

# RTO Insider

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

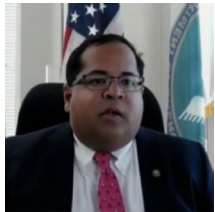
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October 6, 2020

## FERC Urged to Embrace Carbon Pricing

*Chatterjee Sees 'Action' Coming*

By Michael Kuser, Michael Yoder, Amanda Durish Cook and Rich Heidom Jr.



FERC Chair Neil Chatterjee | FERC

FERC Chair Neil Chatterjee said the commission's technical conference on carbon pricing Wednesday would not be an academic exercise.

Although the commission "is not an environmental regulator," he said, "our complex energy markets cannot be hermetically sealed from state environmental policies. ... And it's evident to anyone who's watched us over the past several years [that] we've grappled with the thorny issues that arise at the intersection of state policies and our markets. We're at a pivotal point when it comes to these discussions — a point that, I think, will ultimately lead to action in some shape or form."

FERC heard from 32 industry officials, economists, lawyers, RTO executives and others during the daylong conference, which Chatterjee scheduled in response to a petition by a broad coalition of independent power producers and renewable energy trade groups in April (AD20-14). (See *IPPs, Renewable Groups Seek FERC Carbon Pricing Conference*.)

Most of the panelists urged the commission to support state and RTO efforts to introduce carbon pricing, although they said a uniform national price regime authorized by Congress would be preferable.

Here are the highlights of what we heard.

### 'Crash Warnings'

Sen. Sheldon Whitehouse (D-R.I.) opened the conference with a list of potential bad outcomes if the U.S. and other industrialized nations fail to curb emissions linked to increas-

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## NextEra Buying GridLiance for \$660M

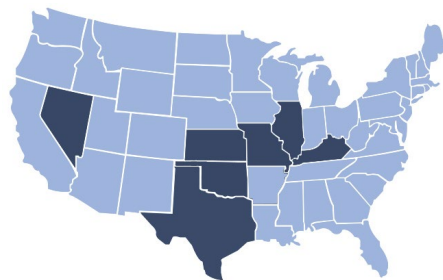
*Blackstone Cashes in its Chips*

By Rich Heidom Jr.

NextEra Energy Transmission (NEET) announced last week that it will pay \$660 million to acquire independent transmission company GridLiance, which owns 700 miles of high-voltage lines in Illinois, Kansas, Kentucky, Missouri, Nevada and Oklahoma.

The deal, which includes the assumption of debt, will be financed in part by parent NextEra Energy's \$2 billion sale of equity to BofA Securities and Barclays, announced Sept. 16.

Launched in 2014, GridLiance markets its expertise in planning, engineering, construction and operations to small transmission owners, including electric cooperatives and public power. Backed by Blackstone Energy Partners, an affiliate of *The Blackstone Group*, it also offers its "partners" a source of capital investment



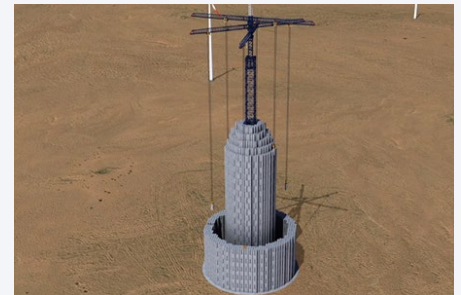
GridLiance owns and operates transmission in Illinois, Kansas, Kentucky, Missouri, Nevada and Oklahoma, and has long-term agreements with transmission owners in Missouri, Oklahoma, Nevada, Texas and Kansas. | *GridLiance*

for transmission projects.

In addition to the transmission it owns,

*Continued on page 7*

### GTM'S POWER AND RENEWABLES SUMMIT



Energy Vault, which stores renewable energy by raising and lowering 35-ton cement bricks, won a \$110 million investment from Softbank. | *Energy Vault*

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## Editorial

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

Deputy Editor / Daily  
Michael Brooks 301-922-7687

Deputy Editor / Enterprise  
Robert Mullin 503-715-6901

Art Director  
Mitchell Parizer 718-613-9388

Associate Editor  
Shawn McFarland 570-856-6738

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

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

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

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

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

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

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

## Subscriptions

Chief Operating Officer / Co-Publisher  
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Account Executive  
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Marketing Director  
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**RTO Insider LLC**  
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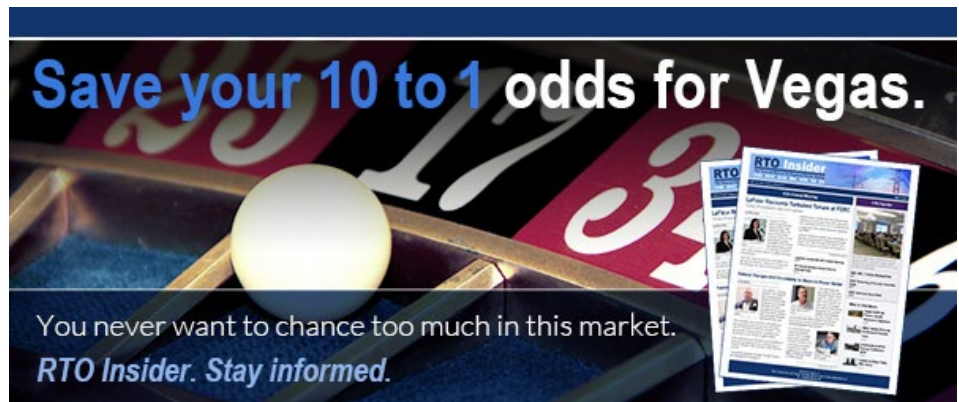
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# GTM's Power and Renewables Summit

## Overheard at GTM's Power and Renewables Summit

### 'Stakes are Exceptionally High' for Climate in Election



Dan Shreve, Wood Mackenzie | © RTO Insider

The Sept. 29 debate between President Trump and former Vice President Joe Biden didn't draw rave reviews, but there was one bright spot, said Dan Shreve, Wood Mackenzie's head of Global Wind Energy Research.

"Happily, climate change did get about 10 minutes of the debate last night, which is far more than what was seen in the last presidential election," Shreve said during a presentation at Greentech Media's annual Power and Renewables Summit last week. "So certainly, environmental concerns are top of mind for folks."

By *one account*, the three debates in the 2016 presidential general election spent less than six minutes on climate change and other environmental issues. In 2000, by contrast, Al Gore and George W. Bush spent more than 14 minutes discussing the environment over three debates.

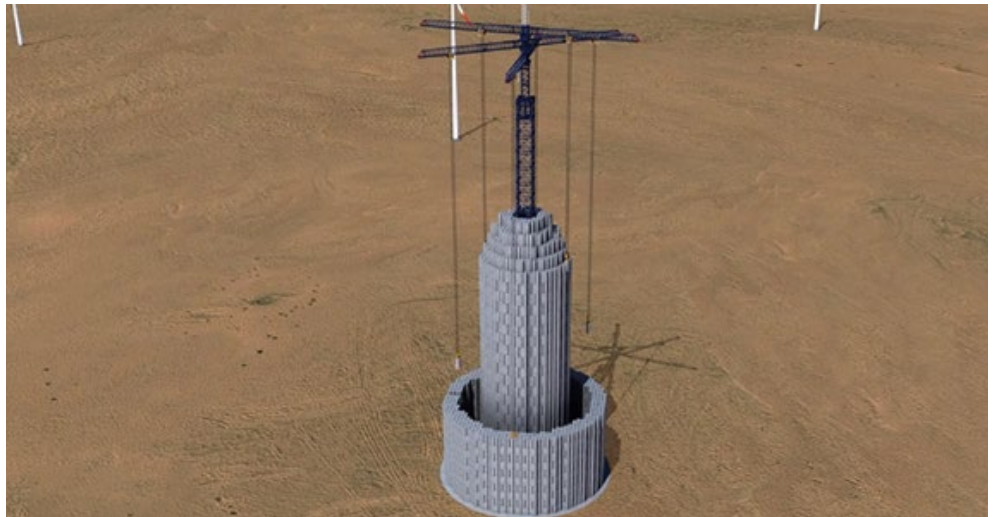
While Trump has dismissed concern over climate change and is promising to continue rolling back environmental regulations, Biden has proposed a \$2 trillion plan to eliminate power sector carbon emissions by 2035 and make the U.S. the leader in electric vehicle production. (See *Biden Offers \$2 Trillion Climate Plan*.)

"The stakes are exceptionally high" in this election, said Shreve, citing both the presidential race and the fight for control of the Senate.

The Biden plan would require 1,500 GW of new capacity — more than 1,100 GW of utility-scale solar, 243 GW of onshore wind and 142 GW of offshore wind — plus 410 GW of battery storage, an estimated \$2.2 trillion in capital expenditures.

"There are some big changes in here, and that's why we're characterizing them as aspirational. The changes are so substantial and require so much collaboration — things that we haven't had a great deal of here in the United States for some time," Shreve said.

The \$2.2 trillion doesn't cover transmission and other infrastructure upgrades needed to support the additional renewables. The National Renewable Energy Laboratory's 2018



Energy Vault, which stores renewable energy by raising and lowering 35-ton cement bricks, won a \$110 million investment from Softbank. | *Energy Vault*

interconnection *seams study*, which proposed three HVDC transmission connections between the Eastern and Western Interconnections, would cost about \$250 billion, Shreve said.

The Climate Institute's proposed North American *Supergrid*, which envisions 42,000 miles of new HVDC transmission, most of it underground, has a price tag of almost \$500 billion, he added.

Winning legislative approval and finding funding isn't the end of the battle, however.

"We're running increasingly into wind and solar permitting issues," Shreve said. "A great deal of NIMBY [not in my back yard] concerns being voiced through social media and a variety of different avenues. ... This same thing happens when we start talking about transmission infrastructure" needed to deliver wind power to load centers.

If emission-free resources supply 90% of the nation's power needs, the remaining 10% could be filled by natural gas-fired generation, but that would require refining carbon-capture technologies that have yet to reach commercialization, Shreve said.

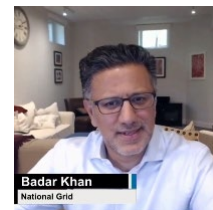
"There's an enormous amount of R&D that has to happen and a tremendous amount of risk of those technologies [not] actually reaching some level of commercial success."

Shreve said venture capital has been pouring into companies attempting to develop long-duration, high-energy-density storage applications that could be paired with wind, citing *Gravitricty* and Energy Vault, which received a

\$110 million investment from Softbank.

"They are still very early-stage technologies," he cautioned.

### National Grid CEO Discusses Electrification Challenges



Badar Khan, National Grid | *Greentech Media*

In another session at the virtual conference, Badar Khan, president of National Grid US, said decarbonizing home heating will be the biggest obstacle to addressing climate change. The utility serves 20 million people in Massachusetts, New York and Rhode Island.

"Home heating is going to be the hardest sector to decarbonize because the current technologies beyond natural gas are just much more expensive. The good news is that plenty of people are working on solutions," he said, referring to geothermal heat pumps, biogas from landfills and wastewater treatment plants, and "green" hydrogen made from renewable power.

"Whether it's the electrifying pathway or the biogas/hydrogen pathway, we're going to need to see a lot of innovation and policy support and a lot of customer engagement," Khan said.

### 'Bullish' on the Future

Todd Glass, a partner in energy and infrastruc-



# GTM's Power and Renewables Summit

ture for the Palo Alto law firm Wilson Sonsini Goodrich & Rosati, said he's "bullish" on the future.

"Renewables are becoming cheaper and cheaper, and the marginal cost of energy is lower than we ever thought it would be, especially 10 to 15 years ago when we were starting to do these types of things. The second thing is that the technology in the controls and dynamic pricing ... these technologies with [artificial intelligence] and other things like that

are driving innovation at the grid edge in a way that delivers value to customers."

Glass said he'd like to "restart the conversation" from the beginning of utility restructuring 20 years ago, saying customers want "the opportunity ... to be green."

While two-thirds of the U.S. load is in restructured states, "one-third of the load has zero choice. That means they get whatever their utility serves up," he said. "That is so stuck in the past and so contrary to the customers' interest. For too long ... utilities and captured utility commissions have deigned to speak for what customers want. I think we need to focus on what the customers actually want and put their interests first."

## 'Huge Opportunity'

Dan Seif, vice president of market development for *7X Energy*, a Texas-based utility-scale solar and storage developer, said load-serving entities in Texas — particularly those not subject to retail choice — should be contracting for storage.

He said ERCOT's interconnection queue has 200 MW of storage and is likely to hit 1 GW within two years. "The real issue that's keeping

it from ... exploding and realizing the size of the queue is contractability of ancillary services, particularly" responsive reserve service (RRS), he said.

Seif said RRS represents two-thirds of the ancillary services that load-serving entities must purchase. "There's a huge opportunity that's kind of obvious for load-serving entities," he said. "They should buy a portion of their load exposure from storage projects or solar and storage projects. All the big guys — Reliant [Energy], EDF [Renewables], the big monopoly utilities ... Austin Energy, [Lower Colorado River Authority], Brazos [Electric Power Cooperative] — no reason not to put that into your portfolio and enable some of these storage projects.

"I think a lot of them are thinking about it, but maybe everybody is kind of looking to the left and right and saying, 'You first.'"

Seif said some financial traders are looking at storage for arbitrage opportunities. But the "natural buyers" are LSEs, "as long as they think they're going to have a lot of load for a while. And the monopolies have no excuse — the customers have nowhere to go." ■

— Rich Heidorn Jr.



Todd Glass, Wilson Sonsini | Greentech Media

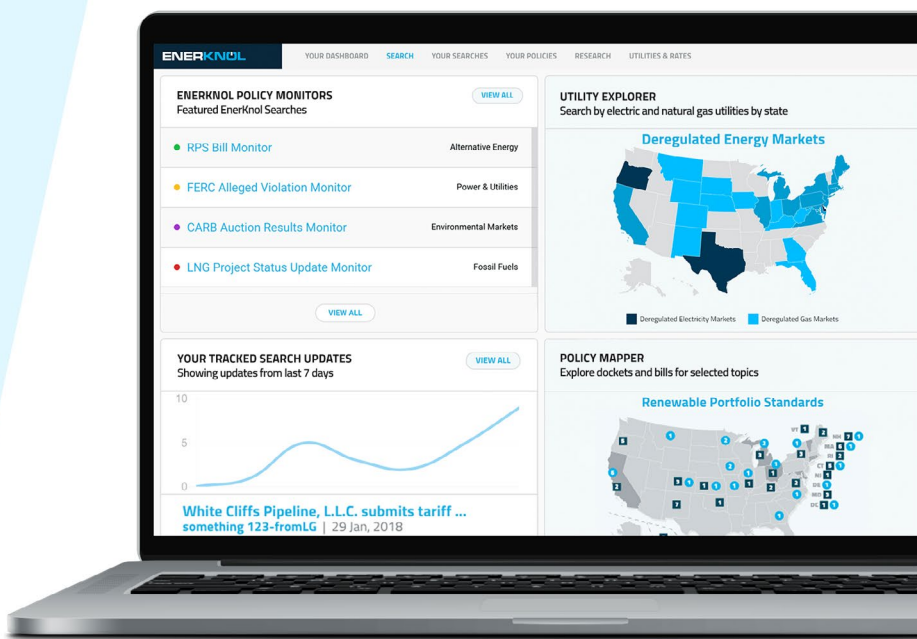
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## GTM's Power and Renewables Summit

# NYISO, PJM Discuss Renewables in Capacity Markets

By Michael Yoder

NYISO and PJM officials discussed potential directions for their capacity markets and ways renewable energy producers could benefit from new market structures during a quick panel discussion during Greentech Media's annual Power and Renewables Summit on Sept. 29.

The panel featured questions about projected capacity market updates and their impact on prices, technologies and risk.

Moderator Anthony Logan, senior analyst with Wood Mackenzie, said recent FERC decisions have created "harsh" price floors, pointing to its expansion of PJM's minimum offer price rule (MOPR) and approval of NYISO's new buyer-side market power mitigation (BSM) rules. (See [FERC Extends PJM MOPR to State Subsidies](#) and [NYISO BSM Mitigation Ruling Sparks Glick Rebuke](#).)

Logan said there will be "casualties" as a result of the orders, pointing out the burgeoning offshore wind sector in both grid operators' markets. He also said they have state policymakers questioning their roles in creating their own energy mixes through legislation. He asked how NYISO and PJM have been working with states to determine what is appropriate bidding behavior by subsidized generators.

Emilie Nelson, executive vice president of NYISO, said the ISO experiences less complications when looking at policies because it only has to deal with one state government, one governor and one legislature. She said one of the benefits of a single-state grid operator is "clarity" in the environmental goals.

Nelson pointed to the Climate Leadership and Community Protection Act (CLCPA) signed by New York Gov. Andrew Cuomo in July 2019 that set ambitious clean energy goals: 100% zero-emission electricity by 2040 and an 85% cut in emissions by 2050 from 1990. It also requires 70% of renewable energy production by 2030. (See ['Astonishing' Buildout Needed for Clean NY Grid](#).)

"Having the clarity on the direction that New York is trying to go allows us to contemplate some design approaches and different ideas to move ahead and explore things not quite as mainstream to see if they would work for our state," Nelson said.

Stu Bresler, senior vice president of market services for PJM, said the RTO differs from



Anthony Logan, senior analyst with Wood Mackenzie (top left), speaks with NYISO's Emilie Nelson and PJM's Stu Bresler during GTM's Power and Renewables Summit on Sept. 29. | *GreenTech Media*

NYISO in that it must balance the interests of 14 jurisdictions, including D.C., instead of just one state. He said the diversity of opinions and policy direction among the states in the PJM region is a constant challenge.

But Bresler also said having each jurisdiction's unique perspective is a valuable tool, giving PJM better insight into potential solutions to problems. The Organization of PJM States Inc. allows for an exchange of ideas as to how the markets should evolve and how operations can be done more effectively.

"That diversity of thought provides for a much richer discussion in our region and has really helped us and assisted us in evolving our operations planning and markets over the years that has been beneficial for ratepayers and consumers," Bresler said.

### Looking for Solutions

Logan said NYISO has taken a "damn the torpedoes" leadership style when it comes to decarbonization. He asked where Nelson sees the ISO's resource mix heading under the new BSM regulations.

Nelson said NYISO is going to see a rapid transformation as more solar, offshore wind and storage come online. The ISO is considering how markets need to change to accommodate the changes. She noted its Grid in Transition initiative, which focuses in part on ensuring that ancillary service products are aligned with reliability needs, particularly around New York

City. (See [NYISO Moves Forward on EAS Projects](#).)

"It's a multifaceted strategy across our market platforms because we are expecting so much change on the system," Nelson said.

Turning to Bresler, Logan said it appeared that PJM has taken a "wait it out" approach toward the MOPR, as some of its states debate using a fixed resource requirement (FRR). He asked how carbon pricing fits into the RTO's markets. (See [Commenters Weigh in on PJM MOPR Compliance Filing](#).)

Bresler said it's PJM's hope that states would not elect the FRR option and instead see how things "play out" in the upcoming capacity auctions. He said the "prevailing wisdom" is the MOPR won't have a huge impact on the first few capacity auctions because of exemptions granted by FERC to existing renewable resources.

In the long term, Bresler said, PJM has questions about the sustainability and durability of the "broad MOPR rule" and wants the states to work with the RTO to achieve environmental goals by leveraging the competitive nature of the markets. (See [NJ Regulators Weighing Input on Capacity Market Exit](#).) He said a carbon price is a potential solution to reach reduction goals, among other concepts.

"Perhaps there's a way to incorporate other goals as well but maintain as much as we can this competitive approach across a large region, which has shown to be tremendously beneficial," Bresler said. ■



# GTM's Power and Renewables Summit

## GTM Panelists Mull Northeast's Resource Adequacy

By Amanda Durish Cook

Long-term resource adequacy in the Northeast could benefit from offshore wind projects, carbon pricing, nuclear power preservation, customer participation and a nudge toward investment from regulators.

