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YOUR EYES AND EARS ON THE ORGANIZED ELECTRIC MARKETS

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FERC/Federal News



Coalition Forms for Consumer Choice in Retail Energy Markets

By Michael Yoder

Six independent power producers and electric retailers announced Thursday they have formed a new organization to promote renewable energy and lobby states for greater customer choice.

The Retail Energy Advancement League (REAL) said it will push for more consumer control over the purchase, production and consumption of electricity, data usage and energy services.

REAL spokesperson Kate Philips said the organization believes “customer empowerment can be a lever” for aiding the transition to a low-carbon power system. Philips said REAL’s set of *principles* include putting control of energy decisions in the hands of consumers and a belief that “advanced competitive retail energy markets” can aid in the “modernization” of energy markets.

The founding companies of the group are IPPs Calpine Energy, NRG Energy and Vistra and green retailers *CleanChoice Energy* and *IGS Energy*. Retailer *Constellation Energy*, which separated from Exelon last week, serves as a founding associate member.

“Americans deserve easily accessible energy choices that reflect their lifestyle goals and choices,” said NRG CEO Mauricio Gutierrez, chair of REAL. “It’s time to allow competitive energy markets to drive innovation and put the power in the hands of people.”

REAL’s Board of Director’s include Gutierrez, Vistra CEO Curt Morgan, CleanChoice Energy President and CEO Tom Matzzie, IGS



| © RTO Insider LLC

Energy President and CEO Scott White and Calpine Energy President and CEO Jim Wood. Its first CEO is expected to be announced at the National Association of Regulatory Utility Commissioners’ Winter Policy Summit in D.C. later this month.

Maryland, Pennsylvania, Arizona

The group says it believes “competitive retail suppliers should be the entities tasked with helping customers achieve their energy goals.”

Philips said companies are motivated more today to invest in clean energy solutions, and a market that “enables regulated utilities to focus on maintaining and improving the state’s power infrastructure” can promote investment in new technologies.

REAL plans on having a “strong presence” in state capitals across the country, Philips said, and wants to work with other groups with shared goals. REAL is already teaming up with the existing Choose Who You Use electricity consumer campaigns in *Maryland*, *Pennsylvania* and *Arizona*.

Philips said polls consistently say customers want choice in their energy decisions. She said REAL will look to make policy decisions “based on what’s best for our customers in states across the country.”

“We think the market works better when the satisfying the consumer is the driving incentive, and not just whatever monopolies can convince regulators to let them charge their monopoly customer base,” Philips said. “When-

ever they are polled, people say they want choice — and do not understand why energy is the single sector where they don’t have it. Every state that offers customer choice, but has chosen to put limits on it, has a waiting list out the door.”

Listening to Consumers

REAL officials cited a 2018 *survey* by Consumers Union, publisher of *Consumer Reports*, that gauged consumers’ attitudes toward their utility companies.

The findings included customers agreeing with the statement “I want to be able to choose my electricity provider” by a 10-to-one margin, with 76% supporting increased use of renewable energy. The survey also found that an additional 48% of all Americans would be willing to pay \$5 more per month to buy 100% renewable energy.

Travis Kavulla, vice president of regulation for NRG Energy, said in a Twitter thread on Thursday that there is “a lot of work to be done” to make sure customers that already have a choice in their energy provider are “educated and empowered” in knowing their options and finding ways to improve their options.

“In every other part of our society we empower individuals to make the decisions that are best for their families and their businesses,” Kavulla said. “The electric sector stands out like a sore thumb — even at a time when we are more and more relying on it to drive a transition.” ■



NRG CEO Mauricio Gutierrez | NRG Energy

FERC/Federal News



GSA, DOD Gear up to Meet Biden's 100% Clean Energy Goal

RFI Lays out 100 to 1,000 GWh Annual Targets for RTOs, ISOs

By K Kaufmann

The U.S. government, which buys more than 9 TWh of electricity per year from competitive retail markets, issued a request for information Thursday in its first step toward ensuring all that power will be carbon-free by 2030.

President Biden set that goal in December, with his executive order on federal sustainability and energy procurement (*EO 14057*). The order calls for each federal agency to “increase its percentage use of carbon pollution-free electricity, so that it constitutes 100% of facility electrical energy use on an annual basis, and seek to match use on an hourly basis to achieve 50% 24/7 carbon pollution-free electricity, by fiscal year 2030.” (See *Biden Calls for Federal Procurement of 100% Clean Energy by 2030*.)

The *RFI* is a joint effort by the General Services Administration and the Department of Defense and particularly seeks input from power providers and other stakeholders in the PJM, ERCOT, ISO-NE, MISO and NYISO markets. The deadline for submitting comments is March 7.

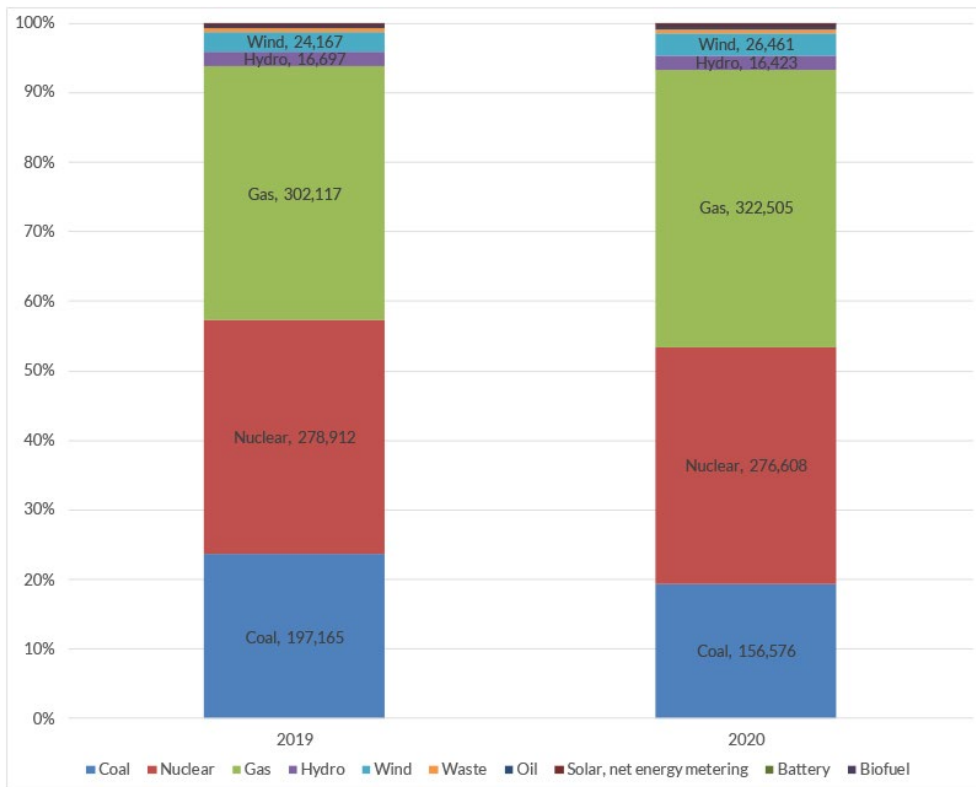
Annual targets for carbon-free electricity (CFE) procurement across these markets include:

- a minimum of 100-250 GWh for each of the five RTOs and ISOs; or
- 500 to 1,000 GWh for ERCOT and PJM; or
- more than 1,000 GWh for PJM only.

In a *press release* announcing the RFI, Federal Chief Sustainability Officer Andrew Mayock said that leveraging that kind of “scale and procurement power” will allow the Biden administration to “accelerate the development of America’s emerging clean tech industries,” create jobs and help American businesses compete in global markets.

The RFI guidelines use a broad definition of carbon-free electricity, ranging from solar, wind and geothermal to nuclear, “renewably sourced hydrogen” and fossil fuels with carbon capture and storage “that meets EPA requirements.”

But the guidelines clearly lean toward renewables and set high standards for potential projects. For example, the government would prefer carbon-free procurements that provide “new or previously underutilized generation



PJM generation by fuel source | *Monitoring Analytics*

sources” and that are located within a grid operator’s service territory. The expectation is that these procurements could spur 10 GW of new clean energy development across the country by 2030, the RFI says.

Further, to avoid any appearance of greenwashing, the RFI also requires new renewable projects to come with bundled renewable energy credits (RECs), indicating that the government wants to ensure the RECS are retired, rather than being sold to offset a utility’s or corporation’s carbon emissions.

The government expects the CFE procurements “to be integrated into existing electricity procurements in a phased approach over several years, through both the transition of existing retail supply contracts, and where appropriate, new power generation procurements,” the RFI says.

The GSA and DOD want to start phasing in contracts for clean power this year, with deliveries beginning in 2023.

Noting that the DOD is one of the largest electricity users in the U.S., Deputy Secretary of Defense Kathleen Hicks said the RFI will signal

to the market the government’s intent to play a leading role in the energy transition. “It’s not just critical to addressing the threat of climate change, but also to our national security as we work to secure U.S. competitiveness in rapidly shifting global energy markets,” Hicks said.

24/7 Clean Power

The big question now is whether and how individual RTOs and ISOs will be able to meet the government’s goals. While ambitious, figures on current renewable generation and projected growth suggest the CFE procurement targets are achievable.

According to figures from FERC, renewable energy represented 85.9% of new generation in the U.S. in the first 10 months of 2021, and the National Renewable Energy Laboratory has reported that interconnection queues across the country are backed up with 750 GW of wind, solar and storage projects.

Coming up with 250 GWh may not be a big stretch for ISO-NE, which at present supplies about 500 GWh to the federal government and *had* almost 19,500 GWh of renewables, including hydro, in its generation mix in 2021,

FERC/Federal News



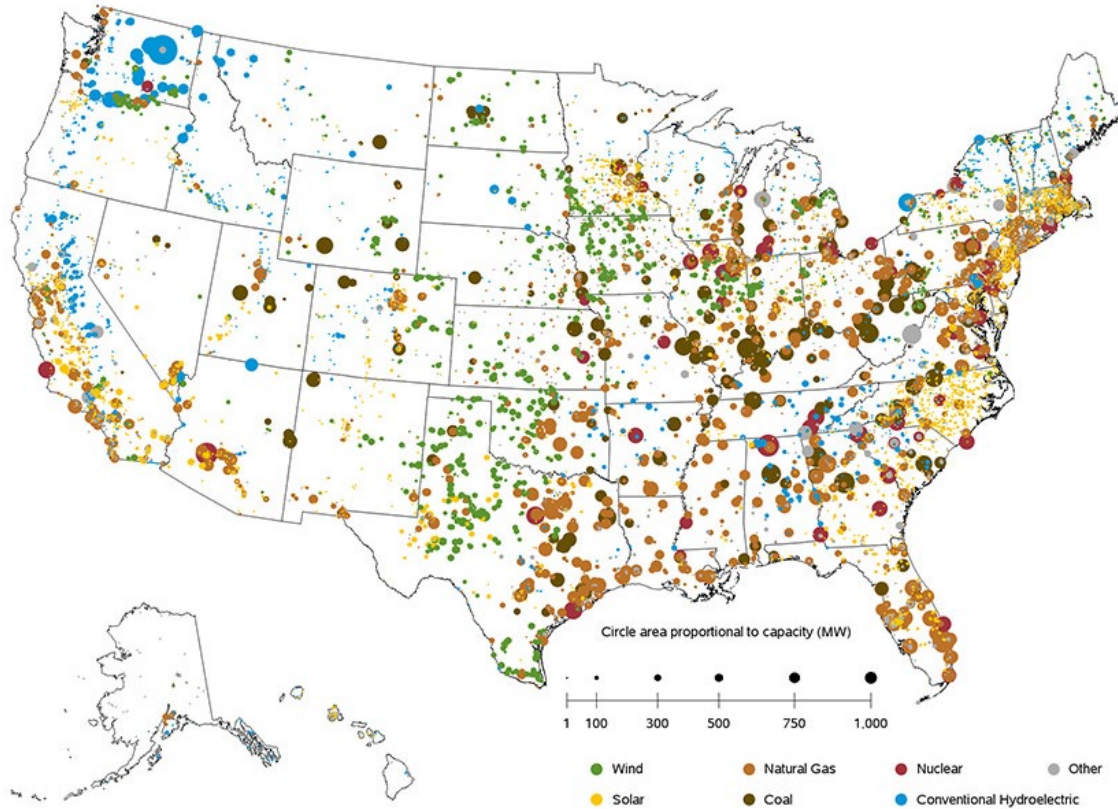
19% of its generation.

Similarly, at 7,500 GWh per year, PJM is the government's top retail market power provider and, *as of 2020*, was producing more than 30,000 GWh from wind and solar. PJM is planning to change its rules for connecting new wind and solar projects to the grid so

that shovel-ready projects will go to the head of the queue. The proposed changes would also streamline approval for projects that do not require a facilities study or any network upgrades. (See *PJM PC/TEAC Briefs: Jan. 11, 2022*.)


The bigger challenge may be meeting the executive order's requirement that 50% of

the power procured be able to match demand hour for hour around the clock. For example, the RFI guidelines do not include energy storage as part of annual calculations of 100% carbon-free energy but can be included as part of a portfolio of resources to meet the 24/7 power matching requirements. ■





Operable utility-scale generating units as of November 2021 | U.S. Energy Information Administration



National/Federal news from our other channels




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CAISO/West News

CPUC Weighing Changes to Contentious Solar Plan

By Hudson Sangree

The California Public Utilities Commission said Thursday it will delay indefinitely a vote on its controversial plan to reduce net metering payments to rooftop solar owners as it considers rewriting the proposal.

The proceeding, led by former Commissioner Martha Guzman Aceves, is now in the hands of new President Alice Reynolds, who previously served as energy adviser to Gov. Gavin Newsom.

“The assigned commissioner [Reynolds] has requested additional time to analyze the record and consider revisions to the proposed decision based on party comments,” Administrative Law Judge Kelly Hymes wrote in an email to parties in the proceeding.

“The proposed decision, which was issued on December 13, 2021, will not appear on the commission’s voting meeting agenda until further notice,” Hymes said.

In an email to clients, ClearView Energy Partners said, “We regard [this] as perhaps the strongest indicator from the CPUC to date that significant changes to the proposed decision are likely. On this point, we reiterate our long-held view that the final decision may move more toward the recommendations from solar advocates.”

The “provision most susceptible to change” is a proposed \$8/kW grid participation charge that has particularly irked homeowners, ClearView said.

California Sen. Diane Feinstein wrote to Reynolds on Jan. 25, recommending that the CPUC reconsider the grid participation charge “to spur adoption of this technology.”

“The fee structure should properly reflect the benefits of distributed generation and promote wide adoption of rooftop solar,” Feinstein said.

Newsom, too, has said he thinks the plan needs work. (See [CPUC Takes Heat on Rooftop Solar Plan](#).)

Opponents of the plan spoke in public comments at the CPUC’s Jan. 27 voting meeting for more than eight hours, leaving only a short time at the end of the day for the commission to take up its scheduled business. (The net metering proposal was expected to be taken up at the meeting, the earliest date on which it could be heard, but the CPUC did not put it on the agenda.)

The proposed decision, released in December, would reduce electric bill credits for homeowners with rooftop solar arrays by up to 80% and add the monthly grid charge to their bills. (See [California PUC Proposes New Net Metering Plan](#).)

In the decision, crafted by Guzman Aceves and Hymes, the CPUC said the current net

metering scheme unfairly shifts costs from homeowners who can afford rooftop solar to those who cannot.

It “negatively impacts nonparticipating customers, is not cost-effective and disproportionately harms low-income ratepayers,” Hymes wrote.

Estimates of the annual cost shift have ranged from more than \$1 billion to \$3.4 billion.

Opponents, led by the solar industry, have contended it will decimate rooftop solar adoption.

Homeowners who purchase rooftop solar arrays and return electricity to the grid have never paid a connection fee and are compensated at full retail rates, which are more than utility-scale solar costs. California has approximately 1.3 million rooftop solar arrays as a result of the generous incentives, advocates argue.

Those who support the CPUC’s proposed decision, including the state’s large investor-owned utilities, argue utility-scale solar is more cost-effective and can serve far more consumers than rooftop arrays.

