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COVER: More than 150 people attended the Electric Power Supply Association (EPSA) Competitive Power Summit at the National Press Club on March 29, where competitive generators and others discussed market changes needed to ensure reliability while reducing carbon emissions. | © RTO Insider LLC

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EPSA Competitive Power Summit

Overheard at EPSA Competitive Power Summit 2022

WASHINGTON — More than 150 people attended the Electric Power Supply Association (EPSA) Competitive Power Summit at the National Press Club on March 29, where competitive generators and others discussed the market changes they said are needed to ensure reliability while reducing carbon emissions. (See related stories, *EPSA Members Renew Call for Carbon Price*; *See Long 'Bridge' for Gas*; *EPSA Panel Debates Role of ISOs, RTOs in Decarbonization*; and *NERC Chief: 'Longer, Deeper, Broader' Weather Presents New Reliability Challenges*.)

Here's some more of what we heard.

Frustrations over RTOs

The role of RTOs was a recurrent topic. During the first of five panel discussions, PJM CEO Manu Asthana and Devin Hartman, energy and environmental policy director for the R Street Institute, acknowledged frustrations over the RTO stakeholder process.

"The stakeholder process is hard, because you have a lot of really smart stakeholders who have their own economic interests, and their own agenda; they're at the table, pushing," Asthana said. "But I also think the stakeholder process is necessary, [so] please continue participating, keeping in mind ... there's a compromise that we're going to have to come

to [so] that hopefully everyone will get what they need. Not everyone will get all of what they want, to quote the Rolling Stones."

"Market design is anything but a clear fix. Even to the top minds in the field, no one's going to agree on all the particulars," Hartman said. "But this debate is worth having. ... The value of organized market structures is actually increasing over time. So don't let the frustrations over the debate on the market rules boil over. ... I think a lot of times, there's some misfires in our public dialogue."

"I just can't see the RTO not being an important part of" the transition," said John Moore, director of the Natural Resources Defense Council's Sustainable FERC Project, citing grid operators' role in ensuring "transparency, accessibility [and] resource neutrality."

But David Springe, executive director of the National Association of State Utility Consumer Advocates, said FERC and RTOs must do more to consider consumers' input.



David Springe, executive director of the National Association of State Utility Consumer Advocates | © RTO Insider LLC

"So much of the transmission decisions get made at a regional level, by an organization that is somewhat beholden to members, that is very difficult to participate in," he said. He said consumer advocates' staffs are too small to "meaningfully" participate.

"A lot of people like to point to CAPS [Consumer Advocates of the PJM States] in PJM. And [CAPS Executive Director] Greg Poulos does a great job representing the consumer advocates in PJM. But it's one person," he continued. "And there's not one in SPP [or MISO]. You know, we're talking about huge decisions being made in rooms where the people representing consumers aren't really participating. That's just [wrong]. It has to be fixed."

Rule Churn

Asthana said he gets regular complaints from generators and others that the pace of change of market rules is too fast. "It's making it harder for market outcomes to be predictable and is having an effect on financing," he said. "Let's accept that there's no perfect answer; let's get a consensus set of answers, and let's let them run for a period of time, unless there's a real issue. I think that needs to be something we should all strive for."

Kevin Smith, president of Tenaska Power Services, said more stable market rules could unlock innovation.



Kevin Smith, president of Tenaska Power Services | © RTO Insider LLC

"When the rules are always changing, then we have to start focusing on our existing assets. And so those human resources that we innovate with are now

focused on existing assets, trying to evaluate the potential impacts of those changes and, in some cases, mitigate the impacts of those changes," he said. "And if we're focused there, then we can't be focused on new, innovative products to advance the grid."

Arnie Quinn, vice president of FERC-jurisdictional markets for Vistra, cautioned against a proliferation of new ancillary service products.

"It's very seductive [to suggest], 'Let's create a new product every time my revenue source needs to be a little bit more secure. So in the energy and ancillary service [technical conference] comments, there were a couple



PJM CEO Manu Asthana and Devin Hartman, R Street Institute | © RTO Insider LLC

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Arnie Quinn, Vistra |
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conversations about breaking out the regulation service into up and down service," he said (AD21-10). (See *Stakeholders Ask FERC to Support E&AS Market Changes.*)

"For the most part, I would say that conversation was very prin-

cipled, [but] some of it was, 'Do down, because renewable resources can provide that, and it would be really nice to give them a revenue source.'" Similarly, traditional generators have sought to create a product to produce additional revenues for being dispatchable. "That can't be the answer" either, he said. "If there's a system need for dispatchability; if there's a system need for regulation down differently than regulation up, then ... let that system need drive the design."

Pat Wood: Fix Supply Chain 1st

In a luncheon speech, former FERC and Texas Public Utility Commission Chair Pat Wood III said that Russia's invasion of Ukraine, and the subsequent international sanctions imposed on it, has brought new urgency to fixing the U.S. supply chain.



Former FERC Chair Pat Wood III, CEO of Hunt Energy Network, gave the luncheon keynote speech | © RTO Insider LLC

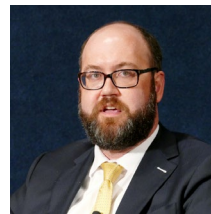
"The supply chain has got to be fixed before we continue our march toward decarbonization," said Wood, now CEO of Hunt Energy Network. "We are running away from what we have plenty of in the U.S., which is coal, gas and oil, for good reasons. ... But we are falling into the arms of Russia and China. They today make the vast majority of the world's enriched uranium, batteries ... solar panels and even I think about 50% of the world's wind turbines. So that should compel us to move this issue — this equipment and technology supply diversity issue — up to the top of our agenda." He complimented President Biden for committing to more LNG exports to Europe to make up for Russia's supply of gas to the continent.

Wood also provided predictions for what the world will look like in 25 years. For one, he predicted EPSA would have to call itself "EPSSA" — the Electric Power Supply and Demand Association — "because in those 25 years, we'll finally learn how to commoditize the demand side."

He also predicted a warmer climate, "but I'll tell you, it was damn cold on Feb. 15, 2021, in Houston, Texas," referencing the winter storm. It will also be much more electrified, especially transportation. "All the people who say, 'Oh, it's going to be slow.'" He shook his head. "There's not a bubba in Houston, Texas, who's not going to be dying to have" an electric Ford F-150. "They're going to be able to have that car be a two-way charger back to the house, so you don't have people who are out [of power] for 36, 72 hours like last year in Texas. They're suddenly demand response customers who look a lot like a large industrial [customer] on the Houston Ship Channel."

Renewable Generators as Merchants

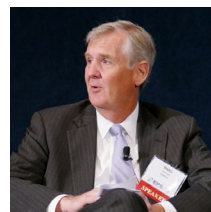
Travis Kavulla, vice president of regulatory affairs for NRG Energy, said policymakers should strive to "make merchants out of clean energy resources," subject to "tail risks and risks of economic underperformance" by avoiding long-term contracts that shift risk onto captive customers.



Travis Kavulla, NRG Energy | © RTO Insider LLC

Kavulla noted that state officials have often been critical of wholesale market design, which they do not regulate. "And yet the design of retail markets — which are exclusively jurisdictional to states; where states are dictators — are largely undiscussed. And so I think states would be wise to contemplate what barriers are facing decarbonization of the retail markets. That begins, I think, with retail competition. One of the reasons why you don't necessarily see ... wholesale market gains pass through to retail rates is the lack of retail competition."

Calpine CEO Thad Hill said the "bedrock" of private investment in infrastructure is investors' belief that they can earn a return on and of capital over time. "We've seen this play out in California, where there hasn't been a new megawatt built in 20 years without a state contract or state-approved contract. It's central planning all over again. I don't think we want that."



Calpine CEO Thad Hill | © RTO Insider LLC

Kavulla also called for more demand-side participation. "Consumers have spent bil-

ions to invest in a smart grid that's still very dumb. And very few customers are on any kind of time-varying rate plan that would give them either visibility into, or an incentive for, switching their loads," he said, "something that has to happen in order to accommodate these intermittent supply resources."

Paul Sotkiewicz, president of E-Cubed Policy Associates, agreed, saying the California "duck curve" is a function of the state's retail rate structure. "Nobody has an incentive to consume energy when prices in the wholesale market are close to zero because they're based on block tariffs. They're trying to stay out of that next block. ... So you've got smart meters, dumb rates."

Investment Strategies for the Energy Transition

The conference also featured much discussion on the business opportunities in addressing climate change.

Stephen Gallagher, chief commercial officer for Brookfield Renewable U.S., cited an estimate that it will cost \$150 trillion to decarbonize the public and private sector, calling it "the largest commercial opportunity of our lifetime."

For its part, Brookfield is about to close its first global energy transition fund, which will bet in part on decarbonizing industries such as cement, steel and chemical manufacturing. Announced with a target of \$7.5 billion, the fund is *expected* to close at \$15 billion.

"That's \$15 billion of equity. So by the time you leverage that up, you're talking probably \$60 [billion], \$70 billion plus that we [will] deploy into this landscape," Gallagher said. "We not only provide the renewable [energy]; we also work with them on supplying capital to fund their transition."

EPSA members agreed that investors have shown an increased appetite for environmental, social and governance (ESG) investments.

"What's not so clear is exactly what an ESG investment is," said Sherman Knight, president and chief commercial officer for Competitive Power Ventures. "For example, is a renewable project in a highly penetrated market that is displacing other renewable projects an ESG investment, where natural gas projects displacing coal is not? As we see things going forward, I think there will be more of a standard, clear definition around what ESG really stands for. At least ... I'm just hoping that that will be the case."

Vistra CEO Curt Morgan said an ESG label can't trump profitability. "Make no mistake:

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Ultimately [investors are] going to look for returns. We're going to be driven more by economics than we are by the flavor of the day that will come and go."

Tenaska's Smith, who said his company remains focused on solar and energy storage "despite the current headwinds and challenges," predicted a shakeout.

"I think we've had the luxury of an abundant capital market where there's been a willingness to invest in every technology type," he said. "People are going to be more focused on returns [in the future]. And so I think that the focus will gravitate more towards those technologies which will yield near-term cash flows."

Knight said CPV does not assume there will be a big increase in electric growth from electrifi-

cation when choosing its investments.

"We definitely run sensitivities and look at that, because I think that there's a real potential [for demand growth].... When I started in the industry 20 years ago, the argument was over 1% or 2% growth. And now, you know, you're arguing between, is it going to be flat growth, or we're going to grow 40%? ... The range is so, so large."

"There's a huge amount of risk" on betting on electricity growth, Morgan agreed. "There's a tremendous amount of money going into hydrogen. That can be a part of the solution, which may dampen the growth of electricity."

No Immediate Solutions

EPSA CEO Todd Snitchler closed the daylong

conference by conceding the group had not solved any of the issues facing the industry.

"But I don't think that was the objective when we started," he said. "So I hope you'll come away with the same appreciation I have that we're trying to figure out how to enable reliability to be paramount and to use competitive markets to deliver it, because it delivers on affordability and also on emissions reductions — and those are all things I think everyone here can get behind." ■

— Rich Heidorn Jr. and Michael Brooks



EPSA CEO Todd Snitchler | © RTO Insider LLC



More than 150 people attended the Electric Power Supply Association (EPSA) Competitive Power Summit at the National Press Club on March 29, where competitive generators and others discussed market changes needed to ensure reliability while reducing carbon emissions. | © RTO Insider LLC

EPSA Competitive Power Summit

EPSA Members Renew Call for Carbon Price; See Long 'Bridge' for Gas

By Rich Heidom Jr.

WASHINGTON — Competitive power generators last week renewed their calls for a national price on carbon emissions while complaining of a lack of market support for the flexible gas-fired generation they say will be needed to supplement renewables for the foreseeable future.

Top officials from Calpine, LS Power, Vistra, Competitive Power Ventures and Tenaska delivered their views at the Electric Power Supply Association's Competitive Power Summit at the National Press Club, where some of their concerns were echoed by a panel of Ph.D.s and the CEOs of NERC, PJM and ISO-NE.

"I think it's worth saying one more time: national carbon price. It's such a no-brainer," said Sherman Knight, president and chief commercial officer for Competitive Power Ventures. "It's straightforward. It is efficient, and it gets it gets the job done."



Sherman Knight, president and CCO, Competitive Power Ventures | © RTO Insider LLC

"I don't know why we continue to have this debate about what's the most direct way [to accomplish decarbonization]; what's the most ... even playing field; what seems to be administratively easy to do," agreed Curt Morgan, CEO of Vistra. "And for the life of me, I've met with a lot of people on Capitol Hill — many you guys probably have too — and I still can't quite get my head around why we can't get something like a carbon price. [It's] baffling. I think, to all of us. There is movement though; I will say I'm not as pessimistic as I was a year ago."

"If we don't put that price of carbon on the system, I don't see how anything could work," Harvard economist William Hogan said in the last session of the daylong conference March 29. "We're doomed to fail. So I'm very pessimistic about it."

"I agree with everything that Bill just said," economist Paul Sotkiewicz, president of E-Cubed Policy Associates, joked in response. "In fact, now I'm so depressed, I'm going to bring my hair dryer into my shower."

A More Expensive Transition

"The energy transition is going to be expensive.



From left: Competitive Power Ventures President and CCO Sherman Knight; Vistra CEO Curt Morgan; LS Power Generation President Nathan Hanson; and Tenaska Power Services President Kevin Smith | © RTO Insider LLC

... And it's going to be far more expensive if we go around choosing pet projects here, here and here," Knight said. "We feel like we're chasing state mandates, as opposed to focusing on reliability and reducing carbon in the industry. And that gets a little bit frustrating. ... We can do it, you know, but certainly it's less effective [than] if there was a federal, or even just a regional — within an RTO — consistent, policy."

ISO-NE CEO Gordon van Welie cited a study by the RTO that predicted the region could face negative LMPs within a decade that would "wreck the markets."

"As the states grapple with that reality, I think there's some empathy starting to develop towards having to put a carbon price into the electricity markets. It's probably not the right place to do it; the right place to do it is in [the economy-wide Regional Greenhouse Gas Initiative] or some national scheme. But both of those are not really politically feasible at this point. So the next best [place] is to put it into the ISO markets. And we're going to need to have the states tell us what number they want."

"It pains me to say it, but I think there is value in some incrementalism, mostly because we have no other option," said Arnie Quinn, vice president of FERC-jurisdictional markets for Vistra. He added that his company would also support a forward clean energy market like that under discussion in ISO-NE. (See [Draft Study Weighs Tradeoffs of CO2 Pricing, FCEM for ISO-NE.](#))

"Incremental carbon pricing is better than none," agreed PJM Independent Market Monitor Joe Bowring, who noted RGGI has had a "demonstrable impact" on system dispatch in PJM despite the fact that only four PJM states currently belong to RGGI.

The RGGI model allows states full control over the carbon quantity and price variables. The results of those state decisions change the marginal costs of generators in the PJM market, and the impacts flow through the normal market dynamics without the RTO having to make any policy decisions about carbon.

"There has to be more state cooperation — whether it's in the form of a carbon price, or

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in recognizing the value of transmission — to help meet state renewable energy and other goals along with resource adequacy,” said John Moore, director of the Natural Resources Defense Council’s Sustainable FERC Project.

Travis Fisher, president of the Electricity Consumers Resource Council (ELCON), said state targets “that say you have to get to this place 30 years from now [is] a very expensive way to do it.”

Instead, policymakers should say, “We are going to minimize the cost of the entire system — generation, transmission, all parts of it — we’re going to minimize the cost of it, subject to all the other policy constraints.’ ... It’s got to be reliability, at least cost.”

The Length of the Natural Gas ‘Bridge’

The role of natural gas also was a recurrent theme in the discussions, with NERC CEO Jim Robb and PJM CEO Manu Asthana joining generators in insisting that natural gas will be needed to supplement intermittent resources and ensure reliability.

“In a world where policymakers don’t want gas — gas has become the new coal in many areas — what do we think is going to provide that balancing capability?” Robb asked. “It could be hydrogen, but that’s a long, long way away. It could be batteries, but we don’t have a battery technology that can perform cost-effectively at the scale we would need it to with the durations that we would need. It could be small nuclear reactors [with] flexible characteristics. But that’s a long, long way off.”

Robb said he agreed with those who see natural gas as a “bridge” to a low-carbon future. What “terrifies me in this transition [is] a lot of people think that the bridge is about this long,” he added, spreading his hands a few inches



Vistra Corp. CEO Curt Morgan | © RTO Insider LLC

apart. “And I think most people in this [conference] room would say this bridge extends from that wall to that wall. Your point of view on the length of that bridge dictates an awful lot as to what you do in terms of investing in infrastructure.”

The inability to invest in gas infrastructure or electric transmission, Robb said, “is really going to cripple our ability to meet any of the emission-reduction targets that we have.”

“I think it is a long bridge,” Asthana responded. “In fact, PJM is on the record as saying that we think we need access to our thermal generation until and unless there’s replacements of assets in place.”

Devin Hartman, energy and environmental policy director for R Street Institute, said NERC and others need to address a “reliability and cost education problem.”

“There are folks — a sizable population — that genuinely believe that we can just force all natural gas off the system nationwide [in] this decade, replace it with renewables, and costs will go down and reliability will be maintained,” he said. “We have a stronger role to play in educating policymakers and others in understanding these mechanisms. How do markets drive [generator] entry and exit? How do they manage risk?”

Where’s the Market Support?

Asthana said capacity markets may be increasingly important in providing incentives to gas generators as energy markets respond to renewables with zero marginal costs. “And you know, maybe there’s an answer in the form of other ancillary services that we procure for ramping or some other form of flexibility.”

Generators said that while they continue to support competitive markets, they are not providing price signals for new gas units.

Vistra’s Morgan said the industry is “at a crossroads,” with reliability at stake.

“I may be the boy that cried wolf, but that’s OK. I’m telling you ... there is a big disconnect in places like PJM and in places like ISO New England if we don’t do something about this,” he said. “We’ve got to have an analysis done that figures out that marginal resource that is necessary, under the most extreme circumstance, with the intermittent resources out, that will ensure reliability. And the ISOs have to be the ones to step up and do this because they’re the objective person. [If] we come to the table, people say, ‘Oh, they’re those greedy generators, or ‘they’re just talking their book again.’