That's according to participants of a virtual panel as part of Greentech Media's annual Power and Renewables Summit on Sept. 29.

Jeffrey Stokes, senior director of power generation for Public Service Enterprise Group, said there's an "interim" period of about 30 years in between now and a future in which there's a total dependence on reliable renewable generation. He said for the interim period, nuclear generation remains vital.

Stokes said PJM should introduce carbon pricing or another way to value renewable and zero-carbon resources. He said more should be done to slow the rate of shutdown notices from nuclear plants in the Northeast and Midwest.

Unmentioned during the panel were the zero-emission credits that PSEG's nuclear plants in New Jersey receive.

New Jersey Board of Public Utilities General Counsel Abe Silverman predicted widespread electrification will drive the need for a substantial amount of new renewable generation capacity. "We're talking about serious load growth for the first time in two decades," he said.



| Avangrid

Silverman said offshore wind generation projects can bring a huge amount of capacity from the East Coast to western destinations. "These are very large projects: 800 [to] 1,000 MW."

Moderator Matt DaPrato, Wood Mackenzie Power & Renewables' head of research strategy, asked how much offshore wind in the Northeast would be hampered by grid operators' lengthy interconnection queues and transmission routes that contain "old grid."

The panelists said offshore projects will inevitably bear transmission upgrade costs.

"Those are the give-and-takes that you have to do to move such a large amount of power," Stokes said.

"It's absolutely something we see as a real barrier ... in New Jersey," Silverman added. He said that at least some offshore wind projects could be situated on old nuclear or coal plant sites readymade with existing infrastructure, such as Exelon's former Oyster Creek Generating Station in New Jersey.

Nevertheless, Silverman said "a lot of projects will need to cross the beach," which will make for "a very delicate" permitting process across beachfront properties.

He said he was jealous of New York's two-in-one grid operator and resource adequacy manager governed by a single set of state regulations. He said resource adequacy coordination, generation planning and incenting carbon-cutting aren't so simple in states that belong to RTOs, like New Jersey.

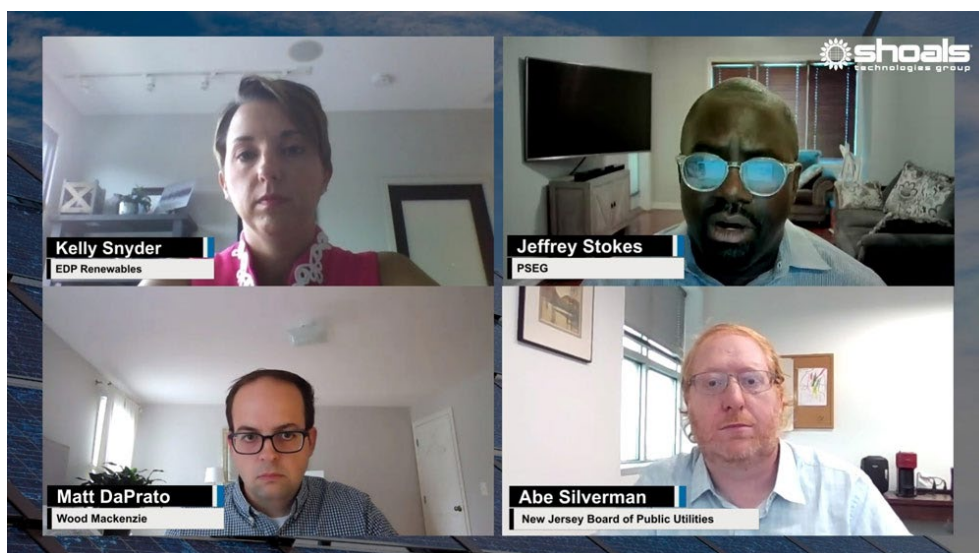
EDP Renewables Associate Director of Origination Kelly Snyder said she credits PJM's commercial and industrial customers for pressing for new renewable generation.

Silverman said RTOs and ISOs generally don't have the "appropriate market structure" to attract private investors to build new technologies or allow customers flexibility."

"Demand was supposed to be dynamic. ... State and federal markets have done a very poor job of including customers in the markets," Silverman said.

He also said state regulators should consider introducing small incentives for renewable and battery storage projects.

"Batteries are a wonderful, clean way to backfill some reliability needs in some of these communities," he said. ■



| GreenTech Media

## Company News

# NextEra Buying GridLiance for \$660M

## Blackstone Cashes in its Chips

*Continued from page 1*

GridLiance also has long-term partnership agreements in Missouri, Oklahoma, Nevada, Texas and Kansas.

For Florida-based NextEra, the acquisition will give it a bigger foothold in the Midwest after failing in its 2016 bid for Texas' Oncor. (See [Texas PUC OKs Sempra-Oncor Deal, LP&L Transfer.](#)) NextEra also was rumored in April as a suitor for Kansas' Evergy. (See [NextEra Said to be Eyeing Evergy as Acquisition Target.](#))

NextEra said the deal will require approval from FERC and utility commissions in Kansas, Missouri and Oklahoma. It is expected to close in 2021.

"GridLiance partners with electric cooperatives and public power utilities to enhance transmission system reliability and is well positioned to benefit from the substantial expected renewables growth over the coming years," NextEra CEO Jim Robo said in a statement.

"This acquisition furthers our goal of creating America's leading competitive transmission company and is consistent with our strategy of adding high-quality regulated assets to our portfolio."

"We are very excited to be joining NextEra Energy Transmission at a pivotal time in the company's development," GridLiance CEO Calvin Crowder said. "Our unique capabilities, proven track record and tremendous growth prospects, coupled with NextEra's experience as a leading transmission owner, make this a great fit for both companies. We are also grateful for the support of Blackstone in founding GridLiance and for working closely with management over several years to build the company."

### Fighting ROFR

NEET currently has operating assets in California, New Hampshire and Texas, including Lone Star Transmission in Central Texas (330 miles of double-circuit 345-kV line and six substations).

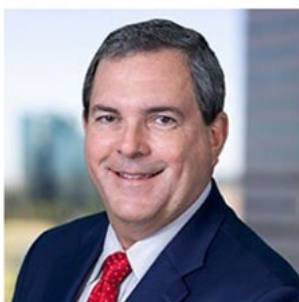
One of NEET's affiliates was awarded the rights to the Empire State Line in Western New York (20 miles of 345-kV line and two substations), which will increase renewable energy flows from the Niagara hydroelectric facility and imports from Ontario by 3,700 MW. Another affiliate is building the East-West Tie in Ontario (280 miles of double-circuit 230-kV line), which it says is the first competitive transmission project awarded to a nonincumbent in the province.

MISO awarded a NEET subsidiary a contract to build the 500-kV Hartburg-Sabine Junction transmission project — a new 23-mile, single-circuit 500-kV transmission line, four 230-kV transmission lines and a new substation — near Beaumont, Texas. But before beginning construction on the nearly \$129 million project, the company will have to overturn a Texas law giving incumbent transmission companies the right of first refusal to build new transmission lines. Oral arguments in NextEra's challenge to the law were heard in the 5th U.S. Circuit Court of Appeals on June 1. (See [Appeals Court Sets Dates in Texas ROFR Challenge.](#))

*The Wall Street Journal* reported on Sept. 29 that Duke Energy recently rebuffed a takeover attempt by NextEra. NextEra is still interested in Duke, the *Journal* said, noting that such a deal would be the largest utility acquisition ever. NextEra is the largest public utility in the U.S. with a market capitalization of \$139 billion; Duke has a market value of about \$61 billion.

NextEra shares closed Sept. 29 at \$283.12/share, down \$1.02 (0.36%). Blackstone shares rose by 5 cents to \$52.71/share (0.095%).

GridLiance was the second asset sale by Blackstone Energy this month. On Sept. 24, it [announced](#) it would sell its 42% stake in Cheniere Energy Partners to Brookfield Infrastructure Partners and funds managed by Blackstone Infrastructure Partners for \$7 billion. In 2012, Blackstone Energy and its affiliates invested \$1.5 billion in Cheniere to build the first two liquefaction trains at the Sabine Pass LNG facility in Louisiana, the first LNG export facility in the continental U.S. ■



**J. Calvin Crowder**  
President and Chief Executive Officer



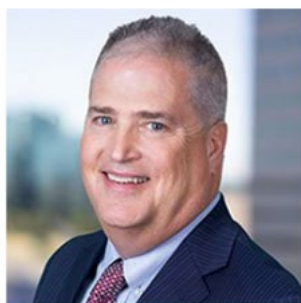
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## FERC/Federal News

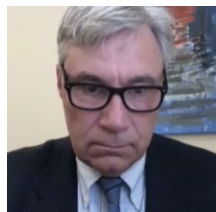


# FERC Urged to Embrace Carbon Pricing

## Chatterjee Sees 'Action' Coming

Continued from page 1

ingly severe weather.



Sen. Sheldon Whitehouse (D-R.I.) | FERC

"These crash warnings focus separately on a coastal property value crash, a separate carbon bubble crash and insurance failure as risk becomes too unpredictable to value. But nothing says all three can't happen," said Whitehouse, co-

founder of the Senate Climate Action Task Force and the ranking Democrat on the Senate Environment and Public Works Committee. "The warnings are many, clear and well founded. ... When you are facing the risk of an economic crash, it's hard to anticipate when the avalanche will start. It could be soon. It could be devastating."

### Legal Authority

Speakers on the day's first panel agreed that the commission has the legal authority to approve a carbon price submitted by an RTO or ISO.

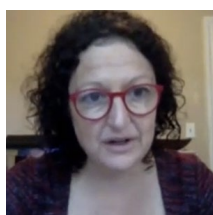


David Hill, Columbia University | FERC

David Hill, a member of the NYISO Board of Directors and an adjunct senior research scholar at the Columbia University Center on Global Energy Policy, went further. "I believe the authority and jurisdiction exist under Sections 205 and 206

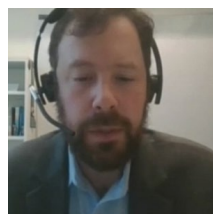
of the Federal Power Act for an ISO or RTO tariff and market design to integrate state carbon pricing and carbon-control policy. And it potentially could be unjust, unreasonable or unduly discriminatory for it not to do so," Hill said.

Kate Konschnik, director of the Climate & Energy Program at Duke University's Nicholas Institute for Environmental Policy Solutions, said carbon pricing could "potentially reduce state policy proliferation."



Kate Konschnik, Duke University | FERC

She ended her opening remarks by chiding FERC for failing to invite any state regulators or more women to the conference; all but five of the 32 panelists were men. "I hope there will be an opportunity to solicit a broader sampling of views for the record and in future conferences and dockets," she said.

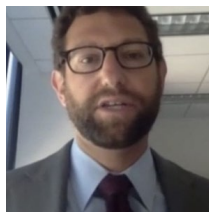


Ari Peskoe, Harvard University | FERC

Ari Peskoe, director of the Harvard Electricity Law Initiative, said that "the Supreme Court's most recent decision [FERC v. EPSA] about the scope of the commission's authority teaches that when the commission does 'no more than follow the

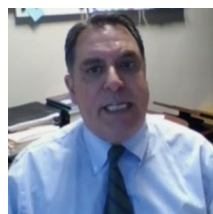
dictates of its regulatory mission to improve the competitiveness, efficiency and reliability of the wholesale market,' courts will be reluctant to cut off the commission's jurisdiction in the absence of a clear statutory bar. Integrating a carbon price can fit well within the commission's mandate as a market regulator."

Attorney Matthew Price, of Jenner & Block, said that by accepting such an RTO filing, the commission does not impose any federal policy on unwilling states.



Matthew Price, Jenner & Block | FERC

"States have allowed load-serving entities to join an RTO, understanding the RTO will make market design decisions governing the footprint. Many decisions will affect different states differently. Indeed, the status quo affects states that can't do so in the most efficient manner, an inevitable consequence of being part of an interstate market," Price said.



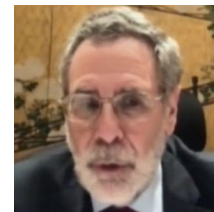
Jim Rossi, Vanderbilt University | FERC

Vanderbilt University School of Law professor Jim Rossi said that both courts and FERC have recognized that many state clean energy programs are beyond FERC's jurisdictional reach, including zero-emission credits and unbundled renewable

energy certificates.

"It would exceed the commission's jurisdiction to use a carbon price in a wholesale tariff to pass judgment on existing state programs favoring clean energy resources, unless a state explicitly chooses for carbon pricing to apply to or supersede specific programs," Rossi said.

Independent consultant Roy Shanker said that while the commission has authority to approve carbon pricing in RTOs, doing so might be counterproductive absent a nationwide and economy-wide carbon price that eliminates "leakage" concerns.



Consultant Roy Shanker | FERC

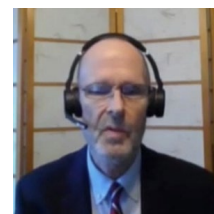
"Notions presented by parties that try to suggest that such segmented approaches to carbon pricing policy convey a societal benefit by internalizing carbon-related emission costs are simply incorrect," Shanker said. "The reality is that they may be making things actually worse."

### One Wholesale Market, One Carbon Price

States should strive for agreement on a single carbon price across a wholesale market's footprint — if not nationwide — experts stressed during the second panel of the day.

Stanford University's Frank Wolak said a "stable, predictable price of carbon into the distant future" could function like fuel prices in wholesale electricity markets.

"Simply subsidizing green is a much more expensive way to reduce greenhouse gas emissions than taxing brown," he said.



PJM Monitor Joe Bowring | FERC

said, revenue redistribution mechanisms can be used.

NYISO CEO Rich Dewey said current compliance costs for environmental obligations, including the Regional Greenhouse Gas Ini-



# FERC/Federal News



tative, are simply incorporated into suppliers' offers and are subject to review from the ISO's Market Monitoring Unit in a "fairly seamless" manner.

New York is relying on decarbonization to target a 70% renewable energy supply by 2030, a full renewable energy supply by 2040 and carbon neutrality by 2050, Dewey said.

"Achievement of those outlying goals will require significant investment in innovative technologies and commercialization of emerging new innovative choices which otherwise, absent a carbon price, would be very challenging to bring to market," he said.

R Street Institute's Devin Hartman argued for a universal carbon price from the federal level.

"Carbon pricing is, at least on paper, the least-cost solution to reducing emissions but also something that's fully compatible with wholesale electric competition," he said. "There's a subset of states that do not want to pursue carbon emission reduction yet but may in the future. And then in the other camp, you have some that have really thrown a variety of policies at this issue. As we move forward in carbon pricing dialogue, the former camp will conform."

Hartman said the longer states are left to pursue individual and uncoordinated pricing plans, the more "unnecessary risk" is introduced into investment decisions and wholesale markets.

"Whereas, if we start to have more long-term pricing stability on this front, then that lets markets go to work more efficiently," he said.

ISO-NE CEO Gordon van Welie said there's "obviously a big political dimension" surrounding how states pursue decarbonization and allocate carbon pricing revenues. He predicted that different approaches and discrepancies across states will create inefficiencies and distort wholesale markets until FERC is forced to act.

"I don't think the commission can escape making a decision," van Welie said, predicting that the issue will come to "a head more quickly in PJM, New England and New York," whose capacity markets employ minimum offer price rules that make it difficult for state-subsidized resources to clear.

Arne Olson, senior partner with Energy and Environmental Economics, said the lack of a nationwide carbon price may be more detrimental to carbon-cutting goals than no carbon pricing at all.

"So the challenge is when [you] apply 50

carbon prices within interstate markets, where there is no ability to control or even measure the carbon content of imports ... you could end up in a situation where piecemeal carbon pricing ends up with a worse result than no carbon pricing," he said. "People want to do things now; they want to take early action to address this problem that is so glaringly obvious. Where we need to get is a societal agreement on what the price of carbon ought to be, so we can get electrification of vehicles and buildings, [and] emission reduction in the industrial sector."

Panelists also conceded that carbon leakage is unavoidable when one geographic area of a wholesale market uses a carbon price and another doesn't. "I think of it as trying to push water into one corner of a bathtub," Olson said.

## Leakage Concerns

Solving the leakage issue was a primary topic for Wednesday's afternoon panel of market design experts.

"It's not an intractable problem, but you have to manage leakage," said Rana Mukerji, senior vice president for market structures at NYISO. "There's not a politically perfect way of managing leakage, but you can minimize the effect of leakage at your borders."

Anthony Giacomoni, senior market strategist for PJM, noted the distinctions between inter- and intra-market leakage.

Because PJM covers 13 states and D.C., he said, "you have this added complexity between the intra-ISO and inter-ISO leakage, and both have to be handled differently because of the nature of the economic dispatch. We dispatch across the entire RTO in one integrated dispatch. We do not handle external transactions in the same manner, and so a different mechanism is needed for leakage between ISOs."

Chairman Chatterjee asked what role carbon pricing could play in investment decisions, including entry and exit of resources.

Matthew White, chief economist for ISO-NE, said carbon pricing would benefit the region's flexible resources. As more renewables come onto the system, he said, there's a need for more "balancing resources" that will be able to meet consumer demand when the weather is uncooperative and renewable resources can't provide energy.

"We do not have the benefits of the sunshine of Southern California," White said. "We live in a place where it is cold and dark for much of the year. And while I love to ski, it does mean we face a difficult challenge ensuring that the

**"Continued talk about the benefit of placing a meaningful price on carbon emissions, uncoupled from concrete and immediate action to do so, while simultaneously acting to undermine state-led emission-reduction efforts, serves only to prolong emissions output from fossil generation, force more nuclear into early retirement and put the nation farther away from meeting our decarbonization goals."**

—Exelon CEO  
Christopher Crane

balancing resources can be there as much as we need them."

## Role for Nukes, Gas

In the closing session, Exelon CEO Christopher Crane lamented the increased emissions resulting from the shuttering of money-losing nuclear generators. He said Illinois will see a 70% increase in electric sector emissions if Exelon shuts its Byron and Dresden plants, which are scheduled for retirement in 2021, and the Braidwood and LaSalle plants, which he said are "showing increasing signs of financial distress."

Crane said Exelon did not fully support the petition seeking a technical conference because it included a sentence saying the petitioners were not asking the commission to institute a rulemaking or direct implementation of carbon pricing.

"Continued talk about the benefit of placing a meaningful price on carbon emissions, uncoupled from concrete and immediate action to do so, while simultaneously acting to undermine state-led emission-reduction efforts, serves

# FERC/Federal News



only to prolong emissions output from fossil generation, force more nuclear into early retirement and put the nation farther away from meeting our decarbonization goals,” Crane said. “Discussion at the commission and RTO/ISO level must evolve into action that is commensurate with the urgency of the climate crisis. Until then, states seeking to preserve and expand emissions-free electricity have only the second-best tools available. If the commission is serious about the virtue of wholesale markets and the efficiencies they bring, it will insist that those markets be used to help states achieve their carbon goals, rather than undermine them.”

Calpine CEO Thad Hill and Dena Wiggins, CEO of the Natural Gas Supply Association, expressed support of carbon pricing but lobbied for a continued role for natural gas-fired generation, saying it is essential to supplementing intermittent resources. “Natural gas generation is an enabler of economy-wide decarbonization, not an inhibitor,” Hill said.

Brett Mattison, CEO of American Electric Power’s Kentucky Power, said FERC must be cognizant of the economic hardship facing ratepayers in his company’s service territory. “In evaluating carbon pricing and other mechanisms designed to incentivize the participation of renewable resources in organized markets, it is important to consider the impacts of such mechanisms on our customers,” he said. “AEP recognizes and is committed to transformation to a greener economy; we cannot, however, overlook issues of cost and reliability as we realize this change. We must promote a diverse supply mix that can lower emissions while preserving cost and reliability goals.”