Hymes said in her email Thursday that she would update parties on the next steps.

“After additional analysis is conducted, I will issue a subsequent ruling providing information on the proceeding schedule and details regarding the oral argument hearing,” she said. ■



The solar industry has fought the CPUC’s proposed net-metering plan. | Shutterstock

CAISO/West News

CAISO Sees \$30B Need for Tx Development

ISO Issues 1st 20-Year Transmission Plan to Reach 100% Clean Energy

By Hudson Sangree

CAISO on Feb. 1 released an inaugural draft of its long-term transmission plan, projecting a \$30.5 billion need for new high-voltage lines to transport wind power long distances across the West and to carry solar, offshore wind and geothermal power from in-state California generators to urban load pockets.

“Given the lead times needed for these facilities, primarily due to right-of-way acquisition and environmental permitting requirements, the CAISO has found that a longer-term blueprint is essential to chart the transmission planning horizon beyond the conventional 10-year time frame that has been used in the past,” the ISO said in its *20-Year Transmission Outlook*.

CAISO launched its 20-year planning process

in May, saying it was needed to help California meet its mandate to serve all retail customers with carbon-free electricity by 2045, as required by 2018’s Senate Bill 100. The ISO’s 10-year process looks at in-state needs; the long-term process considers transmission required to import wind resources from nearly 1,000 miles away in Wyoming and New Mexico.

“This type of forward-looking planning and coordination is essential to meeting the state’s energy policy goals in a reliable and cost-effective fashion and strengthening interconnections with our partners across the West,” CAISO CEO Elliot Mainzer said in a statement.

CAISO has been working with the California Energy Commission, which forecasts long-term demand, and the California Public Utilities Commission, which orders procurement,

“to begin delineating the long-term architecture of the California grid and better align power and transmission planning, resource procurement and interconnection queuing,” Mainzer said.

As its starting point, the 20-year outlook used a joint agency report from March 2021 that predicted California will need to add 120 GW of capacity to reach SB 100’s goals in the next quarter century. That will require tripling its solar and wind resources and achieving an eightfold increase in battery storage, the report said. (See *Calif. Must Triple Capacity to Reach 100% Clean Energy*.)

At the same time, the state will see a large increase in demand from electrifying the transportation and building sectors and the loss of 15 GW of natural gas generation, it said.

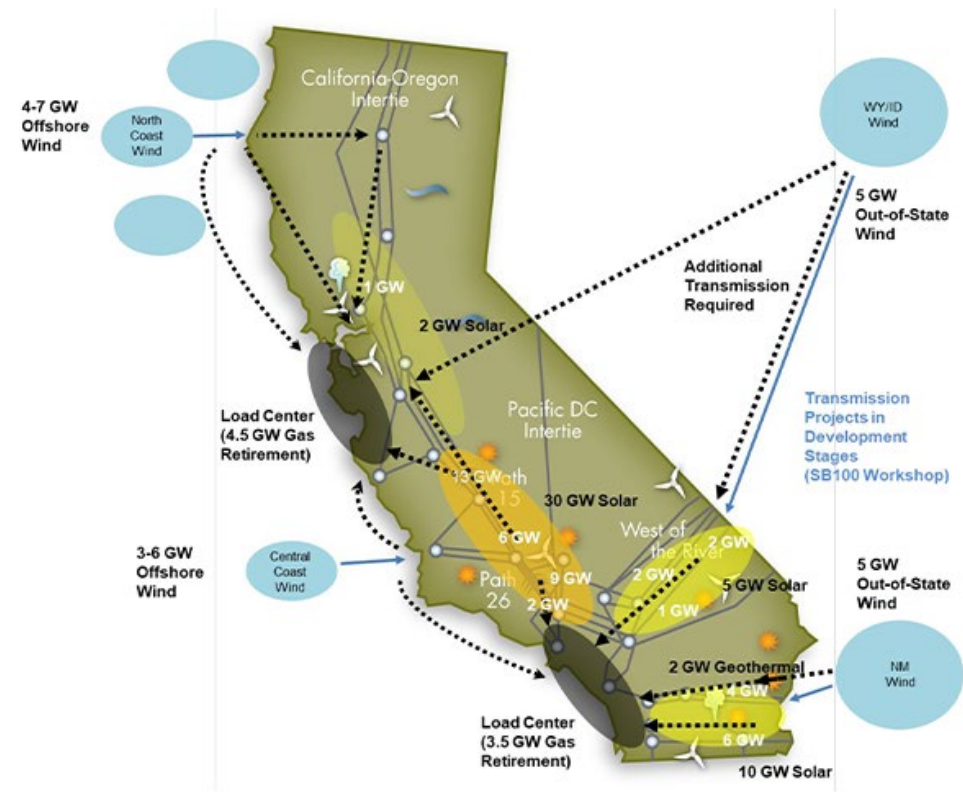
“To meet these needs, the starting point called for 37 GW of battery energy storage, 4 GW of long-duration storage, over 53 GW of utility scale solar, over 2 GW of geothermal and over 24 GW of wind generation — the latter split between out-of-state and in-state resources,” CAISO’s long-term outlook said. “The bulk of the in-state resources consist of offshore wind. These total 120.8 GW.”

CAISO next identified new transmission necessary to connect those resources to its grid.

It said the state needs \$30.5 billion in transmission development, including nearly \$12 billion for 500-kV AC and HVDC lines to carry 10 GW of out-of-state wind power from the Great Plains and Rocky Mountain states; \$11 billion to upgrade CAISO’s system with 230- and 500-kV lines to transport solar and geothermal power; and \$8 billion for 500-kV and HVDC lines to carry 7 to 13 GW of offshore wind to major urban areas.

“The 20-Year Outlook provides a baseline to establish expectations for longer-term planning, recognizing that resource planning and procurement decisions will differ over the years ahead from the assumptions used to establish this baseline,” CAISO planners wrote. “Those changes will be managed by adapting future plans around the baseline architecture in subsequent updates and in the CAISO’s annual transmission planning processes that approve and initiate specific projects.”

CAISO said it expects to continue stakeholder discussions on the long-term outlook throughout 2022. ■



CAISO’s long-term transmission outlook anticipates new lines to carry offshore wind and out-of-state wind to load centers. | CAISO

CAISO/West News

Avista, Tacoma Power Stick with March Entry into WEIM

By Robert Mullin

Washington utilities Avista and Tacoma Power will not delay their entry into the Western Energy Imbalance Market (WEIM) next month, despite the Bonneville Power Administration's decision to postpone joining by two months.

All three entities were scheduled to begin trading in the WEIM on March 2, but BPA last month said it would put off joining until May 3 to address technical and training issues among its large base of generation and transmission customers, most of which are publicly owned utilities. (See [BPA Postpones Western EIM Entry by 2 Months](#).)

Given the complex and time-consuming logistics of integrating members into the WEIM, market operator CAISO in 2018 implemented a policy of only one go-live date each year for new members, typically in early April. The ISO had already accommodated BPA by pushing this year's entry date to March, just ahead of the peak season for snowmelt and hydroelectric generation in the Pacific Northwest.

In letting the go-live date slip to May, CAISO is making another exception for the federal power marketing agency, which operates about three-quarters (15,000 miles) of the Northwest's transmission system and will greatly expand the reach of the WEIM.

"In this case, the ISO has accommodated our delay to a May timeline, just looking at all the work that's been completed and how close we are," BPA EIM Program Manager Roger Bentz said Jan. 27 during an agency workshop.

But BPA's postponement will have no impact



Tacoma Power's Mossyrock Dam is part of the Cowlitz River Project, one of four hydroelectric projects operated by the municipal utility. | Jaywm, CC BY-SA 4.0, via Wikimedia

on the timelines for Avista and Tacoma Power, which both on Jan. 31 confirmed that they plan to join the WEIM on the original schedule.

"We are not delaying our entry," Avista spokesperson Annie Gannon told *RTO Insider*. "We are staying with our date of March 2 since we are on schedule with all of our testing."

Tacoma Power will also stay the course despite its "strong dependency with BPA," spokesperson Rebekah Anderson said.

"After assessing the impacts that BPA's postponement could have on our transition plans, our EIM team determined that the risks and impacts of going live without BPA are low enough to keep the March date," Anderson

said in an email.

As a municipal utility, Tacoma Power has status as a BPA "preference customer," giving it priority access to the agency's relatively low-cost hydroelectric output and the transmission network used to deliver it. The utility also operates four of its own hydroelectric projects, which are together rated at more than 800 MW of nameplate capacity. Unlike most of BPA's preference customers, the utility operates its own balancing authority area as well.

Avista's BAA covers parts of Eastern Washington and the Idaho Panhandle. The Spokane-based utility controls nearly 3,600 miles of transmission and 1,858 MW of generation, including 1,025 MW of hydro. ■

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CAISO/West News

Western EIM Nears \$2B in Total Benefits

Record Year, 3rd Quarter Mark New Heights for Interstate Market

By Hudson Sangree

CAISO's Western Energy Imbalance Market closed 2021 with yearly economic benefits that were more than double those of any prior year, bringing the market's cumulative savings for its participants close to \$2 billion since it launched in 2014.

"The Western EIM's outstanding performance last year provides further tangible evidence of the value of broad regional market coordination," CAISO CEO Elliot Mainzer said in a [statement](#) announcing the results.

The record figures were a product of extreme weather in the West, high natural gas prices and more entities joining the EIM, CAISO said.

The fourth-quarter results announced last week showed benefits of \$204 million for the WEIM's 15 participants, which span much of the Western Interconnection. That brought last year's annual benefits to \$739 million, far exceeding 2020's previous record of \$325 million. The record year swelled the market's total benefits to \$1.93 billion.

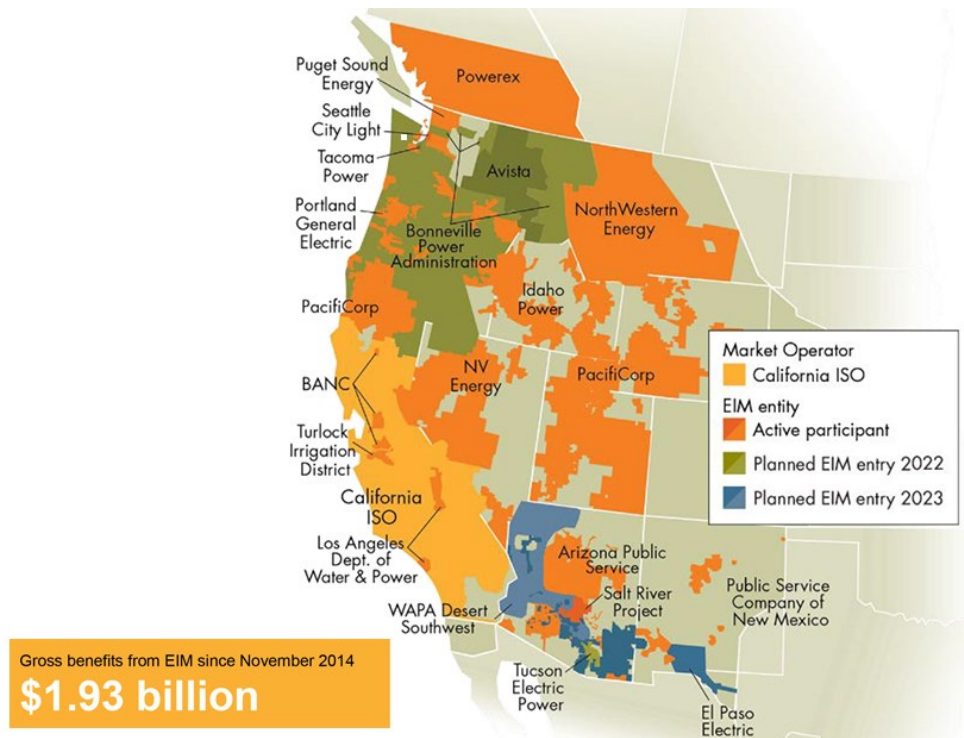
Much of last year's benefits came in the third quarter, which by itself exceeded the total annual benefits of \$297 million in 2019 and came close to 2020's annual figure. The unprecedented savings of \$301 million in Q3 2021 resulted from summer heat waves in California, the Desert Southwest and the Pacific Northwest that triggered high demand amid tight supply, pushing electricity prices higher.

Transfers between WEIM balancing authority areas (BAA) provide access to lower-cost supply in the 15-minute and real-time markets, saving many participants millions of dollars per quarter. The Balancing Authority of Northern California (BANC), for instance, accumulated \$72.5 million in benefits in Q3, while CAISO saved \$54 million.

Q4's winners included CAISO, with \$55.5 million in benefits, and PacifiCorp, which saw nearly \$40 million in benefits.

The WEIM provides a market for excess renewable resources such as wind and solar that would otherwise be curtailed.

The market saw its largest yearly expansion in 2021. New members that joined included the Los Angeles Department of Water and Power, Public Service Company of New Mexico, NorthWestern Energy, Turlock Irrigation Dis-



WEIM's wide reach in the West helped produce record benefits in 2021. | CAISO

trict and BANC members Modesto Irrigation District, City of Redding and Western Area Power Administration-Sierra Nevada Region.

The expansion boosted benefits for all participants, the ISO said.

"The quarterly benefits have grown over time as a result of the participation of new BAAs, which results in benefits for both the individual BAA but also compounds the benefits to adjacent BAAs through additional transfers," it said in its [fourth-quarter report](#).

Defections, Delays

Last week's upbeat news for CAISO arrived days after three more Colorado utilities — Xcel Energy's Public Service Company of Colorado, Platte River Power Authority and Black Hills Colorado Electric — said they had decided not to join the WEIM as previously planned and would instead join SPP's Western Energy Imbalance Service, a smaller but growing competitor. (See [Colorado Utilities Choose WEIS over WEIM](#).)

Colorado Springs Utility had announced last May it would join the WEIS instead of the WEIM. A month later, the other Colorado utilities paused their plans to join the WEIM to

explore other options. The decision made Colorado the only state in the Western Interconnection without any active or planned WEIM participants.

The Bonneville Power Authority, which was scheduled to go live in the WEIM on March 2, said last month it would postpone joining until May 3 to address technical and training issues among its large base of generation and transmission customers, most of which are publicly owned utilities. (See [BPA Postpones Western EIM Entry by 2 Months](#).)

Two other Pacific Northwest utilities, Avista and Tacoma Power, said BPA's decision would not delay their market entry on March 2. Tucson Electric Power is also scheduled to join the WEIM this year. Next year's planned entrants are Avangrid, El Paso Electric and the Western Area Power Administration's Desert Southwest Region.

By next year, WEIM participants are expected to represent nearly 80% of load in the Western Interconnection.

CAISO is going through a stakeholder process to see if it can create an extended day-ahead market for the WEIM, further expanding the capabilities of the market. ■

CAISO/West News

Oregon IOUs Seek to Nix Wildfire Plan ‘Joint Inspections’

By Robert Mullin

Oregon’s investor-owned utilities are asking state regulators to alter key provisions in a newly proposed set of rules designed to bolster utility wildfire mitigation plans.

Portland General Electric (PGE), PacifiCorp and Idaho Power on Wednesday jointly *filed* a draft of the proposed rules that eliminates a requirement that the IOUs collaborate with other users of shared utility poles, such as telecommunications and cable providers, on 10-year inspections to ensure compliance with wildfire safety standards.

Under current regulations, electric utilities are solely responsible for regular inspection of poles supporting their lines, the costs for which are recovered from ratepayers. In crafting the new rules requiring joint inspections, Oregon Public Utility Commission (OPUC) staff were looking to spread the cost of those inspections to other beneficiaries.

The joint inspection provision emerged as a

major sticking point at a Jan. 18 OPUC meeting, when the commission voted to proceed with a formal rulemaking process for the broader ruleset that includes the provision despite utility objections. The commissioners urged commission staff and the IOUs to negotiate a revision for the commission to consider before the rulemaking begins. (See *Ore. PUC Advances Wildfire Rulemaking Despite Utility Concerns.*)

The IOUs voiced concern about the complexity — and risk — of relying on joint inspections, especially for utility poles in high fire-risk areas that might have multiple users and owners.

“We have significant concerns that the proposed joint inspection mandate will cause delays to find and remediate issues found in high fire-risk zones and inevitably increase wildfire risk,” Larry Bekkedahl, PGE senior vice president of advanced energy delivery, said at the Jan. 18 meeting.