Travis Fisher, president, Electricity Consumers Resource Council | © RTO Insider LLC

“I don’t know how to build a gas plant today, in a competitive market, with not knowing how long it’s going to be around,” he continued. “I don’t know how you can say that \$50/MW-day, or \$2 or less a kilowatt-month on a capacity clear supports new build of a gas plant. ... Look, competitive markets have brought better reliability, lower costs. ... But we’ve got a lot of hands in these markets, and a lot of forces are [attempting] to drive lower and lower capacity prices.”

CPV’s Knight agreed that “price signals do not currently support investment in new dispatchable generation in most of the country.”

“I think that what we have to be careful about is saying competitive markets aren’t incentivizing investment. And I think that is absolutely not true. I think what we’re talking about here is tweaking the competitive markets ... as the infrastructure transition occurs ... so that it can unleash the power of private capital to come in and make investments — or not have private companies preserve capital by retiring perfectly good assets that are needed for the transition.”

Generators said the move to effective load-carrying capability should help the most flexible gas units.

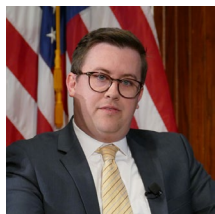
“If it takes you 24 hours to start up, that’s not that useful to the grid with intermittent resources,” Morgan said. “So combined cycle plants that have much more flexibility ought to have a higher effectiveness rating than ... a gas steamer that takes 24 hours to start up. ... We can’t just come in always pushing our own [generation]. We have to admit that some of our dispatchable resources are less effective.” ■

EPSA Competitive Power Summit

EPSA Panel Debates Role of ISOs, RTOs in Decarbonization

With Carbon Pricing off the Table, Industry Is Looking for 'Next-best' Solutions

By K Kaufmann



Brian George, EPSA |
© RTO Insider LLC

WASHINGTON — Competitive power markets just do decarbonization better, according to Brian George, senior director of strategic policy and government affairs for the Electric Power Supply Association (EPSA), moderating a panel on

decarbonization at his organization's Competitive Power Summit at the National Press Club on March 29.

Citing figures from the *Energy Choice Coalition*, George said that from 2005 to 2021, power sector emissions in regions with organized wholesale electricity markets were down 35% compared to a 27% reduction in regions without such markets. Even deeper cuts were reported in wholesale markets with larger amounts of competitively owned generation, such as ISO-NE, which saw a 61% drop in carbon emissions, George said.

But looking ahead, George and five industry executives on the panel, envisioned power markets combining the reliability benefits of RTOs and ISOs with other market structures aimed at coordinating resources and controlling costs in response to a range of increasingly ambitious state, local and corporate clean energy targets.



ISO-NE CEO Gordon van Welie | © RTO Insider LLC

ISO-NE CEO Gordon van Welie summarized the challenge organized power markets face, especially if the end goal is President Joe Biden's 100% decarbonized grid by 2035. "If you're going to run a system where the bulk of the energy is going to come from the sun

and the wind and is inherently unpredictable, you have to have some other energy source that is stable," van Welie said.

Further complicating the picture, George said, the industry's focus on reliability is often equated with a resistance to the clean energy transition.

Stephen Gallagher, chief commercial officer



John Moore, Sustainable FERC Project (right) speaks as (left to right) Stephen Gallagher, Brookfield Renewable U.S.; ISO-NE CEO Gordon van Welie; Arne Olson, Energy + Environmental Economics (E3) and Jill Davies, Shell Energy Americas, listen. | © RTO Insider LLC

for developer Brookfield Renewable U.S., also cited the staggering cost of grid decarbonization. "If you lay out all the plans, both public and private sector, in terms of decarbonization by 2050, that's \$150 trillion of investment — that's trillion," he said.

His company has grown from developing solar projects to working with corporate clients to plan and finance their transition to clean power. "That's going to take time," Gallagher said. Transitioning the economy to "fully green" is not a one-size-fits-all proposition.

"For us, it's working with everybody, working with complex growth and goals on budgetary constraints."

"So, how do we apply markets to all this?" van Welie said. "There are markets that utilize uniform clearing price auctions and marginal pricing, and I think those apply very well to attracting the capital needed for balancing resources, and I think they can be modified to attract renewable energy as well."

John Moore, director of the Sustainable FERC Project, also favors competitive markets for

meeting reliability needs —but combined with some kind of forward clean energy market (FCEM) or centralized market for state, local and corporate mandates.

Capacity markets could evolve to "capability markets," Moore said,

"to address some of the different types of needs we're going to have with meeting much more than just a traditional peak-load day with different types of resources," including major amounts of distributed power.

"I think the states are going to have to recognize the value of something like a centralized clean energy market, and you're going to have to cut the number of products a bit," he said. "There are so many different clean energy mandates, requirements, and they're not going to work in any decentralized fashion."

Echoing other energy industry executives at the summit, Arne Olson, senior partner at



John Moore, Sustainable FERC Project |
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Energy + Environmental Economics (E3), said setting a carbon price would be the quickest way to scale clean energy. (See related story, [EPSA Members Renew Call for Carbon Price](#); See Long ['Bridge' for Gas](#).)

While politically unfeasible, a carbon price is “still useful to hold up as a benchmark” for thinking about the next-best alternative, which Olson believes is a bilateral clean energy market.

“We like that better than an organized FCEM because an organized FCEM seems to be defined around one system, one ISO,” Olson said. “There’s no reason that PJM should have a separate price for clean energy attributes, or that ISO-New England should.”

The value of reducing carbon emissions everywhere should not constantly change, he said.

Van Welie agreed that integrating the environmental attributes of different energy sources would be key. “If you don’t put the externalities into the market design, if you don’t take into account the supply-side friction, the markets are not going to work.”

The Four Pillars

Designing these future markets will depend on what van Welie called “four pillars” — increasing amounts of renewables, dramatically expanded transmission, market structures that are generation-technology neutral, and balancing resources for “energy adequacy.”

“When you think about the grid, it’s fairly simple. It’s a collection of wires and a bunch of devices converting energy inputs into electricity,” he said. “If our wholesale market structures and the various regulatory processes we have around the structure don’t give us four pillars of equal strength, something’s going to break down and we’re going to have adverse outcomes.”



Stephen Gallagher, Brookfield Renewable U.S. | © RTO Insider LLC

A holistic conversation about market evolution is needed, he said. States are primarily focused on clean energy goals, which leaves out transmission and, he said, don’t begin to consider the distribution system.

ISO-NE’s winter peak is now around 20 GW, van Welie said. “The 2050 plan shows it will be close to 60 MW,” and scaling the system up to meet that demand will require “massive amounts of investment in the transmission system.”

ISO-NE’s recent Pathways Study found that existing market structures — the status quo — are “by far the most expensive and the most inefficient” for decarbonizing the grid, van Welie said. One example: “We end up having more storage deployed in order to allow renewables to capture various clean energy attributes,” he said.

Carbon pricing was identified as the most efficient path to decarbonization. (See [Draft Study Weighs Tradeoffs of CO2 Pricing, FCEM for ISO-NE](#).) While a regional or national carbon market is not on the table politically, van Welie’s next-best “is to put [carbon pricing] into the ISO markets, and we’re going to need to have the states tell us what number [of emissions reduction] they want.”

Education, Cooperation, Regulatory Certainty

Looking at the obstacles ahead, panelists raised several issues.

As a developer, Gallagher’s top concern was regulatory certainty. Developers are renegotiating contracts, and in some cases, customers are walking away from projects, he said.

“Not all customers are created equal. Some are very sophisticated, some are not, and they can get scared away with some of the complexity,” he said. “What they need is assurance on executions, so they are willing to pay a premium to make sure” projects are completed, and “right now, that’s not happening.”

Echoing other executives at the summit, Jill Davies, senior vice president of energy trading at Shell Energy Americas, stressed the critical role natural gas will play in the energy transition, providing reliability to markets.

At the same time, she said, “There’s still a lot we can do even to lower emissions across the value chain,” like co-locating solar and storage or carbon capture and natural gas plants.

But Davies also called for “innovation and technology to step in to help us do a better job of forecasting. The role of planning is going to



Jill Davies, Shell Energy Americas | © RTO Insider LLC

be critical going forward to understand how cities will grow. Where will load be? How will we stress test our systems for climate change ... with energy demands that we’ve seen in the U.S. extreme weather events?”

Still another obstacle is the lack of understanding — by regulators, policy makers and the general public — of the complexity and scope of the challenge ahead, and how long the clean energy transition will take, Davies said.

With the accelerating pace of coal plant retirements, people need to realize “it’s not a one-for-one transfer,” she said. “If you retire a coal plant or a gas power generation plant, you just can’t replace it with one solar farm. You need orders of magnitude [of] greater megawatts, and you also need geographic diversification.”

Those pushing for urgent, ambitious clean energy targets also must recognize “that people are not willing to compromise,” she said. “Often times, they don’t want pipelines built where they live; they don’t want to look out their windows and see wind farms.”

Moore agreed with the need for public education. He and other industry insiders “are stunned on a daily basis over the real incomplete level of understanding that policy makers, regulators, legislators all have about how the grid works, and what the implications are for having made at a state level, for example, serious climate commitments in lots of respects, and then not knowing what that ultimately means for consumers and the environment.”

Both he and Davies also called for more cooperation between states and ISOs and RTOs. As more renewables come on the grid, the power a state uses may increasingly come from outside its boundaries, Moore said. States will have to work together, “simplifying products, simplifying the number of local mandates, looking to markets to be more of a resource,” he said. “That’s got to change.” ■

EPSA Competitive Power Summit

NERC Chief: 'Longer, Deeper, Broader' Weather Presents New Reliability Challenges

By Rich Heidom Jr.

WASHINGTON — Extreme weather events during the last two years have brought “extraordinary clarity” about the reliability risks posed by the changing climate, NERC CEO Jim Robb said March 29.



NERC CEO Jim Robb | © RTO Insider LLC

“These weather systems are ... longer, deeper, broader,” Robb told the Electric Power Supply Association’s Competitive Power Summit, citing “heat domes” in the West and the February 2021 winter storm, named “Uri” by the Weather Channel. “And that’s a real problem, because utilities can’t rely as much on transfers [from other regions] to bail them out.”

NERC was able to identify generation that could have preserved ERCOT’s ability to serve load during Uri, “but we’d be wheeling it from peninsular Florida and Montana and places like that,” Robb said. “And the cost to build that transmission is ungodly.”

Uri resulted in several days of rotating black-

outs in Texas to prevent a grid collapse, the largest manually controlled load shed event in U.S. history. It also showed that weather can cause outages to more than wind and solar generation. Natural gas-fired units represented 58% of all generating units that experienced unplanned outages, derates or failures to start, a joint FERC-NERC report concluded.

As weather challenges rise, the drive to electrify transportation and heating means the demand for reliability will only increase, Robb said. “Our tolerance for even momentary outages or any sort of disruption is going to go to zero very, very quickly.”

As a result, he said, “we really need much, much better situational awareness between the system operators, the generators and, importantly, the fuel suppliers.”

A common link in NERC’s assessments of major reliability events driven by weather — including the 2011 and 2018 cold weather events — is that “the system operator and the generators just didn’t know whether their fuel was going to show up or their plants could perform. So, the operators are scrambling to make decisions in real time that they should have had the ability to plan for,” Robb said.

He also repeated his call for a different “mindset” on reliability and resource adequacy, saying the calculation of peak annual load plus reserve margin is no longer sufficient because of intermittent generation and gas plant fuel risks.

Concerns are most acute in California, Texas and New England, “the three hotspots for how the world has evolved,” Robb said. “This will be coming to the theater near you soon. It may take a while, but the dynamics are clearly there.”

Also speaking at the conference, Paul Sotkiewicz, president of E-Cubed Policy Associates, said ERCOT needs “some sort of reliability call option.



Paul Sotkiewicz, E-Cubed Policy Associates | © RTO Insider LLC

“I’m not going to use the term ‘capacity market’ because that’s a dirty word in Austin. ... But the whole point is that you need some sort of reliability call option to say, when the system gets to a certain condition — I don’t care if it’s summer peak, winter peak, the shoulder period — if I need you, I can call on you.”

Calpine CEO Thad Hill echoed Robb’s concern, saying the Biden administration and some state energy policymakers are causing “changes to major tariffs in the markets, where it’s about emissions first, cost second and reliability third.”

Obligation to Perform

Robb said the wholesale markets must redefine generators’ “obligation to perform.”

NERC learned that many generators shut down by Uri had made “a pure economic decision” not to winterize, Robb said.

“They said, ‘Look, it’s not worth it for me to invest in this amount of winterization for this unit because I just won’t show up that day. And sure, I may forgo a day of very high prices, but I don’t [think] the probability of that happening justifies the investment.”

“We have to create the proper set of incentives and ... penalties so that a generator saying, ‘I’ll be there’ — they’ve got to be there. And if they’re not, I’m sorry, they should get whacked on the knee. And they should be incented to be there under a broader range of conditions than we might have thought of before. Because the



Devin Hartman, R Street Institute, speaks as (from left) Calpine CEO Thad Hill, NERC CEO Jim Robb and PJM CEO Manu Asthana listen. | © RTO Insider LLC

EPSA Competitive Power Summit

tails in the distribution of outcomes — these tails are becoming really, really important.”

Educating Rate Regulators

Devin Hartman, energy and environmental policy director for R Street Institute, said NERC needs to help educate policymakers about the need for flexible natural gas units and services such as ramping. (See related story, *EPSA Members Renew Call for Carbon Price; See Long 'Bridge' for Gas.*)

State utility regulators “are really struggling with prudence decisions now. They’re looking at this and saying, ‘We don’t even understand you’re talking about ‘ramp;’” Hartman said.

“This has never been classically built into [integrated resource plan] considerations. And they’re really struggling to kind of operational-

ize it at that level. Increasingly, reliability cost and environmental performance are a function of regional portfolio conditions. And that means ... you actually have to have enhanced information flows and better coordination.”

Arnie Quinn, vice president of FERC-jurisdictional markets for Vistra, said the grid is unlikely to see “reliability catastrophes” as a result of the transition to renewables.

“I think it will be more likely that we will see a lot of resource adequacy RMRs [reliability-must-run agreements] and fuel security RMRs and a bunch of other little RMR actions

and things that bury costs,” he said. “And quietly, costs will go up in a way that’s very non-transparent.”

Glass Half Empty

Asthana and Hartman expressed optimism that RTO stakeholder processes will develop the market designs needed to support efficiency and reliability.

Robb was less confident.

“We got to get the stuff figured out now so that as we redevelop the system over the coming 10, 20, 30 years, we’re leaving something behind that we’re going to feel proud of,” he said. “Right now, it’s not clear to me that we’re going to get there. You guys are optimistic. I’m paid to be the [glass] half-empty guy.” ■



Arnie Quinn, Vistra | © RTO Insider LLC

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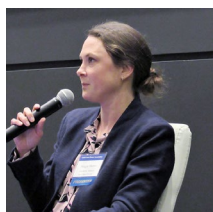
Panelists Go One-on-One over SEEM Proposal

By Amanda Durish Cook

NEW ORLEANS — Two panelists on either side of the *Southeast Energy Exchange Market (SEEM)* argument used several basketball references in debating how the nascent market will work in practice during the Gulf Coast Power Association's MISO South-SPP conference.

SEEM will facilitate sub-hourly, bilateral transactions at a zero-transmission rate. Bordering the MISO and SPP footprints and with 16 member utilities, it's set to go live in October.

The Southern Alliance for Clean Energy's research director Maggie Shober said her concern is SEEM members can pick and choose whom they transact with, effectively blocking out some independent power producers and that it discriminates access to transmission service.



SACE's Maggie Shober
| © RTO Insider LLC

"We aren't seeing this as a driver to new renewables. We see this as a potential air ball," she said, working in a March Madness reference as a nod to the Final Four games being held down the street at the Superdome.

Corey Sellers, Southern Company's general manager of transmission policy, said the member companies don't have an incentive to block certain transactions. "The incentive is to have this [market] as active as possible to drive down costs," he said.

Sellers said interested participants are seeking a "low-cost, low-bureaucracy approach" to the market. He said it will cost about \$5 million to stand up the market and about \$2 million to \$3 million annually to maintain it.

"We think it's a rather elegant approach to modifying the Southeastern market," Sellers said.

Southern is a founding member of SEEM. Other members include Duke, Dominion, Associated Electric Cooperative, Inc., LG&E and KU Energy, Santee Cooper and the Tennessee Valley Authority.

FERC recently rejected more attempts by environmental, clean energy and community groups to overturn both its approval of SEEM and its orders to implement the market. Some

of those groups have also filed an appeal in the D.C. Circuit Court of Appeals, asking the court to prevent SEEM's creation. (See *FERC Again Rejects Efforts to Overturn SEEM.*)

SEEM's footprint would be about the size of MISO, extending from Springfield, Mo., to Savannah, Ga., Sellers said.

Shober said she is worried about the market's "opaqueness." She said SEEM will lack the transparency of an RTO wholesale market.

"Once it goes live, it will be hard for us to even know what's going on in the market," she said, likening the situation to holding a basketball game without media coverage. "How would the public feel about that? 'Here's the winner of your NCAA tournament, and just trust us that it happened this way.'"

Sellers said that while SEEM won't publish real-time pricing, it does plan to share certain hourly statistics, such as megawatt amounts traded. He said the market might publish average weighted prices from the prior trading day.

"The output is a set of bilateral transactions,"

he explained, adding that there wouldn't be uniform pricing.

Sellers said he wasn't yet sure if SEEM is the end goal, but that it's a way to raise a market quickly and realize benefits while keeping conversations open about the future.

But Shober said SEEM is missing several design features that could allow it to transition smoothly into an energy imbalance market or an RTO.

"SEEM is not seeming to be designed in that way to take those steps forward," she said. She likened the market to a "high school JV squad" when it could be a high-performing college team.

Sellers said SEEM represents the best way to make market transactions and possibly save millions without disturbing the members' current constructs.

"Now, are we a fast-break team? Probably not," he said.