Chris Parker, executive director of the Utah Department of Commerce, said his state

would “resist any direct, pre-dispatch carbon price mechanism in RTO/ISO markets because state policies should not have such a direct effect on wholesale markets.”

“FERC has no authority to tax resources in its markets. States have no authority to set a carbon price that directly changes dispatch and prices in wholesale electricity markets,” he continued. “The fact that states’ resource decisions will affect the wholesale markets does not license direct intervention in dispatch and pricing outcomes in wholesale markets. This would leap the boundaries of state authority, exporting state policies to the entire market. Federal market regulation does not license extraterritorial state taxation.”

“There’s a lot of fear among states like Utah that we’re going to end up with other states’ policies rammed down our throat,” he added. “We’re going to be wary of participating in those markets.”

## Chatterjee Responds

Speaking to reporters via teleconference the next day, Chairman Chatterjee acknowledged “there seems to be a basic, foundational agreement that FERC has the legal authority to evaluate” a state-imposed carbon price in an RTO’s or ISO’s tariff. Whether the tariff revisions pass the just-and-reasonable standard of the FPA would depend on their details, he said.

In his opening remarks Wednesday, Chatterjee warned that “some of the proposals that have been floated — while presumably well intentioned — could actually bring with them more harm than good.” When asked what these proposals were, he alluded to state subsidies.

“I believe in markets and market mechanisms, and the landmark actions we have taken bear

**“There’s a lot of fear among states like Utah that we’re going to end up with other states’ policies rammed down our throat,” he added. “We’re going to be wary of participating in those markets.”**

—Chris Parker, executive director of the Utah Department of Commerce

that out,” he said, noting Orders 841 and 2222, which directed RTOs to open their markets to energy storage and aggregated distributed energy resources, respectively. “Out-of-market payments are less efficient toward” decarbonization of the electricity sector, he said.

Chatterjee also said it would not be “appropriate for the commission to act proactively” and find an RTO’s Tariff unjust and unreasonable because of its lack of a price on carbon, “absent a congressional mandate.”

The chairman also was asked about the potential impact of the presidential and congressional elections on federal carbon policy. Regardless of the election results, he said, “the commission is going to have to confront these issues, as states are going to continue to take it upon themselves to push for these policies.” ■

Michael Brooks contributed to this report.

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# CAISO/West News

## Calif. IOUs Escape Blame for Fires so Far

### SCE Line Under Investigation for Bobcat Fire near Los Angeles

By Hudson Sangree

More than 8,000 wildfires have burned nearly 4 million acres in California this year, but there's little indication that utility equipment played a role in starting major blazes.

That differs markedly from the last three years, when equipment belonging to Southern California Edison and Pacific Gas and Electric was blamed for starting catastrophic fires including the Camp Fire, the state's deadliest and most destructive blaze, in November 2018. (PG&E says its large-scale public safety power shutoffs this year have helped avoid catastrophes.)

So far, the only 2020 summer wildfire in which power lines might be implicated is the Bobcat Fire burning in the San Gabriel Mountains

northeast of Los Angeles.

A Sept. 15 report by SCE to the California Public Utilities Commission said the utility experienced a line fault at approximately the same time and in the same area the Bobcat Fire started. However, the utility said a fire camera had recorded smoke from the blaze shortly before its relay tripped.

"The Bobcat Fire was reported in the vicinity of Cogswell Reservoir/Dam in the Angeles National Forest on Sunday, Sept. 6, 2020, at 12:21 p.m." SCE told the CPUC. "The Jarvis 12-kV circuit out of Dalton Substation experienced a relay operation at 12:16 p.m. on Sept. 6, 2020. The Mount Wilson East camera captured the initial stages of the fire, with the first observed smoke as early as approximately 12:10 p.m., prior to the relay operation."



The Bobcat Fire burns in the mountains above Monrovia, Calif., near Los Angeles, on Sept. 10.

The investigation of the Bobcat Fire is being conducted by the U.S. Forest Service, which on Sept. 15 "requested that SCE remove a specific section of SCE overhead conductor in the vicinity of Cogswell Dam," the utility reported.

"While USFS has not alleged that SCE facilities were involved in the ignition of the Bobcat Fire, SCE submits this report in an abundance of caution given USFS' interest in retaining SCE facilities in connection with its investigation," it told the CPUC.

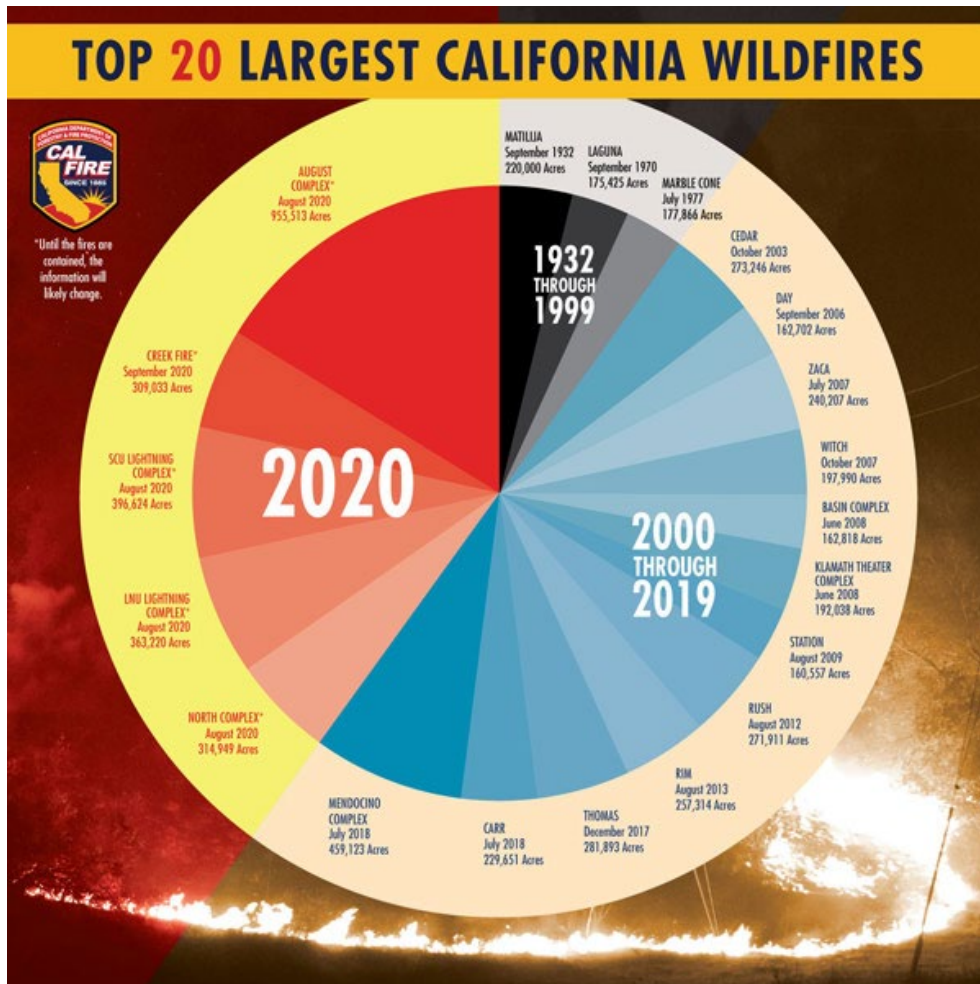
Lightning storms on Aug. 17-18 ignited massive wildfires, including the 980,000-acre August Complex, the largest fire in state history, USFS and the California Department of Forestry and Fire Protection (Cal Fire) reported.

The August storms also started three more of the five largest fires in state history: the SCU Lightning Complex, LNU Lightning Complex and the North Complex, all in Northern California, the agencies said.

The Creek Fire, in the Sierra Nevada foothills of Central California, rounds out the top five fires, all of which occurred this year, Cal Fire said. Its cause, and the cause of other major blazes, remains under investigation.

California still has at least another month of high fire risk. In Northern California, the late summer and fall fire season usually lasts until seasonal rains start in November. Major fires have broken out in drier Southern California as late as December in recent years.

"As we enter the fall season, which is known to have the largest wildfires, we want to remind everyone that now is the time to be prepared," Cal Fire warned residents. ■



Five of the 20 largest wildfires in California history have occurred this year and all but three since 2000. | Cal Fire



# CAISO/West News



## CAISO Floats EIM Base Schedule Rule Changes

### BPA Seeks Change for ‘Slice of System’ Contracts

By Robert Mullin

CAISO launched a two-part initiative Wednesday that would alter how Western Energy Imbalance Market (EIM) participants submit their base schedules.

The base schedule is the hourly forward energy plan that CAISO uses as a baseline to measure energy balance deviations for market settlements in the EIM. Rules set out three deadlines by which EIM entities must submit the resource plans behind their hourly base schedules.

By the first deadline, at T-75 (75 minutes before the operating hour), all participating and nonparticipating resources must submit their base schedules, and participating resources must submit their energy bids. CAISO’s market software then evaluates each 15-minute inter-

val within that hour for capacity and flexible ramping capability.

A second deadline follows at T-55 after CAISO validates initial base schedules. At that point, market entities can review and update their schedules, which is followed by another set of validations.

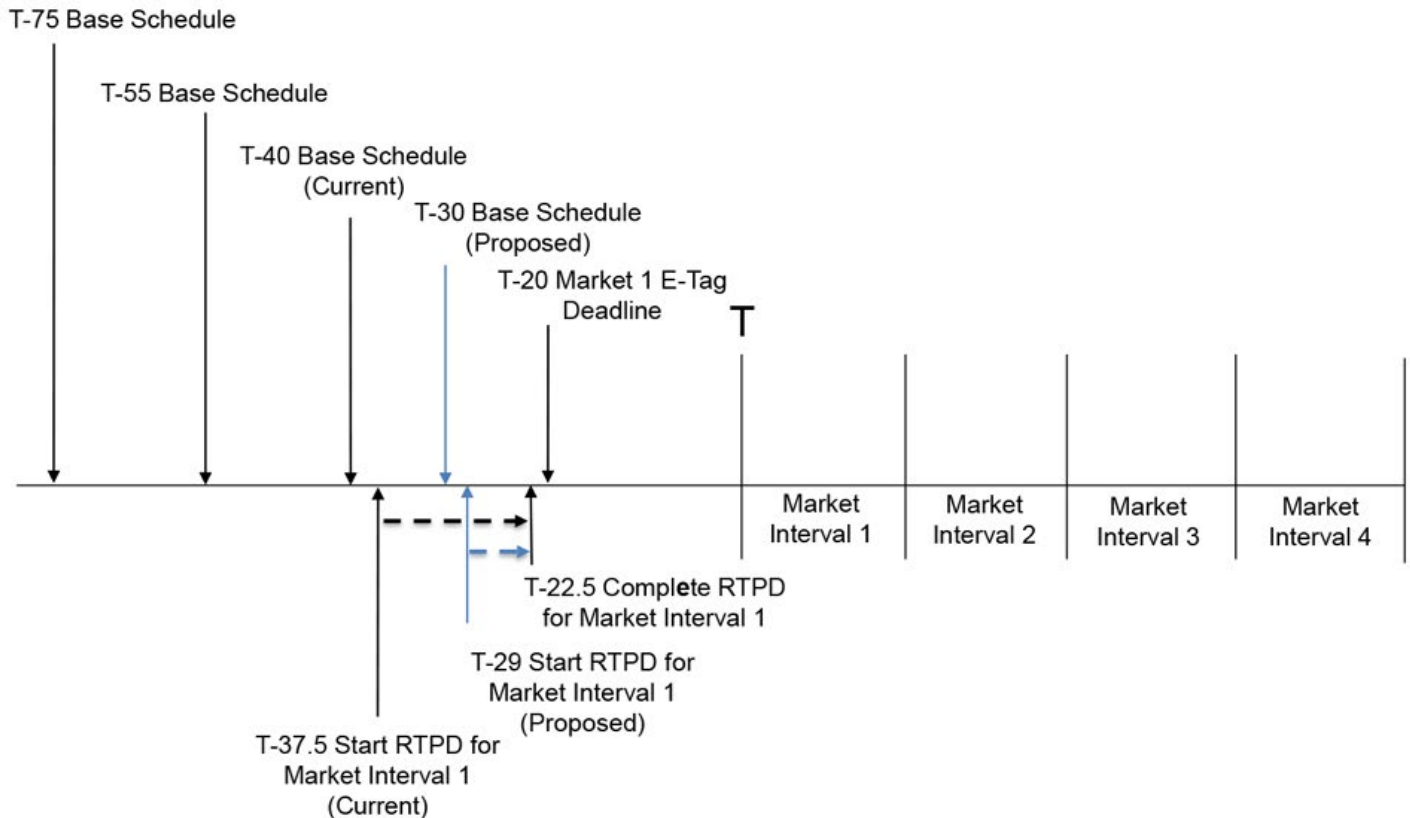
At T-40, entities are required to submit final, financially binding base schedules, used by CAISO to balance against the load forecast and set the baseline for determining imbalance energy for the operating hour.

CAISO’s proposal would push the financially binding base schedule deadline from T-40 to T-30, a move that would require the ISO to update its market software to shift the start of the EIM’s real-time pre-dispatch (RTPD) process from T-37.5 to T-29, while retaining the current RTPD completion time of T-22.5.

CAISO’s final base schedule test would also be moved to after the T-30 deadline.

The ISO committed to examining the change as part of its EIM implementation agreement with the Bonneville Power Administration. A portion of BPA’s customers operate under “slice of system” contracts that provide them with a percentage of the output from the federal Columbia River Power System rather than a fixed volume of energy. Slice nominations can be updated after T-40, potentially exposing BPA to imbalance charges under the existing rules once it begins transacting in the EIM in 2022.

“It would create the ability for EIM entities to submit more accurate final base schedules as the deadline is simply closer to the operating hour,” Danny Johnson, CAISO lead market design developer, said during a call to discuss the



## CAISO/West News

proposal Wednesday. “Ideally this reduces the financial impact of imbalance settlement, and it would provide more accurate base schedules to the RSE [resource sufficiency evaluation].”

Johnson added that while the proposal “was precipitated by the EIM implementation agreement, I do want to clearly point out that this change is available to all EIM participants.”

John Walker, an analyst with Portland General Electric, asked whether CAISO would consider moving any of the other base schedule submission timelines in light of the T-30 change.

“Right now, all we’re proposing is that T-40 to T-30 [shift]. I think maybe at some future date we’d think about moving around the other timelines associated with the base schedule submission process, but not within the scope of this initiative,” Johnson responded.

### Accounting for Start-up Energy

The second part of the straw proposal would allow EIM participants to factor start-up energy into their hourly resource plans and base schedules. The ISO’s Tariff currently prohibits those participants from submitting base schedules that show energy above zero but below a resource’s minimum load (Pmin).

The proposal notes that some EIM resources have multi-hour start times and minimum loads in the hundreds of megawatts, but existing rules prevent those resources from accounting for start-up energy in their base schedules for the EIM’s RSE ahead of an operating hour.

“This leaves the EIM entity with two options: either exclude this energy from the base schedule, which results in no inclusion in the RSE, or reallocate this energy to other online resources,” the proposal says. “Neither of these

options allows the EIM entity to accurately capture a potentially significant amount of energy produced while a resource is starting.”

The proposed plan would entail CAISO altering the logic of its base schedule aggregation portal and the RSE to allow entities to include start-up energy in their base schedule submissions.

“This will allow EIM entities to capture start-up energy in their schedules. The start-up energy will not be hit with uninstructed imbalance energy” charges, Johnson explained.

While the energy will be counted as part of the EIM entity’s RSE for the balancing test, CAISO clarified it would make no changes to the EIM’s capacity, flexible ramp and transmission feasibility tests. A resource operating below its minimum load will still be prohibited from providing ancillary services.

CAISO acknowledges that the changes would create a discrepancy between how start-up energy is treated for EIM and ISO resources. But the ISO noted that it already creates balanced day-ahead schedules through its Integrated Forward Market (IFM) while EIM entities produce their own balanced schedules, allowing the latter to include start-up information in the submission of their base schedules.

“To achieve similar treatment for the CAISO, the IFM would need to include this start-up energy within its optimization. Any after-the-fact inclusion of this energy to balanced day-ahead schedules would potentially create upward flexibility, at the expense of downward flexibility,” CAISO said. “As the CAISO schedules are already balanced, the CAISO does not believe this additional upward flexibility is worth the potential risk of failing the RSE in the downward direction.”

CAISO said it believes inclusion of start-up energy in the day-ahead market should be addressed “holistically” either through its existing extended day-ahead market initiative or some other future effort. (See [CAISO Proposal Sets Course for EIM Day-ahead](#).)

The ISO additionally proposes to implement “after-the-fact” monitoring criteria to ensure participants don’t abuse the market based on the change, including looking for a non-monotonically increasing pattern of base schedules below Pmin over consecutive hours; the lack of a base schedule in an hour following an interval with a base schedule below Pmin; and base schedules remaining below Pmin for an “unreasonably” long period based on the resource’s technology and start-up profile.

Brian Holmes, a director with Utilicast, asked whether resource owners would be given an after-the-fact opportunity to explain why a resource might have been flagged under the criteria, such as a failure to start up.

“I don’t think we want this to be unnecessarily punitive,” Johnson said.

CAISO Senior Manager Brad Cooper said the ISO hopes to implement the start-up energy portion of the proposal by next spring, with the T-30 slated to follow next fall.

Kristina Osborne, CAISO stakeholder engagement and policy specialist, said the proposal will likely fall under the EIM Governing Body’s primary approval authority. She said stakeholders should provide feedback on the proposal and the RTO’s proposed classification by Oct. 14.

The proposal will go before the Governing Body on Dec. 3 and the ISO’s Board of Governors later that month. ■

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## CAISO/West News

# CAISO Governors Say Hello, Goodbye

*Order 831 Measure Could Allow Manipulation, Borenstein Says*

By Hudson Sangree

The CAISO Board of Governors on Thursday bid farewell to its retired CEO, greeted a new leader and passed a half dozen measures, including a plan to implement FERC Order 831 that one governor worried could lead to market manipulation.

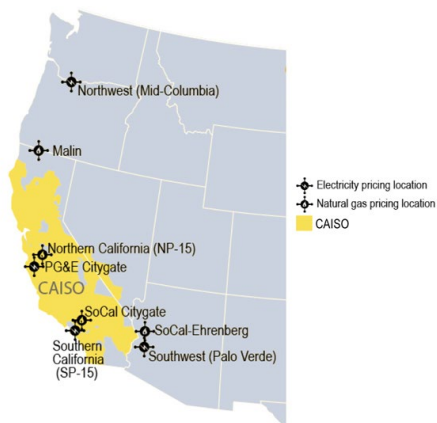
The five-member board also named its new chair and vice chair.

The meeting occurred as CAISO called for conservation to avoid shortfalls unusually late in the year. Triple-digit temperatures hit Los Angeles and inland areas of California last week, straining supply.

The late-season heat wave was a reminder of the grid emergencies in August and September, when resources ran short during record temperatures and forced CAISO to order rolling blackouts Aug. 14-15. (See [CAISO: Blackouts May Continue, Calls Emergency Meetings.](#))

The summer shortages came up in several of Thursday's policy discussions and when former CEO Steve Berberich delivered his last report to the board about events that had happened on his watch.

Berberich officially retired from CAISO on Sept. 29 but agreed to stick around to help with the transition. He told the board Thursday he wanted to "make sure [new CEO Elliot Mainzer] doesn't drown in the firehose that is headed his way."



The Palo Verde and Mid-Columbia hubs will be used by CAISO to set import prices during supply shortages. | U.S. EIA



California depends on exports from neighboring states such as Arizona to meet summer peak demand. | © RTO Insider

The ISO, the California Energy Commission and the California Public Utilities Commission are preparing a report that examines the root causes of the energy shortages, Berberich told the governors. The report will delve into factors such as exports from the state during the shortfalls and failures of some load-serving entities to schedule supply in the day-ahead market.