Bekkedahl said PGE preferred to continue the existing policy of solo inspections, a position backed by representatives from PacifiCorp and

Idaho Power. Commissioner Mark Thompson sympathized with the IOUs, even suggesting he was disinclined to vote in favor of the rulemaking over doubts that the commission could resolve the joint inspection issue during the formal process.

The IOUs offered a blunt solution to the problem in their redline draft, striking the definition of “joint inspection” and any additional references out of the proposed rules — an approach likely to get pushback from commission staff.

More Redlines

The redline draft also addresses the IOUs’ concerns regarding another section of the proposed rules that could put utilities in conflict with municipal codes when trimming trees away from lines in high fire-risk zones within urban areas. The IOUs’ revisions would clarify that utilities are exempt from local ordinances around tree trimming and removal in such zones, giving primacy to OPUC standards.

Last month, the utilities suggested that the commission modify those provisions to focus utility trimming operations on only the highest risk areas, typically located outside urban areas, thereby avoiding conflicts. They appeared to change tack in response to Commissioner Letha Tawney’s questions about whether municipal codes sufficiently accounted for wildfire risk, raising concerns that ignitions in populated areas could create “real havoc.”

The IOUs suggested additional revisions, giving them more latitude in responding to safety violations discovered on non-utility-owned — or “foreign-owned” — poles, including the right to issue a pole owner a notice that specifies a timeline for repair.

“If the pole owner or equipment owner does not replace the reject pole or repair the equipment within the timeframe set forth in the notice, then the operator of electric facilities may repair the equipment or replace the pole and seek reimbursement of all costs and expenses related to correction or replacement of the reject pole or equipment including, but not limited to, administrative and labor costs related to the inspection, permitting and replacement of the reject pole,” the IOUs wrote.

A utility would also be authorized to charge the pole owner a replacement fee amounting to 25% of the cost of the work.

OPUC will meet again today to discuss the wildfire mitigation plan rules. ■



PGE distribution line in Portland, Ore. | © RTO Insider LLC

CAISO/West News

Summer Hydro Outlook Iffy in California

Dry January, February Follow Wet December

By Hudson Sangree

After two extremely dry years, California's drought outlook grew more optimistic in December as major winter storms pushed mountain snowpack to 160% of average, but a rainless January and a lack of precipitation so far in February are clouding the prospects for hydroelectric generation this summer.

On Feb. 1, the state Department of Water Resources (DWR) said no snow in January meant the snowpack is now 92% of normal for the date. In the state's Mediterranean climate, mountain snowpack typically accumulates from December to February and provides water and hydropower throughout a dry spring, summer and fall.

"We are definitely still in a drought," DWR

Director Karla Nemeth said in a statement last week. "A completely dry January shows how quickly surpluses can disappear. The variability of California weather proves that nothing is guaranteed and further emphasizes the need to conserve and continue preparing for a possible third dry year."

DWR's State Water Project is the fourth largest power producer in California, and hydroelectric generation historically supplies about 14% of peak summer capacity.

The state's two largest hydropower-producing reservoirs were below half-full on Sunday. Lake Shasta stood at 36% of capacity and Lake Oroville at 46%.

The 644 MW Edward Hyatt Powerplant at Oroville Dam shut down for the first time

in its history on Aug. 5 because the lake had dropped to critically low levels. After the December storms, the plant restarted one generating unit to supply electricity to CAISO's grid.

"DWR anticipates an average outflow of about 900 cubic feet per second, which will generate approximately 30 MW of power," the department said.

How long even that small amount of generation will last remains in doubt without additional rain and snow this year.

"January has turned out to be much drier than normal for most areas, essentially leveling off any meaningful gains in snowpack made in December," the National Weather Service said Jan. 31. "A dry start to February is expected



California Department of Water Resources personnel conduct a snow survey on Feb. 1 near Lake Tahoe. | Department of Water Resources

CAISO/West News

across much of the West, likely resulting in drought persistence for many areas.”

A two-decade drought in the Southwest has strained Colorado River supplies, with Lake Mead behind Hoover Dam and Lake Powell behind Glen Canyon Dam dropping so low that hydropower generation could cease. (See *Western ‘Megadrought’ Curtails Hydropower* and *Western Drought Puts Hoover Dam Hydropower at Risk.*)

California has seen two of its driest years ever.

Snow water content in California peaked at 60% of normal in 2021 after a similarly dry winter in 2020, CAISO said. The ongoing drought reduced hydropower by 1,000 MW in 2021, the California Public Utilities Commission and California Energy Commission said last summer.

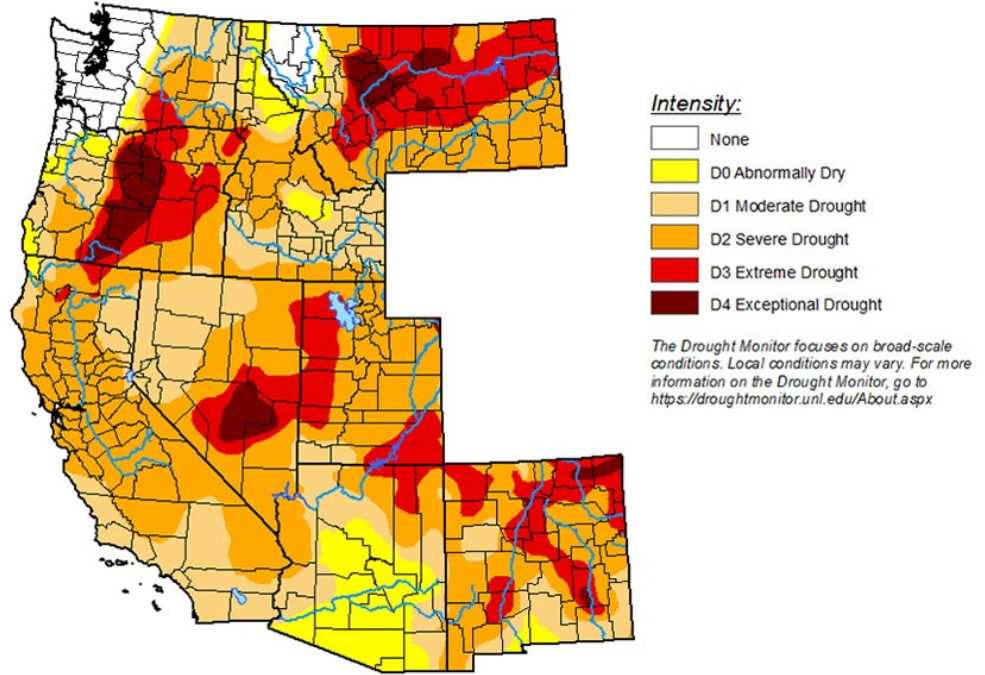
‘Big Hedge’ Against Falling Hydro

This summer’s hydropower supply is questionable, CAISO CEO Elliot Mainzer said in an interview with RTO Insider on Friday.

“We’re likely to be in somewhat better condition, but there is certainly no real sign that this broader trend of drought has really abated yet,” Mainzer said.

“Everybody’s now really carefully watching what February and March are going to hold,” he said. “We still certainly have the potential for some additional precipitation ... but it is going to be a critical variable.”

The addition of hundreds of megawatts of solar generation and battery storage should help alleviate a hydropower shortfall, he said. The state drove a massive scale-up in battery storage after the rolling blackouts of August 2020, adding 2,250 MW by the end of last year to store solar power for peak evening use.



The latest U.S. Drought Monitor map shows severe to exceptional drought persisting across much of the West in February. | U.S. Drought Monitor

(See *CAISO Sees ‘Explosive’ Growth in Storage in July.*)

California’s energy crises in the past two summers occurred during Western heat waves, when air conditioning demand stayed high after sunset, with limited imports available.

A similar scale-up is on track this year, Mainzer said.

“Right now, by June 1, we’re anticipating an additional 2,100 MW of storage, 1,200 MW of solar, 200 MW of wind, 40 MW of hydro, 30 MW of natural gas and 11 MW of biofuels,

totaling 3,581 MW, of which 2,180 MW will be available at the net peak” on hot summer evenings, he said.

“So, the big hedge against continued decline in hydro is just working as diligently as possible to get the resources that have been ordered to be procured by the California Public Utilities Commission and other regulatory authorities onto the system,” Mainzer said. “We are super focused on interconnection capacity and working with the utilities to make sure that we get those resources onto the system without delays.” ■

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CAISO/West News

Polis Speaks on Colorado's Carbon-free Future

By Rebecca Santana

DENVER — Gov. Jared Polis last week joined energy industry stakeholders at the Colorado Solar and Storage Association's 2022 Solar Power and Energy Storage Mountain West Conference to discuss the state's future renewable energy economy.

Despite having trekked through a foot of snow to make it to the Feb. 2 conference, Polis was grateful to be able to speak for a live audience.

Writing in Colorado's *Greenhouse Gas Pollution Reduction Roadmap* issued in January, Polis said that GHG reduction commitments from electric utilities are key to meeting the state's carbon goals.

On Wednesday, the governor announced that most of the state's largest utilities have submitted required clean resource plans showing regulators how they plan to achieve 80% emissions reduction compared to 2005 levels by 2030. He believes it's possible that utilities will reduce emissions beyond the 80% goal.

"That's the floor not the ceiling, but it's a very, very aggressive floor," he said.

Coal plant retirements are also an important piece of the state's climate plan. As aesthetically displeasing as they are bad for air quality, coal plants are "urban blights" that only cost

ratepayers more money, Polis said.

"Coal is our most expensive form of electricity in Colorado ... and we really have to ask ourselves how long are we going to force Coloradans to pay more on their electric bills just to keep our coal plants going?"

With many of the state's utilities moving toward carbon-free generation, Polis is most interested in keeping these renewable energy projects as low-cost as possible. With some "downward pressure" on the solar industry, Polis is optimistic that solar projects could come in under 3 cents/kWh, but he lamented the supply issues and costs the industry faces.

"We hope that President Biden discontinues the tariffs for China. That will help a lot," he said. "Because whenever you think of the geopolitical landscape ... the clean energy transition is something that should bring us together. We need the lowest cost solar panels possible, and I don't care where they're made. We need to get them done; we need to get the cost down."

On Friday, Biden extended the tariffs, but softened the blow by continuing an exemption for bifacial panels and doubling the amount of imports that can enter the country duty free each year, from 2.5 GW to 5 GW. (See *Biden Extends Tariffs on Imported Solar Panels*.)

Colorado has also made efforts to decarbonize buildings and transportation. Polis touted that, as of last month, electric vehicles made up 13% of the state's total new vehicle sales.

Besides promoting EV sales, Polis hopes the state can modernize transportation as a whole with money state regulators budgeted to help improve air quality.

"In November, as part of our state budget, we proposed nearly half a billion dollars of one-time investments to improve air quality and accelerate the adoption of clean technology that improves the health of all Coloradans and helps Colorado meet our climate goals," Polis said.

The state hopes to use the funds to "improve transit opportunities, electrify school buses ... replace the state's oldest, polluting diesel trucks and grow the market for electric bicycles, giving rebates for rideshare programs and subsidies for low-income folks to be able to commute to work on e-bikes."

Planning Ahead: Organized Markets

Looking to the next decade, Polis said joining an organized market will be integral to achieving the state's long-term climate goals.

"In 2019, I signed into law the Colorado Transmission Coordination Act, which directed the PUC [Colorado Public Utilities Commission] to investigate the possible merits of joining an organized market," Polis said.

In December, the PUC released a *report* saying that state utilities could save up to \$230 million by joining a wholesale electric market. (See *Colo. PUC: State Could Save up to \$230M in Wholesale Market*.)

"We now know what we suspected: that Colorado's participation in a regional market is likely to reduce costs, improve the safety and reliability of the grid and advance our climate and clean energy goals," the governor said.

In January, Xcel, Public Service Company of Colorado, Platte River Power Authority and Black Hills Colorado Electric chose to join SPP's Western Energy Imbalance Service, which Polis described as "progress in the right direction." (See *Colorado Utilities Choose WEIS over WEIM*.)

"A Western market is really an important part of reaching our clean energy goals faster and at a lower cost," he said. ■



Gov. Jared Polis speaks at COSSA's Solar Power and Energy Storage Mountain West Conference. | © RTO Insider LLC

ERCOT News



ERCOT's Jones Works to Regain Texans' Trust

By Tom Kleckner

One day at a time, one person at a time.

That is what it will take ERCOT to regain the trust of Texans scarred by last February's disastrous winter storm, interim CEO Brad Jones told *RTO Insider* on Feb. 1.

To illustrate his point, Jones related his chance encounter with a woman following a town hall meeting in the Dallas suburb of Coppell. It was one of three dozen or so stops on his listening tour that eventually became a "blur," but one of few he won't soon forget.

He and another staffer were walking to their car in the parking lot, hoping they wouldn't find their tires slashed. A woman then approached Jones and the staffer, who reacted warily.

"Living in Austin, I assumed she was going to ask us for money," Jones recalled. "She grabbed both my hands and told me her story, what she had been through and how it had affected her family. I told her how important it was to us to ensure that doesn't happen again.

"And then she said the most amazing, most Texan thing to say," he said. "She said, 'I will pray for everyone in ERCOT,' and then she disappeared back into the darkness. Being true to my promise to that woman is why I'm here."

Jones followed that up with a second story dating back to a conservation alert last summer, when ERCOT asked its consumers to reduce their energy usage to compensate for a drop in wind production amid thermal maintenance outages.

Speaking from the grid operator's operations center in Taylor, where he keeps a cot in his office, Jones said a buddy happened to be in town during the conservation alert and visiting his Austin home. The friend called his girlfriend in San Antonio to see how she was doing.

"She blasted back, 'I'll be a lot better when that [expletive] at ERCOT lets me turn up my air conditioning,'" Jones said. "I understand that frustration and anger. I also applaud that she believes it was a responsibility that every Texan should take on, to help other Texans."

Of course, it will take more than prayers and Texans' conservation measures for ERCOT to comfortably meet demand during the current winter storm. Nor do staff see this storm as a test; they see it as normal business, Jones said.

"After listening to [customers'] stories, it makes it so much easier to discuss with them the improvements we're making and to build confidence in what we're trying to achieve," Jones said. "One afternoon or evening in Midland is not going to change the people of Midland and rebuild their trust, but it's a place to start, right? I've told them that in order for us to rebuild their trust, it's not operating one winter well or five winters well. It's 100 winters well, but we have to start somewhere."

So far, so good. The grid operator's December inspections of power plants found nearly complete compliance with the state's new winter readiness regulations. Staff reported almost 7 GW of generation outages Thursday afternoon, below what staff say is normally 10 to 12 GW.

The grid operator's conservative approach to the grid has resulted in more than 9 GW of reserves Thursday afternoon, thanks partially to wind resources' overperformance. Wind was accounting for about 27% of the grid's production during the middle of the day Thursday.

"The grid remains strong, reliable, and it is performing well in this winter weather event," Public Utility Commission Chair Peter Lake said during a Thursday press conference.

ERCOT expected demand to peak around 73.5 GW on Friday morning, which would exceed last year's record winter peak of 69.2 GW before the load sheds began. Experts and academics have concluded demand could have reached 77 GW or higher last year, had the grid operator not been forced to cut load and compensate for the loss of about 50 GW of generation.

Local customer outages reached 70,000 at one point Thursday but had dropped to almost 37,000 as nightfall approached, according to [PowerOutage.us](#). Texas Gov. Greg Abbott said 10,000 restoration crews are currently at work, with another 2,000 expecting from neighboring mutual assistance utilities.

Of more concern are natural gas supplies. As has been frequently noted, the state's gas industry has not been required to winterize its facilities yet, something that is a year or two off. Bloomberg [reported](#) Thursday that 5% of the country's gas production has been knocked offline by the freezing weather and that production declines will continue.

Jones has a plan there. Given the lack of transparency into the natural gas transportation system, he told the ERCOT Board of Directors last month that he wants to add a gas desk in the operations center to monitor gas availability or restrictions. (See [ERCOT Preps for 2nd Cold Snap of Year](#).)