"JV might have been a bit of a low blow," Shober responded. ■



SACE's Maggie Shober (right) and Southern Co.'s Corey Sellers | © RTO Insider LLC

GCPA MISO South-SPP Conference

Overheard at GCPA MISO South-SPP Conference

Good Rapport Between MISO, SPP Sets Tone

By Amanda Durish Cook and Tom Kleckner

NEW ORLEANS — Relationships were on the agenda last week during the Gulf Coast Power Association's MISO South-SPP regional conference, from those among the 200 attendees who hadn't seen each other in two years to the strong bonds now evident between the two RTOs.

SPP CEO Barbara Sugg said her most rewarding accomplishment since taking the helm in March 2020 — about the same time the COVID-19 pandemic “moved everybody’s cheese,” as she said — has been building the RTO’s relationship with MISO.

“I think one of the biggest changes that we made is that we focused on our relationship with MISO, and I can’t tell you how much how rewarding that relationship has been thus far,” Sugg said during her keynote address that opened the two-day conference. “We were

trying to solve the same problems. There’s just doesn’t seem to be a reason to me why we can’t solve them together.”

Sugg said SPP must be ready for the future grid, and collaboration with neighbors is one of her organization’s goals.

“I’ve got a long list of unexpected things that have happened in the past two years,” she said, jokingly. “Don’t worry, I won’t read them to you.”

Sugg referenced the RTOs’ Joint Targeted Interconnection Queue (JTIQ) transmission study as a uniting force between them. (See [MISO, SPP Finalize JTIQ Results with MISO Tx Duplicates](#).)

“Quite simply, we can build it separately, or we can build it together,” she said.

A day later, MISO CEO John Bear said the improved relations were as “simple as Barbara

Sugg and I decided to make it a priority.” He said many down the ranks also deserved credit.

“I can’t heap enough praise on MISO and SPP for doing this,” Clean Grid Alliance’s Beth Soholt said of the JTIQ study, which she called “groundbreaking.”

“We’re just very grateful to John and Barbara.”

Bear: High Reliability, Not High Costs

MISO Chief Customer Officer Todd Hillman conducted an environmentally friendly fireside chat with Bear using a tablet’s video of a burning hearth to add warmth.

“We don’t want to emit any carbon from a fire in the building,” Hillman said.

He asked Bear about his reaction to a recent PJM [study](#) that concluded the grid operator might need a reserve margin above 70% to accommodate a 50% share of renewables in the resource mix and satisfy a one-day-in-10-



Panel discussion during the GCPA MISO South-SPP regional conference | © RTO Insider LLC

GCPA MISO South-SPP Conference

year loss-of-load expectation.

"We all want really high reliability, but we don't want really high costs," Bear responded. He said transmission operators must strike a balance between intermittent assets and controllable assets while building new structures, but added that MISO will strive for a more efficient reserve margin.

"Otherwise, someone else will be here talking to you next year," Bear said.

Although gas generation remains harder to build because of grueling pipeline permitting, Bear said, MISO will continue to rely on gas-fired generation to a degree. "You can't paint 65% of your house without scaffolding and ladders," he said, referring to fossil generation importance during the transition.

Bear called escalating weather events an "enduring issue." He said MISO's seams are a "magic lever" that MISO can sometimes pull to import generation during severe weather.

Hillman asked what topic Bear would raise if he was in an elevator with President Joe Biden. Without hesitation, he said MISO must build long-range transmission projects over the decade. MISO's \$10.4 billion long-range transmission package has a nearly 3:1 benefit-to-cost ratio, the RTO says. (See [MISO Updates Stakeholders on \\$10B Long-range Tx Package.](#))

Bear said if staff is to operate with a fleet awash in intermittent resources, they must be able to move the energy around when output is high or when the intermittent resources aren't producing at high levels. He said MISO will have to look closely at how renewable resources twice the size of today's might alter flows.

The RTO will soon reassess the need for a new set of interregional transmission projects with PJM because of the increase in renewable resources, Bear said.

Consultant Asks for Unified MISO



Jennifer Vosburg |
© RTO Insider LLC

"The future is coming, and we're going to have a rough ride getting there," independent energy consultant Jennifer Vosburg said, calling for a more unified MISO between the Midwest and South. She lamented that about eight years into

the South's MISO membership, it's isolated from the rest of the footprint when it comes to planning.



"Fireside" chat between MISO's Todd Hillman (left) and CEO John Bear | © RTO Insider LLC

"How many futures are we talking about? Are we talking about MISO future or a MISO South future?" she asked rhetorically. "I joined MISO. I didn't join MISO South."

Vosburg pointed out that MISO South is not included in the first half of MISO's long range transmission plan (LRTP) and will not share in costs. When the South is included in long-term planning, she predicted rocky cost-allocation discussions.

A cost-allocation "Civil War," she quipped.

Vosburg also said addressing the connection between MISO Midwest and MISO South is past due. She pointed out that because a 500-kV Dell-New Madrid line is on outage through June, MISO Midwest lacks any physical links into the South. (See [MISO Midwest-South Transfer Service on Outage until July.](#))

"That is something we must address. It's been long enough," Vosburg said. "We're planning for one MISO, but we're operating two."

She said while MISO South won't see any costs from the LRTP's first half, it also won't see any chance for federal infrastructure funding. "I think there's a danger there," Vosburg said, reminding planners that ratepayers are at the other end of spending.

Undergrounding a No-go in NOLA

Entergy New Orleans CEO Deanna Rodriguez

earned the conference's biggest laugh when describing the resilience plan the utility will file at the Big Easy city council's request.

She said Entergy will likely stop short of "gold-plating" the infrastructure by undergrounding all power lines.

"We don't underground our dead people in New Orleans," Rodriguez said, a reference to the city's iconic above-ground tombs. Because New Orleans is at or below sea level, the soil has a high water table, placing bodies buried in the ground at risk of being water-logged or even displaced.

In recent years, Entergy NOLA has been buffeted by hurricanes, severe winter weather and just recently, *tornadoes*. Hurricane Ida last year *cut power to the entire city*, and it took 10 days to completely restore electricity. Rodriguez said that the transmission *structures* that toppled during the storm were first tested by 150-mph winds.

She said it's "critical" the utility get creative in making the system more resilient, including exploring microgrid technology.



Entergy New Orleans
CEO Deanna
Rodriguez | © RTO
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"You have to look at all options," she said.

Tx Planning a 'Least-regret' Approach

Aubrey Johnson, a freshly minted vice president at MISO overseeing all aspects of transmission planning, said that recent leaps in the electric industry are more dramatic than any of the 100 years that came before and require planning a system that can handle more uncertainty.

Johnson said MISO's planning is a "path of least regrets" and quoted President John F. Kennedy in saying, "the best time to fix the roof is when the sun is shining."

"We're speeding to the outcome at a rapid pace. ... What we should realize is, when it's broken, it's always harder to fix."

Antoine Lucas, SPP's vice president of engineering, agreed that transmission planning inaction carries a hefty cost.

"We're going to have to get more study ... into the cost of indecision to get folks more comfortable with the costs of decisions," he said.

MISO Director of Real-Time Operations J.T. Smith said he had a role in the 2011 Multi-Value Project (MVP) portfolio, the RTO's last long-range planning effort. He said the portfolio's only shortcoming is that it didn't go far enough.

"We underbuilt it," he said. Nodding to Soholt in the audience, he said, "Beth was yelling at me [at the time] that it wasn't enough, that more wind was coming."

Lessons from the Natgas Sector

Steve Bruns, a marketing vice president with Tenaska Marketing Ventures, gave attendees and MISO and SPP staff a crash course on natural gas contracts and curtailments during a panel discussion on the fuel supply issues during the February 2021 winter storm that led to load shed in both RTOs.

SPP COO Lanny Nickell said 53% of the grid operator's accredited gas supply didn't show up during the storm, leading to the first load shed in the organization's 80 years. It turned out a "surprisingly low number" of contracts were for firm fuel.

"Less than 50%," Nickell said. "That was eye-opening."



Steve Bruns, Tenaska | © RTO Insider LLC



MISO's Aubrey Johnson (left) listens to SPP's Antoine Lucas during a panel discussion on transmission planning. | © RTO Insider LLC

"I'm sympathizing with you guys because I too still have PTSD over the events that transpired during that week in February," Bruns said. "Firm means something different in the natural gas world. Unfortunately, the electricity markets have decided to be a spot buyer, a daily buyer of commodity [regulated local distribution companies]."

"The big gas utilities' industrial customers have much more of a portfolio approach when they're procuring gas. They're buying first of the month; they're buying fixed price. Yes, those are typically higher priority products that those consumers of natural gas have contracted for, and therefore the producers are going to give those contracts a higher priority level of service when they're going through their curtailments as they're starting to lose production."

Gramlich Says System at 'Breaking Point'

Grid Strategies President Rob Gramlich said RTOs, save for CAISO, fail to proactively plan their transmission systems. He said MISO's and SPP's interconnection queues, largely designed to usher in natural gas and combined cycle plants, are dysfunctional when it comes to integrating the new resource mix.

"This system is really at the breaking point right now," he said. "Low-cost decarbonization requires large-scale transmission."

Gramlich said the future system must be able

to flow tens of gigawatts of renewable power bidirectionally. "If we keep nickel and diming with generator interconnections, we're probably going to end of paying a lot more in the long run," he said.

Past transmission planning efforts to incorporate renewable energy, such as MISO's MVP portfolio and SPP's priority projects, only came up short in that they weren't big enough, rendering wind generation curtailments today, Gramlich said.

"Let's take that lesson, roll it forward, and do this big at the right scale," he said.

Entergy La. CEO Looks to 2050

Entergy Louisiana CEO Phillip May said though some industrial customers were initially resistant to carbon reductions goals, they now widely accept sustainability.

"The shift is complete. Anywhere you go, that conversation is welcome, and you can roll up your sleeves and talk about it," May said.

He said while he's confident about Entergy's goal to reduce carbon emissions 50% by 2030, the path to net-zero by 2050 is hazy.

"The great thing about big, audacious goals is you don't know how you're going to get there," May said. "But I'm confident we'll get to 2050 and there will be a big, quantum change."

May said solar generation is now a "very compelling economic asset," and that carbon capture and sequestration will likely come into play. Electrification of the Gulf Coast's heavy industry is also on the horizon, he said.

"Increasingly, our customers' customers are going to demand that those products be cleaner," May said. ■



Rob Gramlich, Grid Strategies | © RTO Insider LLC

GCPA MISO South-SPP Conference

Industry Experts Bet on Renewables, ESG

By Amanda Durish Cook

NEW ORLEANS — MISO and SPP members' continued addition of renewable resources and more socially responsible operations is gaining speed, industry experts said at Gulf Coast Power Association's MISO-SPP conference.

Mississippi Public Service Commissioner Brent Bailey opened one panel with a "MISO Madness" bracket that pitted together concept renewables and dispatchable generation, reliability and extreme weather, and resilience and affordability. Bailey said the chart, which included a large question mark in the winner's spot, shouldn't be interpreted as an either/or scenario.

"You can fill out your own bracket up to 64 [terms]," he said.

Electric Power Research Institute's Erik Ela said a decarbonized grid should be focused on resource adequacy, flexibility and price formation.

"I hear often, 'Products, products, products.' If there's an issue, create a new product," he said, saying new technologies, not just market products, could ease the renewables takeover. Ela said wholesale markets must consider pricing when resources don't have fuel costs, but do have marginal costs from battery storage, long-duration energy storage and more dynamic demand response.

Casey Cathey, SPP's director of system planning, said that for the past couple of years, zero-marginal cost resources account for 10% of the RTO's systemwide marginal energy pricing component.



Casey Cathey, SPP | © RTO Insider LLC

"The markets were never designed for this," he said.

Casey said even with 31 GW of installed wind capacity, there are still times when SPP's wind generation fleet has a 1% capacity factor. Before the conference, the grid operator set renewable penetration records March 28 and 29, where renewable energy served more than 90% of the demand for electricity across its 14-state footprint.

"When we're hitting these records it's almost



MISO's Melissa Seymour (left) reacts to Mississippi Commissioner Brent Bailey's "MISO Madness" bracket. | © RTO Insider LLC

a blessing ... kind of a curse," Casey said, noting the record-breaking intervals give SPP insights into resource-adequacy requirements, improved outage planning and transmission needs.

SunChase Power Vice President Teran Smith said the industry is "finally" arriving at an era of mass solar buildout after delays because of low-cost natural gas and a breakneck wind buildout. She said there's currently a "mismatch" between demand and supply caused by sluggish interconnection queues and expensive network upgrade costs tagged onto solar projects.

Multiple panelists agreed transmission projects on the horizon will deliver renewable generation.

Bailey said Mississippi will steadfastly advocate a "beneficiary pays" cost allocation for transmission projects. "We do quite often beat the drum around costs," he said.

ESG Becomes the Norm

Another panel discussed the rising impact of environmental, social and corporate governance (ESG) and the electric sector's emphasis on sustainability.

"The electric power is at the forefront of ESG," Kean Miller partner Gordon Polozola said. "It's not just an acronym anymore."

"We're on the cusp of a major generational shift, not just in our industry but across the board," said Sandy Nessing, American Electric Power's new managing director for corporate sustainability. "The next generation looks at ESG and sustainability as a must-have. ... It's under increasing scrutiny."



AEP's Sandy Nessing | © RTO Insider LLC

Nessing said AEP never fielded questions about diversity, equity and inclusion prior to 2020. She said ESG and sustainability is headed from "voluntary to mandatory," citing the Securities and Exchange Commission's recent approval of a measure requiring climate-related disclosures. She said that rule "sets the stage" for what's to come.

Shareholder ESG proposals jumped 22% last year, Nessing said. Many focused on reducing greenhouse gas emissions and transitioning to clean energy. Nessing said investors are increasingly asking utilities to lay out their transition plans from 2030 to 2050.

Activism is increasing and not coming from just shareholders, Nessing added. She said activist organizations will sometimes invest to get a seat at the table and force change. ■

FERC/Federal News



NREL: US Will Need 2,100 American-made OSW Turbines by 2030

Report Finds Only 1 US Port Currently Capable of Supporting Offshore Construction

By K Kaufmann

Reaching President Biden's goal of putting 30 GW of offshore wind off the Atlantic and Pacific coasts by 2030 will require a supply chain capable of producing more than 2,100 wind turbines and more than 6,800 miles of cables, according to a [report](#) released March 28 by the National Renewable Energy Laboratory (NREL).

And most of the components for those turbines and cables must initially come from Europe, even though "it is unlikely that the international suppliers will have sufficient throughput to support construction of both European and U.S. offshore wind projects," the report says.

"If a domestic supply chain is not developed in time, bottlenecks in the global supply chain will present a significant risk to achieving the national offshore wind energy target," the report says.

But Ross Gould, vice president of supply chain development at the Business Network for Offshore Wind (BNOW) sees such supply chain challenges in terms of economic development and job growth. "We know that there is a wide range of opportunities for manufacturing companies in the U.S. to participate in the offshore wind supply chain," said Gould, who worked with NREL on the report. "These offshore wind projects have the capability of creating tens of thousands of jobs."

By 2028, offshore turbines using 100% American-made components could create up to 62,000 jobs, the report says, and even turbines with only 25% domestic content could generate about 15,500 jobs, the report says.

But the path to hitting any of those numbers, as laid out in the report, is daunting. For example, while plans are underway to build 11 new OSW manufacturing facilities that can produce major components, such as turbine blades and towers, major gaps exist in the domestic supply chain for the components those factories will need.

Offshore turbines contain around 8,000 components, many of them much larger than similar components for onshore turbines, Gould said.

Offshore turbine blades are as long as a football field, "significantly larger than their

onshore relatives," Gould said in an interview with *RTO Insider*. "And so, while we have the capabilities to produce [blades] for onshore, those companies would need investment to upgrade their equipment, as well as potentially training [employees] on the new equipment."

Other components are not being produced, or produced at scale, in the U.S., the report says. For example, the permanent magnets used in offshore turbine generators require rare-earth metals that are not mined and cannot, at present, be processed in the U.S.

Still another obstacle, the huge size of some offshore components may also mean they can't be transported by highways, Gould said. They will need to be built near a body of water and port facilities large enough and deep enough for the wind turbine installation vessels (WTIVs) and other ships used to build and operate offshore projects — which brings up additional supply chain gaps, the report says.

Of the 22 ports on the Atlantic Coast, the Portsmouth Marine Terminal in Virginia is the only one that currently has the capacity to accommodate WTIVs, the report says. Others, such as the New Bedford Marine Commerce Terminal are not large enough but can serve as marshalling areas, using smaller "feeder barges" to ferry components out to installation vessels.

Such workarounds may be less expensive, the report says, but "they also introduce additional risk and logistic complexity to transfer components from the barge to the WTIVs at sea."

These installation vessels must also comply with the provisions of a 1920 federal law known as the Jones Act, which requires that ships carrying goods between U.S. ports be American built, owned and operated. The report estimates that at least five such ships will be needed, but only one is currently under construction, for Dominion Energy's Coastal Virginia Offshore Wind project.

Estimated cost per WTIV ranges from \$250 million to \$500 million, the report says, and each ship could take up to three years to build.

The Next BOEM Auction

The study is the first of two reports NREL and other industry stakeholders, including BNOW, will be producing on the offshore wind supply chain. The first part is intended to set out the scope of the needed buildout and the chal-

lenges ahead, Gould said. The second, to be published later this year, will look more closely at the kinds of investments and other support that will be needed to reach Biden's 30 GW goal.

The push for getting an offshore supply chain up and running as quickly as possible is being driven by the growing number of offshore projects in development up and down the East Coast.

In February, the Bureau of Ocean Energy Management (BOEM) held a record-breaking auction for six offshore leases in the New York Bight, pulling in bids totaling \$4.37 billion. If fully developed, the six auction sites could produce more than 19 million MWh of electricity per year, enough to power close to 2 million homes, based on BOEM's estimate of 3 MW/sq km. (See [Fierce Bidding Pushes NY Bight Auction to \\$4.37 Billion](#).)