"We will look into those contributing factors and make sure we are not living on the margin like we were this summer," Berberich said. "Mr. Mainzer, I know, is going to make resource adequacy a top priority."

The board honored Berberich with a resolution that praised his accomplishments during his nine years as CEO, including the creation of the now flourishing Western Energy Imbalance Market and the establishment of RC West, the reliability coordinator for most of the Western Interconnection.

The governors told Mainzer they were pleased he had accepted their job offer after seven years as head of the Bonneville Power Administration.

"Elliot, welcome," Governor Ashutosh Bhagwat said. "We are very excited to work with you. These are exciting times — challenging times, but exciting times. And I know you are going to do an amazing job leading this organization."

Mainzer thanked the governors for their expressions of support and said he was looking forward to getting to work. (See [CAISO Retiring.](#))

[Incoming CEOs Field Questions.](#))

### New Chair, ESDER Phase 4

Later in the meeting, Bhagwat's four colleagues chose him as their new vice chair and picked Angelina Galiteva as CAISO's first female board chair in its 20-year existence. The positions rotate every two years.

The board approved CAISO's fourth and last phase of its five-year effort to make it easier for energy storage and distributed energy resources (ESDER) to participate in its market. (See [CAISO Finalizes ESDER Phase 4 Proposal.](#))

The ESDER initiative includes rooftop solar, energy storage, plug-in electric vehicles and demand response. It addresses a state-of-charge biddable parameter for storage resources; streamlines market participation agreements for non-generator resources; applies market power mitigation to storage resources; and sets a maximum daily run time parameter for DR.

The board also approved [proposals](#) on flexible ramping products, maximum import capability, reliability-must-run contracts, and changes to ISO rates and fees for next year.

### Order 831 Initiative

The longest and most complex of the policy discussions, however, took place over an [initiative](#) meant to align the ISO's practices with the requirements of FERC Order 831.

FERC issued Order 831 in 2016, two years



## CAISO/West News

after the polar vortex of 2014 pushed natural gas prices in the Northeast and Midwest to levels where marginal generation costs exceeded the \$1,000 offer caps then in place. It required ISOs and RTOs to raise the hard caps on supply bids from \$1,000 to \$2,000, with offers over \$1,000 requiring suppliers to justify their costs.

FERC approved CAISO's Tariff changes to comply with the order on Sept. 21. (See [FERC OKs CAISO Cost Recovery Plan for Gas.](#))

The board on Thursday approved a *stakeholder initiative* intended to help facilitate the order in California with import bidding rules and market parameters meant to "align the implementation of the order with some of the different characteristics of the Western grid," said Greg Cook, the ISO's director of market and infrastructure policy.

CAISO must implement the changes by March to comply with FERC's ruling, he said.

The main differences between Eastern and Western markets, Cook said, is that it is rare to see natural gas prices as high as in the East because gas demand peaks at different times in varying parts of the West. Some areas are extremely hot in summer; others are bitterly cold in winter.

And CAISO, unlike other ISOs and RTOs, is heavily dependent on imported electricity, he said.

In response, CAISO maintains a power balance constraint to ensure that supply equals demand. If there is insufficient supply, the ISO relaxes the constraint and sets market prices at a bid cap of \$1,000/MWh.

The initiative approved Thursday sets "appropriate levels of shortage pricing when energy costs exceed \$1,000/MWh." When that happens, and there is insufficient supply to meet demand, the "market will base prices on the price of the highest-priced cleared energy bid if the shortfall is no more than a small threshold value," CAISO Vice President of Market Policy and Performance Mark Rothleder said in his written report to the board. "Market prices will be based on \$2,000/MWh if the shortfall is greater than the threshold value."

A second enhancement establishes rules for allowing import and virtual bids greater than \$1,000/MWh, which Order 831 does not do. The proposal would allow CAISO to accept non-resource adequacy import and virtual bids above \$1,000/MWh "only when the ISO has cost-verified a bid or the ISO has calculated a



Angelina Galiteva, second from left, was elected as CAISO's new chair, and Ashutosh Bhagwat, far right, was elected vice chair on Oct. 1. | © RTO Insider

maximum import price that exceeds \$1,000/MWh," Rothleder wrote.

"For resource adequacy import bids, management proposes to reduce the price of bids priced above \$1,000/MWh to the maximum import bid price index or the highest resource-specific cost-verified bid," he said.

The ISO would calculate the maximum import price based on prevailing bilateral prices at the Palo Verde and Mid-Columbia trading hubs, whichever is higher.

"We picked those because those are the largest, most liquid trading hubs in the Southwest and Northwest, respectively," Cook said.

CAISO's Market Surveillance Committee previously supported the changes as an intermediate step but called for a stakeholder initiative on scarcity pricing to address situations similar to the August and September shortages. (See [CAISO MSC Urges Scarcity Pricing for Emergencies.](#))

Cook said the ISO agrees with that assessment and intends to introduce a scarcity pricing initiative.

Governor Severin Borenstein, a professor at the University of California, Berkeley, took issue with the idea of using the higher-priced trading hub to set prices. Palo Verde can have higher prices and trades at a lower volume than Mid-Columbia, he noted.

"It seems that this is ... not a very precise price index if we're taking the maximum of two very different locations," he said. He worried that CAISO is setting up a system by which traders could game the market with high bids at Palo Verde, which is less liquid than the Mid-Columbia hub.

CAISO said prices at Palo Verde climbed to \$1,500/MWh during the August emergency, and Southern California Edison said it had seen prices of \$1,750/MWh.

Eric Hildebrandt, executive director of market monitoring at CAISO, told Borenstein that FERC must approve such high prices after the fact.

"The best we can do is encourage FERC to perform that kind of review," Hildebrandt said.

Cook said it would "be very rare for these bilateral trading prices to exceed \$1,000/MWh," except in situations such as the August heat wave.

In the initiative, CAISO "wanted to ensure we wouldn't discourage import bids" during times of tight supply, Cook said. If conditions support prices over \$1,000/MWh, then the ISO wants the energy to be able flow into its market, he said.

Rothleder said it would be "too risky at this point" to limit imported supply based on prices, given the experiences of August and September. CAISO intends to address the liquidity issue in the future, including seeking guidance from FERC, he said. In the meantime, it will closely watch prices to make sure they "keep with reality," he said.

The board, including a somewhat reluctant Borenstein, approved the Order 831 initiative unanimously.

"I think we have to do this," Borenstein said of the measure, but he said he remained concerned about creating an "incentive to manipulate the prices at the trading hubs" and urged the ISO to find a solution. ■

## CAISO/West News



# Energy Amendments on NM, Nevada Ballots

## Effort to Reform New Mexico's PRC has Backing of Governor, Lawmakers

By Hudson Sangree

Voters in New Mexico and Nevada will make major decisions on their states' energy futures come Election Day in November.

In Nevada, a constitutional amendment on the ballot asks if the state should commit to a clean-energy future like its neighbors California, New Mexico and Washington.

In New Mexico, lawmakers placed a constitutional amendment on the ballot that would shake up the state's Public Regulation Commission by letting the governor appoint three at-large members in place of the five members now elected by geographic district. Republican and Democratic lawmakers overwhelmingly backed the ballot measure, and Gov. Michelle Lujan Grisham (D) supports it.

Many elected officials were angry with PRC commissioners for what they called an attempt to skirt the state's landmark 2019 Energy Transition Act (ETA), signed by Lujan Grisham, which requires the state's investor-owned utilities to get all their electricity from carbon-free sources by 2045. (See [New Mexico Moves Toward Clean Energy, EIM Participation.](#))

The bill also allows Public Service Company of New Mexico (PNM), the state's largest utility, to issue \$360 million in ratepayer-financed bonds to cover the costs of closing the coal-fired San Juan Generating Station by the end of 2022 and replacing its capacity. The bonds would also fund severance and job training programs for displaced workers, many of whom are Navajo.

The PRC decided to consider a part of PNM's closure application in a proceeding that commenced before the law was passed, raising doubts about whether the ETA would apply. The state Supreme Court later reversed the decision, saying PNM's application was filed after the governor signed the ETA and that the law must govern the PRC's decision-making.

Two current members of the PRC also back the amendment, saying some of those elected to the PRC lack the backgrounds needed to understand and rule on complex regulatory issues.

"The public and the utility companies that serve them deserve to have commissioners with meaningful expertise when they begin working as commissioners," Commissioners

Cynthia Hall and Stephen Fischmann wrote in an *editorial* published in many of the state's newspapers in March 2019. "That means graduate-level education plus significant industry or regulatory experience. Commissioners should be experts at the outset, not rookies."

Other members of the PRC argue allowing the governor to appoint its members would deprive voters, especially those in rural disadvantaged communities, of the opportunity to influence ratemaking and policy decisions.

"There is no requirement for any sort of geographic representation, which makes it extremely likely that the commission would be dominated by members from the urban population centers rather than rural New Mexico," Chair Theresa Becenti-Aguilar and Vice Chair Jefferson Byrd wrote in an *editorial* published by the Associated Press the same month as Hall and Fischmann's. "It is also likely that the ethnic and racial diversity of the PRC would be reduced along with the geographic diversity."

The commission recently *voted* to replace Becenti-Aguilar as chair of the PRC with Fischmann.

### Nevada Clean Energy

The vote coming up in Nevada is the second time residents have been asked whether the state should make clean-energy goals a part of its constitution.

Nevada already has a law, [SB 358](#), signed by Gov. Steve Sisolak in April 2019, that requires the state to get half its electricity from non-carbon-emitting resources by 2030, but environmentalists worry the law could be overturned by elected officials if the political winds shift. They want to enshrine the 50%-by-2030 goal in the state constitution.

In 2018, voters approved the renewable energy mandates in the form of [Question 6](#), with about 59% in favor, the [Nevada Secretary of State's office](#) reported. (See [High Failure Rate for Western Ballot Measures.](#))

That effort, like the current one, was bankrolled by California billionaire activist Tom Steyer.

However, amendments to the state constitution in Nevada must be approved in two consecutive elections, so the ballot measure, again called [Question 6](#), will be taken up for a final vote this year. ■



A decision over the closure of the coal-fired San Juan generating station was one of the controversies that led to a ballot measure to reform New Mexico's Public Regulation Commission. | PNM

## CAISO/West News

## PacifiCorp Faces Class Action over Wildfire Response

By Robert Mullin

Three Northwest law firms last week filed a class action suit against PacifiCorp alleging the utility failed to de-energize power lines that contributed to a set of devastating blazes ignited in Oregon during the Labor Day weekend.

The development highlights the pressures Western utilities increasingly confront as wildfire dangers grow in length and scope, impacting areas previously not prone to the kind of fast-moving conflagrations that have plagued California in recent years.

It also illustrates the tightrope utilities must walk when deciding whether to invoke public safety power shutoffs (PSPS), the policy of pre-emptively shutting down lines to prevent sparking fires in high-risk areas.

The *lawsuit*, filed with the Multnomah County Circuit Court on Thursday, contends that Portland-based Pacific Power and its parent company PacifiCorp ignored warnings of hot, dry winds coupled with “extremely critical fire conditions” on Sept. 7, leaving lines energized in high-risk fire areas even as other Oregon utilities proactively cut power to avoid igniting trees and brush in the state’s extensive and towering forests.

An unusual wind storm with easterly winds swept the state Labor Day evening, toppling a number of those lines, sparking fires that rapidly swept through the Clackamas, Santiam, McKenzie and Umpqua canyons, as well as other parts of Oregon, the complaint contends.

“Defendants’ energized power lines ignited massive, deadly and destructive fires that



Ruins of the Lyons, Ore., home of the lead plaintiffs in the class action suit filed against Pacific Power and PacifiCorp | Jeanyne James/Robin Colbert

raced down the canyons, igniting and destroying homes, businesses and schools,” the complaint says. “These fires burned over hundreds of thousands of acres, destroyed thousands of structures, killed people and upended countless lives.”

As evidence of Pacific Power’s culpability, the lawsuit cites a Northwest Incident Management Team (NIMT) *report* on Sept. 10 stating that downed lines on Sept. 7 sparked at least 13 fires along a nearly 30-mile stretch of the Santiam Canyon from the town of Detroit west to Mehama. The following day, the ferocious, wind-driven Beachie Creek Fire overran Detroit from the east and ultimately grew to more than 190,000 acres after merging with a separate blaze originally dubbed the Santiam Fire.

The lead plaintiffs in the suit, Jeanyne James and Robin Colbert, lived in the Santiam-area town of Lyons. The couple lost their home, four cars, a garage full of collectibles and tools, and nearly all their personal belongings, according to the suit, which seeks to represent other residents who suffered similar losses.

The complaint cites statements from an NIMT commander, who recounted during an early

September press conference that a fire team stationed at the Old Gates School in Gates, east of Lyons, witnessed power lines fall near the school around 9:45 p.m. on Labor Day, sparking a fire that burned down the incident command post. Firefighters and other witnesses saw downed lines ignite fires in other parts of Gates, the complaint notes.

Pacific Power “could have de-energized their power lines during the critical and extremely critical fire conditions, at little to no cost to defendants, and thereby fully eliminate the risk of fire caused by power lines,” the complaint says.

Instead, the utility acknowledged that the Santiam area was not in its PSPS area and only de-energized lines at the request of local emergency agencies, the suit said.

PacifiCorp said it does not comment on pending litigation.

### ‘No Small Matter’

The filing of the class action Thursday coincided with a special meeting of the Oregon Public Utility Commission on utility responses to the Labor Day wind storm and subsequent fires. Testimony illustrated the complications utilities face when deciding whether to call for



Stefan Bird, Pacific Power | Oregon PUC



## CAISO/West News

shutoffs in high-risk areas. It also demonstrated the differences between the responses of the state's two big investor-owned utilities, Pacific Power and Portland General Electric.

Pacific Power CEO Stefan Bird said the utility introduced PSPS in its planning in 2018 "as a last resort in extreme weather conditions in specific high fire-risk areas of our service territory."

"We understand it's no small matter to consider turning the power off for an entire community, and that such an action needs to take in consideration the risks that imposes to critical emergency services that rely on power, such as hospitals, 911 communications, water supply and vulnerable customers that rely on power to meet their medical requirements," Bird told commissioners.

David Lucas, Pacific Power's vice president of operations, said conditions on the utility's system "did not meet protocols" for using PSPS in its high fire-risk areas. However, a [map](#) on Pacific Power's website shows the Santiam Canyon is not even located near any of the utility's PSPS zones.

"Similar to our colleagues at PGE," Lucas said, "we did de-energize lines at the request of local emergency agencies to allow firefighters to do their job safely and to assist in removing debris to unblock roadways." He said utility staff took those actions in the Medford area,

about 235 miles south of the Santiam Canyon.

"We know public safety power shutoffs are often a focus when the public hears about utility wildfire mitigation; however, this is only one tool in a utility's toolbox," Lucas said. "And as we've learned through extensive local community engagement, public safety power shutoff events must be properly planned and coordinated so that a loss of power does not have unintended consequences of actually increasing public safety risk."

Unlike Pacific Power, PGE did pre-emptively de-energize lines on Labor Day in anticipation of the wind storm, shutting power to about 5,000 customers near Mount Hood in what was the first PSPS event to affect Oregon residents. (See [High Fire Danger Prompts First Oregon PSPS Event](#).)

During the PUC call, PGE Vice President Larry Bekkedahl said the utility was under a "heightened level of alert" in the week before the weather event, prompting it to contact customers and community leaders to plan for a potential PSPS, including relocating "medically fragile" residents.

"This was not a decision we took lightly, as we recognized the hardships that the loss of power presents to many customers," Bekkedahl said. "On [Labor Day] evening, I made the decision to de-energize in the highest-risk section of our service area" near Mount Hood. PGE



Larry Bekkedahl, Portland General Electric | Oregon PUC

subsequently de-energized lines in eight other areas, including towns threatened by both the Beachie Creek and Riverside fires, which at one point threatened to merge.

While the lawsuit does not mention PGE's actions, it does note that the Eugene Water & Electric Board (EWEB), which serves a territory about 70 miles south of the Santiam area, pre-emptively de-energized lines during the storm.

The complaint noted that EWEB spokesman Joe Harwood told [The Register-Guard](#) on Sept. 9 that "I know people weren't happy, but the idea was not to be the cause of a fire." ■

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## CAISO/West News

# FERC OKs CAISO EV Charging, Storage Updates

## Changes Meant to Keep Up with Rapidly Changing Market

By Hudson Sangree

FERC last week approved a CAISO Tariff change to increase demand response participation by businesses offering on-site electric vehicle charging and a second change to improve accounting for the load-shifting capabilities of behind-the-meter storage resources (ER20-2443).

The ISO pays DR resources when they curtail load during times of high demand for electricity and strained supply. But a growing share of DR resources now include on-site load, generating capacity and batteries. In particular, the ISO said, a growing trend is providing EV charging at large energy customer locations, such as grocery stores, theaters and office buildings.

“According to CAISO, EVSE [electric vehicle supply equipment] frequently operates under the same retail meter and account as their host facility,” FERC said. “Thus, the entire facility

must participate as a single metered resource even though the EVSE and on-site host load may have very different load profiles. CAISO asserts that, by failing to capture the unique load profile of the EVSE, it may send the wrong price signals to EVSE owners, thereby failing to provide incentives to curtail load during peak conditions.”

CAISO also said storage and DR resources can play important roles in managing peak demand, especially during the evening ramp. The net peak after solar declines was a major source of problems for the ISO during its August and September energy emergencies. (See [CAISO Provides More Details on Blackouts](#).)

The ISO said its current rules “only capture the value of reducing demand compared to typical use” and do not incentivize storage resources to increase demand during oversupply conditions, which it said would help maintain reliability, avoid curtailments and stabilize prices.

To fix those issues, CAISO proposed two

Tariff modifications.

One would treat EVSE as a separate load curtailment measure when providing DR at facilities with on-site load.

“CAISO notes that it will not require such resources to separate their EVSE from the rest of their load, but, where demand response resources elect to measure EVSE performance separately, CAISO states that the resource must submeter the EVSE to avoid comingling the EVSE load and the on-site host load’s performance,” FERC said. “However, CAISO explains that the EVSE and on-site host load will still continue to operate under a single resource ID and will bid and meet CAISO schedules together as a single resource, but [they] will be settled separately based on their individual baselines.”

A second Tariff change creates “a demand response participation model to facilitate load-shifting capabilities of behind-the-meter energy storage resources to better account for when such resources charge or discharge at optimal times.” The change will establish two separate resource IDs: a consumption resource ID to track energy storage charging and a curtailment resource ID to account for the energy storage discharging to increase the site’s load curtailment.

Each resource ID will have its own baseline and DR energy measurement to establish typical use, using methodologies nearly identical to CAISO’s existing metering generator output methodology.

In comments, Southern California Edison supported the changes but worried they could lead to market gaming. CAISO said it was unpersuaded by SCE’s argument.

FERC accepted the revisions effective Oct. 1, saying they would improve DR participation.

“As CAISO explains, EVSE and behind-the-meter energy storage resources are increasing throughout the CAISO footprint at a rapid pace, and the goal of the proposed Tariff revisions is for CAISO’s policies to keep pace with these technological advancements.

“Allowing CAISO to implement these provisions will provide EVSE and behind-the-meter energy storage resources with access to CAISO’s wholesale markets under just and reasonable rules that will also capture their unique characteristics and benefits,” FERC said. ■



CAISO said retail outlets with EV charging could play a role in demand response. | Volta

# ERCOT News



## Overheard at GCPA Fall Conference 2020

### Decarbonization a Major Issue for Electric Industry

Its spring conference having been canceled during the early throes of the coronavirus pandemic, the Gulf Coast Power Association virtually gathered 437 participants last week for its 35th annual Fall Conference.