"That covers the biggest weakness we have," Jones said, noting ISO-NE and NYISO already have similar desks. ERCOT first looked at the idea in 2015, but Jones thought it a wasted effort "because we'll never get the information we need from the gas companies."

However, with the new Texas Energy Reliability Council, power and gas representatives are in the same room for twice-weekly meetings, exchanging information and conversation.

"It's really encouraging. I think we can fill that [information] gap," Jones said. ■



ERCOT CEO Brad Jones speaks to the media following a December stop on his listening tour. | © RTO Insider LLC

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ERCOT Technical Advisory Committee Briefs

TAC Members Look for Direction on Stakeholder Process

ERCOT market participants again expressed their concerns last week with potential changes to the stakeholder process following discussions during last month's Board of Directors meeting.

The newly reconstituted board reviewed the grid operator's corporate governance structure and project portfolio and discussed bylaw revisions and other changes. The directors also pressed staff on the many system projects they are working on. (See "Board Discussions," *Texas PUC Pushes ERCOT on Market Changes*.)

It followed a tense Technical Advisory Committee meeting in July, when members pushed back against interim CEO Brad Jones' proposal to convert the committee into one "comprised of senior-level members from each ERCOT member organization." An August workshop to discuss TAC's future membership and its interaction with the incoming board was canceled. (See "Members Push Back Against Revamped TAC Structure, Conservative Ops," *ERCOT Technical Advisory Committee Briefs: July 28, 2021*.)

TAC currently has 30 members comprising primarily subject-matter experts representing

six different market segments. Some members argued last summer that adding officer-level representatives would only slow the committee's work down.

Morgan Stanley's Clayton Greer, representing the independent power marketer segment, asked during TAC's Jan. 31 meeting whether the board, which met in lengthy executive sessions during the two-day meeting, had given any direction to "reformat" ERCOT's stakeholder process.

"It sounded like they wanted some change, but there was no direction," Greer said.

South Texas Electric Cooperative's Clif Lange, TAC's chair, attended the board meeting. He told Greer that what he heard was more informational for the board and intended to give the directors comparisons between ERCOT's and other grid operators' governance structures.

"Nothing I heard that day gave us any direction

for us to do anything at this point," Lange said. "It's certainly within the purview of the board to determine how they want to establish their committees and subcommittees. I didn't get the feeling from the room that there was any immediate move to want to do that.

"Whether board members are discussing that offline, something we're not privy to, that could be ongoing," he added.

Greer noted the "pile of stuff that we go through as stakeholders" and asked again whether there was a plan to create a better process or methodology for managing change requests.

"The work that gets done ... it can be managed any number of ways," he said. "We selected [the current process] ... because for the most part, it's been effective. It gives a fair hearing to everything and gives everybody a chance to vote on these things. Without a problem statement or understanding what we're doing wrong, I don't get how we can get to a better spot without direction."

Lange allowed that ERCOT's stakeholders are "keenly interested" in any decisions the board may make on the stakeholder process' future, telling *RTO Insider* that he is optimistic the board "still finds value in the collaborative efforts of stakeholders, ERCOT and the" Public Utility Commission of Texas.

"It would be a shame if the stakeholder process was abandoned or significantly diminished, since extraordinary work products have come forth from that collaborative process over the last 20 to 25 years, including the nodal market design and implementation, real-time co-optimization, and ancillary services redesign," Lange said. "That all occurred while meeting the challenges of tightening reserve margins and with the unmatched integration of significant renewable and storage assets.

"ERCOT does a great job in identifying reliability and market flaws and in defining the objectives that they want to target to address those findings, but they don't always have the in-house capability to understand the full ramifications of their objectives," he said. "Stakeholders collectively see the full range of impacts, including financing, development and construction; wires and generator operation; the retail markets; and ultimately the impact to consumers. It is this expertise, combined with the expertise and policy direction provided by ERCOT and the PUCT, that helps to provide a more comprehensive solution. I strongly hope



Clayton Greer, Morgan Stanley | © RTO Insider LLC



TAC Chair Clif Lange (right) catches up with ERCOT CEO Brad Jones during December's board meeting. | © RTO Insider LLC

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the new board finds value in the stakeholder process and the debate that has allowed for some very good and comprehensive solutions to be developed.”

ERCOT has already responded to the board discussion by creating a *Technology Working Group* that provides a forum to share information; review, analyze and develop best practices; and improve market participants’ and the grid operator’s information and operational technology systems and software applications.

The group will be independent of the TAC subcommittee structure, similar to the Regional Planning Group and the Gas Electric Working Group. It is scheduled to hold its first meeting *Thursday*.

Staff Rushes Firm-fuel Product

ERCOT staff have drafted a nodal protocol revision request (*NPRR1120*) that creates a firm-fuel reliability product as directed by state legislation last year and the PUC.

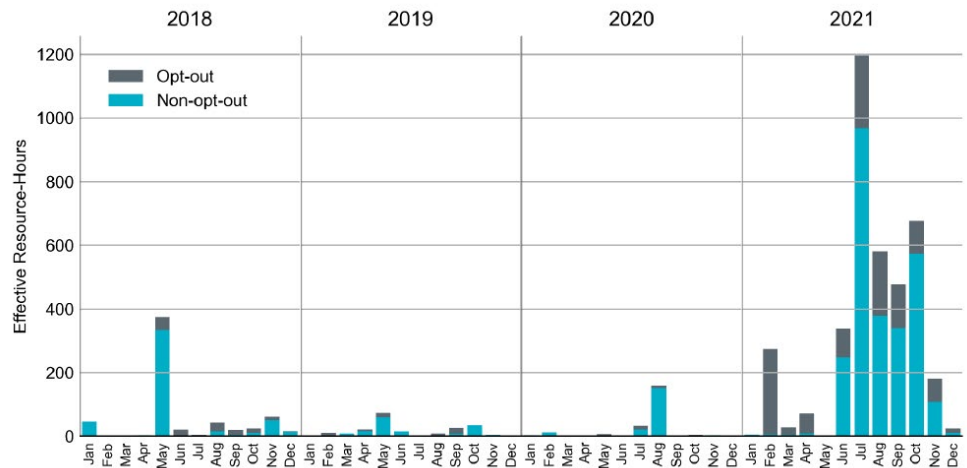
The commission’s *first phase in redesigning the ERCOT market* calls for a standalone, auction-based product that is procured similar to ERCOT’s black start program. The PUC sees the firm-fuel product compensating dispatchable generation resources that meet a higher standard of “firm” winter-weather resilience and reliability and serving as a stopgap should weatherization not be incorporated into a load-serving entity obligation. (See *PUC Forges Ahead with ERCOT Market Redesign*.)

Kenan Ögelman, ERCOT’s vice president of commercial operations, told TAC that in order to deliver the service by next winter, staff are focusing on the “long pole in the tent,” which is completing the settlement and billing system’s changes. He said additional requirements will be reflected in a request for proposals that will quickly follow the NPRR’s approval.

“We’re going to take more time to develop and will put those parameters into the RFP to procure the service,” Ögelman said. “The commission has asked for more time to weigh in on those parameters.”

Greer pointed out that TAC would be expected to pass the NPRR’s language regardless of its accuracy. “I don’t know how you create a straightforward RFP unless you have on-site storage capacity,” he said, adding that coal piles and nuclear rods should also be considered.

“There is an interest is going beyond on-site fuel oil. We want to leave that possibility open, but that would require another RFP and potential protocol language,” Ögelman said. “There are going to be gaps in the RFP that



Reliability unit commitments have soared with ERCOT’s conservative approach to grid operations. | ERCOT

will make the RFP pretty not standard and non-substantial. There are a lot of requirements for the resources that will have to be in the RFP to get this NPRR through.”

Members and staff agreed to set up a workshop to hash out further details on the NPRR and RFP. In the meantime, the Protocol Revision Subcommittee is scheduled to vote on the NPRR during its *Wednesday meeting*. Staff hope to have the board consider the measure during its March 7-8 meeting.

RUC Usage Skyrockets

ERCOT’s heavy use of reliability unit commitments (RUCs) last year as part of its conservative operations approach resulted in 4,052 instructed resource-hours and 3,853.1 effective resource-hours, an 18-fold increase from 2020. The bulk of those hours (3,361, or 87%) came to meet capacity needs during the latter half of the year, when the grid operator began deploying more resources sooner to improve the system’s reserve margin following last February’s disastrous winter storm.

The difference between “instructed” and “effective” values is because of resources starting up, shutting down, partial hour instructions or otherwise not being dispatched.

ERCOT only called for 224 RUC instructed resource hours in 2020, resulting in 220.1 effective hours.

“Compared with previous years, the size of resources getting RUC’ed has not changed much,” ERCOT’s Dave Maggio said.

Last year, ERCOT issued approximately \$5.3 million in make-whole payments, almost exclusively covered through capacity-short charges. The total RUC claw-back charge was about \$3.1 million.

The Independent Market Monitor is sponsoring *NPRR1092*, currently before the Protocol Revision Subcommittee. The measure would reduce the \$1,500/MWh RUC offer floor, designed for a market construct where RUCs were expected to be self-committed.

Texas PUC Chairman Peter Lake supports the NPRR and has *filed a memo* siding with its \$75/MWh offer floor. He said that will still allow resources to increase offers in accounting for higher fuel prices and will be consistent with non-spinning reserves’ price floor.

“We expect to expect to see improved performance of self-committed resources,” IMM Executive Director Carrie Bivens said.

Stakeholders Eye Load Resources

TAC and staff agreed to work together in creating a task force and scheduling a workshop to address load resource issues as Texas becomes a haven for cryptocurrency miners and other loads that can add energy to the grid. Several stakeholder groups have discussed load resource issues, including how to price them and whether they are controllable resources.

Texas Gov. Greg Abbott and U.S. Sen. Ted Cruz (R) have led the charge in *encouraging Bitcoin miners* to set up shop in the state, where their ability to shut down quickly can help the grid during scarce conditions. The Texas Blockchain Council lobbying group says there are already more than two dozen crypto miners in the state.

“Clearly, when the governor and a U.S. senator invite cryptos to come to town, we need to figure out quickly how we can get them reliably connected to the grid,” energy consultant Bob Wittmeyer said. “This issue is much bigger than

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crypto, which can potentially add hundreds of megawatts to the grid in a period of months. We need to move pretty expeditiously here. We've got [transmission and distribution] issues, different metering configurations, co-location issues and issues with resources that choose not to be controllable load resources. We really need to talk about this from multiple levels."

Several stakeholder groups have already discussed issues surrounding load resources and floated a scope document for the task force. Staff said they need time to better understand the issues before hosting a "meaningful" workshop.

"We need a basics-type of discussion on what these loads are," Greer said. "It sounds like a lot of these business plans for these guys involve co-locating with either energy storage or generation, or both."

Greer noted that passage of *NPRR945* in 2020 also introduced bypass issues that need to be discussed. The measure defined electric configurations that are eligible for net metering. (See *ERCOT Technical Advisory Committee Briefs: Oct. 28, 2020*.)

TAC agreed with Lange's proposal to have stakeholders and staff begin laying out ideas and bring them back for the committee's Feb. 23 meeting. The workshop will be held at the

TAC meeting, and the task force could be established in March.

Staff Work to Improve Communications

ERCOT staff worked to ease members' concerns as last week's winter storm approached, telling them that internal and external communications have both been improved.

"Right now, everything is business as usual at ERCOT," Chris Schein, interim communications leader, said in providing TAC an update on the grid operator's efforts.

Schein said ERCOT now conducts daily calls with market participants' communicators; it has set up a regular cadence for external messages; and it has completed internal and external audits of its communications practices. The internal audit looked back at ERCOT's communications during the storm, and the external audit looked forward at best practices to address insufficient staffing, inconsistent messaging, uncertainty among the market's communicators and flawed energy emergency alert (EEA) communications.

The grid operator had fewer than two staffers devoted to media communications during last year's storm, "insufficient for an organization the size of ERCOT," Schein said. Outside contractors will help it "dial up or dial down" communications as needed, he said.

"Frankly, ERCOT, under the leadership of Brad Jones, has clearly communicated that we are going to be aggressive in calling for conservation alerts," Schein said. "It's an effective tool for ERCOT to use. We've been working very hard the last seven months with the news media so they understand conservation alerts do not mean EEAs."

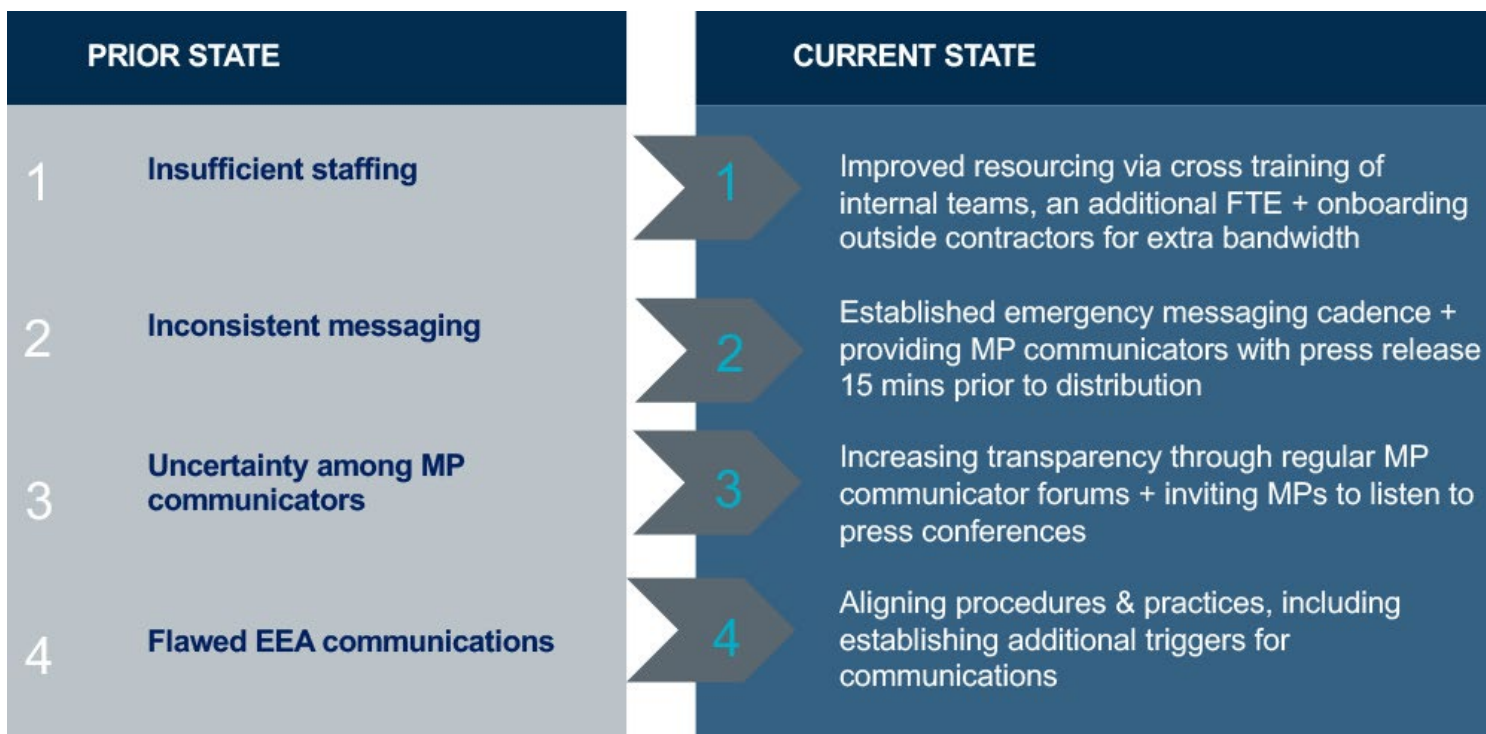
Mark Dreyfus, who represents several cities in the commercial consumer segment and who requested the update, said communication is a two-way street and that many of his constituents need to trust the messages they're receiving from ERCOT during an emergency.

"I just don't think we're there because of the dramatic loss of trust in the community that occurred [last year] with the storm," Dreyfus said. "We have to engage with those groups to ensure ERCOT is a trustworthy source of information."

Indeed, a recent *University of Houston survey* found that if there are more power outages because of cold weather, 70% would hold the grid operator responsible.

