problem is compounded by hints of reluctance from renewable developers about investing in an RTO where conventional resources are retained.

"What we're hearing is some of the recommendations and activities we're making in the SAWG space and in the REAL space might be shifting renewables to other more profitable regions," Casey Cathey, senior director of grid asset utilization, told the REAL Team. "Are we defining the requirements at a razor's edge to where we're just maintaining the fleet and barely improving? I think we need more markets, we need more carrots to be able to better optimize over a longer time horizon so the LREs can kind of appreciate what kind of supply we actually better recognize ... we want to make sure we're sending the right signal that if we are retaining our conventional fleet, that we have a path forward, because right now it seems like there's a whipsaw."

SPP's [generator interconnection dashboard](#) indicates solar resources account for 43% of the projects in the GI queue (45.6 GW of 105.5 GW), followed closely by wind (26.1 GW, 24.8%) and battery storage (19.9 GW, 18.8%). Cathey said solar requests exceeded those for wind for the

first time earlier this year.

"We can't wait [for the solar]. We've had 250 megawatts of installed solar for a long time, but we have just not seen that build," he said. "We've been thinking for about six to seven years that this might be our next frontier. Wind is highly volatile, it can be helpful, but a lot of times when wind winds down, solar's actually doing pretty good."

Cathey said the potential 90 GW of solar, wind and batteries in the queue doesn't give him "a lot of comfort," however.

"If we installed all gigawatts of wind, solar and batteries and we also retired a good portion of our conventionals, we would still have C.J. describing some slides of some conservative operations, and so we need to be balanced here," he said. "Hopefully, a lot of this gets built but we also need to make sure we're sending the right signal to either keep resources, conventionals, online for a period of time until another technology can take over."

## RA Forum Draws Industry Interest

The REAL Team will hold its next in-person meeting Sept. 8 in Dallas, the day after SPP hosts a [Resource Adequacy Summit](#) at DFW International Airport.

What started as a meeting limited to 75 attendees has blown up into an industry event that has drawn the interest of at least two FERC commissioners, according to organizers. NERC's and EPRI's CEOs, Jim Robb and Arshad Mansoor, respectively, have accepted invitations.

"There's heavy interest nationally to provide forums where the reliability standard concept can be discussed on a national basis, what that involves and what defines resource adequacy, not just within ISOs but regionally," McAdams said.

SPP has extended invitations to its neighbors, with MISO already accepting. ERCOT also has been invited to attend.

Even without ERCOT, Texas will have a heavy presence. McAdams said PUC staff will attend and energy consulting firm E3 will discuss valuing availability. E3 proposed an LSE reliability obligation construct and several other market designs for the Texas grid operator following the disastrous and deadly 2021 winter storm.

SPP has secured a larger meeting space than originally planned to handle the increased attendance. ■

## Company Briefs

### Amazon Says Carbon Emissions Fell for 1st Time in 2022



Amazon.com's carbon emissions ticked lower for the first time since the company began

reporting the figure, thanks to increased purchases of renewable electricity and a big slowdown in the retailer's sales growth.

The company emitted 71.27 million metric tons of carbon dioxide equivalent in 2022, down 0.4% from the previous year, it said in its annual [sustainability report](#), published on July 18.

Amazon also said its carbon intensity, a measure of how much the company emits for every dollar of merchandise sold, is down 7% during the same period by using more solar and wind to power its operations and adding about 9,000 electric vehicles to its delivery fleet.

More: [Bloomberg](#)

### Volkswagen Developing Wireless EV Charging



Volkswagen last week confirmed that it's working on wireless electric vehicle charging, with its own patented coil and charging pad design with silicon-carbide materials, aimed partly toward daily garage use.

According to Volkswagen, its original design was a 6.6-kW prototype, which would perform at charge rates comparable to 240-V systems. But in early trials in conjunction with a silicon carbide inverter, the system has performed up to 120 kW. The company has a goal of upping the system to 300 kW. The project is being done at Volkswagen's Knoxville Innovation Hub, in conjunction with Oak Ridge National Lab and the University of Tennessee.

The company also suggested that the

system could increase the driving range of future EVs, as their battery pack frames would not have to be as heavy.

More: [Green Car Reports](#)

### Stellantis to Build 2nd US EV Battery Plant in Joint Venture with Samsung



Stellantis says it will build a second U.S.

electric vehicle battery factory in a joint venture with Samsung.

The Dutch automaker didn't disclose the location but said Monday that it signed a memorandum of understanding with Samsung under its existing joint venture called StarPlus Energy.

The new plant will open in early 2027, joining a joint-venture facility in Kokomo, Ind., that's already under construction and scheduled to start production in early 2025.

More: [Associated Press](#)

## Federal Briefs

### Senate Confirms EPA Enforcement Chief 2 Years After Initial Nomination



The Senate on Thursday confirmed **David Uhlmann**, President Joe Biden's nominee for assistant administrator of EPA's Office of Enforcement and Compliance Assurance, in a 53-46 vote more than two years

after his initial nomination.