The next BOEM auction, announced March 25, will be held on May 11, for two offshore leases in the [Carolina Long Bay](#), off the coasts of North and South Carolina. According to the [BOEM announcement](#), the two sites, totaling 110,091 acres, could produce up to 1.3 GW of energy, enough to power 500,000 homes. The [final sales notice](#) for the auction lists 16 eligible bidders, including Duke Energy Renewables, Ørsted North America and Shell New Energies.

With thousands of megawatts to be built in less than a decade, Matt Shields, senior offshore wind analyst at NREL, estimates that two or three manufacturing plants will be needed for each major offshore wind component, such as blades and cables. Costs per facility could range from \$200 million to as high as \$900 million, he said.

"These figures typically don't include additional investments in port capabilities to support these big facilities," Shields said in an email to *RTO Insider*. "We can safely say that, if we do build all these facilities, it will be in the billions of dollars and will require a mix of public [and] private investment."

While the current report does not address policy, Shields said, "There are a lot of nuances about what exactly is needed...The most important thing is certainty about projects actually getting built so that OEMs can have low-risk return on investment." ■

FERC/Federal News



Responsibly Sourced Gas Market is 'Growing,' Kinder Morgan Says

Pipeline Company Awaits FERC Order for New RSG Market Mechanism

By Jennifer Delony

Responsibly sourced natural gas (RSG) is now a "sizeable" and "growing" market, according to Andrew Swinick, commercial director at Kinder Morgan.

The market is "driven by voluntary efforts to do better when it comes to our business practices," he said March 29 at the Northeast Gas Association's Regional Market Trends Forum. "In 2018, we had only five companies that had committed volumes to RSG, and today we're looking at 28."

RSG, also called producer-certified gas, is a third-party-certified product based on a supplier's ability to demonstrate it has reduced environmental impacts from its product and operates under best practices of environmental, social and governance (ESG) criteria.

"Right now, the goal of RSG is to minimize emissions along the natural gas value chain and to continuously look at ways to reduce those emissions levels," he said. More suppliers are turning to RSG in response to end-user

demand that Swinick says "is growing radically and dramatically."

The three major certifying entities in operation currently are the nonprofits Equitable Origin and MiQ, and TrustWell by data analytics company Project Canary.

Certification is based on an ISO-like framework that "provides verification of responsible practices through rigorous independent audits, like emission reductions, no flaring and methane monitoring," said Jeff Formica, vice president of environmental, safety, health and quality at Seneca Resources.

Seneca achieved Equitable Origin certification for 100% of its Appalachian assets in December 2021, according to Formica. The facility-level certification, he said, ensures that companies are always working to improve their ESG practices.

MiQ, which is also a facility-level certification, targets methane-intensity reduction by understanding how much methane a producer's facilities emit versus the amount of natural gas they produce. It also ensures certified entities

have comprehensive monitoring technologies in place to detect unintended emissions, Formica said.

The TrustWell certification works at the level of the gas well to reduce greenhouse gas emissions, set responsible water stewardship plans, mitigate operational risks and understand community needs, he said.

Growth Opportunity

Kinder Morgan, the largest U.S. gas pipeline company, could receive approval from FERC in the coming weeks for a new market mechanism that would support expansion of RSG.

The company filed a tariff, via its Tennessee Gas subsidiary, with FERC in December that would allow it to secure contracts specific to transporting RSG on its pipelines (RP22-417-001). Suppliers would need to demonstrate that they meet a predetermined, methane-intensity level certified by TrustWell to qualify for the tariff.

If FERC allows the company to move ahead with the new service, it would "encourage the transportation and trading on the Tennessee system of RSG supply from producers," Kinder Morgan said in its tariff filing.

The company's customers have shown broad support for the concept, according to Swinick, who said that Kinder Morgan expects to see an order from FERC in the coming weeks allowing service to begin May 1.

Producers see the offering as an "attractive" option, he said.

The Environmental Defense Fund asked FERC to "carefully consider" the program in a Jan. 24 filing and called for a technical conference.

"As the first request for FERC approval of an RSG-type program, Tennessee's filing has the potential to create a significant precedent for the pipeline industry more broadly," EDF said.

Consolidated Edison commended Kinder Morgan in a Feb. 22 filing for taking a step that it said will allow customers to procure RSG, and the utility encouraged other interstate pipelines to provide a similar option.

The service will "aid natural gas distribution companies ... in their efforts to reduce upstream greenhouse gas emissions associated with production or gathering of natural gas," Con Ed said. ■



Kinder Morgan's Andrew Swinick says natural gas producers are increasingly seeking third-party certification for their supply to minimize emissions along the gas value chain, such as with compressor stations like this one. | Shutterstock

FERC/Federal News



How FERC's Office of Public Participation is Spending its Early Days

By Sam Mintz

FERC's *Office of Public Participation* is up and running 44 years after Congress first directed the agency to create it.

It's a very different world than lawmakers probably imagined back then. For one, the office has had to start up almost entirely virtually as the pandemic continues to keep workers away from the office.



FERC OPP Director
Elin Katz | © RTO Insider
LLC

But Elin Katz, a former consumer advocate who was appointed director of OPP in October, has been diving right in despite the circumstances.

"It's been hard, but we're going along, and like everybody else, we're doing the best we

can under the circumstances," she said during an event hosted by the Connecticut Power and Energy Society Wednesday.

So what does OPP do, anyway?

A big part of the job is answering calls from people looking to engage with FERC's work.

"I think of us as a soft place to land," Katz said.

About 30% of the calls have nothing to do with FERC jurisdictional issues, but Katz said the office tries to find answers for every call.

OPP is also doing outreach and creating educational materials to help the public understand better how the agency operates.

And Katz said she has started an informal mission within the office called Comments Matter to let people know that their voices are heard.

"You can file a comment fairly easily. It tells you how to do that on our website," she said. "But I also reassure people that when you file a



FERC's Office of Public Participation is up and running. | © RTO Insider LLC

comment ... the commissioners read them."

Katz is aware that some issues tend to attract more voices than others.

"There's a lot of concern around infrastructure development," she said. "A lot of the angst in recent years has been around ... pipelines, and that was part of the impetus for the office, to make sure that people who are impacted by infrastructure projects are able to bring their voice in earlier."

Transmission infrastructure is also a growing point of notice for the office.

The office, she said, wants to understand how to make sure that the public and affected parties are part of the process and FERC is protecting environmental justice communities

from unnecessary infrastructure development.

OPP is planning to hold its first in-person staff meeting at the April open meeting.

The office is also still staffing up. FERC is hiring a supervisory energy markets adviser and supervisory infrastructure adviser for OPP.

"We're building the plane as we fly it," Katz said, adding that anyone can reach out to OPP if they need assistance understanding what is happening at FERC.

And she had a request for members of the public.

"Hold our feet to the fire," she said. "Make sure we're meeting your expectations and giving you, as members of the public, what you need." ■

South news from our other channels



Q&A: SERC CEO Jason Blake

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SERC Board of Directors/Members Briefing: March 30, 2022

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CAISO/West News

BPA 'Full Speed Ahead' on May WEIM Entry, but Issues Remain

By Robert Mullin

The Bonneville Power Administration is on track to enter the Western Energy Imbalance Market on May 3, despite lingering issues with market integration software, agency officials said Thursday.

"It is still very much full speed ahead as we continue to work through the outstanding milestones and progressing towards our May go-live date," Nita Zimmerman, BPA's chief business transformation officer, said during a stakeholder meeting.

The federal power marketing agency was originally scheduled to begin transacting in the WEIM on March 2, along with Avista and Tacoma Power. But after beginning parallel operations Dec. 1, BPA delayed entry by two months because of technical problems and customer training issues. The parallel production environment allows new participants to submit bids and base schedules, collect e-tags and learn how to adapt operations to real-time developments. (See *BPA Postpones Western EIM Entry by 2 Months*.)

"We managed through the slight delay, and we've made progress to meet the milestones necessary for participation, including resuming parallel operations [with the WEIM] on March 8," Zimmerman said.

She said BPA on Wednesday submitted its WEIM "readiness attestation" to CAISO, the market's operator, which will in turn submit the document to FERC.

"With this success achieved, there is still more work to be done," Zimmerman said. "BPA will continue to test and implement the systems necessary to participate in the EIM."

The outcome of that testing will be the subject of an April 19 meeting of BPA executives responsible for issuing a "go/no-go" decision on the May 3 entry date, said Mark Symonds, the agency's director of commercial operations.

"That's where we bring our executives together and make sure, from a functional readiness standpoint, we are in all-systems-go from a systems, process and people standpoint, to make sure that we have the level of confidence that we need to run our EIM operations on May 3," Symonds said.

Elsa Chang, BPA's EIM program manager, said the most "critical" problems to be addressed have to do with integration of the "sub-alloca-

tion" and outage management systems related to WEIM operations.

The problem with the sub-allocation system has been particularly thorny. That system is designed to allocate the costs and payments for WEIM settlements back to BPA customers. Testing has revealed discrepancies between CAISO settlement statements and the sub-allocation amounts, BPA's Rasa Keanini said.

Chang said BPA expects to complete its work on the sub-allocation system by the May 3 WEIM go-live date but also has a contingency plan in place in case fixes provided by the software vendor fail to pass BPA's testing by that date.

"We plan to have the work delivered no later than June 25, which is the day BPA issues our first EIM bill to our transmission customers," she said.

Chang said BPA has also encountered "performance issues" with its WEIM outage management software, which went live March 8 when the agency re-entered parallel operations with the market.

"This system is necessary for BPA to participate in the EIM, so issues can potentially result in both safety and reliability problems," Chang said, adding that BPA has "patched" the system and will continue to monitor it and resolve any problems.

Customer Concerns

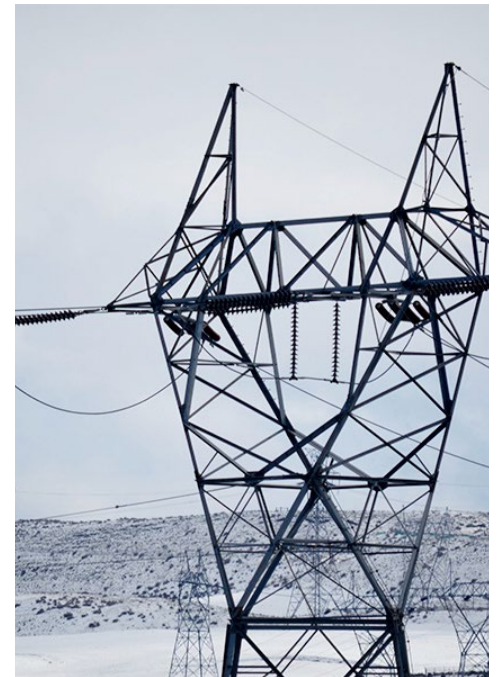
Stakeholders on the call voiced concerns about what BPA will do if the software system issues have not been sufficiently addressed by the time BPA officials meet on April 19 to make the "go/no-go" decision.

"What happens if things don't, don't go quite as well as we expect?" Adam Cornelius, principal utility analyst with Snohomish County Public Utility District in Washington, asked.

"That's really a great point," Symonds said, "and it's one that we're watching very closely and why we have been working very collaboratively with our vendor to clear the defects that get identified and be able to test the sub-allocation routine and not just validate the routine itself."

Symonds said he expects BPA to make "significant progress" on that front ahead of the April 19 meeting.

"It is possible that things could go in a different direction," Symonds said. "That's why we've continued to reinforce our [WEIM] partici-



BPA transmission lines near The Dalles Dam | © RTO Insider LLC

ipation principles up and down the line for years — that we have the ability to manage our participation in the market."

Ed Mount, director of power supply planning and operations at The Energy Authority, pressed the sub-allocation system issue, saying the allocations are "where the rubber hits the road" for his company's customers.

"Is there a contingency plan for billing customers if there are still discrepancies that are being seen between the sub-allocation system logic and what you're being billed with CAISO?" Mount asked.

Symonds described the complexity of that system logic and the importance of the quality of the metering data being fed into the system.

He said BPA would contact "selected" customers — mostly those at aggregated customer meter points — regarding the data over the next few weeks "so that we can tackle any of those issues that we think we are seeing now, rather than waiting until after go-live or even our first settlement statement to see it."

"We also have different contingency plans that we can exercise along the way, in the event that we continue to have any issues with how those calculations come together," he added. ■

CAISO/West News

West Coast Wind Faces Big Challenges

Pacific Offshore Wind Summit Weighs Infrastructure Needs

By Hudson Sangree

SAN FRANCISCO – Offshore wind is expected to progress steadily in California over the next decade, but panelists at last week's *Pacific Offshore Wind Summit* in San Francisco expressed concern that the infrastructure needed to support floating wind farms could lag development plans.

New to offshore wind, the West Coast will need to build high-voltage transmission lines, port facilities and assembly areas for massive wind turbines. The region lacks a trained workforce for offshore wind and a dedicated, on-time supply chain. And it still must develop a strategic plan, as required by last year's California *Assembly Bill 525*, to make offshore wind part of its 100% clean energy initiative.

"We're going to develop a strategic plan under AB 525, but it will only mean anything to the industry and to the climate if there's a way to implement that strategic plan," Eli Harland, adviser to California Energy Commission member Kourtney Vaccaro, said in a panel on regional cooperation.



Eli Harland, California Energy Commission | © RTO Insider LLC

"That's not going to get done with a couple of people in the Energy Commission pushing it forward," Harland said. "That's going to take a resource commitment that, if we don't make it, we're going to find ourselves really behind when the industry takes off, and we're not going to be ready for construction and operation."

Stakeholders at the conference said a best-case scenario would be for the infrastructure work to happen in the years between a pending lease auction and the start of construction.

The West Coast's first offshore lease auction will be held later this year for two areas off Northern and Central California, Amanda Lefton, director of the Bureau of Ocean Energy Management (BOEM) told the audience, prompting spontaneous applause.

"Let me be clear," Lefton said. "We are going to hold a statewide offshore wind energy lease sale in California this year. The sale will offer up wind energy areas in the northern and central coasts, and these areas will enable the



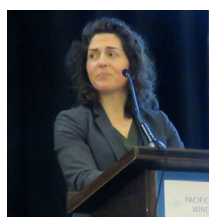
Assembling floating wind turbines for the West Coast will require large port facilities, like those in Rotterdam used for Scotland's Kincardine Offshore Windfarm. | Principle Power

buildout of significant new domestic clean energy over the next decade or more. This will also help California reach its carbon-free energy goal by 2045."

The California auction is part of the Biden administration's goal to develop 30 GW of offshore wind by 2030, Lefton said.

"We plan to release a proposed sale notice later this spring," she said. "This notice gives you all the first look at the [proposed] terms and will ask for feedback on important initiatives for ... labor agreements, credits for domestic supply chain investments, engagement with tribal nations and ocean users, and working with the commercial fishing industry."

Panelists at the conference, hosted by trade group Offshore Wind California and organizer Infocast, addressed challenges including port construction, transmission coordination and supply chain issues.

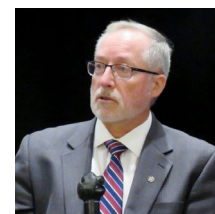


BOEM Director Amanda Lefton | © RTO Insider LLC

Transmission

The two wind energy areas that BOEM plans to auction this year have distinct transmission states.

The Morro Bay Wind Energy Area in Central California is "well-positioned" because it's already served by transmission lines to the defunct Morro Bay Power Plant and the soon-to-be retired Diablo Canyon Power Plant, the state's last nuclear generator, Neil Millar, CAISO vice president of infrastructure and operations planning, said in a panel on transmission and interconnections.



Neil Millar, CAISO | © RTO Insider LLC

There already is ample transmission capacity for the 3 GW that Morro Bay wind is expected to generate and more when Diablo Canyon closes, Millar said.

A growing movement of scientists and elected officials has argued for keeping the 2,256-MW Diablo Canyon plant open for reliability's sake

CAISO/West News

during California's clean energy transition. If that happens, it will significantly limit available transmission capacity.

The Humboldt Bay Wind Energy Area, in contrast, requires "starting from scratch" to carry the 1.6 GW it is anticipated to generate, Millar said.

"It's all about Humboldt," he said.

Unserved by major transmission lines, the Humboldt area on California's sparsely populated North Coast would require a new line that crosses rugged mountains to connect to the Pacific AC Intertie, one of the state's major north-south transmission corridors, or an undersea cable that surfaces near San Francisco, he said.

The Humboldt area is being examined as part of CAISO's new 20-year transmission outlook and in collaboration with the California Public Utilities Commission and the Energy Commission, Millar said.

Coordinated transmission, instead of the serial connections that became a problem for East Coast wind, is a priority on the West Coast, panelists said.

Since late February, when BOEM announced three new wind energy call areas in southern Oregon, there has been talk of coordinating transmission links between the two states. (See *Energy Bar Weighs OSW in Oregon, California.*)

"The growing Pacific Coast scale of this, which has just been expanded [with BOEM's Feb. 24 announcement] ... sets in motion a whole set of speculation about coordination across the region," Adam Stern, executive director of Offshore Wind California, said at the time.

In far northern California, there are potential wind-farm areas off the coast near Crescent City, Arne Jacobson, director of the Schatz Energy Research Center at Cal Poly Humboldt, said. If those areas are eventually slated for wind development, transmission coordination

with the southern Oregon areas might be an efficient solution, he said.

The Port of Coos Bay in southwest Oregon is also hoping to play a role in offshore wind, port CEO John Burns said in a panel on seaport facilities and staging areas. Once a major timber port, it still owns 1,000 acres that could be used to support offshore wind.

Ports

In the seaport session, panelists said that while Humboldt lacks transmission, it has what wind developers consider a nearly ideal bay and spacious quayside to assemble turbines and transport them to sea.

The Port of Humboldt Bay recently received a \$10.5 million grant from the Energy Commission to begin upgrading its facilities for wind development.

The funds will help the Humboldt Bay Harbor, Recreation and Conservation District re-



From left: Larry Oetker, Humboldt Bay harbor district; Kristin Decas, Port of Hueneme; and John Burns, Port of Coos Bay | © RTO Insider LLC

CAISO/West News



talize the historic timber port on the state's Redwood Coast, beginning with preliminary engineering and design work. The money will also be used to attract matching grants from the federal government.