"I really can't wait to be together to see you all in person," GCPA Executive Director Kim Casey said, lamenting her "love-hate" relationship with technology.

Decarbonization and the need for a low-carbon future were among the topics, with a pair of industry experts sharing their expertise during one panel discussion.

"We're living our future right now," CenterPoint Energy's Kenny Mercado said in introducing his panelists. "There's no better place on earth than Texas to further explore what happens next as we drive our way to a low-carbon future."

Brett Perlman, CEO of the Center for Houston's Future and a former Texas Public Utility Commissioner, suggested the state follow the decarbonization example set by Germany, which is similar in size to Texas. The European nation's guiding principles include continued electrification in parallel to accelerating renewable grid penetration; a focus on renewable power's ability to displace fossil fuels; using blue hydrogen to address hard-to-decarbonize sectors like steel and refining; and finding entry points for green hydrogen and wind power.

"We want to continue to drive the electrification of things like transportation, reprioritize renewable energy and start to develop this hydrogen resource," Perlman said. "A lot of this is going to be market-driven. We've already seen the market drive coal retirements and storage expansion. There will need to be a policy driver, but we're waiting on that."

The Lone Star State leads the nation with 700 million metric tons of carbon dioxide emissions a year. The electric, transportation and industrial sectors each account for about a third of 96% of those emissions. It also leads the nation in wind power with more than 30 GW of capacity, trailing only four countries.

"That's a surprising picture, for a lot of people," Perlman said. "Texas is one of the world leaders in non-carbon electric generation. If you asked people, they would say California. They would never guess Texas."



Pat Wood III (lower right) moderates a panel featuring (clockwise from upper left) Caleb Stephenson, Calpine; Doug Moorehead, Broad Reach Power; and Vanus Priestley, Priestley Consulting. | GCPA

"We have really 10 years, according to climate scientists, to make [decarbonization] work. We have 10 years to really invest in the future, and I don't see a place that that can happen quicker than ERCOT," he said.

The Electric Power Research Institute's Neva Espinoza explained the organization's *Project 2X to 2050*, one of the "key pathways" to a decarbonized economy. The initiative looks at the electric, transportation and industry/buildings sectors and how energy efficiency, cleaner electricity, efficient electrification and low-carbon resources will enable decarbonization goals set for 2030 and 2050.

Espinoza said the U.S. generation fleet is 30% less carbon-intensive than it was in 2005. She pointed out that has resulted in average retail prices that are essentially flat.

"We're seeing a decoupling of economic growth and CO<sub>2</sub> emissions," Espinoza said. "We have to continue to clean our electric fleet so that it is 50% less carbon-intensive than the 2005 electric fleet. We need to add an additional 30 GW of flexible resources to our grid today."

### Developers Eye Energy Storage

Pat Wood III, former FERC and Texas PUC chair, moderated a panel on resource development and power contracting. He closed the discussion by asking each speaker their one wish.

Priestley Consulting's Vanus Priestley, who was heavily involved in ERCOT's market de-

sign, said he would take the "immense talent" at ERCOT and work on health care. Broad Reach Power CTO Doug Moorehead opted to see an increase in educational awareness around energy storage, from the seventh grade to college, so "education would be faster."

Caleb Stephenson, co-leader of Calpine's wholesale commercial operations group, was more realistic.

"I would like to see a national price on carbon. A lot of people are supporting it, and we need to push this through," he said. "I'm less optimistic about the reality of the politics around it, but we're going to keep pushing it. The power sector accounts for less than a quarter of greenhouse gases. We're going to have to lean on the power sector to push others."

Stephenson said "deeper decarbonization" has renewed the focus on reliability planning and alternatives to peaker plants.

"Recent events in California underscore this point. The days of significant new gas plant development is over," he said. "This elevates the importance of existing plants. As folks involved in the market, batteries are now the marginal source of new capacity in some regions. Most [load-serving entities'] future plans are overwhelmingly focused on storage."

Moorehead reminded his audience not to forget about storage's other assets.

"As renewables flood the market here in ERCOT and elsewhere, energy storage is one of the answers to congestion," he said. "We're starting to see now the bankability around



# ERCOT News



energy storage. ... I consider battery storage a generation device. It's effective closer to load, especially in large, urban areas."

## Walker: Summer 2020 Went as Planned

PUC Chair DeAnn Walker reviewed the ERCOT market's 2020 summer, one without energy emergency alerts or skimpy generation supplies. Just as planned, she intimated.

"The reason we didn't is exactly what I said when we implemented changes to the ORDC [operating reserve demand curve]," Walker said. "People's behavior changed."

Walker's reference was to a pair of 0.25 standard deviation shifts in the loss-of-load probability calculation since 2018 and using a single, blended ORDC. The curve provides a price adder during periods of generation scarcity. (See *Texas PUC Responds to Shrinking Reserve Margin*.)

"The market performed great. We had a higher reserve margin going into the summer because of more wind and more solar," she said. "COVID-19 hasn't really affected usage. It's been a different summer, and a lot of it is we have more generation online."

Walker told moderator and former PUC Commissioner Brandy Marty Marquez that even more generation is on the way.

"Distributed generation is just going to continue to grow. We're going to see things happen with batteries that no one can envision right now," she said. "I think we will continue — at least that's what ERCOT tells me with what's in the [interconnection] queue — to see a lot more solar and more wind. Whoever thought Texas could put more wind in? But we keep finding ways to put more wind in."

"There is no ISO in the United States or in the world better than ERCOT. I know [it] will stay ahead of it. I don't really have worries about the summer as much as I did when I came in," Walker said.

## The View from Wall Street

A panel of financial analysts shared their thoughts on the electric sector's performance during the economic downturn. Rebecca Kruger, managing director for Goldman Sachs, noted that utility share prices tend to trade in inverse proportion to the stock market, but that hasn't been the case this year.

"You would think [utility stocks] would be trading extremely well ... but the sector as a whole is trading at a sizeable discount," she said. "We've always been a believer in scale and diversity in this sector. COVID, for us, brought

forward how important scale is. We do see a diverging perspective, with the larger caps tending to outperform."

"Utility stocks are trading at their cheapest level since the height of the dot-com bubble," said Bank of America's Julien Dumoulin-Smith, a familiar presence during electric utility earnings calls. "At the end of the day, what we're seeing transpire right now is going to result in higher valuations."

Dumoulin-Smith said the lower discount rates will result in further transmission investment. "Having that low-cost capital is going to invite a lot of transactions for developers," he said.

That bodes well for an industry where wind, solar and now energy storage have all taken advantage of plunging prices.

"It's not lost on us that the sector appears to be at a crossroads," Kruger said. "Two things are driving it: technological advancements — we saw that with renewables, and now with battery storage — and the intense focus on climate change."

"This industry has already been transforming itself," said Gabe Grosberg, a senior director for S&P Global. Many more coal plants are slated to close, and there's continued investment in the industry ... \$150 billion annually, much of it in renewables. We see a continued trend in renewables ... that reflects what the consumers want. They want lower carbon intensity; they want electricity they can count on; but they also want to reduce greenhouse gases."

## COVID Still Major Conversation Piece

As is the case at many events during the new normal, the COVID-19 pandemic was the topic of several conversations.

Delivering one of several keynote addresses, CPS Energy CEO Paula Gold-Williams shared her organization's response as the pandemic took hold in February and March.

"Our organization had no idea how overwhelming this pandemic would be. It was emotionally intense," she said. "With our organization, we had to restructure everything. We recognized we were an essential service, and we had to declare every position an essential service. There were 3,100 of us, and it took all 3,100 of us to work."

Joe Tracy, executive vice president and senior adviser to the Federal Reserve Bank of Dallas' president, said the pandemic forced the Fed to rely on new forms of data because more forecasting methods rely on "backward-looking"

government data.

"We turned to cellphone data to get a measure of people's mobility," he said, noting mobility bottomed out in March and April when Americans started sheltering at home. "We saw it ... slowly start to recover as many states got a handle on the virus."



Phil Wilson, Lower Colorado River Authority | GCPA

But no one had a more up-close and personal view of the pandemic than Phil Wilson, the Lower Colorado River Authority's general manager. Having previously served as Texas' secretary of state and as the Texas Department of Transportation

executive director, Wilson was called upon again when the state's Health and Human Services Commission's (HHSC) executive commissioner took a position in his native Louisiana. He balanced both of his jobs during a daily routine that left a little time for dinner and a few hours of sleep.

"You're only as good as the people working with you, and I had a strong team there. I made some lifelong friends because you're in the trenches trying to solve some very difficult situations," Wilson said. "The HHSC has a significant portion of its workforce that can't work remotely. I wanted to make sure those individuals are just as valued as those who work remotely. It really comes down to the fact you're as good as your people."

## ERCOT's Maggio Wins Award

Dave Maggio, ERCOT's director of market design and analysis, was honored with GCPA's emPOWERing Young Professionals Award, presented to energy professionals under the age of 40.

Maggio joined ERCOT in 2007 as part of a group of engineers hired to bring the nodal market online. He is currently driving the grid operator's implementation of real-time co-optimization.

As previously [announced](#), 40-year industry veteran Tom Payton was awarded the Pat Wood Power Star Award by its namesake. The award recognizes significant contributions to Texas' competitive energy markets.

Payton served on the ERCOT Board of Directors from 2002 until 2006. He retired in 2013 after serving as senior vice president of power for Occidental Petroleum. ■

— Tom Kleckner

## ISO-NE News

# RI Updates 2030 Load and Renewables Forecast

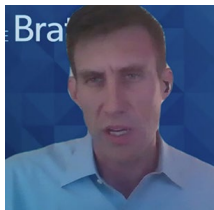
By Michael Kuser

Rhode Island will need to add about 440 GWh of renewable energy annually to meet the state's goal of 100% renewable energy by 2030. The Brattle Group said at the second in a series of three public workshops hosted by the state's Office of Energy Resources (OER) on Sept. 29.

Equally daunting, the state will need to continue adding an average of 400 GWh a year to maintain the 100% target through 2050 as its load potentially doubles from the electrification of heating and transportation, Brattle said.

The consultants are helping state officials develop a plan by year-end for the clean energy target mandated in a January executive order by Gov. Gina Raimondo. (See [RI Seeks to Lead with 100% Renewable Goal](#).)

### Electrification Impact



Michael Hagerty, Brattle  
| The Brattle Group

At the first public meeting in July, the analysts said the state would need to add 360 GWh annually through 2030 to meet the target. The current estimate's base case projects net load of 7,700 GWh in 2030, including electrification of 5% of

light-duty vehicles (LDVs) and 5% of heating, based on an ISO-NE forecast, said Michael Hagerty, Brattle senior associate. The baseline also incorporates National Grid's forecast for energy efficiency.

The baseline is bracketed by a low-demand scenario of 7,000 GWh and a high-demand scenario of 8,300 MWh, which assumes 15% LDV electrification and 10% heating electrification.

"In our low-demand scenario, we're assuming that level of electrification does not occur," Hagerty said.

The study says the state needs to add 4,400 GWh of renewable energy by 2030 to meet 100%. Last year, Rhode Island's renewable electricity production of 930 GWh represented 13% of the state's load. The state has 410 MW of renewables, including 230 MW of solar, including net metered resources, and 180 MW of contracted resources.

Current transmission queues list more than 12

GW of offshore wind, and 2.2 GW of onshore wind from Maine and 4 GW from New York. But the ISO-NE queue currently has no Rhode Island-based onshore wind because of wind quality and land availability, Brattle reported.

The costs of transmission and distribution system upgrades needed to accommodate the new renewables is "a source of significant uncertainty," Hagerty said. "We've been reviewing these projections with renewable developers to make sure that they find them to be reasonable, and we've generally heard that they are."

The limited availability of low-cost interconnection points for 1- to 10-MW scale distributed solar has resulted in increased interconnection costs, which might offset some of the cost declines seen in the industry, Hagerty said. An increase of \$200 to \$300/kW in system upgrades could increase distributed solar costs by \$10 to \$24/MWh, he added.

### Wholesale Modeling



Dean Murphy, Brattle |  
The Brattle Group

Brattle principal Dean Murphy outlined how the consultants are modeling the New England wholesale electricity market.

"It's important to recognize that the fundamental nature of this market is going

to change substantially, even by 2030, and perhaps especially thereafter due to the significant addition of renewable energy generators across the system," Murphy said. At 6% of regional load, "Rhode Island ... is a very small component of New England overall, so it will be driven more by changes in other states that are also decarbonizing their electricity resources, albeit less quickly than Rhode Island."

Because the output of renewables is highly correlated and difficult to store, once a lot of solar has been added to the system, incremental additions will have diminishing value. To capture how that dynamic will work out over time, Brattle uses an in-house model called GridSim.

The study projects that gas-fired capacity will be kept around until 2040 but will be used much less than now as other renewable resources come online. In response to a question by an attendee, Brattle principal Jürgen Weiss acknowledged that gas generators will become

increasingly dependent on capacity revenues to survive as their energy market revenue drops with lower utilization. He said the model accounts for the shift, ensuring all resources cover their fixed and variable costs.

"[It is] important to note that something similar is already the case since there are resources that don't generate much electricity but stay in the market to provide reliability," such as older dual-fuel units, he said. "If they have been built, you don't necessarily need higher capacity prices since the capital cost is sunk and you just need to cover their going-forward costs," Weiss said.

"Solar may be an excellent complement to wind, in part because it does generate more in the summer, when there is a summer peak for load in the daytime," Murphy said. "A blend of these two kinds of resources is likely to be better than either one in isolation."

### Environmental Justice

OER Commissioner Nicholas Ucci told the workshop that his office is including social and environmental justice considerations in its work on clean energy.

"Folks should be comforted by the fact that we are accounting for many if not most of those categories in the 4600 framework, either analytically, qualitatively or by other means," Ucci said, referring to the Public Utilities Commission's Docket No. 4600, an investigation into the changing electric distribution system.

"One piece of good news is that, unlike in the past when dirty stuff was located in places that hurt particularly vulnerable populations, here we're talking about locating renewable energy resources — and their negative impact on surrounding communities is considerably less than coal-fired power plants," Weiss said.

How those vulnerable populations are protected from potential rate increases is a separate and important topic, Weiss said. "But we're cleaning up Rhode Island's electricity system, so the trajectory is to remove harm that might have been inflicted in the past. One can also ask whether the policies that are implemented to achieve the 100% renewable electricity target could be used to help those communities that are disadvantaged."

For environmental justice, "the first step is to look inward," Ucci said. "A lot of our state agencies are starting to connect with local grassroots organizations to better understand their perspectives [and] working to educate and train ourselves." ■

## ISO-NE News

# Vermont Working to Electrify Rural Transit

By Michael Kuser

More than 400 people joined the annual three-day Energy Action Network (EAN) [Summit](#) online last week to hear ideas on how to tackle some of the clean energy challenges facing the mostly rural Vermont, including increasing bus ridership and incentivizing more fuel-efficient cars.

EAN comprises more than 200 nonprofits, businesses, public agencies and other organizations advocating for clean energy. Following is some of what we heard at the meeting.

### 'Cultural War'

State Sen. Andrew Perchlik spoke about his proposed vehicle "feebate" program aimed at people buying new vehicles. It would provide a rebate if the vehicle has a mileage rating above average for its vehicle class and add a fee on the purchase if it is below average. [House Bill 529](#), signed into law last year, called for a study of the proposal, which Perchlik said would be self-funding program and revenue-neutral for the state.

The electric Chevy Bolt, which gets 118 mpg equivalent, would be worth a \$1,000 rebate, under the program he said.

"But if you really wanted a Cadillac CT5 that only gets 21 mpg, that price would be adjusted up \$500. ... In a truck example, if you wanted the Ford F-150 Raptor four-wheel drive that only gets 16 mpg, you would pay \$250 more for that vehicle," Perchlik said.

"We would adjust accordingly... to make sure that it's meeting its goal of causing people to buy more efficient vehicles," Perchlik said. "We also don't want to make the penalty so large ... that it creates a lot of pushback, especially as we're just rolling out the program."

He said the program has been implemented in Ontario but not in the U.S. "Part of the reason is that you get into a cultural war of truck owners not wanting to support Prius owners, for example."

### Junk the Clunker, Go Electric

Sue Minter, executive director of [Capstone](#) Community Action, a social advocacy organization, and EAN Senior Fellow Linda McGinnis promoted a "Replace Your Ride" program modeled on [one](#) in California to provide cash incentives to low-income Vermonters to trade in their older high-polluting vehicles for a range

of clean transportation and shared-mobility options.

Jennifer Wallace-Brodeur of the Vermont Energy Investment Corp. (VEIC), a nonprofit organization that advocates for energy efficiency and renewable energy, joined Cara Robeck of the Vermont Energy Education Program (VEEP) and Peggy O'Neill-Vivanco of the University of Vermont to speak on combining and electrifying rural school and public transportation.

The Vermont Clean Cities [Coalition](#) at UVM is a transportation fuels resource for educators, consumers and providers of advanced transportation technologies.

An anonymous participant submitted a question about how the electric buses would handle the rough terrain that a lot of diesel- or natural gas-powered school buses cover in rural areas.

In 2017, Green Mountain Transit, Advance Transit and UVM demonstrated an electric transit bus to test out how it would do in winter conditions and a variety of routes. "We did find that there are different emission savings and fuel cost savings associated with different operating conditions. So, whether it be short routes in town with lots of stops and starts, or hilly routes, there's definitely some pros and cons to all of that. Operating conditions do make a difference," O'Neill-Vivanco said. (See [Takeaways from the Zero Emission Bus Conference](#).)

Wallace-Brodeur said that buses can increase their power through regenerative braking when they're going downhill.

"But they do draw on the battery a little bit more when you're going up, so it's a bit of a tradeoff there," she said. "And we absolutely know that winter conditions will impact the range of battery electric buses. So that has to be factored in when you're planning routes and the size of batteries and battery configuration."

Analysts at UVM have found that all of the schools that are participating in the test could meet the needs of their daily school transportation routes, with an electric bus, despite the range decreases in winter, Robeck said.

Another question was how the program would overcome safety issues connected with merging school and public transit systems.

"In most of the world, and many cities in this country, school and public transit does take place on the same buses, including in Burling-



Clockwise from top left: Carolyn Wesley, EAN; Jennifer Wallace-Brodeur, VEIC; Peggy O'Neill-Vivanco, UVM; and Cara Robeck, VEEP. | Vermont EAN

ton, Vt., and it takes place on public buses, not on school buses," Robeck said.

### Nothing Beats a Free Ride

Jack Hanson of Sustainable Transportation Vermont (STVT) proposed that the state allocate \$3 million out of the \$641 million transportation budget for 2020 to fund fare-free transit, as a way to cut per capita emissions and enhance social justice.

"Vermont has a very serious problem of transportation emissions despite years of improvement, with nearly half of current emissions as a state coming from transportation. By far the largest share of those emissions is from our reliance on single-occupancy vehicles," Hanson said.

Mass transit offers a drastic reduction in carbon emissions over single-occupancy vehicle gains, but it's a challenge in a rural state to get people out of their cars and onto buses. Fare-free transit has proven effective in case studies around the world, he said.

For example, [Advance Transit](#), which serves the Dartmouth area between Vermont and New Hampshire, saw a 76% increase in ridership in the first two years of fare-free transit and a nearly 300% increase since it was implemented in 2014. [Green Mountain Transit](#), which serves the Burlington and Montpelier areas, projects that if fare-free was implemented under normal, non-pandemic conditions, it would see a 37% increase in ridership, Hanson said.

"So, who is currently paying transit fares in Vermont? Well, it's the bus riders themselves, obviously," Hanson said. "And this is a group of Vermonters that is disproportionately low-income and people of color. It's a group that has some of the least impact on climate change ... [and] many of these folks have limited mobility options." ■



# ISO-NE News

## Overheard at NECA 2020 Fuels Conference

### Implications for Future of Natural Gas

The Northeast Energy and Commerce Association's Fuels Conference on Wednesday tackled the subject of natural gas bans by local governments, questioning whether they are necessary for the "transition to a clean energy future or major government overreach with unintended consequences."