Uhlmann, an environmental law professor at the University of Michigan Law School, was first nominated by Biden in June 2021; the president resubmitted his nomination twice. Sen. Joe Manchin (D-W.Va.), who voted against Uhlmann's confirmation, had vowed earlier this year to oppose all EPA nominees in protest of how the administration has implemented the Inflation Reduction Act.

Three Republicans, Bill Cassidy (La.), Lisa Murkowski (Alaska) and Susan Collins (Maine) voted to confirm Uhlmann.

More: [The Hill](#)

### Schumer Urges FERC to Complete Transmission Rules 'Expediently'



Senate Majority Leader **Chuck Schumer** (D-N.Y.) wrote to FERC on Thursday urging it to "expeditiously" finalize proposed rules regarding transmission planning and backstop siting authority.

Most of Schumer's letter concerned FERC's Notice of Proposed Rulemaking that would direct transmission providers to revise their planning processes to identify infrastructure needs on a long-term, forward-looking basis (RM21-17). He said that rather than allowing providers to propose a list of benefits on which they would base their selections of projects, FERC should prescribe a set of benefits and include a cost allocation mechanism in the rule based on those benefits.

Schumer also urged FERC to quickly finalize its rule governing its new backstop siting authority, granted by the Infrastructure Investment and Jobs Act of 2021. "FERC should

finalize a rule that preserves state primacy over transmission permit applications while ensuring a project can move forward with a direct application to FERC after one year," Schumer wrote.

More: [Heatmap News](#)

### G20 Countries Fail to Reach Agreement on Cutting Fossil Fuels

The G20 bloc of wealthy economies meeting in India failed to reach a consensus on phasing down fossil fuels on Saturday after objections by some producer nations.

Disagreements including the intended tripling of renewable energy capacities by 2030 resulted in officials issuing an outcome statement and a chair summary instead of a joint communique at the end of their four-day meeting in Panaji, the capital of the Indian coastal state of Goa.

Officials also failed to reach consensus over curbing the "unabated" use of fossil fuels and argued over the language to describe the pathway to cut emissions, two sources familiar with the matter said.

More: [The Guardian](#)



# State Briefs

## INDIANA

### Ratepayers in \$46M Debt to State's Biggest Utilities

Residents owed \$45.6 million to the state's "big five" investor-owned utilities in March, the most recent month for which complete data are available — with thousands among them cut off from service.

According to data reported to the Office of the Utility Consumer Counselor, current as of June 30, about 186,000 accounts were 60-plus days behind on bills in March to AES Indiana, CenterPoint Energy, Duke Energy Indiana, Indiana Michigan Power and Northern Indiana Public Service Co.

The utilities reported the data to the office under a settlement reached in October. It does not include state's next-largest utility company, Citizens Energy Group, nor municipal and cooperative utilities.

More: [Indiana Capital Chronicle](#)

## MAINE

### Top CMP Critic Joins Company's Side of Utility Takeover Campaign

Former state Sen. Tom Saviello is being paid \$5,000/month by investor-owned utility Versant Power to oppose a ballot initiative for the state to take over all IOU electric infrastructure, according to campaign finance disclosures filed last week.

Saviello was vocally opposed to the New England Clean Energy Connect transmission project, owned in part by Central Maine Power parent Avangrid. CMP serves about 80% of residents, and Versant serves about 17%. If approved by voters, a new nonprofit company would purchase both utilities' transmission and distribution infrastructure.

When asked if he felt like he was joining "the dark side," Saviello said that he had to work hard to put aside his longstanding antipathy for CMP, though he thinks both utilities have improved their communication during recent supply rate hikes. He said a state takeover of the utilities is too risky.

More: [Bangor Daily News](#)

## MICHIGAN

### State Instructs Insurance Companies to Report Climate Risks

The Department of Insurance and Financial

Services (DIFS) will now require insurance companies based within the state to report their climate-related risks and mitigation strategies to the national climate risk disclosure survey.

The state joins 26 others that require providers to fill out the survey from the National Association of Insurance Commissioners. According to a statement from DIFS, the survey will help insurance companies and customers prepare for short- and long-term climate risks.

"Across the country, we are seeing more frequent and more severe weather events, and this is causing some insurers to exit the market in coastal states," DIFS Director Anita Fox said in a statement. "Thankfully, our weather patterns in Michigan have been more consistent, but we must be proactive to ensure that the future outlook for Michigan's insurance market remains stable for Michigan consumers and businesses."

More: [Michigan Advance](#)

## NEVADA

### Williamson Reappointed Chair of PUC



Gov. Joe Lombardo (R) has reappointed **Hayley Williamson** as chair of the Public Utilities Commission, the governor's office announced on Wednesday.

Williamson has served as chair since 2020. She

started work as an attorney at the commission in 2013, serving as senior assistant general counsel and acting general counsel. Former Gov. Steve Sisolak appointed her as a commissioner in April 2019, and she since helped develop rules to implement the state's renewable portfolio standard, renewable natural gas requirements and natural disaster protection plans.