A new marine terminal is being planned to handle heavy cargo vessels and floating platforms. Humboldt Bay lacks the bridges and other impediments to developing wind ports in larger deep-water harbors, such as San Francisco and San Diego bays.

In Humboldt, the port is "foundational infrastructure" that might be ready for wind deployment in five to six years, about the same timeframe as the permitting process for sites in the Humboldt Bay Wind Energy Area, Jacobson said.

New transmission to Humboldt is likely to take longer, he said.

Larry Oetker, executive director of the Humboldt Bay harbor district, offered a similar assessment.

"Our goal is to have all the permits and to be ready to go within the next few years," Oetker said. "We want the work to be ready when the offshore wind industry is ready, and we don't want the port to be an obstacle. And so simultaneously [with technical studies] we're working on workforce development and transmission upgrades. Because in the end, the transmission upgrades and the offshore wind leases and future offshore wind leases are going to dictate the amount of port investment that's going to be needed."

In Central and Southern California, it is less clear which ports will be primary staging areas for the Morro Bay wind fleet.

The Port of Long Beach in Los Angeles County,

one of the world's busiest container ports, is interested in playing some part, possibly in conjunction with other ports that have different strengths, Matt Arms, the port's director of environmental planning, said.

Kristin Decas, CEO of the Port of Hueneme in Ventura County, made a pitch for its potential to be the best staging area for Morro Bay. The deep-water harbor is home to Naval Base Ventura County and is a major entry port for cargo ships carrying cars and bananas.

"Right now, we sit as the sixth leading port on the West Coast for commercial cargo," Decas said. "We are actually moving more cargo than Portland and Boston right now. We're the fourth largest container port in the state of California."

When panelists were asked if building a new port made sense, Decas said building a new port is a "heavier lift" than building a wind farm.

"I don't think that's going to be your answer," she said.

Supply Chain, Floating Turbines

Several panels addressed supply chain issues, including a session on cabling and mooring. Whether the supply chain can provide "just in time" delivery for West Coast wind development remains doubtful, panelists said.

Bill Wall, project director at LS Cable Systems America, which made undersea cable for the first U.S. wind farm, Block Island, and subsequent projects, said his company has a two-to-three-year backlog in its factories, making delivery times uncertain.

Tom Fulton, head of renewables and mooring development at marine energy and infrastructure firm Acteon, asked audience members to

imagine how much room it would take to store equipment for even a 1-GW wind farm if the equipment could not be installed promptly.

Developers are expecting to install enormous 15-MW floating turbines off the West Coast, each more than 900 feet tall with blades longer than a football field. A 1-GW wind farm will require 67 towers along with miles of anchoring and mooring gear. The links in an anchor chain weigh half a ton; polyester cable used instead of chain is a foot thick, Fulton said.

The floating platforms will be in water 2,000 to 4,000 feet deep, but that should not be a problem, panelists said.

Oil platforms have operated at such depths for years, Fulton said.

Henrik Stiesdal, CEO of offshore wind developer Stiesdal A/S, acknowledged floating wind is still in its infancy as an industry but said the technology has been proven since 2009. The West Coast won't require entirely new designs, he said as part of a panel on floating turbines.

Asked for final thoughts on floating offshore wind, Stiesdal said, "It's the future," while other panelists commented that it is a way to harness large amounts of wind energy and to use its scale as a means of producing clean power.

California hopes to eventually have 10 GW or more of offshore wind.

Aaron Smith, chief commercial officer of wind developer Principle Power, said: "I agree with you guys, but it's also going to take a lot of coordinated effort to build the capabilities to make this happen, so we really need to focus and get started now." ■

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CAISO/West News

Western Power Pool Names New CEO

By Hudson Sangree and Robert Mullin

The Western Power Pool has named industry veteran Sarah Edmonds as its new president and CEO, a role in which she will be responsible for furthering the aspirations of WPP's Western Resource Adequacy Program (WRAP) throughout much of the Western Interconnection.



Sarah Edmonds has been named the new CEO of Western Power Pool. | © RTO Insider LLC

"We are truly fortunate to have retained Sarah Edmonds because she brings exactly the right mixture of experience, credibility, and integrity to build on the WPP's strong foundation, and we are confident she can move it forward with purpose and innovation," WPP Chairman Bill Drummond said in a March 24 [statement](#).

Edmonds is currently director of transmission and reliability services at Portland General Electric, a job she plans to leave April 18, WPP said. Her prior roles included serving as vice president and general counsel at PacifiCorp Transmission.

Edmonds has been a key player in designing WRAP and in other organizational efforts in the Western grid, including development of the governance structure of the Western Energy Imbalance Market (WEIM).

"Her move is seen as an important continuation of her extensive work on regional grid matters," the WPP statement said.

Edmonds said in the statement she is looking forward to "teaming up with the WPP's Board and staff to propel the organization into the next stage of excellence to meet the needs and aspirations of the Western Power Pool membership."

Edmonds will replace outgoing President Frank Afranji, who is retiring after leading the organization for four years and establishing the WRAP. (See [Retiring WPP Head Foresees Increased Collaboration on Western RA](#).)

Earlier this year, the Northwest Power Pool rebranded itself as the Western Power Pool, signifying its expanding reach across the Western Interconnection.

What was once a member-run organization

focused mainly on grid reliability in the Pacific Northwest and Intermountain regions, Portland, Ore.-based WPP spent the past two years growing south and east.

WPP has been developing WRAP since 2020, initially to address concerns that Northwest utilities have been unknowingly drawing on the same shrinking pool of reliability resources, but interest in the effort spread to other parts of the West.

The WRAP, which is slated to launch a "nonbinding" iteration in the third quarter of this year, has attracted participants in an area spanning from British Columbia south to Arizona and east into South Dakota. Stage 1 of the WRAP will include 26 participants that together represent a summer peak load of about 67,000 MW and a winter peak of more than 65,000 MW.

In creating the WRAP, WPP has also been forced to repurpose itself as an organization. Once the WRAP enters its "binding" phase in 2023, the program and WPP will become subject to federal oversight and [FERC](#) rules.

Anticipating those requirements, WPP has moved to restructure its governance and prepare to adopt some elements of an RTO, such as the appointment of an independent board of directors. WPP has created an RA Participants Committee and will establish a Committee of States to ensure that utility regulators have a voice in discussions related to the WRAP. (See [RA Program will Require Restructuring of NWPP](#).)

Edmonds has played a leading role in those efforts.

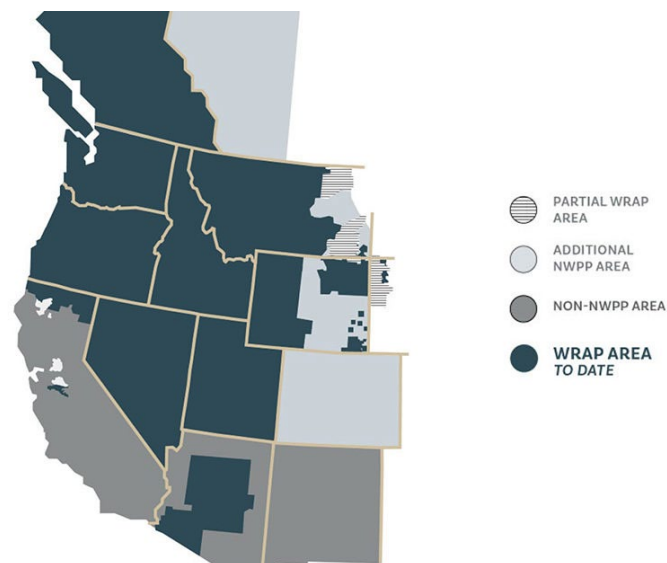
WPP has not signaled intentions to expand the WRAP's offerings beyond resource adequacy but appears increasingly as a possible platform for incrementally developing a Western RTO — one that would compete with CAISO's stalled regionalization efforts, the ISO's well established WEIM, and SPP's nascent RTO West and Western Energy Imbalance Service.

WPP last year selected SPP to operate the technical aspects of the WRAP, providing the market's forward-showing functions, modeling and system analytics, and real-time operations.

The WPP board selected Edmonds after a monthslong search for an experienced industry professional with "demonstrated knowledge of the increasingly complex regional and interregional grid issues faced by the Western U.S. and Western Canada," it said.

Edmonds "has stood out amongst her peers in helping to steer the development the Western Resource Adequacy Program development effort," Debra Smith, CEO of Seattle City Light, said in the statement. "Her keen mind and expertise in utility regulatory and governance concepts, and her relationships across the landscape of stakeholders will be a tremendous asset to the WPP and its membership."

"Nobody is better positioned to steer the organization through the WRAP implementation into the binding program and whatever comes next," Smith said. ■



The Northwest Power Pool changed its name this year to Western Power Pool to reflect its expanding Western Resource Adequacy Program. | [NWPP](#)

CAISO/West News

Constellation Hit with \$4.7M Penalty for Violating CAISO RA Rules

By Robert Mullin

Constellation NewEnergy (CNE) has agreed to pay \$4.7 million in penalties for violating CAISO tariff provisions related to the treatment of imports intended for resource adequacy.

FERC on March 29 issued an order approving a settlement in which the company will pay a \$2.4 million civil penalty to the U.S. Treasury Department for violating the RA rules and associated FERC regulations. The company must also disburse \$2.3 million in funds to CAISO, which will be distributed to network load (IN22-4).

A subsidiary of Constellation Energy, CNE describes itself as “a full-service energy company that provides comprehensive and innovative solutions to meet the energy needs of governmental, large commercial, institutional and industrial customers.”

At issue in last week’s order was CNE’s past practice — until 2017 — of not sourcing electricity for import before selling energy into CAISO’s day-ahead and real-time markets.

“CNE did not have a specific source of power linked to a specific RA import prior to submitting offers and instead intended to rely on the bilateral spot energy market if needed,” the commission wrote. “As a part of this business practice, CNE regularly offered its import capacity into the CAISO day-ahead market at \$399/MWh. If those day-ahead offers cleared, CNE would reoffer the import capacity in the real-time market at either \$899/MWh or \$999/MWh.”

In June and August 2017, CNE failed to meet RA-related dispatches in California because it could not secure electricity in the bilateral market, prompting it to end the practice.

But FERC’s Office of Enforcement found that CNE’s practice violated the commission’s market behavior rules — specifically 18 C.F.R.



CAISO headquarters in Folsom, Calif. | © RTO Insider LLC

section 35.41(a) — and sections 4.2.1, 37.2.1.1, and 37.3.1 of the CAISO tariff.

The commission explained that section 35.41(a) states that “where a seller participates in a commission-approved organized market, seller must operate and schedule generating facilities, undertake maintenance, declare outages, and commit or otherwise bid supply in a manner that complies with the commission-approved rules and regulations of the applicable market.”

Enforcement determined that CNE violated that rule by violating sections of the CAISO tariff that require market participants to follow the ISO’s dispatch instructions when the company could not respond to the RA-related dispatch signals in June and August 2017.

FERC found that CAISO’s tariff “requires that market participants have a ‘reasonable expectation’ of being ‘available and capable of performing at the levels specified in the bid’ at the time it is placed in the day-ahead

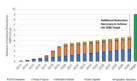
market. Enforcement determined CNE lacked a sufficiently reasonable basis for its expectation that it would be able to wait to secure electricity in the spot market to support its RA imports during times when the market was constrained.”

Enforcement also pointed out that it was “unreasonable” for CNE to expect that electricity would be readily available in the spot markets when CAISO prices were reaching or exceeding \$999/MWh, “because such prices usually reflect an environment in which it is difficult to secure sufficient supply to meet demand,” the commission said.

“In particular, we note that CNE’s conduct went against the purpose of RA, which is to ensure that firm resources are available to address supply shortfalls,” FERC concluded.

In addition to paying the penalties, CNE also agreed to only use specific generation sources or firm contracts with respect to importing RA in the future. ■

West news from our other channels



Big Investments Still Needed to Meet Calif. Dairy Methane Goal

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ERCOT News



ERCOT Technical Advisory Committee Briefs

Committee Approves Task Force to Address Crypto Mining Loads

ERCOT's Technical Advisory Committee last week approved staff's request to create a task force to develop policy recommendations for interconnecting large flexible loads, such as cryptocurrency miners that are flocking to the state.

ERCOT has already established an *interim process*, effective March 25, requiring transmission service providers (TSPs) to submit interconnection studies for large loads that have not been modeled and studied in a completed staff planning assessment and proposing to interconnect to the grid.

The interim process applies to those projects that add 20 MW of demand at a generator within the next two years. Projects that aren't co-located face a minimum threshold of 75 MW. The rule applies to both new projects and expansions.

The committee debated the Large Flexible Load Task Force's proposed scope and how deep into the policy weeds its members should get before agreeing to let the group further refine its scope and bring it back before TAC for its April 13 meeting.

"We really need to figure out the reliability issues around these cryptos," said Bob Wittmeyer, representing Longhorn Power. "Adding things beyond our authority is going to slow down the work of the group."

"We just want to get this rolling as soon as possible. We're concerned about how quickly these loads are coming on," said Woody Rickerson, ERCOT's vice president of system planning and weatherization. "We have processes to interconnect large loads; that isn't the issue. It's this new type of load that's coming on very



The ERCOT Technical Advisory Committee's March meeting | *Admin Monitor*

quickly that we don't have the process for."

The task force will report directly and provide recommendations to the TAC. Staff will lead the group, which will nominate a vice chair for the committee's approval during its first meeting.

RUC Offer Floor Lowered to \$250

TAC members took three separate votes before finally reaching consensus on the Independent Market Monitor's proposal to lower the reliability unit commitment's (RUC) offer floor from \$1,500/MWh to \$250/MWh.

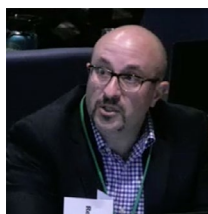
The committee narrowly rejected a proposal to lower the floor to \$200/MWh, 17-9 with four abstentions. However, had one of those abstentions been a "yes" vote, it would have passed. A vote to lower the floor to \$500/MWh was more soundly defeated, 14-12 with four abstentions, before the \$250/MWh compromise passed, 18-8 with four abstentions.

The investor-owned utility segment accounted for 11 of the 12 abstentions, with American Electric Power's Richard Ross casting a "yes" vote during the final attempt.

The nodal protocol revision request (*NPRR1092*) also includes a two-hour opt-out provision.

ERCOT established the RUC offer floor when the market construct's self-commitment was relied upon and RUCs were infrequent. That changed last year with the grid operator's conservative operations, when it began procuring more reserves to ensure greater grid reliability.

Reliant Energy Retail Services' Bill Barnes helped hammer out the compromise with Luminant Energy, one of the more vocal opponents to ERCOT's increased use of RUCs. "We think this addresses concerns about being able to opt-out at the last minute," he said.



Bill Barnes, Reliant Energy Retail Services | *Admin Monitor*

"We're concerned about out-of-market actions affecting us. We're not sure whether to start in quick-start mode right now," Luminant's Ian Haley said.

Staff still need to provide an impact analysis for the change and committed to do so before

the TAC's meeting this month.

ECRS Resources Face 2-hour Requirement

The committee passed a rule change that requires resources providing ERCOT contingency reserve service (ECRS) to provide two consecutive hours and/or be capable of sustaining four consecutive hours of non-spinning reserve service. The TAC approved *NPRR1096* by a 20-3 vote, with seven members abstaining.



Caitlin Smith, Jupiter Power | *Admin Monitor*

Jupiter Power's Caitlin Smith, who cast one of the opposing votes, *filed comments* that argued the measure would require a longer duration for an existing service currently awarded on an hourly basis and result in a policy that is not technology neutral.

Smith also said the change would narrow the pool of non-spin suppliers and further distorts the market.

"This does seem to be overly cautious and can affect the market by keeping some folks from providing the service," Sierra Club's Cyrus Reed said.

The TAC agreed to an action item to review long-duration resources' solutions that require ERCOT system changes to manage reliability risk related to the provision of ancillary services.

Jupiter recently commercialized its *first transmission-connected project*, a 100-MW storage facility in West Texas with 200 MWh of duration capacity.

NPRR1096 also requires ERCOT to conduct unannounced tests on energy storage resources providing ECRS and/or non-spin in real time to verify their state of charge.

Helton Replaces Blakey as Vice Chair

Committee members elected Engie's Bob Helton, a former TAC chair, to replace Just Energy's Eric Blakey as vice chair.

Blakey, who served as TAC's vice chair last year, withdrew his nomination for 2022 when ERCOT's Board of Directors last month declined to confirm his election and that of South Texas Electric Cooperative's Cliff Lange as chair. The board deferred their approval fol-

ERCOT News



Just Energy's Eric Blakey explains withdrawing from the vice chair position. | *Admin Monitor*

lowing an executive session. (See *ERCOT Board of Directors Briefs: March 7-8, 2022*.)

Blakey told members it was his understanding that the directors were uncomfortable confirming him after Just Energy filed a *lawsuit* in November against ERCOT and the Texas Public Utility Commission. The Canada-based retailer, which filed for bankruptcy after the February 2021 winter storm, is seeking to recover payments that were made by its parties to the grid operator for certain invoices relating to the storm.

Interim ERCOT CEO Brad Jones all but confirmed Blakey's comments, telling the committee that the directors "had a discomfort because of the relationship with his company."

"All of the board sees you as a man of high integrity," Jones told Blakey. "This issue had nothing to do with yourself; it has everything to do with the situation in which we find ourselves."

"I respect the decision," said Blakey, who said he intends to remain a TAC member. "Being vice chair is something I'll always cherish. It's been an honor."

Blakey nominated Helton, who served as TAC chair until 2021, as his replacement. Helton was elected without opposition.

"I'll be glad to help out for the rest of this year," Helton said, thanking Blakey for his service.

Engie last week filed its own *complaint against ERCOT* with the PUC, alleging it had not been compensated or credited for ancillary services provided during the emergency alert conditions wrought by the 2021 storm. Jones noted Engie is following ERCOT's alternative dispute resolution process, which allows an appeal before the commission should its initial complaint be rejected.