Schein agreed ERCOT lost trust during last year's winter storm. "I'm not making any judgments as to whether it was worthy or not, but it happened," he said.

"Building trust takes years; losing trust takes seconds. We are in the process of rebuilding



ERCOT has made changes to improve its communications. | ERCOT

ERCOT News



trust. It will take time,” Schein said. “We’re at a phase now where it’s trust and verify. We not only have to say things; we have to live up to things so these various audiences will look at us and say, ‘Yes, they did what they said they were going to do.’”

Lange Re-elected TAC Chair

Committee members re-elected Lange and Just Energy’s Eric Blakey to serve once again as their chair and vice chair, respectively, this year.

ENGIE’s Bob Helton, who nominated Lange and Blakey, said he did so because their leadership during a “very difficult year ... got us to some places we needed to go.” Helton, who has served as both chair and vice chair, said he looked forward to working with them to finish up ERCOT’s market designs and other issues.

“We have a lot of ground to cover, particularly with the ongoing market-reform issues and anything else that pops up that is unforeseen now,” Lange said. “We’re looking forward to another great year, and a challenging year, for sure.”

Members also confirmed TAC’s subcommittee chairs and vice chairs for 2022:

- **Protocol Revision Subcommittee:** Martha Henson, Oncor, and Melissa Trevino, Occidental Chemical.
- **Retail Market Subcommittee:** John Schatz, Luminant Generation, and Deborah McKeever, Oncor.
- **Reliability and Operations Subcommittee:** Chase Smith, Southern Power, and Katie Rich, Golden Spread Electric Cooperative.
- **Wholesale Market Subcommittee:** Resmi Surendran, Shell Energy, and Ivan Velasquez, Oncor.

HCAP, ORDC Fixes Comply with PUC

TAC unanimously approved its combo ballot, which included two other binding document revision requests (OBDRRs) related to recent PUC orders to reduce the high systemwide offer cap (HCAP) from \$9,000/MWh to \$5,000/MWh and to raise the operating reserve demand curve’s (ORDC) minimum contingency level from 2,000 MW to 3,000. Both changes were effective Jan. 1. (See [PUC Forges Ahead with ERCOT Market Redesign](#).)

OBDRR037 caps the power balance penalty curve at \$5,001/MWh (the HCAP plus \$1/MWh), effectively setting the curve’s price at its maximum value when violations are above

100 MW. The measure also reduces the generic transmission constraint shadow-price cap for base case voltage violations from \$9,251/MW to \$5,251/MW. Gray box language describes how the curve will work with the new HCAP upon real-time co-optimization’s implementation.

OBDRR038 updates the ORDC’s minimum contingency level to 3,000 MW within the relevant methodology document.

The combo ballot also included seven NPRRs, two Nodal Operating Guide revision requests (NOGRRs), an additional OBDRR, two modifications to the Retail Market Guide (RMGRRs), three system change requests (SCRs), and single changes to the Planning Guide (PGRR) and the Verifiable Cost Manual (VCMRR).

- **NPRR1095:** contains revisions that the Texas Standard Electronic Transaction (Texas SET) Working Group has determined are necessary to support the Texas SET V5.0 improvement list.
- **NPRR1098:** establishes reactive power capability requirements for new DC ties interconnecting to the ERCOT system and existing DC ties replaced after Jan. 1.
- **NPRR1099:** grants ERCOT greater authority to move a resource node in the network operations model when deemed necessary to properly reflect point-of-interconnection (POI) changes or resource retirements.
- **NPRR1102:** allows ERCOT to adjust back-casted non-interval data recorder load profiles.
- **NPRR1111:** expands the use of the security-constrained economic dispatch (SCED) base point below the high dispatch limit flag to signify that ERCOT has instructed an intermittent renewable resource (IRR) or DC-coupled resources not to exceed its base point.
- **NPRR1113:** adjusts the real-time ancillary service imbalance payment/charge’s definitions to prohibit double-counting of the regulation-up schedule when calculating capacity in the imbalance settlement for controllable load resources available to SCED.
- **NPRR1114:** establishes processes to assess and collect securitization uplift charges to qualified scheduling entities representing LSEs pursuant to one of the PUC’s two debt obligation orders (52322).
- **NOGRR234:** revises the guide to be consistent with NPRR1098’s reactive power capability requirements for DC ties, specifying DC tie

operator responsibilities related to real-time operational voltage control.

- **NOGRR235:** corrects blackline and gray box language associated with **NOGRR210** and **NOGRR227**.
- **OBDRR034:** allows ERCOT to move network operations model resource nodes for POI changes or resource retirements.
- **PGRR099:** provides that an entity will not be eligible to begin or maintain a generator interconnection or modification (GIM) if it or any other owner of the project meets any of the company ownership (including affiliations) or headquarters criteria listed in the state’s Lone Star Infrastructure Protection Act. Any entity that seeks to initiate a GIM will be required to submit an attestation confirming that it does not meet the statutory criteria.
- **RMGRR166:** revises the timing for retail electric providers to access the daily switch hold files that are posted by the transmission and/or distribution service providers.
- **RMGRR169:** updates the Texas SET’s continuous service agreement (CSA) bypass validations at ERCOT; allows for rejection of move out (MVO) transactions if the CSA owner and MVO competitive retailer (CR) do not match; allows ERCOT to issue a move in transaction for the appropriate CSA CR when an MVO is submitted; and revises the inadvertent gain process to align with SCR817’s proposed MarkeTrak enhancements.
- **SCR816:** unlocks congestion revenue right bid credit on the same day auction results are posted.
- **SCR817:** adds validations/requirements to existing MarkeTrak subtypes, revises existing workflows and suggests new subtypes to align with current market practices for more efficient issue resolution.
- **SCR819:** improves dispatch of base points to resources to account for the ramping of un-curtailed IRRs.
- **VCMRR032:** clarifies that the average run time per start is calculated by dividing the total running hours by the total number of starts during the 20-consecutive-day period. It ensures that at a minimum, one start will be used in the calculation of the average run time per start when the resource is operating on the first interval of the first day of the 20-consecutive-day period. ■

— Tom Kleckner

ERCOT News



ERCOT Breezes Through Latest Winter Storm

SPP, MISO also Experience Milder Conditions than in Feb. 2021

By Tom Kleckner

ERCOT comfortably met demand during last week's latest round of winter weather, a welcome change from last February's disaster under much more severe conditions.

Demand peaked at 68.9 GW Friday morning, far short of early projections of 75 GW and failing to eclipse record demand of 69.2 GW set during last year's winter storm. Had demand reached last February's estimated 77 GW that came after widespread and dayslong outages began, ERCOT would have handled that too, as it had as much as 22 GW of reserve capacity at times.

Customer outages topped out around 70,000 on Thursday, a result of ice accumulation and falling tree limbs on power lines. It was a far cry from the millions that were left without power for days last February. By Monday morning, Poweroutage.us was tracking 7,500 outages in Texas.

The weather helped too. Temperatures were not as low as they were last February, dipping into the 20s rather than single digits, with not more than 3 inches of snow falling north-west of Dallas. Houston's low Friday was 26 degrees Fahrenheit, double last year's low of 13 degrees, and sub-freezing temperatures lasted only 18 straight hours, compared to 44 consecutive hours in 2021.

Renewable energy, which initially took the fall from Texas politicians for last year's shortfall, overperformed last week. Staff said that at times, wind farms were providing nearly a third

of ERCOT's power supply.

The ERCOT grid came within minutes of a total collapse last February as more than 51 GW of mostly thermal generation was rendered inoperable by freezing temperatures and ice. (See [ERCOT: Grid was 'Seconds and Minutes' from Total Collapse](#).)

Legislation passed in the wake of last year's storm required all generation resources to be weatherized and allowed plants to burn alternative fuels, such as fuel oil. The grid operator released a [winterization report](#) last month that said 321 of 324 generation units and transmission facilities passed their inspections.

During a press conference Friday with Texas Gov. Greg Abbott and other agency officials at the state's emergency operations center in Austin, interim ERCOT CEO Brad Jones said no significant power plant outages were reported — about 7.5 GW — and the number of resources that failed were below expectations.

"We believe the weatherization and our preparations have been extraordinary and are pretty successful," Jones said.

Even the state's natural gas system, widely seen within the electric industry as its Achilles' heel, came through. There were some early production drops that regulators said did not cut into supplies — nothing like the 50% drop in production last year.

"We are operating as expected with natural gas coming into the system," Texas Railroad Commissioner Christi Craddick said Friday. "Fluctuations in production have been brief



Alison Silverstein | Advanced Power Alliance

and expected."

The Railroad Commission, which regulates the state's oil and gas industry, has yet to draft new weatherization requirement that likely won't be in place until 2023.

Abbott was quick to jump on the grid's performance. "The Texas electric grid is more reliable and more resilient than it has ever been," he said during the briefing.

The governor later listed on Twitter the improvements he said had been made to the grid. "Fear-mongers should be ashamed," he [tweeted](#).

"Happily, this storm was not an arctic event, so the bulk power system held up well," said Alison Silverstein, an Austin-based energy consultant and former FERC and Texas Public



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ERCOT News



Utility Commission staffer. “But Gov. Abbott exaggerates the grid’s readiness for very cold winter weather.”

“Texas got lucky. The weather wasn’t that bad ... so demand stayed below projections,” Stoic Energy president Doug Lewin said.

Silverstein told *RTO Insider* that ERCOT’s grid is “certainly more reliable and resilient” than it was before last February’s winter storm. She credited power plant winterization requirements, the PUC’s restructuring of energy pricing through a lower price cap and a modified operating reserve demand curve, and enabling additional demand response.

But, she cautioned, there is more work to do before the grid can be considered “truly more reliable and resilient.”

“ERCOT needs to better understand and serve short-term fast-ramping operational needs with resources like fast generation, demand response, batteries and virtual power plants. ERCOT also needs to improve its load forecasting and seasonal adequacy assessment

methodology,” Silverstein said.

“But the simplest, lowest-cost way to make the ERCOT grid more reliable is to invest in energy efficiency for Texas homes and businesses, because lower, more manageable loads make it easier for the grid to be reliable and resilient every single day,” she said.

Silverstein said her biggest worry is “no one’s sharing the math for how much all of the ERCOT’s conservative operations measures are going to cost or whether the PUCT’s new market proposals are going to work, and at what cost.”

SPP, MISO Handle Demand

SPP returned its Eastern Interconnection footprint to normal operations Friday afternoon, saying it had enough generation to meet demand and available reserves, and that it did not foresee extreme or abnormal reliability threats.

The RTO issued weather and resource advisories earlier in the week but never resorted to conservative operations. Demand peaked

at 40.6 GW Thursday morning, well below the grid operator’s record winter peak of 43.7 GW set last February.

Spokesperson Meghan Sever said icing outages and derates of wind resources were significantly less than predicted, as much of the icing occurred south of SPP’s main wind corridor. She credited action steps taken from the RTO’s [comprehensive review](#) of its response to the 2021 winter storm and the weather and resource advisories issued last week as helping meet the footprint’s demand.

MISO officials also used lessons learned from previous winter storms to “anticipate operational needs and identify solutions as quickly as possible” in easily meeting demand.

The RTO issued a severe weather alert and conservative operations for its Central region and Arkansas on Feb. 2-4, requesting members update their generation and transmission availability in its outage tracking system. ■

— *Amanda Durish Cook contributed to this report.*



Icy winter wonderland in Carrollton, a Dallas suburb | *David Muehlenthal*

ISO-NE News

Experts Expect Stable or Decreased Prices in ISO-NE Capacity Auction

By Sam Mintz

Monday's Forward Capacity Auction in ISO-NE will likely have similar outcomes to last year's, observers say, even as debate swirls in the region around the future of the market.

The clearing price in FCA 16 will probably be about equal to or lower than last year's, said experts and analysts who spoke to *RTO Insider*.

There are two primary changes acting on the market that are likely to largely offset each other: a significant decrease in the installed capacity requirement (ICR) and falling supply.

This year's ICR is 32,568 MW, down about 1,600 MW from last year's value of 34,153 MW. That's because of a decrease in ISO-NE's peak load forecast, said Joe Prosack, an analyst at *ESAI Power*.

The decrease stems from changes to the RTO's methodologies, particularly in the incorporation of energy efficiency capacity. Historically, that calculation has been based on energy efficiency resource performance.

But "the performance of EE resources often exceeded the actual capacity supply obligations that they had," Prosack said. "So in essence, they were adding back way more demand than energy efficiency resources were adding in terms of supply."

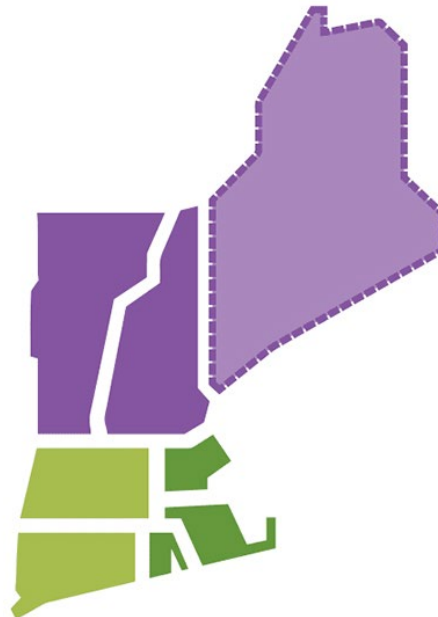
The new methodology change brings those two into alignment. "And as a result, they're essentially adding back less energy efficiency capacity compared to previous years, and that resulted in a large decline in the peak load forecast," Prosack said.

ESAI thinks there will be a large surplus of capacity, even with the known supply decrease, which will push prices below *last year's clearing prices* of \$3.98 kW-month in the Southeast New England zone, \$2.61 kW-month in the Rest-of-Pool zone, and \$2.48 kW-month in the Northern New England and Maine zones.

That's not a universal opinion, however.

Dan Dolan, president of the New England Power Generators Association, said he believes the supply decreases — particularly the loss of the Killingly Energy Center in Connecticut that had its capacity supply obligation terminated by ISO-NE last year — will largely offset the lower ICR. Dolan spoke before the D.C. Court of Appeals on Friday stayed FERC's order ending Killingly's capacity supply obligation, allowing the proposed plant to take part

FCA 16 Capacity Zones



Northern New England Capacity Zone

- New Hampshire, Vermont, and Maine Load Zones
- Export-constrained

Maine "Nested" Capacity Zone

- Separate capacity zone within Northern New England
- Export-constrained

Southeast New England Capacity Zone

- Northeastern Massachusetts/Boston, Southeastern Massachusetts, and Rhode Island Load Zones
- Import-constrained

Rest-of-Pool Capacity Zone

- Western/Central Massachusetts and Connecticut Load Zones

ISO-NE's capacity zones for Forward Capacity Auction 16 | ISO-NE

in the auction. (See *Killingly Stays Alive After DC Circuit Halts FERC's Termination Order*.)

"In a market as small as New England, any large power plant coming in or out has a big impact on the auction results," he said. But overall, "my guess is we have a relatively stable auction," Dolan said.

Another Year of the MOPR

Renewable and battery storage developers face continuing uncertainty about the auction as the region's minimum offer price rule, intended to mitigate the price-dampening effects of state-sponsored resources, remains in effect.

Some of those companies have also argued that the capacity market disadvantages renewable projects more broadly.

"There is a perception that the bids with state subsidies are the only ones that get inflated, but [the Internal Market Monitor] actually has done this for unsubsidized projects as well," said Theodore Paradise, executive vice president of the transmission and storage company Anbaric. "The result has kept not only renewables with state contracts out of the market ... but it's hampered the clean energy transition."

Anbaric and the Massachusetts Municipal Wholesale Electric Co. had a bid for a 100-MW battery storage project increased by the

Monitor for this upcoming auction, a decision that *FERC upheld*, although its Democratic commissioners said that the companies made a "persuasive case" in their protest.

Some state-sponsored resources should be able to clear the auction because of "generally low enough" offer review trigger prices, the offer floors for new resources, ESAI's Scott Niemann said.