"Hayley is a passionate public servant, and I'm grateful for her willingness to continue her service in leading one of Nevada's most important commissions," Lombardo said in a statement.

## NORTH CAROLINA

### Coal-fired Electricity Falling Below Solar in State

Solar electricity generation outpaced coal generation in the state in the first three

months of 2023, the third time in the past couple of years, according to data from the U.S. Energy Information Administration.

Coal provided 37% of electricity generation in 2015; in the first quarter of 2023, it was down to 7%, while solar was up to 8%, according to the EIA.

"Based on this data, we'd expect to see solar generation regularly surpass coal generation starting this year," said Matt Abele, interim executive director of the North Carolina Sustainable Energy Association.

More: [WFAE](#)

## OHIO

### Battle over How Randazzo Spent \$4.3M from FirstEnergy Continues

**FirstEnergy**

Attorneys are continuing to battle over

documents regarding how former Public Utilities Commission Chair Sam Randazzo spent and spoke about \$4.3 million he received from FirstEnergy in 2019.

Attorneys for the plaintiffs in a class-action suit against FirstEnergy want to know what Randazzo did with the money as part of their lawsuit over one of the largest bribery and money laundering conspiracies in state history. The company now says the money paid to Randazzo was a bribe, part of the scheme that led to former House Speaker Larry Householder's sentencing to 20 years in federal prison last month.

The plaintiffs — a group of pension and investment funds — along with fired FirstEnergy executives Charles Jones and Michael Dowling are demanding that FirstEnergy produce a report from an internal investigation it conducted after Householder and his co-conspirators were first arrested by the FBI. As part of their effort, they want to know what Randazzo did with the \$4.3 million and what he told others about it during the conspiracy and the 17 months following the arrests. Randazzo played a major role in drafting the legislation at the heart of the conspiracy, which bailed out FirstEnergy's nuclear plants in the state.

More: [Ohio Capital Journal](#)

## OKLAHOMA

### OG&E Facing 2nd Lawsuit over Fires at Apartment Complexes

Developers of apartments that were

**OG&E** destroyed by a five-alarm fire in 2022, the largest blaze in Oklahoma City history, and their insurers are suing Oklahoma Gas & Electric and its contractor Red Dirt Electric for more than \$60 million.

The developers' new apartment complex was less than a month away from occupancy when a fire destroyed it. The lawsuit alleges OG&E failed to hire a competent and qualified electrical contractor to perform services, and failed to properly train and supervise employees and contractors to ensure all work was performed safely and correctly. Several claims match those made in a 2019 lawsuit filed by the developers of a different apartment complex and their insurers after sustaining \$10 million in fire-related damages.

An investigative report by the Oklahoma City fire marshal concluded the 2022 blaze was possibly caused by an electrical malfunction that sparked flames in multiple areas of the complex.

More: [The Oklahoman](#)

## VERMONT

### Rutland Town Board Has Questions for Solar Developer



Rutland's leadership has questions about a 3-MW solar facility proposed in the town but likely won't have many answers for another few months.

Post Road Solar has filed a pre-application with the state Public Utility Commission for a solar project to be built off Route 7. Among the town board's concerns is how far the project will be from the road.

According to a developer representative, the current setbacks shown in the preliminary design are the minimum allowed by the state, but the company is open to moving

them. The complete permit application likely won't be filed until the fall.

More: [Rutland Herald](#)

## VIRGINIA

### Clarke County Seeking to Ban New Solar Plants

Members of the Clarke County Board of Supervisors say solar facilities are taking away land needed for farms and open space and have ordered planners to make changes to the county's zoning ordinance that will prohibit any more from being built.

Earlier this year, the board approved a site plan amendment for Hecate Energy to proceed with Phase 2 of a 20-MW plant on 235 acres off Lord Fairfax Highway near White Post and Double Tollgate.

Solar power plants "degrade and endanger farmland," board Chairman David Weiss said. "We have to stop this now, or in 10 years, there won't be any farms in Clarke County."

More: [The Northern Virginia Daily](#)

# Save your acrobatics for Cirque de Soleil.

Jumping through hoops was never really your thing anyway.



## NetZero Insider. Stay informed.

Staying on top of the news and policy changes as the U.S. decarbonizes its economy is a mighty challenge. That's why you subscribe to *NetZero Insider*, your eyes and ears on climate policy and adaptation. Offering comprehensive, timely, unbiased reporting and analysis from Washington and the states, *NetZero Insider* makes it easy for you to be prepared. Whatever the future brings.

**NetZero**  
**Insider**



# Save your obstacle courses for weekend Mud Runs.

Getting the information you need shouldn't wear you out.



***ERO Insider. Stay informed.***

Staying on top of cybersecurity alerts and new reliability standards is a mighty challenge. That's why you subscribe to *ERO Insider*, your eyes and ears on electric reliability. Offering comprehensive, timely, unbiased reporting and analysis from inside the room at NERC and Regional Entity meetings, *ERO Insider* makes it easy for you to be prepared. Whatever the future brings.