The board will have a chance to confirm Lange's and Helton's elections during this month's meeting.

In-person Meetings Return

The meeting was the TAC's first in person since the COVID-19 pandemic began in 2020 and its first at ERCOT's new headquarters offices in Austin, as its members acknowledged.

Lange, presiding over his first in-person meeting as the committee's chair, introduced himself as "the man behind the curtain for the last few years."

Barnes, sporting a new horseshoe mustache more commonly known as a handlebar, approved the previous meeting's minutes by raising his nameplate.

"I'm just making sure my card still works," he cracked.

TAC Endorses 5 Changes

The TAC approved a system change request against three votes from the consumer segment. *SCR818* modifies the network model

management system and topology processor to incorporate geomagnetically induced currents (GIC) modeling data for maintaining GIC system models in the ERCOT planning area for compliance with NERC reliability standard TPL-007-4 (Transmission System Planned Performance for Geomagnetic Disturbance Events).

Members unanimously approved a combination ballot that included four additional NPRRs:

- *NPRR1116*: removes obsolete language from Market Information System Administrative and Design Requirements referencing other binding documents on the system. Those documents are posted to the ERCOT website.
- *NPRR1117*: aligns the protocols with *SMOGR025*'s revisions allowing losses in short runs of connecting lines to be disregarded where the ERCOT-pollled settlement meter is not physically at the point of interconnection.
- *NPRR1122*: clarifies that ERCOT will retain all securitization default charge escrow deposits to cover necessary potential future obligations for securitization default charges, and that funds provided for default charge escrow deposits must be sent to the correct account to be properly credited. It also corrects a subscript definition error in the securitization default charge maximum megawatt-hour activity ratio share.
- *NPRR1123*: provides for the assessment of securitization uplift charge escrow deposits based on counter-party initial estimated adjusted meter load. ■

— Tom Kleckner

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ISO-NE News

East Boston Substation Saga Continues as Eversource Seeks Permits

By Sam Mintz

The long-standing fight over Eversource's planned East Boston substation is not over.

The utility is asking the Massachusetts Energy Facilities Siting Board to expedite approval of 15 state and local permits and certificates it says have been delayed or not considered quickly enough.

But in doing so, Eversource has given the project's many vocal opponents another opportunity to state their case for why the project shouldn't go forward at all.

The EFSB initially approved the project, which has served as a powerful example of the con-

flict between regional transmission planning goals and local siting concerns, last February. (See *Controversial East Boston Substation Approved*.)

Eversource's Case

Eversource, backed by Massachusetts officials, has warned that the substation is necessary to fill a fast-growing capacity need.

"Electric service in the East Boston and Chelsea area is at risk," said Craig Hallstrom, the company's president for regional electric operations, at a public EFSB hearing Wednesday.

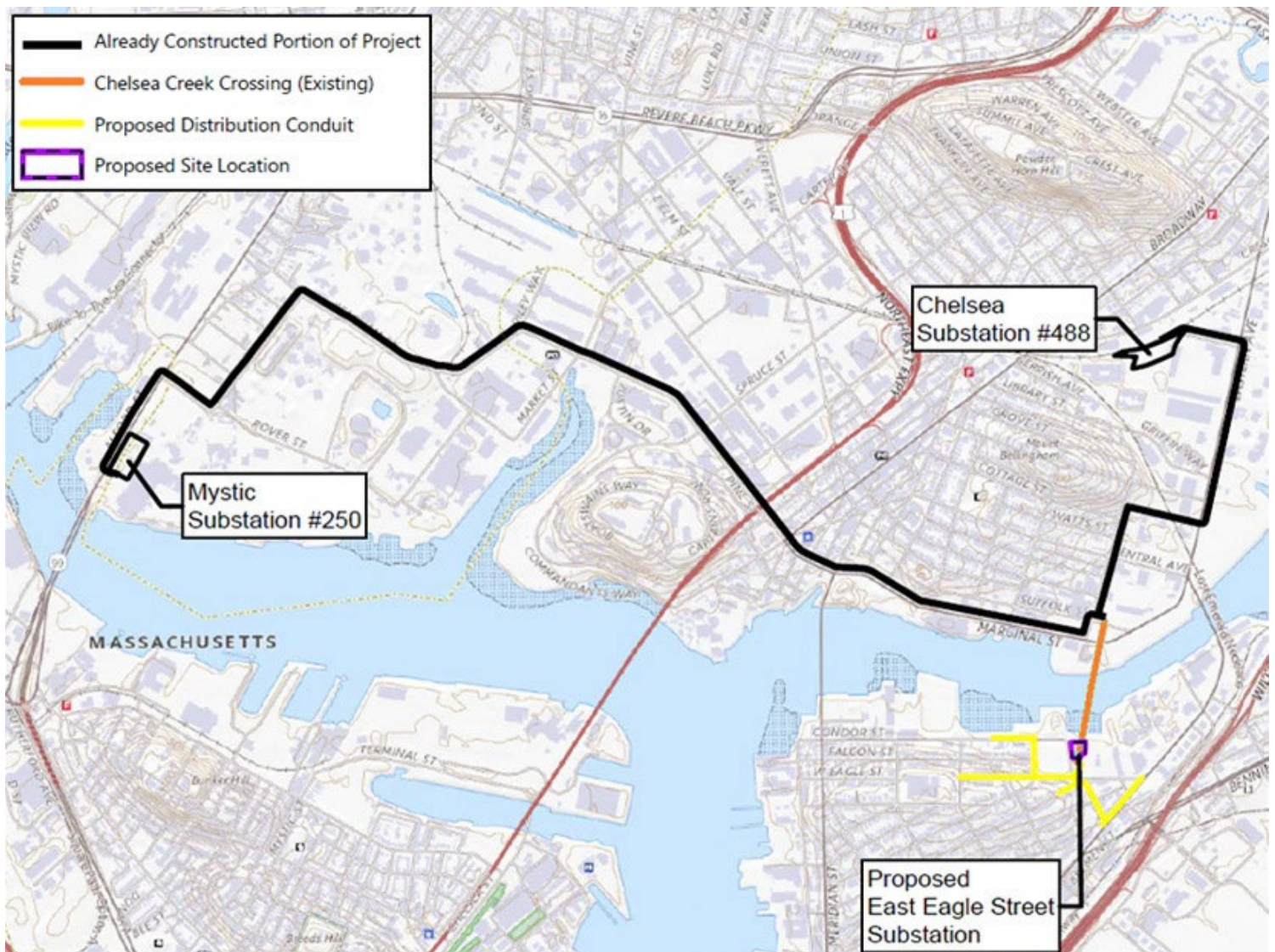
He called the plan a "standard utility design" to locate a substation at a customer load center. East Boston, he said, is the only Boston neigh-

borhood that doesn't have one, instead being served by the Chelsea substation.

"Without this new substation ... it will be a challenge for this area to be part of the new electrification of systems like EVs and heat pumps," Hallstrom said.

The project won't be complete for several years once construction starts, but that hasn't stopped Eversource representatives from employing grim warnings about immediate danger in their arguments for the plan.

"This summer, we're hoping we have some beautiful hot weather as things go back to normal and we're heading out of this pandemic," said Nicole Bowden, an Eversource community



The site of a proposed Eversource substation project in East Boston | Energy Facilities Siting Board

ISO-NE News

relations specialist.

“You’re coming home from work. Your kids are coming home from camp. Everyone’s tired. You’re ready to get in the shower. You don’t have any electricity. The water’s not hot. You can’t sit down and watch the Red Sox game. The A.C.’s not blowing; the fans aren’t blowing. And it’s going to be three, four, five, six days of this.”

“We want to avoid this,” Bowden said.

Opposition Continues

The project is opposed by many East Boston residents and nearly every relevant elected official in Boston, from city council to the mayor to the state’s two senators. The city’s voters also overwhelmingly *opposed* siting the project there in a non-binding referendum in November.

Widespread frustration among opponents stems from the project’s location near public spaces, in a flood zone, and in an environmental justice community that has seen a long history of environmental hazards and pollution.

That opposition has extended to the company’s latest request to expedite the 15 certificates.

“As far as my interpretation, this is Eversource requesting to evade the permitting process and build this thing before the appeals that have been filed ... are finished,” East Boston resident Leonard Olsen said at the hearing. “It’s equally absurd as the project itself.” Opponents have also challenged Eversource’s claims about the need for the project, noting that past load projections over the long process of planning the project have at times failed to come to fruition.

“It feels a bit like the boy who cried wolf, as we’ve seen what the actual summer peak loads



A preliminary design concept from Eversource for the facade of its proposed substation | *Energy Facilities Siting Board*

have been in comparison to some of what the projections are,” said John Walkey, director of Waterfront & Climate Justice Initiatives at the advocacy group GreenRoots.

Some public officials representing the area recognize the need for more infrastructure to meet the area’s demand for electricity, especially considering decarbonization efforts. But they say Eversource has not met the moment.

“The opposition is not that we don’t need infrastructure to meet our greener future, that we won’t need to be able to generate for our EV stations,” said Lydia Edwards, a former Boston City Councilor who was elected to the state Senate in January. “I just think what we’ve been trying to say for the past several years, and in many languages, is that we can be more creative than this. This is not going to prepare

us or help us become healthier in our future,” Edwards said.

What’s Next?

Anyone who wants to be a participant or intervenor in the EFSB case has until April 19 to file a petition.

The EFSB will hold an adjudicatory hearing on the Eversource certificate request starting on May 17.

In its consideration, the board will look again at the need for the facility, its design, and whether granting an exemption from state and local requirements is “reasonable and consistent with providing necessary energy supply for the Commonwealth with minimal impact on environment and lowest possible cost,” board member Donna Sharkey said. ■

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ISO-NE News

ISO-NE Sends MOPR Filing to FERC, Teeing up Big Decision

By Sam Mintz

After months of debate by ISO-NE and stakeholders, the RTO's proposal to revamp its Forward Capacity Market is now in the hands of FERC.

In a *detailed filing* to federal regulators last week, ISO-NE laid out its reasoning both for eliminating the contentious minimum offer price rule (MOPR) and for doing so after a two-year delay.

The proposal largely reiterates the points that the grid operator has made during a monthslong stakeholder process in NEPOOL, but the document is the first time its entire reasoning has been laid out in one place.

ISO-NE is calling for the creation of a "more nuanced mechanism for evaluating new resource capacity market offers," exempting both clean or renewable resources and merchant generators from a new resource-specific, buyer-side market power review.

But to avoid a flood of new state-sponsored resources into the capacity market and a corresponding rash of "inefficient retirements," it proposes a two-year transition period during which the MOPR would remain in effect but up to 700 MW of renewables could get exemptions from it.

"The ISO is concerned that the immediate entry of large quantities of state-sponsored resources could pose an unacceptable risk to the existing resources upon which the region currently relies, prompting the retirement of these resources before the point at which we are in a position to fully ascertain and account for the relative reliability benefits of the retiring resources and the new resources replacing them," ISO-NE COO Vamsi Chadalavada said in testimony attached to the filing.

A History of Failure

As a backdrop to its latest proposal, ISO-NE lays out a history of admitted failures at accommodating state-sponsored resources into the capacity market.

The 2014 renewable technology resource (RTR) exemption had caps that were too small, and rules too restrictive, to qualify many of the renewable resources trying to get into the capacity market.

The RTO's Competitive Auctions with Sponsored Policy Resources (CASPR) construct — which created a second, "substitution" auction,

in which existing resources can transfer their capacity supply obligations (CSOs) to state-sponsored resources — has also failed to have the intended results. In the four auctions since its implementation, only 54 MW of state-sponsored resources have been awarded a CSO through a substitution auction, the RTO said.

A New Plan

In light of those failures, and with clean energy procurements on the rise even more in the New England states in the last few years, ISO-NE needed a new plan.

Its proposal excludes certain new resources from having their capacity market offers mitigated if they "lack either the ability or the incentive to exercise market power (or both), or because exclusion of those resources will address the inefficient overbuild concerns related to the accelerated state procurement of sponsored resources," the RTO wrote.

In addition to federally or state-sponsored resources, new projects with a capacity less than or equal to 5 MW, passive demand response resources and new resources that are not receiving revenues outside of RTO-administered wholesale markets from a load-serving entity, state or subdivision of a state will also be exempt from the buyer-side review and any mitigation.

FERC's Response in the Balance

Now the ball is in FERC's court, and while sometimes the federal agency's response is predictable, this is not one of those times.

Arguably the most pertinent question is whether the two-year delay complies with FERC Democrats' recent pointed, if nonbinding, directive to remove the MOPR "expeditiously." (See *FERC Weighs in as ISO-NE Prepares for Capacity Auction*.)

FERC typically responds to filings under Federal Power Act Section 205 within 60 days, and there are a number of ways it could respond, said Ari Peskoe, director of the Electricity Law Initiative at Harvard Law School.

It could approve the filing as is, and it would go into effect. It could reject the filing, keeping the status quo. It could also issue a deficiency letter asking for more information or call for a paper hearing, extending the deadline.

Or, Peskoe said, "it could reject the filing, and with that rejection issue a Section 206 order



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

finding that the status quo is unjust and unreasonable and order ISO-NE to change it. That could be a specific order to put into place an immediate end to the MOPR."

FERC took that route with PJM's MOPR in 2018, and the resulting process took another year and a half to complete. But, Peskoe said, because the immediate cessation of the MOPR was already on the table and under discussion in New England, it could likely develop much more quickly.

D.C. politics could end up playing into the decision too: There's a possible scenario in which FERC ends up split 2-2 in 2023 after approving ISO-NE's two-year transition. If the RTO were to backtrack at that point on its decision to remove the MOPR altogether, its decision could end up being approved by the split FERC by operation of law.

Eyes on the RTO

The debate over the MOPR removal and especially the transition proposal has generated an *unusual amount of scrutiny* of ISO-NE and NEPOOL, which often operate under the radar.

In particular, opponents of the delay have cried foul and accused the grid operator of being an impediment to the clean energy transition.

"ISO-NE, New England's energy operator, just decided to push back letting clean energy into the regional market by two more years," *tweeted* Melissa Birchard, senior regulatory attorney for power grid reform at the Acadia Center. "This is a mistake for the climate and sticks consumers with extra costs. FERC should reject this and direct the ISO to let clean energy compete now." ■

ISO-NE News

FERC Allows ISO-NE 1-month Delay for FCA 17

FERC on Friday agreed to allow ISO-NE to adjust the schedule for next year's Forward Capacity Auction 17, which was pushed back because of uncertainty surrounding Killingly Energy Center.

In February, the RTO had asked the federal agency to allow it to ignore any dates set for FCA 17 in the grid operator's tariff or other operating documents, and instead publish a new schedule ([ER22-1053](#)).

NEPOOL stakeholders and the New England Power Generators Association supported the ISO's filing, and FERC signed off on the change.

"The proposed revisions enable ISO-NE to provide market participants with information (such as, for example, final FCA 16 clearing prices) that facilitates their ability to meet the requirements for participating in FCA 17 per the tariff," FERC commissioners wrote.

The grid operator has proposed a *pushed back FCA 17 schedule*, which would see next year's auction take place in March, a month later than the typical February auction.



The Killingly Energy Center has been at the center of controversy and uncertainty in New England's capacity auction process. | [NTE Energy](#)

FCA 16's final auction results were delayed several weeks by confusion over whether the gas-fired Killingly plant could participate in the auction, but were published in March after it

was omitted. (See [Highlights from FCA 16: No New Gas, No Big Storage.](#)) ■

— Sam Mintz

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MISO News

Nonprofits Push Entergy on Tx Planning

By Amanda Durish Cook

NEW ORLEANS — Several nonprofits pushed Entergy to embrace large scale transmission expansion in adjusting to a growing renewable fleet during an Entergy Regional State Committee Working Group meeting Wednesday.

Debra Lew, with Energy Systems Integration Group, said Entergy's corporate decarbonization goal requires transmission. The company committed in 2020 that it would meet a 100% clean energy goal by 2050.

Lew said Entergy should have a "triple goal" in the transition: "clean, reliable and affordable." She said large-scale transmission projects are key to ensuring those goals.

"The larger the geographic size of transmission expansion, coordination, the cheaper the energy," she said. "Transmission costs are tiny compared to other resources and infrastructure costs."

Andy Kowalczyk, with activist group 350 New Orleans, also advocated for a robust transmission system and called for a re-examination of MISO South's planning needs.

"Utility trends in the changing resource profile for MISO South, public policy goals and prevalence of extreme weather events drive the need for a reassessment of planning for the bulk power system in the region," he said.

Kowalczyk said between Entergy utilities' and Cleco's current requests for proposals, MISO South is primed for an additional 4.2 GW of renewable generation. He said he pictures even more RFPs within five years.



350 New Orleans' Andy Kowalczyk addresses the Entergy Regional State Committee Working Group | © RTO Insider LLC

"This is only the beginning of this generation shift," he said. "There will need to be adjustments in transmission planning to deliver renewables and meet this shift."

He also said an "inability to transfer power from outside of impact zones hindered recovery for Louisiana and Texas residents after Hurricanes Laura and Ida."

Laura in 2020 and Ida in 2021 were the strongest hurricanes to ever strike Louisiana.

Clean Grid Alliance's Natalie McIntire asked Entergy leadership to prepare a future presentation on how the utilities plan to handle a clean transformation in terms of generation and transmission planning. ■

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MISO News

MISO Fills out Executive Team

MISO on Friday promoted and installed new officers of its executive management team.

The grid operator *announced* last month that it will add three vice presidents and promote three current vice presidents to the senior level.

New senior vice presidents will include current Vice President of System Planning Jennifer Curran, General Counsel and Corporate Secretary Andre Porter and Chief Digital Officer Todd Ramey. Curran and Ramey have been with MISO for about 20 years apiece; Porter joined the RTO in 2016.

New vice presidents will include Executive Director of System Operations Renuka Chatterjee, Executive Director of System Planning Aubrey Johnson, and Melissa Seymour, executive director of external affairs for MISO's Central region.

Chatterjee is a 21-year veteran of MISO. Johnson and Seymour joined MISO in 2017 and 2013, respectively.