The exception is offshore wind projects, which have to use the auction's starting price. That makes it "very difficult [to clear] unless they get a unit-specific exemption," Niemann said. ■

March 25, 2022

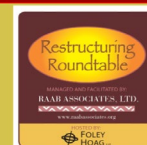
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ISO-NE News

Killingly Stays Alive After DC Circuit Halts FERC's Termination Order

By Sam Mintz

The Killingly Energy Center saga is not over yet.

The D.C. Circuit Court of Appeals *issued a stay* Friday on FERC's order to terminate Killingly's capacity supply obligation, allowing the proposed Connecticut natural gas plant to participate in ISO-NE's capacity auction Monday.

The stay came just 72 hours before Forward Capacity Auction 16 for delivery year 2025/26. (See [Experts Expect Stable or Decreased Prices in ISO-NE Capacity Auction](#).)

"Absent other legal developments, the ISO will comply with this order in the conduct of the auction and will therefore unwind the actions it had taken to terminate Killingly," ISO-NE said in a notice to stakeholders Friday evening. "After FCA 16 is conducted, should FERC confirm the termination of Killingly, the ISO would adjust the auction results to reflect the removal of Killingly."

ISO-NE had requested the termination of Killingly's CSO in November, saying that the proj-

ect would not be able to meet key milestones for fulfilling its capacity obligations.

FERC approved the termination Jan. 3, writing that it was "persuaded by the evidence" presented by ISO-NE ([ER22-355](#)). That meant Killingly would have to forfeit its CSO for 2022/23 and would not be able to take part in FCA 16. (See [FERC Accepts ISO-NE Request to Terminate Killingly CSO](#).)

The D.C. Circuit ruled that the order cannot be enforced until FERC "resolves" developer NTE Energy's Jan. 11 petition for rehearing.

The rehearing request would be *automatically denied* "by operation of law" if the commission does not act on it within 30 days.

The court's full opinion was not yet available as of Saturday. Judge Robert Wilkins noted in the order that he would have denied the stay, but Judges Neomi Rao and Ketanji Brown Jackson sided with NTE.

The developer did not immediately respond to a request for comment.

In a second notice Sunday, the RTO said it had declined suggestions that it delay the auction.

Instead, ISO-NE said it will calculate prices and quantities cleared with and without Killingly. "The ISO intends to keep these results confidential until there is greater certainty about Killingly's status. This will protect the commercially sensitive information that might otherwise be revealed as part of the auction finalization process," said Allison DiGrande, director of Participant Relations & Services. "This approach will allow the ISO to conduct the auction in a timely fashion, consistent with the requirements of its tariff, while addressing the uncertainty created by the recent D.C. Circuit Court of Appeals order."

DiGrande said the RTO also will not reveal the results of any clearing in the substitution auction until Killingly's status is resolved. "The ISO believes that this is the most prudent path to both minimize disruptions to the administration of FCA 16 and the required timing of [Forward Capacity Market] activities related to subsequent auctions. After due consideration, the ISO is confident that this approach will ensure the integrity of the auction while also complying with the D.C. Circuit Court of Appeals order." ■



A rendering of the proposed Killingly Energy Center | NTE Energy

ISO-NE News

ISO-NE's Plan to Delay MOPR Removal Wins out at NEPOOL

By Sam Mintz

NEPOOL's senior stakeholder committee Thursday signed off on a plan to delay the elimination of ISO-NE's minimum offer price rule (MOPR), which the RTO abruptly threw its support behind the week before after months of working on a different proposal that would have removed the contentious rule immediately.

The debate over the plan initially put forward by generators Calpine and Dynegy, which ISO-NE can now submit to FERC, is the latest volley in a long-running dispute over the effects of a rapid transition to renewables on the reliability of the region's grid.

The MOPR sets a price floor for bids into the capacity market, designed to prevent what its backers say are "artificially" low prices caused by the participation of state-supported resources.

ISO-NE said that its backing of the two-year transition away from the MOPR, rather than immediate removal, is designed to slow the entry of state-sponsored resources into the capacity market to a "steady pace" rather than a "sudden, voluminous and permanent shift." (See [In Late Twist, ISO-NE Calls for 2-Year Delay on MOPR Elimination](#).)

The grid operator has worried that reliability of New England's grid could suffer from a rapid influx of sponsored resources and an exodus of existing generators.

"What I know, based on what we've observed and studied and seen, is that a transition offers the most measured way forward ... and gives us much-needed time to put in place critical reforms," ISO-NE COO Vamsi Chadalavada told stakeholders at the Participants Committee meeting Thursday. "We are convinced of this position and this judgment, and we do need your support, because the best way for us to move forward is collectively, rather than arguing back and forth about what's right and what's wrong."

The transition plan was backed by generation, transmission and supplier sectors in the NEPOOL vote Thursday. It's also not opposed by five of the six New England states (with New Hampshire as the outlier because the state opposes MOPR removal altogether).

But renewable developers, advocates and environmental groups have cried foul, arguing that the RTO has not made its case convincing-



Wind turbines in Gloucester, Mass. | Fletcher6, CC BY-SA 3.0, via Wikimedia Commons

ly that the transition is necessary for reliability.

"The ISO provided no quantitative support ... that deviating from its blueprint established nine months earlier to impose a delay will reduce reliability risks," the nonprofit RENEW Northeast wrote in a *memo* last week, also noting that "temporary programs have a habit of being extended."

"The grid operator's saying we're not going to allow new clean energy resources to fairly compete in the region's market until almost the end of the decade," Bruce Ho, senior advocate at the Natural Resources Defense Council, said in an interview. "That's pretty extreme and really doesn't seem in line with what [FERC] has been pushing for."

Joe Curtatone, president of the Northeast Clean Energy Council, [took to Twitter](#) to slam the MOPR transition proposal.

"Much of what shapes our energy supply and the fate of our climate takes place in meetings few people know about, like at NEPOOL today," the former Somerville, Mass., mayor wrote. "There's a rule that forces clean energy to submit higher bids that protect fossil fuel suppliers. It's grimy insider baseball, and it needs to stop."

The transition plan does allow for up to 700 MW of capacity from state-subsidized resources to enter the market through a renewable technology resources (RTR) exemption in Forward Capacity Auctions 17 and 18 (300 MW in FCA 17 and 400 MW in FCA 18). And the committee approved an amendment from RENEW Northeast that would carry over any unused megawatts between those two years.

The plan now faces an uncertain future at FERC.

Members of the commission's Democratic majority, Chairman Richard Glick and Commissioner Allison Clements, wrote recently that the MOPR makes ISO-NE's tariff unjust and unreasonable, and that the RTO should move forward "expeditiously" with eliminating it. (See [FERC Weighs in as ISO-NE Prepares for Capacity Auction](#).)

A FERC spokesperson said that Glick "does not want to risk prejudging the matter" and will wait for an official filing before the commission to comment on the ISO-NE proposal.

"What ISO-NE is proposing doesn't seem to align with what commissioners are asking the grid operator to do," Ho said. "I think we saw very clearly from the chairman ... that he expects ISO New England to get rid of the unjust and unreasonable MOPR rule."

Consent Agenda

The Participants Committee also approved three items on its consent agenda:

- changes to the resource retirement process to allow retirement bids to be updated later in order to give generators more flexibility, [proposed](#) by Calpine and recommended by the Markets Committee last month. (See [NEPOOL Markets Committee Briefs: Jan. 12, 2022](#).)
- biennial review revisions to ISO-NE Operating Procedure No. 5 (Resource Maintenance and Outage Scheduling) Appendices A (Operable Capacity Calculations) and B (Outage Request Form), as recommended by the Reliability Committee.
- revisions to Appendix G (Designated Blackstart Resource Commitment) to OP-11 (Blackstart Resource Administration), as recommended by the RC. ■

ISO-NE News

Van Welie Calls on FERC to Coordinate NE Winter Reliability Conversations

By Sam Mintz

ISO-NE CEO Gordon van Welie resumed his push for winter reliability solutions Thursday, pointing to near misses last month as motivation to make policy changes, while also reiterating that the RTO has limited agency in fixing the region's problems.

Van Welie's *memo* to the NEPOOL Participants Committee followed up on recent exchanges he has had with state officials after ISO-NE issued vocal warnings about the reliability of the grid in New England ahead of this winter. (See *New England's Reliability Debate Bleeds into FERC Compressor Decision*.)

A lack of extended extreme weather has spared the region from the worst effects so far this season, but van Welie warned in his latest memo that policymakers still need to find solutions.

The message was a familiar refrain. A changing generation mix is leading to new problems and could be "insufficient in the face of the wrong combination of severe weather, non-gas generation contingencies and fuel supply chain issues," van Welie wrote.

It also came with a new twist: an "evolving situation" in New York, including the shutdown of the Indian Point nuclear plant and increasing gas consumption, that could lead to reductions in how much energy it exports to New England.

On one of the biggest issues — how to store energy for longer durations — van Welie laid out a few possible solutions, including more hydro imports from Quebec, increased LNG imports and more dual-fuel capability.



© RTO Insider LLC

But his biggest ask in the new memo was for better coordination, and he placed the onus on FERC to get everyone into the same room.

"We plan to continue talking with the states about this issue, and we've asked FERC to continue to focus on these issues with us until we find a solution. We are hoping that they will utilize their convening power to get all the right parties together later this year," he wrote.

January Scares

Several incidents on cold days in January that led ISO-NE to briefly take emergency actions paint a picture of the vulnerabilities that van Welie is describing.

The first was on Jan. 11. NYISO told ISO-NE in the morning that it would likely have to reduce imports because of constraints on its own system. Around noon, a pole on the Phase 2 line from Hydro-Quebec tripped. Throughout the day, 1,100 MW of generation went down, and in total, an expected surplus of 1,278 MW turned into a deficit of about 1,200 MW.

The RTO had to commit additional units and declared a Master/Local Control Center Procedure No. 2, preparing for abnormal conditions on the grid.

The problems ultimately self-resolved, with imports resuming from New York and the Phase 2 trip fixed.

But the next day brought more challenges. Canaport LNG lost its electric feed, and ISO-NE had to notify New England pipelines that they should expect additional demand. The line was restored a few hours later.

The Millstone nuclear plant in Connecticut also went down for nearly a week during January for repairs.

"These are many of the major contingencies we worry about, and they all occurred within the span of two weeks," van Welie wrote. "Thankfully, the region did not experience extended severe weather during this time frame, and we have been able to manage through them." ■



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ISO-NE News

Maine Governor Revisits Vetoed Plan to Replace IOUs

New Bill Would Open Pathway to Divest CMP, Versant Assets

By Jennifer Delony

Maine Gov. Janet Mills introduced a bill Wednesday that opens a new chapter in a long-standing effort to hold the state's investor-owned utilities accountable for reliable and affordable electric service.

Bill Harwood, Maine's newly appointed public advocate, applauded Mills for introducing the bill, saying in a statement that it will fill in "glaring gaps" in the state's regulation of its utilities.

The *Act to Ensure Transmission and Distribution Utility Accountability* (LD 1959) would direct the Maine Public Utilities Commission to establish a performance report card for the state's T&D utilities, with the possibility of imposing fines for not complying with performance standards. If a utility "consistently fails" to meet those standards, the commission would decide whether to sell off the utility's assets, according to the bill.

If the commission were to move forward with divestiture, it would consider bids from potential buyers along with a proposal from a state-appointed committee to create a consumer-owned utility to purchase the assets.

Last July, Mills vetoed a similar bill, the *Act to Create Pine Tree Power Authority* (LD 1708), saying in her veto message that while the concept was sound, the bill was "hastily drafted." (See *Mills Tells Maine Legislature to Slow Down on Plan to Replace IOUs*.)

The bill would have set reliability, cost and cus-

tomers service metrics for the commission to determine whether the state's two IOUs, Central Maine Power and Versant Power, are "fit to serve" Maine ratepayers. It also would have authorized the creation of a consumer-owned nonprofit, called Pine Tree Power, to purchase a utility's assets, should it be found unfit.

CMP is owned by Spain-based Iberdrola via Avangrid (NYSE: AGR), while Versant is a subsidiary of Calgary, Canada-based ENMAX.

Our Power, a nonprofit supporting the creation of Pine Tree Power, began a citizen initiative in August to force a public vote on LD 1708. The group has collected 73% of the 60,000 signatures needed for the initiative, Stephanie Clifford, campaign manager for Our Power, said in a Jan. 19 statement.

To make the November 2022 ballot, all signatures were due Jan. 31, but the group said it will continue collecting signatures throughout this year for the 2023 ballot.

Our Power opposes the governor's new bill for not aligning with the group's goals, Wayne Jortner, former senior counsel for the Maine Public Advocate and lead petitioner for the ballot initiative, said in a Feb. 3 statement.

"We know all Mainers share our goals: thriving democracy, economic competition, a livable planet, and safe and affordable energy infrastructure," Jortner said. "That is why our ballot question is built on those principles."

The governor's bill now goes to the Joint Energy, Utilities and Technology (EUT) Committee.



A bill from Gov. Janet Mills puts a new twist on an initiative to hold Maine's transmission and distribution utilities accountable for reliable and affordable electricity. | Versant Power

Rep. Nicole Grohoski (D), a member of the EUT Committee, does not believe the governor's bill can provide relief for current high energy costs the way LD 1708 would. Grohoski co-sponsored LD 1708 and is a co-petitioner of the Our Power initiative.

"Maine people work hard for their money, while CMP's and Versant's far-off investors sit back in their cushy chairs siphoning off as much as they can get away with," she said in a statement. Our Power's referendum "frees us from this abusive relationship and offers net savings of \$9 billion ... with lower bills starting for us all on Day One."

Mills received support for her proposal from a bipartisan group of EUT Committee members.

EUT Committee Chair Sen. Mark Lawrence (D) said he is "pleased" to work with the governor and committee members to move the legislation forward. ■

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MISO News



Initial MTEP22 Portfolio has \$3.3B in Costs

By Amanda Durish Cook

MISO's first version of its 2022 Annual Transmission Plan (MTEP 22) portfolio and will cost \$3.3 billion, staff said during the first of a series of subregional planning meetings last week.

The figure is a tick higher than 2021's package, which slightly exceeded \$3 billion and was approved by the Board of Directors in December. (See [MISO Wraps Annual Transmission Package](#).)

The draft MTEP 22 spending breaks down to \$611 million worth of baseline reliability projects, \$172 million in generator interconnection projects, and \$2.5 billion worth of "other" projects, the catch-all classification the RTO uses for projects that address either load growth, aging equipment or other reliability needs.

The grid operator will perform independent analyses through May on the project recommendations to determine whether it finds the same issues that transmission owners identified. Staff will meet with the TOs over any discrepancies.

In August, MISO will release a clearer picture of the recommendations. They will be updated through early December, when the board will take up the transmission planning package for consideration.

The RTO won't conduct market congestion planning or special economic planning studies this year, leaving those assessments to its ongoing long-range transmission plan. That planning effort might produce its first project approvals for the Midwest in June. (See [MISO Promises Long-range Tx Project Reveal Soon](#).)

"For this year, the economic planning is incorporated into the long-range transmission plan," said Thompson Adu, transmission expansion planning senior manager.

Transmission planning is more important than it's ever been in MISO, which has a packed generation interconnection queue comprised almost exclusively of renewable generation and battery storage.

The queue currently has 856 projects totaling 134.3 GW, about 10 GW higher than the system's current summer peaks. Last fall, developers' requests to join the system pushed the queue to a 153-GW high, crushing all previous records. (See [MISO Warns Queue Won't Stay at 150-GW High](#).)

The RTO's Central region of Illinois, Indiana and northeastern Missouri is responsible for 52 GW of potential generation, much of it solar, spread across more than 300 active projects. Network upgrade costs for just the projects from the 2018 and 2019 cycles, excluding affected system upgrade costs, have been estimated at more than \$2 billion.

"Especially in the Central [region], we see the largest number of solar, storage and hybrid projects," MISO engineer Forrest Tingo said.

MISO South accounts for more than 200 active projects, representing 36.5 GW. The South's 2020 cycle of generation requests faces \$759 million of network upgrades before they can connect to the system.

Clean Grid Alliance's Natalie McIntire asked whether the region is experiencing costly network upgrades comparable to those of the MISO West planning region, where upgrades come at too steep a cost for most generation developers to proceed. The West's collection of generation hopefuls in the queue are currently burdened with almost \$1.8 billion in estimated network upgrade costs.