Judy Chang, undersecretary of energy in the Massachusetts Executive Office of Energy and Environmental Affairs, said that the transition away from natural gas "is not going to be easy," noting that gas demand has increased amid decarbonization efforts and that it is used for both heat and electricity.

"New England has very cold winters, and approximately 50% of our households heat with natural gas, and that number has been increasing," Chang said. "In addition, we are at the end of long pipelines."

Regulatory Assistance Project principal Richard Cowart concurred, saying, "Phasing out natural gas is probably the most challenging climate policy topic" he has encountered in nearly 30 years of working to decarbonize the power sector.

"I just think [natural] gas is going to be harder," Cowart said. "The automobile fleet is easier than converting buildings away from fossil fuels, but climate science tells us it has to be done."

Cowart said gas utilities need new business



Clockwise from top left: Rick Sullivan, Economic Development Council of Western Massachusetts; Judith Judson, Ameresco; Zach Chapin, Dominion Energy; and Edson Ng, G4 Insights | NECA

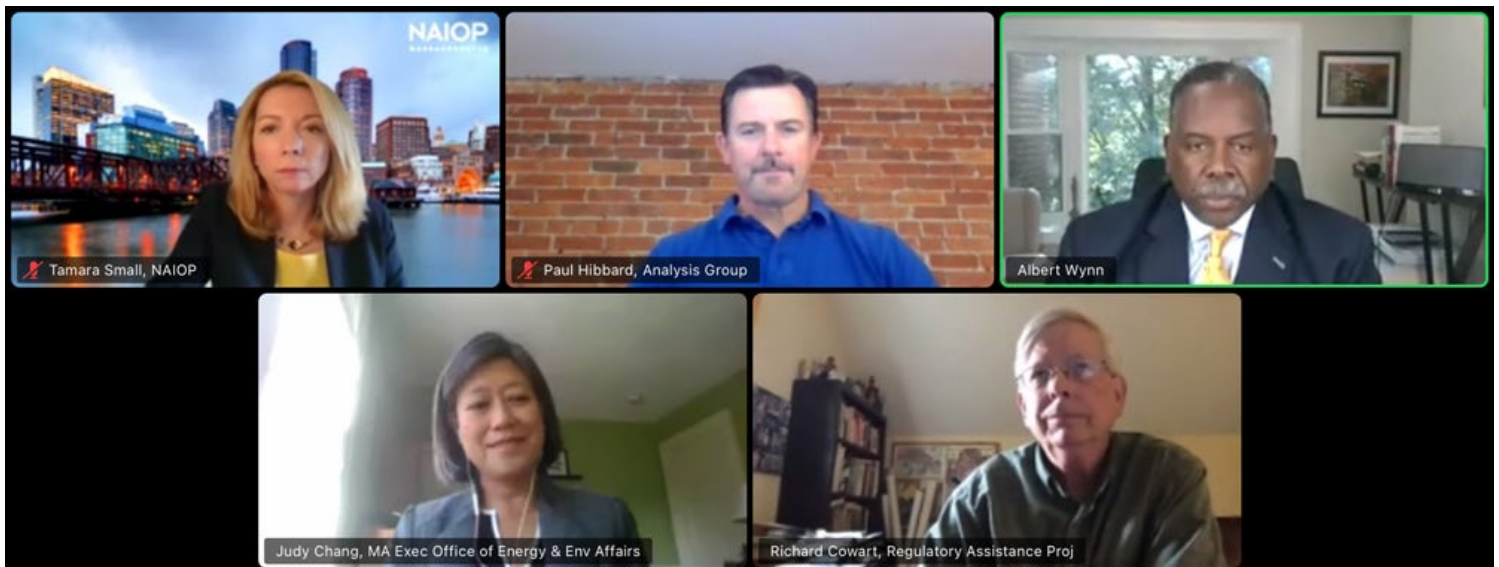
models and a regulatory transformation as well. "I went through electric industry restructuring, and this is starting to feel a lot like that."

Cutting away quickly from fossil fuels like natural gas is not possible, according to Cowart. "Cold turkey is not on the menu," he said. "We can only exit traditional fossil gas and oil as quickly as we can add renewable electricity, perhaps some clean gases, heat pumps and building renovations."

Tamara Small, CEO of NAIOP Massachusetts,

which represents companies involved in commercial real estate, said that her organization recognizes the effects of climate change, and its 1,700 members embrace projects designed to reduce carbon emissions. Small said any transition away from fossil fuel needs to be done in a "phased approach," especially in new construction.

"Banning the use of natural gas for new construction means that residents will be paying for electric stoves and other electric appliances that drive up individual utility costs



Clockwise from top left: Tamara Small, NAIOP Massachusetts; Paul Hibbard, Analysis Group; Albert Wynn, Greenberg Traurig; Judy Chang, Massachusetts Executive Office of Energy and Environmental Affairs; Richard Cowart, Regulatory Assistance Project | NECA

## ISO-NE News

and may burden residents who cannot afford large increases," Small said. "Energy efficiency needs to go hand in hand with electrification, but there is still a cost impact."

Paul Hibbard, principal at Analysis Group, said he has not seen "careful economic analysis or assessment of what is the pathway" to reaching net-zero carbon emissions by 2050.

"The most difficult part of decarbonization is putting a pin on the board about when we need to be all-electric in buildings. [It] will be important to provide that runway ... to get carbon reductions going much sooner," Hibbard said.

### Tepper Talks About Mass. DPU Petition

Nearly two years after a series of explosions and fires in natural gas lines just outside of Boston in September 2018, the Massachusetts Attorney General's Office filed a *petition* with the Department of Public Utilities to investigate the future of the industry as the state "transitions away from fossil fuels and toward a clean, renewable energy future by 2050."

Rebecca Tepper, the chief of the office's Energy and Telecommunications Division, said during a keynote speech that "numerous audits and reports" showed how vulnerable the "whole state gas system is."

"If we sit back and do not plan for how to manage this transition, we will repeat the mistakes of the past, and vulnerable communities will be the ones who suffer," she said.

The first phase of the investigation, Tepper said, should require gas companies to submit detailed economic analyses and business plans that project the state's future gas demand, including potential revenues, expenses and

investments, and input from stakeholders on necessary regulatory, policy and legislative changes. The second phase should focus on developing and carrying out the changes required in a way that protects the state's gas consumers.

"It's critical that we start planning this now, and that we include all stakeholders in our process," Tepper said. "I feel like we are at a crossroad. It's not unlike where we were in restructuring, and we need to work together as a stakeholder community to figure this out."

"We're not alone in Massachusetts thinking about this," she said. The petition points to similar actions in New York, where an investigation was opened in March to ensure more useful and comprehensive planning for natural gas usage and investments, and California, which started a proceeding this year to examine the safety and reliability of its natural gas infrastructure, while the state focuses on achieving its long-term decarbonization goals.

"This transition is happening; it's happening faster than even we thought it would, so neither the status quo nor kicking the problem down the road is going to work," Tepper said. "This is the time. Not five years or 10 years from now."

### Renewable Natural Gas Opportunities

Judith Judson, Ameresco's vice president of distributed energy systems, said that the Northeast has a chance to be an early leader in renewable natural gas.

Judson said that Ameresco had discussions with utilities in the Northeast on adding RNG from landfills, waste-water treatment plants

or large waste-producing farms to their supply portfolios.

"In terms of carbon emissions, it's considered carbon neutral," Judson said. "There are a growing number of studies that [RNG] is cost-effective relative to other decarbonization options for heating."

RNG can be delivered through existing infrastructure without any further capital investment, she said, and it is a baseload, dispatchable renewable fuel source to support resilience objectives.

Judson said that an "economy-wide perspective" is needed to meet carbon goals in a "cost-effective way," and RNG should be a part.


### Looming Mystic Closure Reduces Flexibility

Jake Anderson, head of gas and power fundamentals analysis at Macquarie Energy, said during his keynote that the announced retirement of Exelon's Mystic Units 8 and 9 "reduces flexibility" for New England gas markets.

Asked if there will be renewed interest in gas storage development from independent or pipeline-affiliated companies, given the gap in storage capacity and production volume, Anderson said, "it's a tough environment for building storage because the costs haven't necessarily come down all that much."

Regardless of the economics, Anderson added, if gas demand grows and LNG terminals need storage, "we're going to see at some point a resurgence of storage building; it's just a question of when and how quickly." ■


— Jason York



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## ISO-NE News

# NEPOOL Participants Committee Briefs

### Committee Split on Capacity Performance Payments for EE

ISO-NE will ask FERC to exempt energy efficiency resources from capacity performance payments, although the proposal failed to win an endorsement from the New England Power Pool Participants Committee on Thursday.

The proposal received a 58% sector-weighted vote of the PC, short of the 60% endorsement threshold, with unanimous dissent from the End User sector and all 49 Publicly Owned Entity members abstaining from the vote. The Generation, Transmission, Supplier and Alternative Resource sectors supported the change. Last month, the NEPOOL Markets Committee also failed to endorse the proposal along similar voting lines. (See *NEPOOL Stakeholders Split over PFP for EE*.)

However, the Participants Committee did endorse a related measure to revise the Financial Assurance Policy to exclude EE capacity supply obligations from the calculation of capacity financial assurance requirements. The motion passed with a 79% vote in favor.

The RTO says capacity performance bonuses should be limited to those resources whose performance could be at risk during a capacity shortage. The change is a recognition that EE resources permanently reduce energy consumption and have no real-time performance measures, officials said.

### Other Actions

In other action, the committee approved:

- Revisions to Operating Procedures 17 and



ISO-NE Chief Operating Officer Vamsi Chadalavada  
| ISO-NE

21. The changes to OP-17 spell out in more detail the ranges of acceptable load power factors for sections of the New England Control Area and the responsibilities of ISO-NE, transmission owners and transmission customers. The revisions to OP-21 incorporate the annual generator winter readiness survey process and the yearly natural gas critical infrastructure survey, intended to ensure the interstate natural gas system is not on electrical circuits subject to automatic or manual load-shedding schemes.

- Hydro-Québec interconnection capability credits and installed capacity requirement values for Forward Capacity Auction 15. The HQICC is 883 MW for each month of the 2024/25 capacity commitment period (June through May). The ICR is 34,153 MW, with a net ICR of 33,270 MW.
- The 2021 operating and capital budgets for ISO-NE and the budget for the New England States Committee on Electricity (NESCOE). The RTO's proposed operating budget is \$178.6 million, a 2.5% increase from 2020, excluding FERC Order 1000 funding and before depreciation. Its full-time headcount remains unchanged at 587. The RTO's capital budget is unchanged from 2020 at \$28 million. NESCOE's \$2.4 million budget for next year is below the \$2.5 million projected in its five-year *pro forma* budget.

In executive session, the committee also:

- approved an extension and amendment to the Generation Information System Administration Agreement between NEPOOL and APX; and
- approved the hiring of former National Grid executive Peter Flynn as a project administrator for the Future Grid Study and Rutgers University professor Frank Felder as a consultant on the "Transition to the Future Grid."

### Pathways Process Continues

Felder and Kathleen Spees of The Brattle Group each made presentations on "*Potential Pathways to the Future Grid*," with Spees exploring the "*Integrated Clean Capacity Market*" and Felder the "*Focus on Forward Clean Energy Market and Carbon Pricing*."

Spees said any useful path forward for New England will have to meet both resource adequacy needs and state policies supporting emission-free generation. She said that the Integrated Clean Capacity Market would be



ISO-NE CEO Gordon van Welie | © RTO Insider

a three-year forward market that attracts the optimal resource mix for reliability and state policy goals. By co-optimizing procurement of unbundled capacity and unbundled clean energy attribute credits, it would be a "fit-for-purpose market for achieving the 80 to 100% clean electricity future," she said.

Felder told the committee that the goal of his project is to achieve "a common understanding" that defines potential future pathways and the variations and tradeoffs among them.

He said while co-optimizing the Forward Clean Energy Market (FCEM) and Forward Capacity Market (FCM) would "in theory ... maximize the social surplus of meeting states' clean energy objectives and regions' resource adequacy requirements ... it is not clear if [it] can be implemented in practice."

Without co-optimization, resources offering into the FCEM will have to estimate their expected revenues in the FCM, and if those estimates are incorrect, inefficient outcomes may result.

Felder added that to achieve significant carbon reductions, the emission cap for the Regional Greenhouse Gas Initiative must be "substantially reduced so that prices of emission allowances are close to the" social cost of carbon. Low and non-emitting carbon resources offering into the FCM have larger margins and recover more of their fixed costs in the energy market, enabling them to be more competitive.

### CEO, COO Reports

ISO-NE CEO Gordon van Welie *briefed* the PC on the Board of Directors' direction to management to prioritize the evaluation of



## ISO-NE News

“net carbon pricing” and an FCEM, which he discussed at FERC’s Sept. 30 technical conference on carbon pricing. (See related story, [FERC Urged to Embrace Carbon Pricing](#).)

In [prepared remarks](#) to the FERC conference, van Welie said the primary tool for New England states “to effect rapid decarbonization has been to sponsor clean energy resources outside of the wholesale markets, which make the owners of these resources largely indifferent to market prices.” He added that the RTO “has long advocated for carbon pricing as a solution that allows markets to efficiently price emissions without harming price formation.”

Van Welie said the RTO recognizes “that any solution requires a coordinated effort with state and federal policymakers and our stakeholders. Many policymakers are concerned that carbon pricing will lead to cost increases in the wholesale markets. We believe that those increases will be significantly offset by reductions in state programs. Furthermore, we can implement a ‘net carbon pricing’ methodol-

ogy whereby the emissions fees on resources are automatically rebated to wholesale buyers through our wholesale settlements systems, thereby minimizing the cost impact.”

In his committee [report](#), ISO-NE Chief Operating Officer Vamsi Chadalavada said that the energy market value was \$158 million in September, a nearly 50% drop from August and down \$53 million from September 2019.

Chadalavada added that development of the 2021 Regional System Plan will start in the first quarter. He said improvements to streamline the plan are underway and include a webpage for economic studies and enhanced environmental and emissions information.

According to Chadalavada, FCA 15 values will be filed with FERC no later than Nov. 10, and 2021 annual reconfiguration auction values will be filed by Dec. 1.

### Draft of ISO-NE 2021 Annual Work Plan Discussed

Chadalavada also [presented](#) a draft of ISO-NE’s

2021 Annual Work Plan for “innovating for the changing grid; adjusting to impacts of recent events; advancing operational improvements; and managing risks.”

In addition to the Future Grid project, the RTO’s major initiatives will include elements of the Energy Security Initiative, transmission planning for an evolving grid and evaluating the impact of shifting net peak loads.

The RTO also will be reviewing lessons learned from its first competitive transmission solicitation; working on improvements to operational and long-term planning forecasts, including the impact of the COVID-19 pandemic; and moving the financial transmission rights market to a clearinghouse.

Chadalavada also cited upcoming upgrades to the nGEM day-ahead market clearing software and capital projects to protect against increased hacking attempts. ■

— Jason York

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# MISO News

## Laura Pricing Leaves MISO Stakeholders Scratching Heads

By Michael Brooks

A briefing by MISO staff last week on the record uplift in the RTO's energy market caused by Hurricane Laura left stakeholders with more questions than answers.

During a joint meeting of the MISO Markets and Reliability subcommittees, staff recounted the events of Aug. 27, when the Category 4 hurricane made landfall in Louisiana, just east of the state's border with Texas, damaging about 120 transmission lines and leaving about 730,000 customers in the area without power. (See *MISO Keeps Advisories in Effect a Week After Laura*.)

The storm caused a unique situation that resulted in nearly \$90 million in uplift payments, a record high for the RTO. Though Laura itself barely touched MISO's Texas footprint — with little rain, wind or even cloud cover, according

to the RTO — the hurricane sliced across the West of the Atchafalaya Basin (WOTAB) load pocket, which straddles the Louisiana-Texas border. This created a new load pocket in Texas within WOTAB, which staff variously referred to as the "western load pocket" and the "Hurricane Laura load pocket subarea."

Only three high-voltage transmission lines were available to serve load in the new pocket because of the storm, and the largest, rated at 500-kV, eventually tripped. This led MISO to direct Entergy to shed about 573 MW of load in the pocket, centered around The Woodlands, about 30 miles north of Houston.

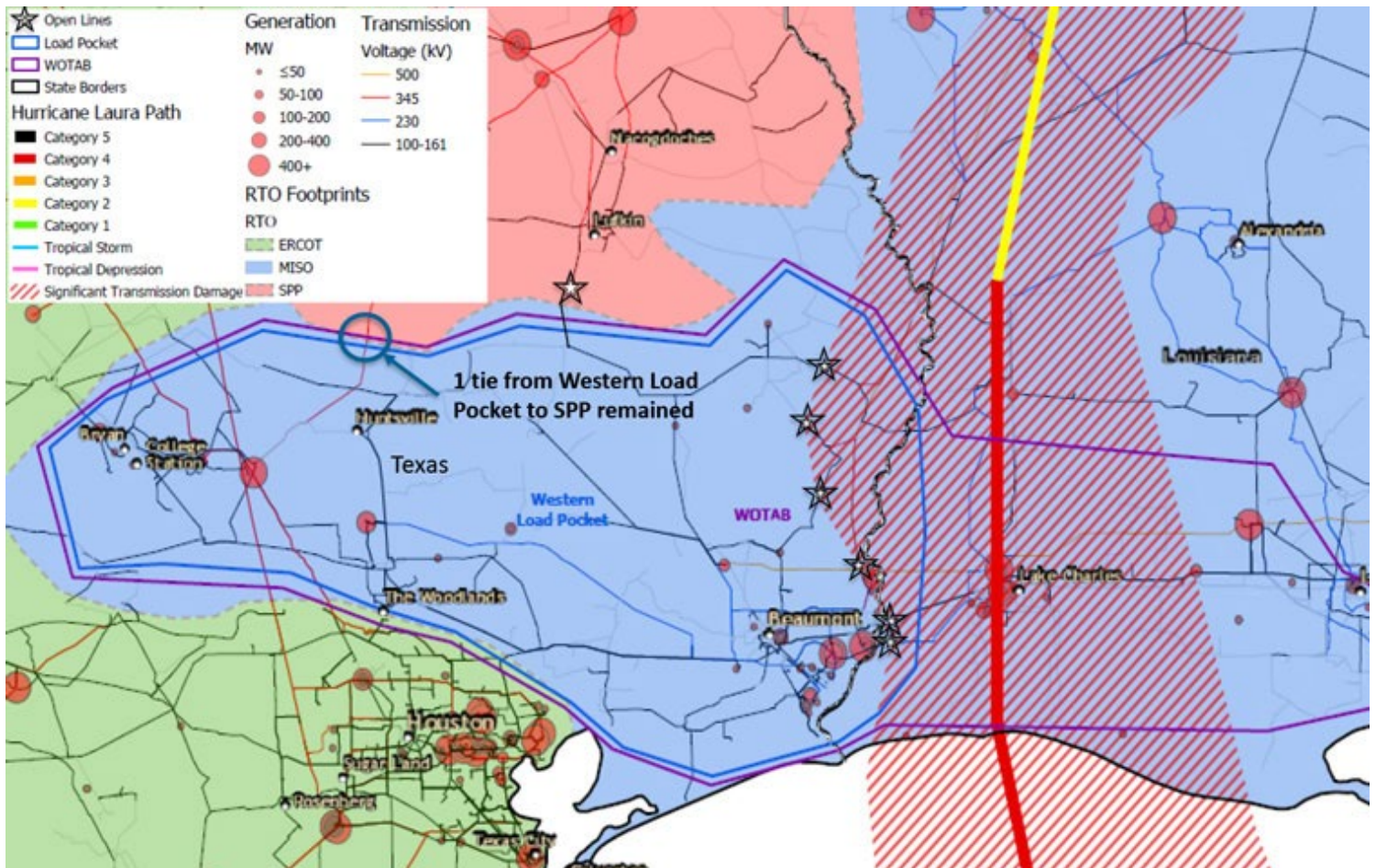
MISO's Tariff requires emergency pricing for load-shedding events, with each node in the affected area set at the value of lost load (VoLL), \$3,500/MWh. But according to staff, the RTO's pricing software does not allow for an area as small as the new load pocket to be

automatically priced at VoLL, requiring staff to spend more than 1,000 hours over two weeks manually entering the prices after-the-fact.