CEO John Bear said the Board of Directors was fully supportive of the promotions. In a



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

press release, he said the six “have individually and collectively made exceptional contributions to MISO’s history by sharing their

expertise and consistently demonstrating our core values.” ■

— Amanda Durish Cook

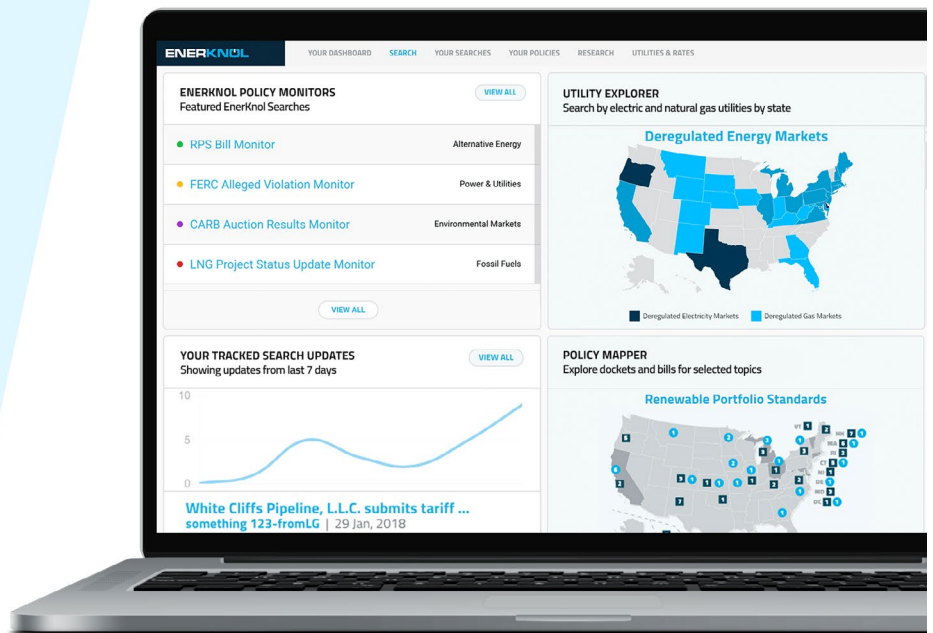
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NYISO News

NYISO Management Committee Briefs

Ready for Next Winter

NYISO expects by next winter to meet the recommendations made in the joint FERC-NERC [report](#) on the February 2021 winter storm in the Midwest and Texas to protect critical natural gas infrastructure from manual and automatic load shedding and to prohibit use of such critical infrastructure loads for demand response, COO Rick Gonzales told the Management Committee on Wednesday.

“The NERC Board of Trustees directed the development of reliability standards consistent with the report recommendations in anticipation of this coming and next winter,” Gonzales said. “Normally it would take much longer through the NERC standard development process, but the directive by the NERC board is to have those standards developed again in time for the coming and the following winter, consistent with the recommendation time frames identified in the report.”

The ISO presented stakeholders its [work](#) on the recommendations at the Installed Capacity Working Group meeting Feb. 3, saying it intends to implement the rules on Nov. 1, the first day of the 2022/23 winter capability period.

In addition, the ISO requested that resources meeting its proposed definition of critical infrastructure load not be registered in its DR programs for the 2022 summer capability period.

Staffing Recruitment Improves

NYISO has started to make significant progress in terms of recruiting talent for several open key staff positions, CEO Rich Dewey told the MC.

“We’re still looking at a vacancy rate as we sit here today of about 9%, but of the 56 open positions, we have had accepted offers on 17 of them, so that’s a pretty successful recruiting month,” Dewey said.

Those new people need to be onboarded and brought up to speed, trained and acclimated to the ISO, but the progress is encouraging, he said.

NYISO has adopted a hybrid approach to working and has not identified any specific number of days that people are required or mandated to be in the office.

“We’ve asked each of the department heads to identify those positions and those work functions where it’s more efficient or effective to do it in person and, when flexibility is warranted or justified, allow people the choice of where they want to work,” Dewey said. “It varies by job and by department and will be monitored and tracked and adjustments made to the extent we need.”

Board Seeks 10% Increase in Compensation

Following a tri-annual structured compensation [review](#), the NYISO Board of Directors intends to increase its members’ pay by approximately 10%, or 3.33%/year for the period.

The board reviews its compensation every three years and compares it to market forces to assess whether it is consistent. According to the ISO agreement, any change to board compensation can only happen after notifying the MC.

“I wanted to inform the Management Com-

mittee today of those plans and then if there’s any comments, questions or concerns, give the committee the opportunity to voice those, and then the board will take that under consideration when they meet in April before they finalize those changes,” Dewey said.

The current annual retainer of \$65,000 per director would increase to \$71,500; the retainer for being vice chairman or committee chair would go from \$10,000 to \$12,500; and the board committee meeting day stipend of \$5,000 would increase to \$5,500.

“This was anticipated when we put the budget together for 2022,” Dewey said. “The changes that the board is proposing are going to be accommodated within that budget that’s been placed, so I’m not coming here today to seek additional funds.”

Real-time BPCG Eligibility Changes

The committee unanimously recommended that the board approve tariff [revisions](#) to the real-time bid production cost guarantee (BPCG) payment provisions.

In order to close a loophole whereby units may receive inappropriate real-time BPCG payments under certain circumstances, the new tariff language adds an exception to the eligibility criteria for units placed out of merit for reliability below a self-scheduled wattage level, said Mark Buffaline, senior settlements analyst at the ISO. (See “Real-time BPCG Eligibility Changes,” [NYISO Business Issues Committee Briefs: March 16, 2022.](#)) ■

— Michael Kuser

Northeast news from our other channels



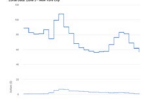
[NH Saves Supreme Court Cases Dropped; Program Approval Still Pending](#)

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[Vt. Senate Advances State’s 1st Environmental Justice Bill](#)

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[New York Proposes Opt-out CDG Program](#)

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PJM News



FERC Fines Dynegy \$569K for Misleading Ramp Rates in PJM

By Michael Yoder

FERC on March 28 approved an agreement between Dynegy and its Office of Enforcement that will have the company pay more than \$569,000 to settle allegations that it violated the PJM tariff by misrepresenting the ramping levels of 10 of its combined cycle combustion turbines in 2017 (IN22-3).

Enforcement found that the units' real-time energy market offers misrepresented that they could "ramp to their maximum oil-based output attained during their summer capacity tests (ICAP) while running on gas." The office also alleged that Dynegy failed to comply with the requirement that each unit be able to "change output at the ramping rate specified in the offer data."

Dynegy stipulated to the facts in the agreement but neither admitted nor denied the alleged violations. The company agreed to pay disgorgement plus interest, totaling \$119,425 and a civil penalty of \$450,000 to the U.S. Treasury and to submit two annual compliance monitoring reports identifying "any known violations" regarding the PJM units identified in the investigation.

"The PJM market and its market participants bore the cost of Dynegy's violation," FERC said. "The commission directs PJM to use its best efforts to allocate the disgorgement funds on a *pro rata* basis to affected market participants."

Background

The commission said the 10 units identified in the investigation were split among three facilities in PJM: Pleasants Power Station in West Virginia; Armstrong Power Station in Pennsylvania; and Troy Energy Facility in Ohio.

FERC said during PJM's capacity auctions for



The Troy Energy gas-fired plant in Luckey, Ohio, was involved in the Dynegy case with FERC. | *Industrial Power Services*

the 2016/17 and 2017/18 delivery years, the previous owner of the units offered and cleared capacity "at a level that would require the units to run on oil" to meet their ICAP during a capacity test, with Dynegy inheriting an "oil-based" ICAP for each unit for both delivery years when they were acquired.

"However, these units were unlikely to be able to reach their oil-based ICAP when the units were already running on gas on summer days in 2017 consistent with the ramp rate that Dynegy entered for these units' real-time offers," FERC said.

In the summer of 2017, Dynegy's real-time offers represented that the units could attain oil-based ICAP "in less than a minute if dispatched from a unit's maximum output on gas that day to the higher oil-based ICAP."

FERC said for the units to achieve maximum output after starting on gas in the summer months, they would "likely have to switch to oil" by ramping down to about 20 MW and then ramping back up after the fuel change-over was completed. The process would take about 28 minutes to go from the unit's daily

maximum output on gas to the oil-based ICAP.

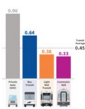
The investigation found the real-time offers "misrepresented the ramping rate for the segment of the real-time offer curve that could only be reached on oil" and that Dynegy submitted "false or misleading information" to PJM that the units could ramp upward to the oil-based ICAP in one minute.

Dynegy calculated each combined cycle's maximum generation using a formula incorporating the next day's forecasted ambient conditions under both gas and oil, the commission said, and the calculations were used to determine the unit's day-ahead and real-time offer curves and economic maximum for the day.

"In the summer months of 2017, the oil-based ICAPs were generally too far above the daily predicted gas max for Dynegy to reasonably expect that the units could reach their oil-based ICAP on gas alone," FERC said.

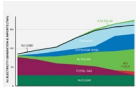
Dynegy sold the Troy and Armstrong facilities in July 2017 to LS Power. Vistra acquired Dynegy, including the Pleasants units, in April 2018. ■

Mid-Atlantic news from our other channels



[NJ Transit Advances with EV Bus, Sustainability Plans](#)

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[Brattle Study of NJ Energy Master Plan Cost Under Scrutiny](#)

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[Md. General Assembly Sends Climate Solutions Bill to Hogan](#)

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PJM News



FERC Conditionally Accepts Rockland Electric's ROE Adder in PJM

By Michael Yoder

FERC on March 29 conditionally granted Rockland Electric Co.'s request for a new base return on equity (ROE) of 10.54% and a 50-basis-point ROE adder for its continued participation in PJM (ER22-910).

The commission also accepted Rockland's proposed updated annual transmission revenue requirement (TRR) under PJM's tariff, suspending it for five months to become effective Aug. 30, subject to refund.

Both the ROE and TRR will be subject to review in hearing and settlement judge procedures established by the commission.

Rockland's service territory includes parts of three counties in New Jersey that border New York — Bergen (eastern division), Passaic (central division) and Sussex (western division). The company said it turned over operational control of its eastern division transmission assets to PJM in 2001, while Rockland's central and western divisions, along with Orange and Rockland Utilities (O&R), are members of NYISO.

According to Rockland, New Jersey law does not mandate that it maintain membership in PJM or any other transmission organization. Rockland said its transmission systems with O&R have historically been operated as a single system, "irrespective of state geographical boundaries or regional operating authority jurisdiction," and O&R "continues to design and operate them as a single integrated system."

"Prior to joining PJM, Rockland contends that it did not have its own annual transmission revenue requirement or transmission rates on file with the commission," FERC said in its order. "However, upon joining PJM, Rockland separated its annual transmission revenue requirement for its eastern division from O&R's transmission rate."

Rockland said it conducted a "variety of transmission projects to expand and improve the safety, reliability, and capacity" of the integrated transmission system from 2016-2020 that "justifies" it updating its transmission rates. The company said it derived its updated annual transmission revenue requirement by:

- calculating the 2020 annual revenue requirement for the integrated transmission system of \$73,637,503 and
- multiplying it by the ratio of the 2020 Rockland system peak load of 395 MW to the 2020 integrated transmission system peak

load of 1,416 MW.

Rockland said it applied the calculation with a reduction of \$187,217, which "accounts for the annual passback of net excess accumulated deferred income taxes (ADIT)," coming up with an updated annual transmission revenue requirement of \$20,354,318, equating to \$51,530 per MW/year.

The company said the updated rates were just and reasonable because they are "derived from a methodology the commission has already approved" and "reflect a composite fixed charge rate composed of reasonable factors derived from reasonable calculations."

Rockland also requested a 50-basis-point adder to its base ROE for continued participation in PJM, saying the commission approved the participation adder in its 2017 rate case. The company said its PJM membership "continues to be voluntary."

The New Jersey Division of Rate Counsel argued that Rockland "improperly proposes to include the costs of facilities that are physically located within the footprint of and under the control of NYISO and are not available for use by PJM transmission customers." The Rate Counsel also argued that Rockland's load ratio share methodology "leads to a result in which a PJM transmission customer physically located in the PJM footprint is paying a portion of the costs of O&R facilities located within the NYISO footprint that NYISO operates and controls."

"Rate Counsel argues if the combined O&R and RECO transmission facilities are an integrated transmission system, then the customers on the two systems are similarly situated and it would be unduly discriminatory for customers on an integrated transmission system to pay different rates as a result of where on the overall system they connect," FERC said in its order.

Rockland responded by saying the Rate Coun-



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sel attempted to "inaccurately paint a picture that the integrated transmission system consists of two separate and distinct pieces that are operated and controlled by two different regional transmission organizations."

The company also said that if the commission adopted the Rate Counsel's rationale, it "may have widespread dramatic impacts on transmission ratemaking with respect to any transmission system that is owned by more than one utility."

Commission Finding

FERC conditionally granted the request for a 50-basis-point adder, saying it was consistent with Section 219 of the Federal Power Act and commission precedent.

"Rockland is a member of PJM, and there is no evidence in the record suggesting that its membership is not voluntary, such as evidence suggesting New Jersey law mandates Rockland maintains its membership in an RTO," FERC said.

The commission conditioned its approval on the adder being applied to a base ROE shown to be "just and reasonable," with the resulting ROE required to fall within "the applicable zone of reasonableness," to be determined in the settlement judge procedures. Approval of the incentive was further conditioned on Rockland's continued membership in PJM.

The commission found that its preliminary analysis suggested the proposed rate changes "may be substantially excessive" and would be "more appropriately addressed in the hearing and settlement judge procedures."

FERC suspended the rates for five months and encouraged the parties to the proceeding to "make every effort to settle their dispute" before hearing procedures begin.

Commissioner Mark Christie issued a concurrence, saying an ROE "should reflect the market cost of equity capital, no more and no less, to the best of the regulator's ability to determine, including pricing in risk."

"An ROE adder, by definition, awards the utility more than the market cost of equity capital," Christie said. "An ROE adder is literally an involuntary gift from consumers to a monopoly provider. While I recognize that ROE adders for RTO membership reflect current commission policy dating back several years, it is my hope we will finalize our proceeding initiated last year. This is particularly salient at a time when transmission charges are among the fastest growing components of consumers' bills." ■

PJM News



PJM Requests Rehearing of FTR Credit Requirement Filing

By Michael Yoder

PJM on Thursday asked FERC to rehear a previous decision rejecting the RTO's plan to modify its financial transmission rights credit requirement calculation, defending its original December filing (*ER22-703*).

The commission on Feb. 28 rejected PJM's proposal to modify the FTR credit requirement by implementing an initial margin calculation from a historical simulation (HSIM) model using a 97% confidence interval, saying the RTO failed to support the plan because its independent auditors only validated the model at a 99% confidence interval.

FERC directed the RTO to file within 60 days to show cause why its existing FTR credit requirement remains just and reasonable or explain what tariff changes will remedy the commission's concerns. (See *FERC Rejects PJM's FTR Credit Requirement Proposal*.)

Stakeholders voting at a March 23 PJM Members Committee meeting endorsed a motion for the RTO to refile the original proposal "accompanied by some new supporting rationale." (See *Stakeholders Encourage PJM to Defend FTR Filing*.)

"The Feb. 28 order errs by disregarding nearly all of the substantial evidence PJM presented in support of the December Section 205 filing," PJM said in its rehearing request.

Rehearing Request

In its filing Thursday, PJM said it presented "abundant evidence" supporting its December filing to show the proposed use of the 97% confidence interval was just and reasonable

and that FERC's February order "addresses little of that evidence." The RTO said the commission's order limited discussion of the 97% confidence interval to two aspects, including:

- an independent auditor's evaluation of the HSIM model, "offered only as a supplemental check on the model's technical capability," which the order discounted because the model reviewed by the auditor used a 99% confidence interval; and
- the estimation that the overall level of collateral would be lower under the HSIM with a 97% confidence interval "compared to the level of collateral under the current effective rules" and that the proposed tariff revisions don't show how "sufficient collateral to address the riskiest market participants" will be collected.

"Neither of these bases for the rejection of the December Section 205 filing is well-founded, and both should be withdrawn on rehearing," PJM said in its request. "The Feb. 28 order never engages with the large bulk of the evidence PJM provided in support of the HSIM with a 97% confidence interval — as if that evidence had never been presented. Such fundamental failure by the commission to address the record evidence is a signal of unlawful agency conduct, which the commission now has an opportunity to correct on rehearing."

PJM highlighted three issues it took away from the commission's February order.

First, PJM said the order asserted the RTO did not demonstrate the HSIM model "would operate as represented across extreme events or that the initial margin estimates would

cover expected losses." PJM said back-testing analyses included in the filing "made those very demonstrations" and that FERC "misunderstands the limited purpose of the additional check provided by the independent auditors' validation of the HSIM model."

PJM said the back-testing failure rate, or the instances when the initial margin was not adequate to cover potential losses, "did not exceed 3% which is consistent with the model confidence interval of 97%."

"The Feb. 28 order erred in disregarding PJM's evidence that the HSIM model with a 97% confidence interval would operate as represented across extreme events, and that the initial margin estimates would cover expected losses," PJM said.

Second, PJM said FERC's order disregarded recent RTO tariff revisions regarding the "assessment of participant riskiness" and misinterpreted how the HSIM addresses risk when looking at the 97% confidence interval.

PJM noted that FERC found that the RTO "failed to demonstrate that its proposed FTR credit revisions are reasonably calibrated to ensure that market participants will be required to provide adequate collateral relative to the risks of their positions" because the "proposed 97% confidence interval would result in a reduction in market participants' aggregate collateral commitments relative to the existing FTR credit requirement."

"It is possible the Feb. 28 order is using interchangeably the distinct issues of the riskiest participants (which concern a particular participant's demonstrated ability and willingness to honor its financial obligations) and the riskiest portfolios or positions (which concern the level of risk that the potential losses on a particular portfolio might exceed the posted collateral)," PJM said in its request.

Finally, PJM said FERC's conclusion that the RTO did not demonstrate the 97% confidence interval is just and reasonable "assumes away most of the evidence PJM did present."