Staff said the South's upgrade costs are trending higher simply because of the number of projects.

Year's First Expedited Requests Approved

MISO also recently authorized five expedited transmission project reviews in Arkansas, Louisiana, North Dakota and Kentucky.

Staff found no adverse impacts after studying two new substations in northeastern Arkansas and southwestern Louisiana.

Entergy Arkansas has requested to build the Sandy Bayou 500/230-kV substation along the existing Driver-to-Shelby 500-kV transmission line to serve up to 550 MW of new industrial load. The utility hopes to have the \$91-million substation in service by June 2024 and said work should begin immediately outside of the MTEP 22 cycle. The substation will be located near the Arkansas-Tennessee border.

Asked whether the Arkansas project is connected to Memphis, Light, Gas and Water's possible migration from the Tennessee Valley Authority to MISO, staff said no. (See [Memphis Moves Closer to Breaking from TVA](#).)

Memphis recently received bids from more than 20 companies hoping to provide alterna-

tive energy sources to the city. Should the city become a MISO member, it would need new transmission links to the system.

The RTO will conduct its next board meeting in Memphis this March. The grid operator has historically held its spring Board Week in New Orleans, but staff said the city's meeting venues are fully booked.

Southern Renewable Energy Association's Simon Mahan noted during last week's South subregional planning meeting that the new substation will be situated near a possible long-range transmission line in MISO South. He asked whether the substation would supplant the need for long-range transmission in the region.

"It's too early to say how it affects it," MISO's Bill Kenney responded.

Cleco's request for the \$15 million Cole substation on an existing 230-kV line in Louisiana drew less stakeholder interest. The utility said the project will address new industrial customers and is estimated to be in service by Oct. 15.

The new substations will not be open to competitive bidding because they're considered load-growth category projects.

MISO also recommended expediting two requests for transformer upgrades from American Transmission Co. in eastern North Dakota and from Michigan Public Power Agency in western Michigan. Both said load growth required that the projects begin ahead of the MTEP 22 cycle.

Staff will discuss its approvals based on its reliability analyses during the March Planning Advisory Committee meeting.

Kentucky utility Henderson Municipal Power and Light (HMPL) requested the fifth expedited project, a reroute of four 69-kV transmission lines in northwest Kentucky to make way for highway construction. The municipal utility expects the project to cost about \$3.8 million.

MISO said HMPL plans to complete the project by the end of June, five months before MTEP 22 receives a vote before the board.

MISO engineer Andenet Leyew said during a Jan. 19 Central Technical Study Task Force meeting that staff didn't uncover any adverse reliability impacts when analyzing the project. He said the RTO will allow the project to move ahead out of the usual annual cycle, though it will still be considered part of MTEP 22. ■

MISO News

Smooth December Operations for MISO

By Amanda Durish Cook

December saw unexceptional load and higher energy prices, MISO said in a monthly operations report.

The grid operator *reported* an average load of 73 GW and a peak of almost 89 GW on Dec. 26. Load registered lower than last December's 75-GW average and 91-GW peak.

MISO said higher fuel prices drove real-time LMPs to an average \$36.50/MWh, up sharply from the previous December's average of \$24/MWh. Day-ahead prices averaged a little more than \$37/MWh.

Coal and natural gas-fired generation sat atop the month's fuel mix, each serving about 30% of load. Wind and nuclear generation contributed about 18% apiece.

The grid operator had an average 40 GW of generation unavailable daily because of planned and unplanned outages and derates.

Most of the 14 GW in daily unplanned outages came from coal and gas units.

MISO's Central region — Michigan, Wisconsin, most of Indiana and Illinois, and eastern Missouri — averaged 37 GW of load. MISO's North region — Minnesota, Iowa, North Dakota, northern South Dakota and a sliver of eastern Montana — averaged an 18-GW load. MISO South also averaged 18 GW of load.

The Central region remains the heaviest user of coal generation as it supplied about 50% of the region's real-time fuel mix in December. The North region was able to draw on a 48% share of wind generation, while the South used a 60% natural gas and 30% nuclear fuel mix.

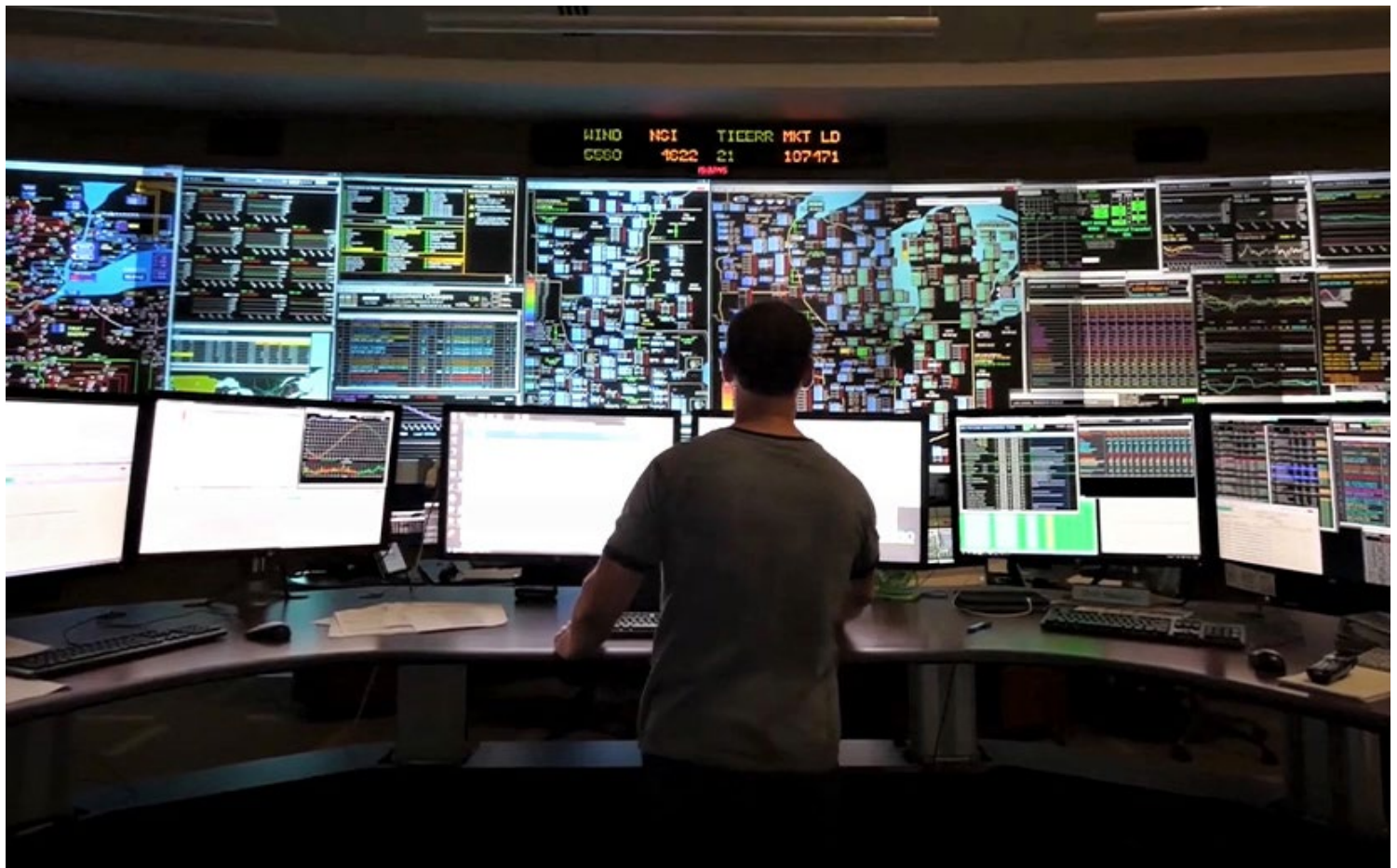
Unsurprisingly, the month contained an all-time wind generation record, with wind supplying nearly 22 GW of the footprint's demand on Dec. 12. However, that record was outdone a month later when wind served almost 24 GW on Jan. 18.

MISO collected \$139 million in day-ahead market congestion costs during December.

December and January, which MISO considers its riskiest months, are now behind the grid operator without a maximum generation emergency. Cold weather in January forced the RTO to declare a maximum generation warning and send two conservative operations instructions on separate occasions for different parts of the footprint. (See "2 Conservative Ops Declarations in January," *MISO Market Subcommittee Briefs: Jan. 27, 2022.*)

MISO told stakeholders before the winter that January would contain the highest risk of an emergency. It also delivered warnings about patchy deliveries of natural gas and coal supplies and generation outages should a cold snap descend on the footprint. (See *MISO Sounds Alarm on Potential Winter Fuel Scarcity.*)

The grid operator entered this winter with 8 GW of additional generation over last winter, mostly from renewable resources. ■



MISO control room | MISO

MISO News

MISO Begins Dynamic Line Ratings Work

By Amanda Durish Cook

MISO foresees a relatively easy shift to incorporate transmission owners' dynamic line ratings but says it will have to settle on a weather forecasting method.

Operations manager Brian Kiefer said MISO's real-time systems can comfortably host transmission lines' varied ratings required under FERC Order 881.

"We're in good shape there," he told stakeholders during a Jan. 28 Reliability Subcommittee meeting.

Order 881 requires transmission providers to establish ambient-adjusted line ratings into transmission service and near-term markets. (See [FERC Orders End to Static Tx Line Ratings.](#))

Kiefer said the commission's requirement for 10 days of hourly forecasted ratings for short-term transmission requests will be new for the industry. Stakeholders asked whether TOs would have to furnish their own temperature forecasts or whether the RTO will provide that data to make ratings forecasts more uniform.

"We're looking at what sort of data we can provide to our members to make implementation easier, and that includes weather data," Kiefer said.

He said MISO will probably create a new ratings data interface for its TOs.

Reliability Subcommittee Chair Ray McCausland predicted that stakeholders will form a task team to assign responsibilities and hammer out compliance details.

Kiefer said he expects FERC will require dynamic line ratings be implemented by summer 2025. He said MISO will likely form a pilot project in the meantime to implement TOs' temperature-adjusted ratings as they are finalized.

The grid operator has *said* "increasingly com-



| © RTO Insider LLC

plex operating days require more complete understanding of equipment reliability" under emergency line ratings. MISO also said more than 60% of ratings for transmission facilities are "identical ratings across severity categories," meaning some TOs' normal and emergency ratings have the same values.

Multiple stakeholders have told the RTO that reliability should come first when applying dynamic transmission ratings. Stakeholders have also warned that raising ratings on one facility might have downstream impacts on other transmission facilities in the system.

Stacy Hebert, a TO representative, has also said that implementing ambient adjusted ratings sets is not a guarantee that a facility won't bind.

Staff and TOs last year identified about 500 candidate facilities that have bound on congestion quarter-to-quarter. About 25% of those facilities are already in an ambient-adjusted ratings program.

MISO Independent Market Monitor David Patton has extolled the benefits of ambient

adjusted transmission ratings several times in public stakeholder meetings. He has said the grid operator could realize several hundred million dollars in annual savings if TOs fully implemented the ratings.

He *reported* that MISO's real-time congestion costs more than doubled from late 2020 to late 2021 as more transmission elements began binding year-over-year. Patton attributed the sharp increase to the costs of re-dispatching the system to manage constraints caused by high wind output and natural gas prices. Ambient adjusted ratings and a plan for grid reconfigurations could ease constraints, he said.

Patton has also rejected the idea that TOs can't use dynamic ratings on transformers. Last year he asked that MISO examine individual transformers to see if they can handle ambient adjusted ratings. Some board members have observed that many of the system's transformers are probably antiques.

MISO and its transmission owners have been working since late 2020 to establish more dynamic line ratings. ■

Midwest news from our other channels



[First US EV Charging Road to Open in Detroit in 2023](#)

NetZero
Insider



[Michigan Climate Plan Delayed](#)

NetZero
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NYISO News

NYISO Begins Discussing Market Rules for Internal Controllable Lines

NYISO staff Thursday briefed the Installed Capacity/Market Issues Working Group on the schedule for the ISO's initiative to develop market participation rules for internal controllable lines.

With no internal controllable lines currently operational in New York, the ISO has only some "bare bones" rules in the capacity market that could structure participation of internal unforced capacity deliverability rights (UDRs), *said* Amanda Myott, energy market design specialist. There are no related rules for energy market participation.

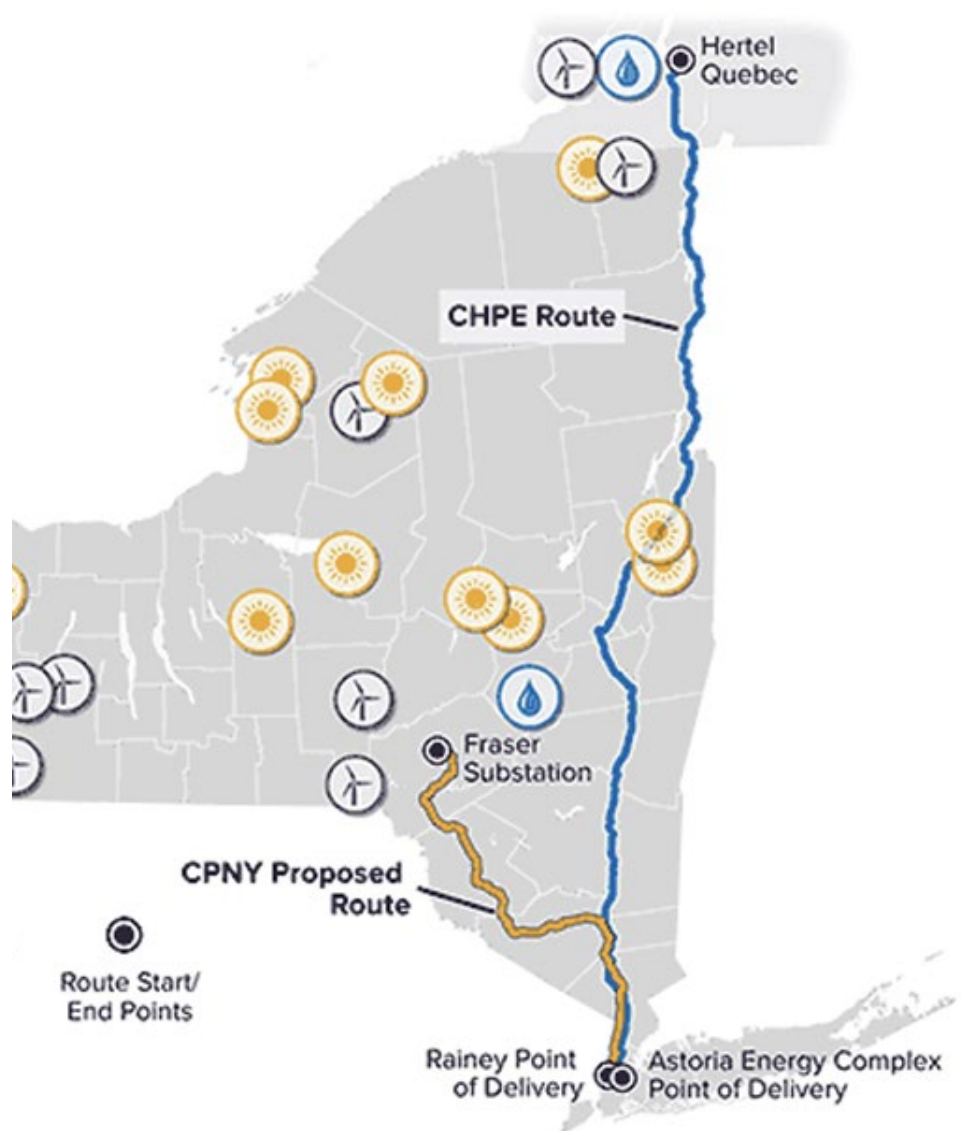
New York in September selected two transmission projects as Tier 4 renewable resources under its Clean Energy Standard. If approved by the Public Service Commission, the 1,300-MW, 174-mile Clean Path New York transmission project is likely to be the first internal controllable line in the state. (See *Two Transmission Projects Selected to Bring Low-carbon Power to NYC.*)

NYISO will begin by developing energy market rules and then, based on those rules, evaluate if there are any needed revisions to capacity market rules for UDRs.