Staff said they were confident that MISO followed the Tariff appropriately, and stakeholders did not dispute that. They did question, however, the rationale for pricing what were presumably "dead buses" in the load-shed area.

Stakeholders also expressed confusion over the different labels for the load pocket, the timeline of events and the map provided by staff. They asked that MISO provide clarifications and a more detailed map that included the nodes that were affected and the three remaining transmission lines.

MISO said it would provide such clarifications at the subcommittees' meetings next month, and that staff will be prepared to discuss lessons learned and potential policy changes. ■



Hurricane Laura damaged scores of transmission lines as it roared through Louisiana just east of the state's border with Texas, creating a new load pocket in MISO's Texas footprint. | MISO

## MISO News

# FERC Analyzing NextEra Wind Farm's Reactive Power Rates

By Amanda Durish Cook

FERC last week placed an Iowa wind farm's method for calculating reactive power rates into question, although it declined to initiate a blanket probe into similar NextEra Energy rate filings.

The commission said NextEra Energy Resources' Crystal Lake II wind farm in north-central Iowa may be improperly including operations and maintenance costs and transmission-related expenses in its reactive power rate schedule. It set the facility's rates for hearing and settlement proceedings (ER20-2543).

Crystal Lake II said it now requires slightly more than \$1 million per year in reactive power revenue. The facility is designed to provide reactive power, and its turbines have been churning since 2012.

Nearby Interstate Power and Light (IPL), an Alliant subsidiary, raised objections to Crystal Lake II's rate schedule, arguing that it is unacceptable for asynchronous generators to use the reactive power rate methodology FERC established in 1999 for synchronous generators. IPL said the filing was "one of a series of filings by subsidiaries of NextEra to establish charges for reactive service." The utility asked the commission to consolidate and investigate all similar filings by NextEra subsidiaries.

FERC said a preliminary analysis of Crystal Lake II's proposed rates showed they could be unjust and unreasonable. The commission said a consolidation of other NextEra filings was beyond the scope of the proceeding but said that IPL "may raise its concerns regarding how



Crystal Lake wind farm | NextEra Energy

the proposed revenue requirement has been calculated in the hearing and settlement judge procedures."

For its reactive power charges, Crystal Lake II included the costs of low-voltage collection system feeders and low-voltage transformers, which aggregate the output of individual wind turbines. The collection system costs include some substation costs.

IPL argued that collection system costs aren't necessary for synchronous generators' production of reactive power and therefore aren't contemplated by FERC's 1999 methodology. The utility also said the equipment costs can't be completely dedicated to reactive power production.

"The allocation of accessory electric equipment costs to the production of reactive power

has not been shown to be just and reasonable and appears excessive," IPL said.

The company also charged that Crystal Lake II was expecting to be compensated for transmission-related system losses, though FERC's methodology only allows traditional generation's heating losses to be recovered. "Wind-powered generators do not experience significant heat-related losses in the production of reactive power," it said.

The utility said FERC should "consider balancing the requirement to provide reactive power with the need for reactive power in a particular locale or region." It said that FERC "should not simply assume that, because a generator is able and willing to provide reactive power, that this reactive power is needed for reliable and efficient operation of the electric system." ■

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## MISO News



# Vistra Declares End of Midwest Coal Fleet

## Company Blames 'Dysfunctional' MISO Capacity Market

By Amanda Durish Cook

Vistra Energy last week said MISO's "irreparably dysfunctional" capacity auction design deserves blame for its decision to shutter the last of its Midwestern coal plants.

Houston-based Vistra said it will wind down operations at seven coal plants in Illinois and Ohio by 2027, "or sooner should economic or other conditions dictate." The competitive supplier said the closures of the four Illinois-based plants are partly because of low capacity payments in the MISO market. Vistra said low natural gas prices, EPA requirements, inadequate state subsidies and an influx of new generation also played a role in its decision to idle the units.

The retirements will leave Vistra with a coal generation presence only in its native Texas by 2027. The retirements will take about 7 GW of capacity offline, mostly in the MISO footprint. They include:

- 585 MW from the Edwards Power Plant in MISO's Illinois territory by 2022;
- 1,185 MW from the Baldwin Power Plant in MISO's Illinois territory by 2025;
- about 1 GW and an additional 239 MW in natural gas-fired generation from the Joppa Power Plant in MISO's Illinois territory by 2025;



Edwards Power Plant | Sierra Club

- 1,108 MW from the Kincaid Power Plant in PJM's Illinois territory by 2027;
- 1,020 MW from the Miami Fort Power Plant in PJM's Ohio territory by 2027;
- 615 MW from the Newton Power Plant in MISO's Illinois territory by 2027; and
- 1,300 MW from the Zimmer Power Plant in PJM's Ohio territory by 2027.

Most of the plants range in age from 50 to 65 years old. The move follows Vistra's *announcement* last year to close four other aging coal plants in downstate Illinois.

Vistra Chief Operating Officer Jim Burke said the company has gone "above and beyond" to try to make the coal plants viable.

"The advance notice of these retirements provides us with ample time to work with our impacted employees and communities to ease the impact of the closures," Burke said in a *statement*. "We've proven ourselves in previous similar situations to live up to our core principles, taking care of our employees and communities. That will not change."

The company's statement included a plug for the proposed *Illinois Coal to Solar and Energy Storage Act*, which would bill ratepayers to develop 300 MW of utility-scale solar and 150 MW of energy storage at 10 existing power plant sites in central and southern Illinois.

Vistra also framed the announcement as an opportunity to accelerate carbon-reduction goals. It introduced a plan to achieve net-zero emissions by 2050 — a more aggressive target than its previous 80% reduction goal by midcentury. It also touted what it called the "Vistra Zero" portfolio, which contains six new solar projects and one battery energy storage project all located in the "attractive Texas ERCOT market."

### MISO Mum on Criticism

MISO representatives declined to comment on Vistra's complaint over its Planning Resource Auction design, which employs a vertical demand curve. In 2018, FERC rejected a request by Independent Market Monitor David Patton to order the RTO to employ a sloped demand curve, which he said would provide better investment signals. The commission said the PRA was just and reasonable because it ensured that load-serving entities have enough capacity to maintain the one-day-in-10-year

reliability standard. (See *FERC Vacates, Upholds MISO Resource Adequacy Rules*.)

The Brattle Group in August *criticized* MISO's PRA clearing prices as "overly volatile," saying it muddies investment signals. Brattle senior associate Walter Graf said the RTO's vertical demand curve results in "bipolar" pricing that is "not consistent with true reliability value, thereby lowering efficiency and limiting the usefulness of prices to signal value."

Graf suggested MISO adopt three objectives for its PRA:

- Enforce resource adequacy requirements on LSEs with penalties for being short "while respecting constraints between sub-regions."
- Facilitate transactions of residual capacity at "fair prices that reflect market conditions."
- Inform timely and efficient investment and retirement decisions as LSEs and states plan how they meet resource adequacy objectives.

However, Graf said Brattle's critique was not to be construed as a recommendation that MISO adopt a sloped demand curve.

Four years ago, MISO attempted to bifurcate its capacity market by holding a forward capacity auction for its competitive retail areas — which account for less than 10% of its total load — three years ahead of the usual PRA. FERC *rejected* the proposal.

Vistra's announcement is the latest in a string of coal generation retirement decisions by the company.

Since 2010, Vistra has announced the retirement of more than 19 GW at 23 coal and natural gas plants. Vistra said most of those announcements have occurred in the past four years, representing more than 16 GW at 19 coal plants. The company also cited an "economically challenged" environment in the ERCOT market when it *announced* two coal plant closures in 2017. Before its acquisition by Vistra, Dynegy also blasted MISO's market design as a *reason* its downstate Illinois coal plants couldn't survive.

The Sierra Club said Vistra's latest announcement is among the largest coal retirement commitments ever made in the U.S. It used Vistra's announcement to *call on* the company to set retirement dates for its three remaining coal plants in Texas. ■

# SPP News



## SPP Delays Staff's Return to Offices by 3 Months

SPP leadership has delayed staff's return to their offices until at least Jan. 4 – a three-month delay from the previous target of Oct. 5 – because of increasing COVID-19 diagnoses in Arkansas.

COO Lanny Nickell said in a Thursday *email* that SPP's officers decided to postpone the return to the RTO's Little Rock headquarters until 2021. The White House Coronavirus Task Force on Sept. 29 said Arkansas has the nation's seventh highest rate of new cases: 194 per 100,000. Arkansas on Wednesday reported 942 new cases and 19 deaths, raising its totals to 80,945 and 1,369, respectively.

"It wasn't an easy choice. Like many of you, we're eager to get back to normal, but case numbers are still high across our state and in Little Rock," Nickell said. "Especially given our office's open floor plan, which could exacerbate the effects of exposure should any of our staff become sick, we're doing all we can to safeguard the health of our employees and our



SPP has delayed by three months staff's return to its corporate headquarters. | WER Architects

ability to serve you."

Nickell also said SPP's system loads have largely returned to pre-pandemic levels. He said the grid operator has sufficient capacity and

reserves to meet demand this fall and that delayed generator maintenance has not resulted in an increase in unplanned outages. ■

— Tom Kleckner

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## SPP News



# FERC Approves GIAs, Rejects OG&E Challenge

By Tom Kleckner

FERC last week accepted two previously rejected unexecuted generator interconnection agreements between SPP, Oklahoma Gas & Electric (OG&E) and a pair of wind farms (ER20-2544, ER20-2545).

The two wind facilities, Frontier Windpower II and Chilocco Wind Farm, were part of SPP's 2016 definitive interconnection system impact study (DISIS). Staff performed five restudies following the initial DISIS as projects dropped out of the GI queue or interconnection points were re-designated.

The fourth restudy identified Wolf Creek-Emporia as a shared network upgrade needed to accommodate the cluster's interconnection requests. However, the ensuing restudy indicated the upgrade was no longer needed following the Board of Directors' 2019 approval of the Wolf Creek-Blackberry competitive transmission project.

The latter project is now waiting on FERC approval to proceed. (See "Board Lifts Suspension on Competitive Upgrade," *SPP Board of Directors/MC Briefs: Sept. 22, 2020*.)

SPP revised the original GIAs to remove the

Emporia upgrade. It said it filed the unexecuted agreements because OG&E disagreed with the proposed cost allocations, which did not allocate any Blackberry project costs to the wind facilities.

FERC rejected the GIA filings in April, saying their cost allocations were unjust and unreasonable because they were based on the Emporia upgrade. In approving the revised GIAs on Sept. 28, it noted they no longer contain the Emporia upgrade and include the Blackberry project as a contingent facility.

The commission reiterated its position that SPP did not violate its Tariff in performing the fifth restudy, pointing out that 13 higher or equal priority queued interconnection customers had dropped out. FERC disagreed with OG&E's argument that SPP violated the commission's interconnection-related pricing policy and cost-causation principles by proposing not to assign Blackberry's costs to the DISIS group.

"SPP's proposed cost allocation for the Blackberry project is consistent with the [Tariff's] requirements for cost allocation," the commission said.

FERC last week also responded to OG&E's

request to rehear the April order on Frontier II, which was automatically rejected when the commission did not respond within 30 days. The commission provided additional discussion but came to the same conclusion (ER19-2747).

OG&E had argued that FERC "failed to support with substantial evidence" its finding that SPP was allowed to undertake the fifth restudy when some of the projects were withdrawn. The commission declined to address the complaints.

The utility also contended that FERC erred by agreeing with an earlier mistaken SPP statement that a planning assessment justified the fifth restudy, arguing that the assessment contained improper assumptions that cause it to ignore the Frontier project's impact. The commission reminded OG&E that it found the fifth restudy was not flawed, and it said the utility failed to provide evidence supporting its allegations that SPP never provided "specific assumptions" including in the planning assessment.

Frontier II, at 350 MW, is the *largest* wind project in Duke Energy Renewables' fleet. It will be paired with the 200-MW Frontier I, which has been operational since 2016. ■



Duke Energy's Frontier Windpower II project will expand the existing Frontier I site. | *Duke Energy Renewables*



## SPP News



# Chatterjee, Danly Clash over 'Regulatory Flexibility'

## Commission Grants Montana-Dakota Waiver of SPP Tariff

By Robert Mullin

A seemingly mundane request for a waiver of an SPP Tariff requirement last week prompted a rare philosophical dispute between FERC's two Republican members (ER20-966).

At issue was a request by Montana-Dakota Utilities for a one-time waiver of a one-year notice requirement for rolling over its network integration transmission service (NITS).

Under SPP's Tariff, an existing firm transmission customer with a contract of at least five years has the right to continue taking service from a transmission provider when its contract expires, rolls over or is renewed. But the RTO's rules stipulate that the customer must notify the provider that it is exercising its reservation priority no later than one year before the end of its existing contract.

In May 2016, FERC approved a partial settlement among Montana-Dakota, SPP, the Western Area Power Administration and Basin Electric Power Cooperative that memorialized an agreement among the parties to resolve seams issues related to the integration of WAPA and Basin into the RTO.

One of the issues the partial settlement was intended to resolve was the provision of network customer transmission credits to Montana-Dakota according to section 30.9 of SPP's Tariff. The settlement also described the terms and conditions of the NITS agreement (NITSA) signed by Montana-Dakota and SPP. The RTO filed the NITSA on July 27, 2016, retroactively effective Oct. 1, 2015, and to expire five years later.



FERC Commissioner James Danly at his confirmation hearing in November 2019 | © RTO Insider



FERC Chairman Neil Chatterjee | © RTO Insider

On Oct. 19, 2019, Montana-Dakota submitted revisions to the NITSA to include additional facilities eligible for the section 30.9 credits. While that revised NITSA was still pending before FERC, the utility was notified by SPP on Jan. 28, 2020, that its original NITS was set to expire on Sept. 30. Montana-Dakota said it contacted SPP the next day to express its wish to roll over the NITS. Because the service was set to expire Oct. 1, Montana-Dakota had been required to notify SPP on Oct. 1, 2019, but the utility said SPP had been on notice of the utility's intent to do so throughout negotiations for the revised NITSA.

Montana-Dakota contended that it met the four criteria laid out by FERC for granting Tariff waivers: that it acted in good faith; that the waiver is limited in scope; that it solves a "concrete problem"; and that it does not harm third parties.

The utility said it incorrectly assumed that the NITSA was effective as long as the partial settlement remained in effect and that it was unaware SPP's Tariff required it to provide notification of its intent to roll over. It said the

waiver would protect it from substantial network upgrade costs that it and its customers would incur in obtaining new NITS.

Both WAPA and Basin said they supported the waiver; SPP said it did not oppose the request.

In a brief finding, Chairman Neil Chatterjee and Democratic Commissioner Richard Glick voted to grant the waiver, agreeing that Montana-Dakota's request met FERC's four requirements. "Montana-Dakota's failure to comply with the current one-year notice requirement appears to have been inadvertent, and Montana-Dakota states that it notified SPP the day after it was informed that it missed the deadline, providing SPP with notice approximately eight months prior to expiration of its NITSA," they said.

### No Authority

More substantial than the order itself was the dissent issued by Commissioner James Danly, along with a concurrence from Chatterjee that firmly faulted Danly's legal reasoning.

In his dissent, Danly argued that the commission lacks the authority to grant such a request. "Even if we were to put that infirmity aside, Montana-Dakota's request fails our

# SPP News

four-factor test,” he added.

Danly wove a complicated legal argument that left open the question what latitude — if any — that FERC has in approving waiver requests. He argued that the filed rate doctrine and FERC’s rule against retroactive ratemaking restrict the commission’s ability to grant retroactive waivers. He noted that while those doctrines were developed in cases regarding utility rates, the logic of the doctrines “applies equally” to non-rate tariff cases.

“Because a waiver request is in essence a request that the commission permit a one-time change to a tariff provision, the commission is legally barred by the filed rate doctrine and the rule against retroactive ratemaking from granting a retroactive waiver request unless one of two judicially recognized exceptions applies: (1) the parties had notice that the tariff provision could be waived retroactively; or (2) the tariff provision is embodied in a private contract between the parties, who have agreed in that contract to make the agreed-upon rate effective prior to filing that contract with the commission. Neither of these exceptions apply here,” Danly said.

He said that while the commission “may enjoy some latitude to interpret this precedent,” it must “at least acknowledge that its authority to grant such a waiver is at issue and then identify the source of its legal authority to approve the request.” FERC had failed to meet that standard in the Montana-Dakota docket, he argued.

But even if FERC had the authority to grant the waiver, Danly said Montana-Dakota failed the four-factor test because the utility asserted that the waiver would maintain the status quo through its ability to continue to take NITS

to serve its load and maintain the long-term benefits of the partial settlement for the utility and SPP members.

“But the fact that granting the waiver preserves the status quo is exactly why the waiver harms third parties,” Danly argued.

“Preserving the status quo for Montana-Dakota when application of SPP’s tariff would cause it to lose its rollover rights will cause entities that have submitted requests for service to incur substantial network upgrade costs to obtain service to which they would otherwise be entitled absent the waiver, or else be denied service,” Danly said. “The record does not inform us as to the number of requests that would be affected by granting this waiver. Nevertheless, even in the absence of that evidence, we know, based on Montana-Dakota’s own submission, that the request must run afoul of the no-harm-to-third-parties factor.”

Danly said he recognized that denying the request could have “serious consequences” for Montana-Dakota in the form of network upgrade costs passed on to its customers, which “would only have been exacerbated” by FERC’s “inexcusable” eight-month delay in acting on the request, preventing the utility from meeting SPP’s May deadline for participating in the transmission open season.

“Though Montana-Dakota and its customers may be due sympathy, to ignore the consequences of the waiver to other utilities is to take a one-sided view of the equities,” Danly said.

## ‘Regulatory Inflexibility’

“The dissent, at its core, argues for an approach to waiver requests that requires flawless adherence to all administrative

tariff deadlines and denies the commission a modicum of regulatory flexibility to address ministerial or inadvertent errors on a case-by-case basis,” Chatterjee countered in his concurrence. “Such an approach ignores the business realities facing public utilities. And it harms consumers. Recent challenges posed by the COVID-19 pandemic have underscored the value of regulatory flexibility when circumstances warrant.”

Chatterjee noted that Danly acknowledged the potential harm to Montana-Dakota customers and said that neither the Federal Power Act nor the filed rate doctrine require such an outcome for an “inadvertently” missed administrative deadline where there is no evidence of harm to third parties.

“The dissent does not sufficiently grapple with the record evidence here that granting the instant waiver not only will avoid harm to customers of Montana-Dakota, but also will avoid harm to specific third parties,” Chatterjee wrote.

The chairman cited WAPA’s comments that failure to grant the waiver could jeopardize the partial settlement, which preventing pancaked rates for WAPA’s Upper Great Plains Region, Basin Electric members and other load-serving entities in the Upper Missouri Zone.

Danly shot back regarding Chatterjee’s criticism of the dissent’s “regulatory inflexibility.”