PJM said it demonstrated that the failure rate under the 97% confidence interval "was less than 2%, compared to an 8% failure rate under the currently effective rules." It also said testimony from Chief Risk Officer Nigeria Bloczynski showed the 97% confidence interval embodies "a high confidence interval and a significant improvement to the PJM collateral practices." ■



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SPP News

SPP Stuns with 90.2% Renewable Penetration Mark

By Tom Kleckner

SPP set the energy Twitterverse on fire last week when it [announced](#) it had become the first regional grid operator to temporarily serve more than 90% of its demand with renewable energy.

“Remember when they said that at 20% the whole thing would come crashing down?” tweeted Joshua Rhodes, an energy researcher at the University of Texas. “Ninety percent.”

Rhodes noted the 20% figure was an annual number and that 90% was an instantaneous number. “In the end, 90% instantaneous is a new U.S. record and worth recognition!” he said.

“It is indeed noteworthy — it’s awesome,” said Aron Patrick, manager of research for Kentucky utility LG&E and KU Energy.

The record came at 2:42 a.m. CT March 29, when renewable energy set a new penetration mark of 90.2%, breaking the old mark of 87.6% set in May 2021. Wind accounted for 88.5% of the renewables, breaking the previous wind record of 84%, also set last May.

SPP also set new renewable and wind production records. The RTO produced a record 23.8 GW of renewable energy at 9:25 p.m. on March 28, bettering the previous high of 21.8 GW set Feb. 15. At 10:34 p.m. that same evening, SPP produced 22.9 GW of wind energy, topping the previous high of 21.8 GW set on Feb. 15.

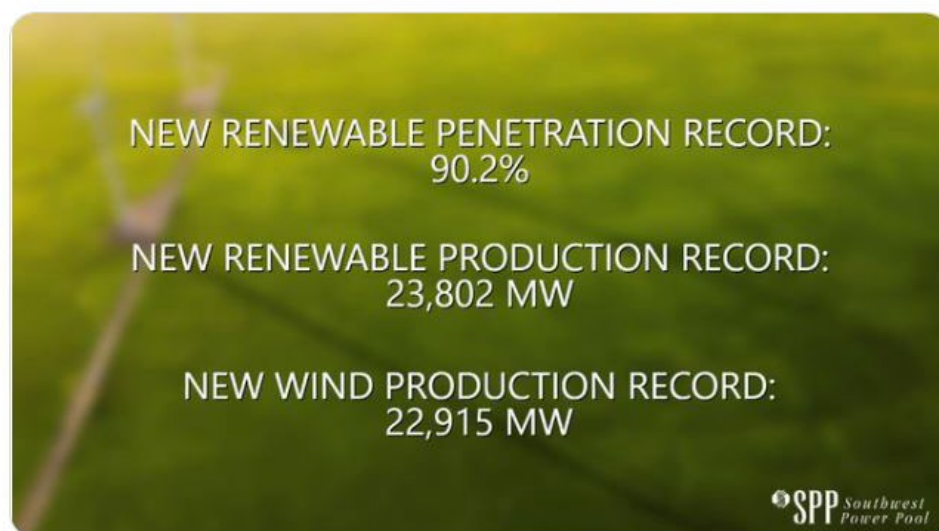
With SPP’s system demanding around 25 GW during the off-peak periods, the numbers came as no surprise to RTO staff. A cold front that swept through SPP’s 14-state footprint,



SPP CEO Barbara Sugg speaks before GCPA’s MISO South-SPP conference attendees. | © RTO Insider LLC

 Southwest Power Pool
@SPPorg

SPP set new renewable records: renewable energy penetration record of 90.2% at 2:24 a.m. March 29, renewable production record of 23,802 MW at 9:25 p.m. and a wind production record of 22,915 MW at 10:34 p.m. March 28. spp.org/newsroom/press...



4:45 PM · Mar 29, 2022 · Twitter Web App

SPP’s announcement drew widespread attention. (SPP tweeted the time as being 2:24 but reported 2:42 in a press release)| [SPP via Twitter](#)

bringing wind gusts as high as 60 mph, also played a role.

CEO Barbara Sugg told *RTO Insider* the records were an example of staff’s increased ability to forecast both load and wind production.

“That speaks to the tools that we have in place for forecasting,” she said after delivering a keynote address during the Gulf Coast Power Association’s MISO South-SPP conference. “It speaks to the training and the systems that the operators have because that amount of volatile, non-dispatchable generation consuming that much of the load requires everybody knowing exactly what’s going on and having the systems in place to be able to manage through it.”

“In a decade’s time, our region has gone from thinking of 25% renewable-penetration levels as nearly unreachable to a point where we regularly exceed 75% without reliability concerns,”

SPP Senior Vice President of Operations Bruce Rew said in a [statement](#).

“It’s important to realize that reliability is more important than achieving a renewable goal,” Sugg said. “You’re setting a new record, right? We have to maintain reliability.”

The RTO has about 31 GW of installed wind capacity with another 66 GW of renewable resources in its generator interconnection queue. SPP’s footprint includes the high-wind regions of the Dakotas, Kansas, Missouri, Nebraska, Oklahoma and Texas, giving staff a huge pool of resources to draw from.

“There is a lot of wind in our footprint and a lot of desire for that demand to be harnessed into energy,” Sugg said. “We just have to be sure that the transmission rates can support it, and that we can figure out how to balance the desire for [wind energy] with the requirement to maintain reliability. It’s a delicate balance.” ■

Company Briefs

AEP Names New Chief Sustainability Officer



American Electric Power (AEP) last week promoted Sandy Nessing to vice president and chief sustainability officer, effective April 1.

Nessing, who joined AEP in 2006, was the managing director of corporate sustainability and was responsible for leading the company's sustainability and environmental, social and governance strategy, and corporate stakeholder engagement.

More: [AEP](#)

Vietnamese Automaker to Build EVs in NC



VINFAST

Vietnamese automaker VinFast last week announced plans to build a \$4 billion factory in North Carolina to manufacture electric vehicles.

The company will build its first North American plant in Chatham County, with production expected to start in 2024.

More: [The Associated Press](#)

Xcel SW President Retiring

Xcel Energy last week announced that



David Hudson, president of the company's Southwest operations, will retire on May 1 after 38 years with the company.

Hudson became president of Xcel's Southwestern Public Service Company in January 2014 and led the expansion of the region's grid that quadrupled power import/export capabilities, boosted job-creation and electrified large areas of newly developed oil and gas fields in southeastern New Mexico and West Texas.

Hudson's successor is expected to be named in the coming weeks.

More: [Amarillo Globe-News](#)

Federal Briefs

US to Require New Vehicles to Average 49 MPG by 2026

The National Highway Traffic Safety Administration (NHTSA) last week announced that every automaker must ensure that its fleet of light-duty vehicles sold in the U.S. average 49 mpg by 2026.

The new Corporate Average Fuel Economy standards will take effect in 2024 and will require automakers to increase fuel efficiency by 8% annually for the 2024 and 2025 model years. By 2026, that figure will rise to 10%.

With better MPG comes less money spent on gas (about \$1,387 less over the lifetime of a vehicle bought in the 2029 model year). However, the agency also acknowledged that requiring automakers to make vehicles more fuel-efficient will mean the cost of new vehicles will go up (about \$1,087 on average), the NHTSA said.

More: [Car and Driver](#)

Coal Exec Indicted for Embezzling, Lying on Tax Returns

A federal grand jury last week indicted former Kentucky coal executive Rex G. Fought for allegedly embezzling money from investors and filing false tax returns that didn't report the income.

One informant told authorities that Fought, who was the manager of Catalyst Resources, Rockhampton Energy and Covol Fuels No. 3 during the alleged conspiracy, worked

with others to steal millions of dollars between 2014 and September 2019, according to a sworn statement.

The jury indicted Fought on one charge of conspiracy to defraud the U.S. by obstructing tax collection efforts, punishable by up to five years in prison.

More: [Lexington Herald-Leader](#)

Commerce Dept. Investigating Solar Imports from Asia

The Commerce Department last week said it is investigating whether solar panel imports from Southeast Asia are circumventing anti-dumping rules that limit imports from China.

The investigation follows a complaint by Auxin Solar, a California-based manufacturer, that said solar panels assembled in four Southeast Asian nations (Cambodia, Malaysia, Thailand and Vietnam) are circumventing rules intended to block imports of solar cells and panels from China.

The White House declined to comment, but a department spokesman said the agency will "conduct an open and transparent investigation to determine whether circumvention" of U.S. trade law is occurring.

More: [The Associated Press](#)

Energy Department Announces New Standards for Federal Buildings

The DOE last week announced new energy



efficiency standards for federal buildings set to take effect in 2023.

The new requirements will mandate all new federal buildings to comply with the 2021 International Energy Conservation Code beginning next April. Any major retrofits to existing buildings would also be covered under the updated codes. The department also announced new proposed efficiency standards for residential pool heaters and air conditioners.

Combined with the building codes, the government estimated the proposals would save more than a net \$15 billion over the 30 years.

More: [The Hill](#)

Environmental Law Group Sues TVA Over Gas Pipeline Documents



The Southern Environmental Law Center (SELC) last week sued the Tennessee Valley Authority for failing to disclose full contracts related to proposed natural gas pipelines.

TVA plans to shutter its remaining coal-fired power plants and get power from natural gas. The SELC requested copies of the company's contracts with two gas companies under the federal Freedom of Information Act; however, when TVA supplied the con-

tracts, they were heavily redacted. TVA said the contracts contain confidential business information that is exempt from disclosure.

SELCO is seeking unredacted copies and a declaration that TVA violated the Freedom of Information Act.

More: [The Associated Press](#)

Manchin Hires Gas Lobbyist for Senate ENR Committee

Sen. Joe Manchin recently hired natural gas industry lobbyist **C.J. Osman** to work for the Senate's Energy and Natural Resources Committee.



Osman spent six years at the Interstate Natural Gas Association of America (INGAA) as its top lobbyist before joining Manchin's committee as a professional staff member in March. Osman was registered as a lobbyist representing the INGAA from 2019 to 2021 and represented the organization's interests

in both the House and the Senate.

It is not clear if Osman's portfolio includes natural gas policy.

More: [Business Insider](#)

Report: Negligence Uncovered at Diablo Canyon

The Office of the Inspector General last week issued a report on a significant failure by Nuclear Regulatory Commission inspectors charged with ensuring the safe operation of the Diablo Canyon nuclear power plant in California that led to one of the plant's two reactors being shut down for eight days in July 2020.

A cooling system pipe had sprung a leak, but the major problem highlighted by the OIG was the failure of on-site NRC safety inspectors to detect the corrosion that led to the leak during an inspection that took place three months prior. Worse yet, according to the report, inspectors claimed to have inspected the area of the plant in question, when in fact they had not. A resulting inquiry report found that inspectors had spent

only five hours during inspection when the procedures required for a complete inspection take 12 hours.

Diablo Canyon's two towers are the remaining nuclear generators in the state. PG&E has decided to shut Diablo Canyon down in 2025 when its license expires.

More: [Santa Barbara Independent](#)

US Battery Storage Soared in 2021

In 2021, the market added 3,508 MW of storage capacity, an amount more than double from the prior year, according to a report issued last week by Wood Mackenzie and the American Clean Power Association.

The rapid growth in battery storage has gone on for years, rising from 257 MW in 2016 to last year's total, an increase of more than 1,200%.

The report includes a forecast showing substantial growth to the point that annual projects will increase to about 10,000 MW in 2023 and stay at about that level through 2026.

More: [Energy News Network](#)

State Briefs

COLORADO

Economist Calls Tri-State's Exit Fees 'Flawed and Unreasonable'



TRI-STATE

Greg Golino, an economist with FERC, last week called Tri-State

Generation's exit fee calculations "flawed and unreasonable."

In a released report, Golino said the exit fee for United Power should be less than a tenth of the \$1.6 billion Tri-State is seeking. In its calculations of a contract termination payment, Tri-State tallied the portion of the overall debt a cooperative is responsible for based on its revenues, plus the cost of all the electricity it would have bought between now and the end of the contract in 2050. With that, Tri-State determined United Power's \$1.6 billion exit fee — and the fees for the 42 other members.

In a rebuttal, Tri-State said low exit fees could stress its operating system and create an incentive for big co-ops to depart, leaving its smallest members stranded. The company's six largest cooperatives, based on association exit fee calculations, account for

47% of its revenue.

In the end, FERC will determine the exit fees.

More: [The Colorado Sun](#)

Lawsuit Alleges Xcel Power Line Sparked Wildfire



A lawsuit filed last week against

Xcel Energy alleges that its power lines and equipment were a "substantial factor" in the cause, origin and continuation of a wildfire that destroyed more than 1,000 homes and other buildings in suburban Denver in December.

Authorities have not finished their investigation into what caused the fire and said the work is expected to take several more months.

Xcel spokesperson Michelle Aguayo said the company is reviewing the lawsuit but said it has not seen evidence that its equipment ignited the fire.

More: [The Associated Press](#)

ILLINOIS

Senate Approves Energy Grid Reliability Task Force

The Senate last week advanced a measure that would create a task force to study electric grid reliability in light of the 2021 passage of the Climate and Equitable Jobs Act.

The unpaid, 33-member task force would be known as the Illinois Regional Generation Reliability Task Force and would study the effect of state laws, including CEJA, on energy prices and grid reliability. It would also study ways to deploy new technologies and ways to "improve" the power supply mix, among other tasks.

The task force would be made up mostly of industry groups and lawmakers.

More: [KPMG](#)

MICHIGAN

Consumers Energy Sets Net-zero Natural Gas Emissions Goal

Consumers Energy last week said it will

achieve net-zero greenhouse emissions from its natural gas production and delivery system, including customers and suppliers, by 2050.

Consumers recently received regulatory approval to allow residential and commercial customers to voluntarily offset natural gas carbon emissions by investing in state forestry projects. It also has several efficiency programs to reduce energy waste and lower bills, which it says have saved customers about \$4 billion since 2009 and prevented 19 million tons of carbon emissions.

The company last year said it will eliminate the use of coal in producing electricity by 2025 and replace the stations with existing natural gas plants.

More: [The Detroit News](#)

OHIO

Former DeWine Aide Warned Governor About Randazzo Before FBI Raid

J.B. Hadden, who was Gov. Mike DeWine's campaign treasurer from 2009 to 2015, reportedly warned senior aides to the then-new governor about Sam Randazzo's "opaque and undisclosed" financial ties to FirstEnergy Corp. when DeWine was considering appointing a chairman to the Public Utilities Commission.

The warning came in a 198-page dossier alleging Randazzo — a lawyer and lobbyist who represented gas companies and industrial scale electricity buyers — used businesses registered in his name to "funnel" money from FirstEnergy to buy real estate. Despite the warning, DeWine named Randazzo the PUC's chairman on Feb. 4, 2019.

Less than two years into Randazzo's five-year term, the FBI raided his condo and seized boxes of material. He resigned days later. The next summer, FirstEnergy admitted it paid Randazzo \$22 million between 2010 and 2019 for favorable PUC rulings and other favors. That includes \$4.3 million, paid just before DeWine appointed him.

More: [Ohio Capital Journal](#)

RHODE ISLAND

Superior Court Grants Pause, Halts National Grid Sale to PPL

Superior Court Associate Justice Brian Stern last week granted a request from the Attorney General's Office to stop National Grid from selling the state utility company, Narragansett Electric, to PPL.

The Division of Public Utilities and Carriers in February approved the \$3.8 billion sale on the grounds that the change in ownership would not hurt service or the public interest, per criteria set forth in state law. Attorney General Peter Neronha appealed the decision a day later, arguing the decision did not provide adequate proof it had met the review standards.

While the court decision only halts the transaction temporarily, it does acknowledge Neronha's concerns that regulators did not meet the state's requirements when issuing approval of the sale. The court will take up the review of the regulators' approval at a hearing on April 12.

More: [Providence Business News](#)

TENNESSEE

TVA Partnering with Meta, Others on Solar Farm

The Tennessee Valley Authority last week announced it has joined with Meta (formerly Facebook), Jackson Energy Authority and Silicon Ranch to begin construction of a new 70-MW solar facility to support Meta's regional operations with 100% renewable energy.

Silicon Ranch will fund, own and operate the \$90-million McKellar Solar Farm.

The companies broke ground last week.

More: [Chattanooga Times Free Press](#)

WEST VIRGINIA

Justice Signs Bill Setting up Geothermal Regulatory Program

Gov. **Jim Justice** last week signed a bill that will set up a regulatory program for the state's geothermal energy.

The bill gives the Department of Environmental Protection oversight over the energy and requires the department to create a permitting system and establish temperature levels and volume flow rates.

The bill also grants ownership rights to the resources to the owner of the property.

More: [Charleston Gazette-Mail](#)

SEVA to Develop Former Mine into Solar Field

SEVA WV last week announced it plans to

redevelop the former Hobet coal mine into the state's largest solar field.

SunPark, which will cover 3,000 acres and cost \$320 million, will feature a 250-MW solar field along with a mix-used development that will include industry, lodging, recreation and hospitality.

More: [WV News](#)

WISCONSIN

Madison Securing Electric Buses for Rapid Transit System



Madison announced last week that it will use \$41.6 million in federal funding to buy 27 electric buses for the first phase of the city's bus rapid transit (BRT) system.

The resolution calls for a base order of 27 60-foot all-electric articulated buses, which is more than half of the 46 vehicles needed to operate the upcoming BRT system. The contract with New Flyer includes options of either 14 additional diesel BRT buses (\$14 million) or 19 additional electric BRT buses (\$28.9 million).

Either option must be selected no later than Dec. 31.

More: [Wisconsin State Journal](#)

PSC Approves Natural Gas Plant Near Wausau



The Public Service Commission last week voted 2-1 to approve a \$171 million gas power plant near Wausau.

The new facility, proposed by We Energies and Wisconsin Public Service, will be built at the existing Weston coal power plant site in Marathon County. It will use seven reciprocating internal combustion engines (RICE) and can run day or night with a lower environmental impact, utilities said.

More: [Milwaukee Sentinel Journal](#)

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