“It is the law that denies us that regulatory flexibility, inadvertency and circumstance-specific challenges notwithstanding,” Danly said. “To deny a waiver under circumstances such as these might appear inflexible. But the doctrines that constrain us make no allowance for such considerations.” ■



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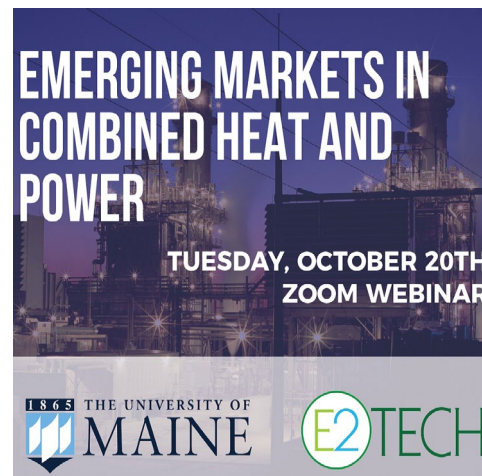


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## Company Briefs

### AEP to Switch 100% of Vehicle Fleet to Electric by 2030



American Electric Power last week announced it will accelerate its electric vehicle pur-

chases with the goal of replacing 100% of its 2,300 cars and light-duty trucks with EV alternatives by 2030.

AEP's total fleet is composed of nearly 8,000 vehicles, including medium- and heavy-duty vehicles. By converting them to electric or hybrid models, the company said it will achieve its goal of electrifying 40% of its entire on-road fleet in less than 10 years.

The company estimates it will avoid using more than 10 million gallons of fuel, amounting to \$40 million savings in fuel costs over the life of the vehicles.

More: [AEP](#)

### Ameren Sets Goal of Net Zero by 2050



Ameren last week pledged to reach net-zero carbon

emissions by 2050, with a plan to invest \$8 billion in renewable energy and accelerate coal plant closures.

In its 15-year integrated resource plan, Ameren said it plans to invest nearly \$8 billion to add 3.1 GW of renewables to its mix by 2030, hitting a total of 5.4 GW by 2040. The move will allow it to reduce carbon emissions by 50% from 2005 levels by 2030 and 85% by 2040.

The timeline for coal plant retirements has also been accelerated for its Sioux Energy Center, which is now expected to close by 2028, and its Rush Island Energy Center, which will shutter by 2039. Ameren already planned to close its Meramec Energy Center by 2022 and two of its four units at the Labadie Energy Center by 2036. The moves would remove three-quarters of its coal-fired capacity by 2040. All remaining plants are scheduled to retire by 2042.

More: [GreenTech Media](#)

### Avangrid Renewables Adds to Offshore Wind Leadership Team



Avangrid Renewables last week announced the appointment of Bill White as head of U.S.

offshore wind and Sy Oytan as deputy CEO of Vineyard Wind.

White will lead the development and implementation of the company's overall offshore wind strategy in the U.S., while Oytan will join White's team and oversee business management, finance, development and delivery for the Vineyard Wind and Park City projects.

Prior to joining Avangrid, White served as president and CEO of EnBW North America. Oytan previously led offshore wind development efforts for the multinational engineering firm Arup.

More: [Avangrid Renewables](#)

### Robert Murray Files for Black Lung Benefits



**Robert Murray**, the former president and CEO of the now bankrupt Murray Energy, has filed an application with the U.S. Department of Labor for black lung benefits. Murray and his company often fought

against federal mine safety regulations aimed at reducing the disease.

Murray, 80, said that because of his health, he can no longer handle his positions as CEO and chairman of the company's board.

Murray's claim is being evaluated to determine the party potentially responsible for paying the benefits. The Labor Department is required to determine a liable party before an initial ruling can be made.

More: [West Virginia Public Broadcasting](#)

### Exxon Plans for Surging Carbon Emissions



ExxonMobil has been planning to increase annual carbon dioxide

emissions by as much as the output of the entire nation of Greece, as the company's assessment of its \$210 billion investment strategy shows yearly emissions rising 17% by 2025.

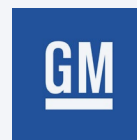
Planning documents show Exxon has assessed the direct emissions it expects from the seven-year investment plan adopted in 2018. The additional 21 million metric tons of carbon dioxide per year that would result from ramping up production dwarfs projections for its own efforts to reduce pollution.

Internal estimates reflect only a small portion of Exxon's total contribution to

climate change. Greenhouse gases from direct operations typically account for a fifth of the total at a large oil company, as most emissions come from customers burning fuel, for which the Exxon documents don't account. That means the full climate impact of Exxon's growth strategy would likely be five times the estimate — or about 100 million tons of additional carbon dioxide — had it accounted for Scope 3 emissions.

More: [Bloomberg Green](#)

### GM to Achieve 60% Renewable Energy Thanks to Solar Deal



General Motors last week took a step toward its goal of sourcing 100% of its energy from renewables by 2040 with the announcement it had signed a power

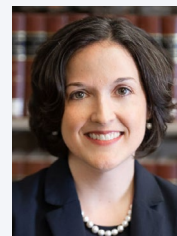
purchase agreement for a 180-MW solar project to be constructed in Arkansas.

Details such as location, developer and terms of the PPA have not been released, but when the project is completed in 2023, the capacity will lift GM over 60% renewable energy usage and 1 GW of total renewable use.

The power generated by the installation will supply three GM sites in the Midwest: the Wentzville Assembly facility in Missouri, as well as the Lansing Delta Township Assembly and Lansing Grand River Assembly facilities in Michigan.

More: [pv magazine](#)

### Judge Blocks Peabody, Arch Coal Joint Venture



U.S. District Judge **Sarah Pitlyk** last week blocked a proposed joint venture between private coal companies Peabody Energy and Arch Resources, saying the Federal Trade Commission "has shown that there is a

reasonable probability that the proposed joint venture will substantially impair competition in the market for Southern Powder River Basin coal."

Peabody and Arch proposed combining the country's two most productive mines, which border each other near Wright, Wyo., in 2019, and saying the move would "unlock synergies" of \$820 million. However, the FTC moved to block the deal in February.

More: [St. Louis Post-Dispatch](#)



## Octopus Acquires Startup Evolve Energy



octopusenergy

U.K. green energy company Octopus last week acquired U.S. startup Evolve Energy as part of a \$100 million investment. Octopus Energy US is targeting 25 million

U.S. energy accounts on its technology platform by 2027.

Evolve Energy, which was launched in 2018, is a Houston and Silicon Valley-based startup that uses artificial intelligence and machine learning to optimize energy usage and provide customers with the best prices for renewable power.

More: [Renews](#)

## Ørsted, Eversource Ink Deal to Build Compliant Ships

Ørsted last week announced a deal with Eversource Energy and marine transportation company Edison Chouest Offshore to build what is considered the offshore wind industry's first ship compliant with the Jones Act.

The Jones Act is a federal law that requires goods shipped between U.S. ports to be transported on ships that are built in the U.S., owned by U.S. companies and operated by U.S. citizens. The offshore wind industry needs special ships to construct and maintain infrastructure. Because the U.S. is just beginning its offshore wind sector, companies building the first projects are using ships and equipment from Europe and have

had to shuffle employees and equipment to comply with the act. Making compliant ships is considered an essential step in growing the industry in the U.S.

More: [Axios](#)

## STEC to Retire 22 MW of Gas Generation

The South Texas Electric Cooperative last week notified ERCOT it intends to retire a pair of gas turbines at its Sam Rayburn facility near Victoria, Texas, because of economic reasons.

The cooperative told the grid operator on Oct. 1 that it intends to decommission and permanently retire the units next February. Each of the units has 11 MW of capacity and was energized in 1963.

# Federal Briefs

## Duke Energy Plans Largest Floating PV Project



Duke Energy last week said it will build its first floating solar

array at U.S. Army base Fort Bragg in North Carolina. It is the largest such project ever announced in the Southeast, according to Wood Mackenzie.

The \$36 million contract between Duke and Fort Bragg includes lighting and water upgrades, plus a 2-MW storage system tacked onto a 1.1-MW solar project. Ameresco will build the array on a lake at the base, while Fort Bragg will take over ownership when construction is finished.

The average size of floating PV installations in the U.S. is 1.5 MW, according to WoodMac data. The country's largest project, a 4.4-MW installation in New Jersey, went live last year. The country has thus far installed about 9 MW of floating installations, making Fort Bragg's project "quite substantial," WoodMac solar analyst Molly Cox said.

More: [GreenTech Media](#)

## EPA Finalizes Weaker Emissions Standards



EPA last week finalized a rule that could reclassify many "major" sources of pollution as minor ones, allowing facilities to abide by less stringent emissions standards for substances such as

mercury, lead and arsenic.

The rule will allow major sources to become reclassified if they meet the hazardous air pollutants guidelines in place for the smaller "area" polluters — producing 10 tons per year or less of a single toxin, or 25 tons/year for facilities that emit multiple toxins. The agency estimated the changes will result in up to 1,258 tons/year of additional emissions of hazardous pollutants.

EPA first estimated about 3,900 emitters could be reclassified and subjected to weaker standards than before, but it later added that there are a total of 7,183 facilities currently subject to the major source standards.

More: [The Hill](#)

## House Passes Bills to Protect Energy Sector Against Cyberattacks

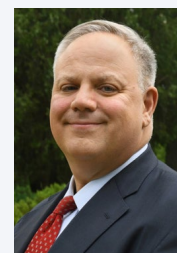
The House of Representatives last week unanimously passed four bills aimed at securing the grid and other energy infrastructure against cyberattacks.

The Cyber Sense Act would require the secretary of energy to establish a program to test the cybersecurity of products intended to be used in the bulk power system. The Enhancing Grid Security Through Public-Private Partnerships Act would require the Department of Energy to establish a program to enhance the cyber and physical security of electric utilities, along with issuing a report on ways to enhance security to address threats.

The Energy Emergency Leadership Act would enhance leadership at DOE on cybersecurity missions to protect the nation's energy infrastructure. Finally, the Grid Security Research and Development Act would strengthen the ability of the sector to respond to cyber and physical threats, such as wildfires.

More: [The Hill](#)

## Interior Secretary to Lead BLM



Interior Secretary **David Bernhardt** will take over as director of the Bureau of Land Management after acting Director William Perry Pendley was removed from the position by a federal judge last week, according to an employee email.

Judge Brian Morris last week ruled that Pendley served unlawfully, as the department and the White House improperly relied on temporary orders far beyond the 210 days allotted in the Federal Vacancies Reform Act.

More: [The Hill](#)

## Trump Reins in Carolinas Offshore Wind Progress

President Trump's recent executive order to extend a moratorium on offshore drilling in the Carolinas will also halt offshore wind development in the area.

The Interior Department's Bureau of Ocean Energy Management confirmed the ban will apply to offshore wind as well as oil and gas. The ban will come into effect on July 1, 2022, and last 10 years.

Existing developments should not be affected by the ruling. However, future lease sales will be halted.

More: [Renews](#)

## WIPP Received Nuclear Waste Shipments from California

The Waste Isolation Pilot Plant (WIPP) near



Carlsbad, N.M., resumed receiving nuclear waste shipments from the Lawrence Livermore National Laboratory (LLNL) near San Francisco this month after a 10-year hiatus. The waste will be permanently disposed of in an underground repository about 2,000 feet underground.

LLNL is primarily a research laboratory that generates transuranic waste during research and engineering operations related to nuclear weapons, plutonium and other technological aspects.

A new release said the resumption of shipments was a result of a multiyear project and collaboration between the Department of Energy's Carlsbad Field Office, WIPP contractor Nuclear Waste Partnership, the National Nuclear Security Administration and its Livermore Field Office.

More: [Carlsbad Current-Argus](#)

# State Briefs

## REGIONAL

### NARUC Appoints Commissioners to Board of Directors

National Association of Regulatory Utility Commissioners President Brandon Presley last week announced the appointment of three commissioners to the association's board of directors. Maida Coleman (Missouri), Lillian Mateo-Santos (Puerto Rico) and Crystal Rhoades (Nebraska) will fill vacancies of state regulators whose terms have expired.

Coleman joined the Missouri Public Service Commission in 2015 and chaired NARUC's Committee on Consumers and the Public Interest. Mateo-Santos, who serves as the second vice president of the Southeastern Association of Regulatory Utility Commissioners, joined the Puerto Rico Energy Board in 2018. Rhoades was elected to the Nebraska Public Service Commission in 2014 and represents NARUC on the Federal Communications Commission's North American Numbering Council.

More: [NARUC](#)

## ARIZONA

### APS Authorizes Energy Efficiency Assistance



Arizona Public Service last week implemented a \$51.9 million energy

efficiency package that offers programs to help families and small businesses navigate the COVID-19 pandemic.

The plan allows for \$9,000 per household for limited income weatherization, a 500%

increase to an HVAC unit replacement incentive, a \$50 incentive for joining the APS Cool Rewards demand response program and incentives for smart thermostats, connected cool pumps and smart water heaters.

More: [Daily Energy Insider](#)

## CALIFORNIA

### El Dorado County to Start Process of Moving from PG&E



The El Dorado County Board of Supervisors last week started the formal process of joining a community choice aggregation program with

Pioneer Community Energy and leaving Pacific Gas and Electric by voting to gather data and information on the process.

The nonprofit governmental program would buy energy from PG&E that would still be transmitted through PG&E-owned lines, which means shutoffs could still happen. However, Vice Chair John Hidahl said aside from cost savings, there is potential for more local control if any changes are made at the state level when it comes to PG&E's infrastructure.

Hidahl said the county hopes to have the process finished by the end of the year. Customers are free to stay with PG&E if they want.

More: [KQVR](#)

### PG&E PSPS Leaves Tens of Thousands Without Power

About 87,500 Pacific Gas and Electric customers in 16 counties were without power on Sept. 27 and 28 after the utility pre-

emptively shut it off in areas where wildfires were burning or could possibly start.

The scope of the PSPS included customers in Alpine, Amador, Butte, Calaveras, El Dorado, Kern, Lake, Napa, Nevada, Placer, Plumas, Shasta, Sierra, Sonoma, Tehama and Yuba counties.

Essentially all customers' power was restored on the night of Sept. 28, the company said. Once the weather "all clear" was given, PG&E crews began inspecting more than 3,900 miles of transmission and distribution lines. Preliminary data showed 13 instances of weather-related damage and hazards in the affected areas, including downed lines and vegetation on lines.

More: [Los Angeles Times](#); [PG&E](#)

### Wheeler Challenges Effort to Mandate Zero-emission Vehicles



EPA Administrator **Andrew Wheeler** last week questioned Gov. Gavin Newsom's plan to require all new passenger vehicle sales in 2035 be zero-emission models and said the plan "raises serious questions regarding its legality and

practicality."

Wheeler said the move could cause problems for the state's grid and used the recent rolling blackouts as evidence that it could not support the adoption. He also said the move may be subject to federal approval. (See [Calif. to Halt Gas-powered Auto Sales by 2035](#).)

More: [Reuters](#)

## COLORADO

### Greenhouse Gas Reduction Plan Calls for More EVs



Gov. **Jared Polis** last week released a draft plan to drastically cut greenhouse gas pollution by accelerating the move to electric vehicles and buses, reducing methane emissions from the oil and gas industry

and decreasing emissions from electricity generation by at least 80%.

The plan aims to cut greenhouse gas emissions by more than 25% of 2005 levels in the next five years and 50% by 2030. It also aims for “close to 100%” of vehicles to be electric by 2050.

A public listening session will be held on Oct. 20 with the draft being open for public comment through Nov. 1. It is expected to be finalized and published by the end of the year.

More: [The Denver Post](#)

## CONNECTICUT

### Lamont Signs Energy Bills

Gov. Ned Lamont last week signed three energy-related bills during a special session of the House of Representatives and Senate.

One bill will give consumers credits on their electric bills, plus \$250 in reimbursements for lost food and medicine, in the event of future power outages longer than 96 hours. Another bill amended the environmental justice law, which sets requirements for public disclosure, notice and participation in communities that have been adversely affected by facilities such as power plants and trash-to-energy plants.

Another bill added new regulations for cleaning up historic, contaminated industrial sites to make them easier to redevelop. It also requires those who create spills of a variety of wastes, including oil, petroleum and chemicals, to report and remediate them.

More: [Stamford Advocate](#)

## ILLINOIS

### Former ComEd Exec Pleads Guilty in Ongoing Bribery Probe



Former Commonwealth Edison executive Fidel Marquez

last week pled guilty to a corruption charge and helped the federal government get its first conviction in the ongoing probe into a political bribery scheme that has implicated former House Speaker Michael Madigan. Marquez served as senior vice president of governmental and external affairs from March 2012 to September 2019.

Earlier this month, prosecutors filed a document charging Marquez with bribery conspiracy and specifically pointed to a \$37,500 payment he made to an intermediary company in 2018, “a substantial portion of which was intended for” Madigan’s associates. Marquez was among those implicated earlier this summer when prosecutors first filed a bribery charge against ComEd, alleging it sent \$1.3 million to Madigan’s associates while hoping to land support for key legislation.

No other individuals have been criminally charged as part of the case, including Madigan.

More: [Chicago Sun-Times](#)

## MICHIGAN

### Former Mine Sites to be Repurposed for Solar Operations

Circle Power of Royal Oak last week was awarded a five-year land lease agreement with the Department of Natural Resources to develop large-scale solar arrays at two former mine sites, which will be developed through its affiliate, Copper Country Power I.

The two sites to be developed include the Groveland Mine in Dickinson County, a former 347-acre iron mine, and the 7 Mile Pit in Crawford County, a 169-acre property previously used for sand and gravel mining. A development timeline has not been established because both sites have been left in a degraded condition.

More: [MLive](#)

## NEW JERSEY

### PSEG Applies to Keep Annual Subsidies for Nukes

The Public Service Enterprise Group last week filed an application with the Board of Public Utilities to retain \$300 million in ratepayer subsidies annually to keep its fleet of nuclear plants in South Jersey operating.

PSEG initially won the subsidies in 2018, allowing it to avoid closing the three nuclear units on Artificial Island. Without new financial incentives, CEO Ralph Izzo threatened closing the plants, which supply roughly

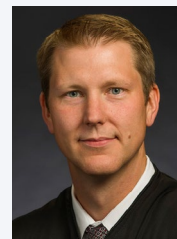
90% of the carbon-free electricity used by customers. In seeking three more years of subsidies, company officials argued the need for the financial incentives is greater than ever.

Unlike in 2018, the BPU has leeway to reduce the requested subsidies. Then, incentive legislation stipulated the board could only approve \$300 million in subsidies, or deny them, and not approve lesser subsidies. The proceeding is likely to be decided next spring.

More: [NJ Spotlight](#)

## OHIO

### Judge Declines AG’s Request for Injunction in HB 6 Civil Case



Franklin County Judge **Christopher Brown** last week declined Attorney General Dave Yost’s request to stop FirstEnergy, former House Speaker Larry Householder and other defendants accused in

a bribery scheme from donating money to political campaigns.

FirstEnergy said Yost’s civil case is without “legal merit,” as the company is not yet facing charges in the case.

Yost says there is still a possibility of filing another injunction to stop new charges set to appear on electric bills in January if HB 6 is not repealed.

More: [WOSU](#)

## VIRGINIA

### Shenandoah County Backs Solar Facility

The Shenandoah County Planning Commission last week unanimously approved a proposed large-scale solar facility in Mount Jackson.

Commissioners recommended the approval of a special-use permit filed by Randolph Solar Partners, which plans to construct a 3.19-MW solar facility on a 32-acre portion of property.

The project, which is expected to become operational in mid-2021, still needs final approval from the Board of Supervisors on Oct. 13.

More: [The Northern Virginia Daily](#)



## WEST VIRGINIA

### Dominion Energy Files Base Rate Adjustment with PSC



Dominion Energy West Virginia last week filed a request

with the Public Service Commission to increase its base rates for natural gas service.

If approved, the monthly bill for a typical residential customer would increase by \$8.58. The \$12.17 gross monthly bill increase reflected in the filing is because of the partial offset and simultaneous change

in the pipeline replacement and expansion program rate case, the other main component of customers' monthly bills.

The new base rates would be effective in July 2021.

More: [WBOY](#)

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