"Modeling of internal controllable lines within resource adequacy studies will also be an important consideration when determining ICAP market rules," Myott said.

The working group will discuss energy market designs through April before beginning to talk about the capacity market that same month. The goal is to have a completed proposal by the end of the year. ■

— Michael Kuser



The Clean Path NY Project would be the first internal controllable line within the New York Control Area. | NYISERDA

Northeast news from our other channels



'Quintessential' NYC High-rise to Recycle Heat for Decarbonization Pilot

NetZero Insider



Legislators Gear up to Reconsider Maine Generation Authority Bill

NetZero Insider



Western NY Dairy RNG Project Draws Opposition

NetZero Insider

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PJM News



FERC Accepts New PJM FTR Forfeiture Rule, Without Refunds

By Michael Yoder

FERC on Jan. 31 accepted PJM's financial transmission rights forfeiture rule replacement without ordering refunds of bills under the previous regime the RTO implemented without commission approval (*ER17-1433*). The new rule took effect Feb. 1.

The commission in May found that PJM's previous 1-cent FTR impact test, which determines whether the net flow impacts the absolute value of an FTR by 1 cent or greater, to be unjust and unreasonable. It ordered a replacement that used a different threshold or an alternative approach. (See [FERC Rejects PJM FTR Forfeiture Rule.](#))

PJM in July proposed replacing the 1-cent threshold test with a test that is evaluated at each individual constraint and to post additional day-ahead data to "enable market participants to better estimate whether their transactions may trigger forfeiture."

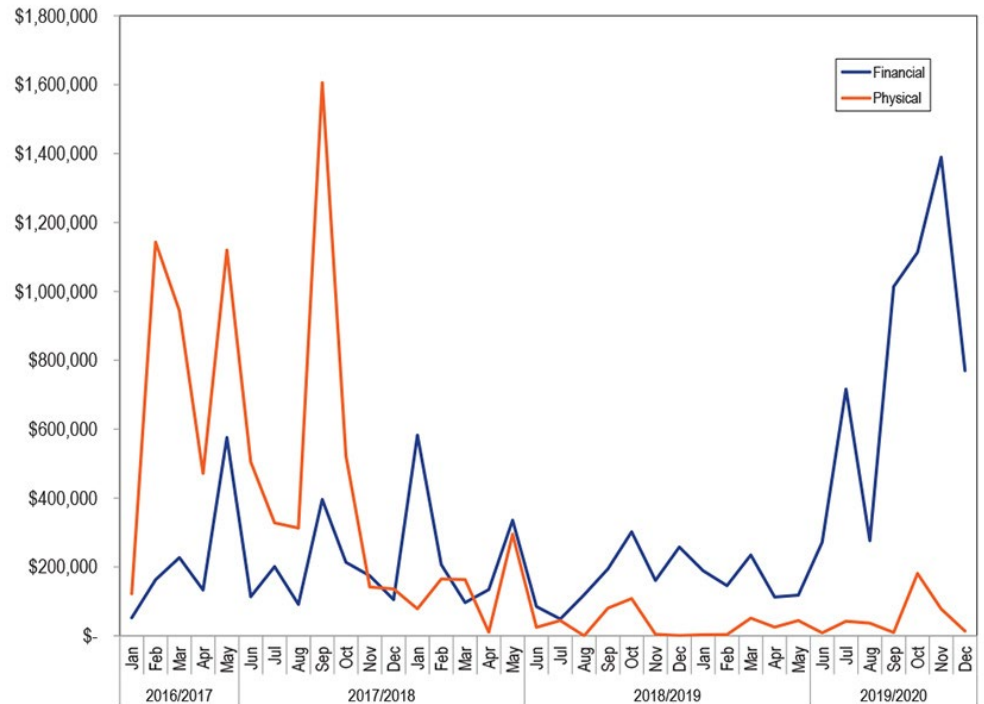
FTRs are financial instruments that allow load-serving entities to hedge the risk of transmission congestion costs and permit financial traders to arbitrage day-ahead and real-time congestion. PJM originally implemented the forfeiture rule in 2000 to prevent market participants from using virtual transactions to create congestion that benefits their FTR positions.

Under PJM's revised rule, the revenues on an individual constraint may be forfeited when:

- the absolute value of the attributable net flow across a day-ahead binding constraint relative to the day-ahead load weighted reference bus between the FTR delivery and receipt buses exceeds 10% of the physical limit of such binding constraint;
- the net flow is in the direction that increases the value of the FTR between the delivery and receipt buses; and
- the net flow results in a higher congestion LMP spread in the day-ahead energy market than in the real-time energy market.

"We find that PJM's revised FTR forfeiture rule reflects a reasonable balance," the commission said last week. "It will sufficiently deter manipulative behavior without significantly burdening legitimate hedging activity."

"While the revised FTR impact test has, in a sense, replaced a greater than 1-cent



Monthly FTR forfeitures for physical and financial participants | *Monitoring Analytics*

threshold with a marginally more restrictive greater-than-zero threshold, we expect that evaluating forfeiture at each individual constraint will substantially reduce the amount of money forfeited because it targets only the constraints at which violations occur," it said.

No Refunds

FERC first ordered PJM to change how it implemented the forfeiture rule in January 2017. The RTO responded with two compliance filings and began billing forfeitures based on the new approach in September 2017, even though the commission had not approved the filings.

In its order rejecting the filings last year, FERC said PJM must include information to help the commission to determine whether it should issue refunds and surcharges.

PJM requested that FERC decline to order retroactive refunds, saying it was "not presently capable of providing details regarding the specific parties who would receive refunds or be charged surcharges." The RTO said that "absent considerable software development and testing work that would take months to complete," it was unable to identify market

participants that would have violated the pre-2017 rule and the extent of resulting charges or credits from an update.

The commission found that PJM had demonstrated that it does not have the capability to calculate refunds, and therefore they were "not appropriate."

"In order to attempt to resettle nearly 4.5 years' worth of FTR forfeitures, PJM would need to resurrect the old code, significantly rewrite this software to account for structural database changes resulting from subsequent market design modifications and then conduct testing work that would take months to complete," FERC said. "These efforts would come at considerable expense, which would presumably be passed on to transmission ratepayers."

While he concurred with the results of the order FERC Commissioner James Danly admonished PJM for implementing the rule before it was approved by the commission.

"I also must regretfully agree with the decision not to order refunds because it appears impossible to put this genie back into its bottle," Danly said. "PJM shoulders the blame for this mess for implementing a compliance rate that had not yet been approved." ■

PJM News



NRC Finds Cybersecurity Deficient at Davis-Besse

By John Funk

The Nuclear Regulatory Commission last week ruled that the Davis-Besse nuclear plant in northwest Ohio violated cybersecurity rules and ordered it to develop new procedures.

The plant also now faces a series of stepped-up inspections to make sure its staff are following the new cybersecurity procedures.

NRC noted in a letter made public last week that Davis-Besse and its owner Energy Harbor, headquartered in Akron, agreed to a cybersecurity “performance deficiency” during a Dec. 6 closed-door meeting with the commission but disagreed about how significant the lapses were. The company has 30 days to appeal.

The commission uses a four-color code to signify the seriousness or significance of the citations it issues, which determines the subsequent level of future inspections the citations will bring.

A “green” citation indicates a minor infraction, without further significance, similar to a warning that law enforcement might issue to a speeding motorist. More serious citations are “white,” the next level, or “yellow,” lead-

ing to increasingly wider and more intrusive inspections. The fourth color is “red,” the most serious citation, typically leading to inspections of multiple systems, often plant-wide, all of it billed to the plant owner.

NRC stated the cybersecurity citation is “greater than green” but did not specify how much greater, meaning the citation is at least a “white” finding and could be “yellow” or even “red.” Cybersecurity violations are not publicly explained in detail, nor are appeals made public. Companies are by law not permitted to discuss publicly the details of cybersecurity violations. Energy Harbor did not return phone calls seeking comment.

The company is simultaneously opposing NRC findings on a maintenance issue at Davis-Besse that could affect the entire commercial nuclear industry.

Energy Harbor is fighting a preliminary citation that Davis-Besse’s failure over 15 years to inspect and clean electrical switches controlling the power output of the plant’s two emergency diesel generators (DGs) led to their failure to actually generate power when they were started during routine testing. In other words, the diesel engines fired up, but their generators

did not produce power.

The preliminary finding was issued in December. (See [NRC Preparing to Cite Davis-Besse Nuclear Plant on Safety Issue.](#))

Emergency DGs are crucial safety equipment capable of powering emergency cooling and other systems during a reactor shutdown and a simultaneous loss of power from the transmission grid. They are not often used, but when they are, they must work. That’s why nuclear plants have two, one of which is a backup.

An NRC “greater than green” citation that the electrical switches controlling the output of the generators require scheduled maintenance could have industry-wide significance because every nuclear plant is equipped with emergency DGs.

During a two-hour teleconference with NRC last week, the company’s engineers argued that the failure of the electrical contacts in the switches was inherent in the materials used to make them and not because of lack of maintenance.

The commission is not expected to make a final ruling on the switches until March. ■



Davis-Besse nuclear plant in northern Ohio | NRC

PJM News



FERC Auditors Find FirstEnergy Accounting Irregularities

Lobbying Fees Improperly Reported; Costs Included as Overhead

By John Funk

FirstEnergy's long-time use of an internal service company to handle the day-to-day accounting for its transmission companies, local distribution companies and former power plant companies violated a number of federal regulations, a FERC audit has concluded (FA19-1).

FERC's Division of Audits and Accounting issued an 85-page report Friday detailing the

findings of the audit it announced a year ago. The company has largely agreed with its findings and committed to refunding \$9.6 million to customers, the audit report noted.

The close examination of FirstEnergy's accounting practices discovered that the cost of routine operations — from day-to-day local utility customer services to corporate political lobbying — somehow were reflected as other costs in accounting — for example, in transmission company overhead — and consequently may have been passed on as customer charges.

It also found that the internal company FirstEnergy had created to handle back-office accounting, FirstEnergy Service Co. (FESC), accounted for routine distribution company operating and overhead expenses as, for example, construction works in progress, though the expenses had nothing to do with construction.

In some cases, those mislabeled construction cost were deferred, meaning they were temporarily listed as a loss, only to be later amortized and collected in delivery rate increases.



FirstEnergy's Akron, Ohio, headquarters | [DangApricot, CC BY-SA-3.0, via Wikimedia](#)

PJM News



FESC “capitalized overhead costs to Construction Work in Progress-Electric using an allocation method that was not based on actual time employees were engaged in construction activities based on timecard reports or on a representative time study,” the report said. “This may have led to FirstEnergy’s subsidiaries capitalizing costs to [that account] that did not have a definite relationship to construction. As a result, the companies may have overstated construction costs recorded in [the electric plant in-service account] as well as accumulated depreciation, depreciation expenses and accumulated deferred income tax (ADIT) balances, and understated operating expenses.

Relation to Bribery Scandal

The audit closely examined the role the unorthodox accounting practices played in the largest political scandal in Ohio’s history: FirstEnergy’s contributions of at least \$70.1 million to “dark money” groups to bankroll a yearlong campaign to win legislative approval of a \$1.1 billion subsidy for two nuclear power plants formerly owned by the company. Ohio lawmakers approved the bailout in 2019 in legislation known as House Bill 6.

Passage of H.B. 6 turned out to have been the key event in an ongoing federal probe into political corruption at the state level.

Lawmakers repealed the nuclear bailout provision of H.B. 6 in March 2021, eight months after federal prosecutors *indicted* former Ohio House Speaker Larry Householder (R) and four of his associates on federal racketeering charges. Two of the associates have pleaded guilty and are awaiting sentencing. A third killed himself. Householder and the fourth are awaiting trial.

FirstEnergy pleaded guilty to conspiring with public officials in a *deferred prosecution agreement*

and agreed to a \$230 million fine. The federal investigation is continuing, and further indictments are possible.

The audit found that “FESC improperly accounted for and improperly reported lobbying expenses, donations and other costs that lacked proper supporting documentation or were misclassified” as unsupported costs. The costs were charged to FirstEnergy subsidiaries as well as to the corporation. This led the subsidiaries to improperly account for and report the costs in their respective accounting records.

The report added that “out of \$70.9 million of payments, \$44.5 million was recorded in the accounts of [former power plant subsidiary] FirstEnergy Solutions [FES], and \$25 million was recorded in FirstEnergy’s own books.”

FERC audit staff’s “discussions on internal controls during on-site interviews of FESC employees raised audit staff’s concerns about the existence of significant shortcomings in FirstEnergy and its subsidiary companies’ controls over financial reporting, including controls over accounting for the costs of civic, political and related activities, such as lobbying activities, performed by and on behalf of FirstEnergy and its subsidiaries,” the report said.

“Moreover, these controls may have been circumvented in ways designed to conceal the nature and purpose of expenditures made and, as a result, that led to the improper inclusion of lobbying and other nonutility costs in wholesale rate determinations.

Payments to Randazzo

The report details \$22.8 million in payments FirstEnergy made between 2010 and 2018 to a pair of tiny Ohio companies incorporated by veteran utility lawyer and lobbyist Samuel Randazzo. Gov. Mike DeWine appointed

Randazzo chair of the Public Utilities Commission in February 2019, a few weeks after the company made a final \$4.3 million payment to Randazzo. DeWine has said he was unaware of the payment.

The company charged \$20.9 million of the \$22.8 million it paid to Randazzo to transmission companies and some of the corporation’s 10 local distribution companies, which the audit did not identify.

“FirstEnergy represented to audit staff that it will make refunds of around \$185,000 to retail and transmission customers and has already made the related accounting entries to correct charges of \$6.7 million allocated to electric plant in service of the [franchised public utilities] and transmission companies and to prevent those expenses from impacting future rates,” the audit said.

Randazzo resigned in November 2021, four days after FBI agents raided his downtown Columbus condo. He has not been charged.

The report also revealed that FirstEnergy told FERC staff auditors it was investigating \$28.8 million in payments to 16 “entities associated with an individual identified by FirstEnergy” but not revealed in the report.

Most of those payments (\$19.7 million) were charged to local distribution companies, while \$1.1 million went on the books of FirstEnergy’s transmission companies, \$2.2 million to FES and \$5.8 million to the corporate books.

The audit report could bolster an effort by the Ohio Consumers’ Counsel (OCC) to convince the Ohio PUC to compel FirstEnergy to submit discovery in a case regarding the company’s political expenditures pending before the commission. The OCC, a state agency charged with representing consumers in utility issues, again *pressed a PUC administrative judge* for discovery within hours of the FERC audit release. ■

Mid-Atlantic news from our other channels



NJ Committee Advances \$45M Electric Bus Bill

NetZero
Insider



NJ’s New Emission Rules Draw Fire

NetZero
Insider



Va. Senate Committee Rejects Wheeler Nomination

NetZero
Insider

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Company Briefs

Constellation Launches as Public Energy Firm After Splitting from Exelon



Constellation last week became a stand-alone public energy company after separating from Exelon Corp.

The company, which claims to be the nation's largest provider of carbon-free energy, operates power plants and supplies power and natural gas in the competitive retail and wholesale markets. It has announced climate goals, including achieving 95% carbon-free electricity by 2030 and 100% by 2040.

Constellation began trading last Wednesday on the Nasdaq Global Select Market.

More: [The Baltimore Sun](#)

135+ Corporations Announced Clean Energy Contracts in 2021

Influential companies, including retail giants

Amazon and Target, and tech powerhouses Microsoft and Meta bought a record 31.1 GW of renewable energy to run their operations in 2021 — a jump of nearly 24% from the previous year's record of 25.1 GW. More than two-thirds of these purchases (17 GW) came in the U.S.

More than 137 corporations in 32 countries publicly announced clean energy contracts in 2021, according to BNEF's outlook, making up more than 10% of all the renewable energy capacity added globally last year.

For the second year in a row, Amazon.com was the biggest buyer globally, announcing 44 offsite PPAs in nine countries, totaling 6.2 GW. This brings its total clean energy PPA capacity to 13.9 GW. Microsoft and Facebook parent Meta have the next largest among corporations, at 8.9 GW and 8 GW, respectively.

More: [Market Watch](#)

Union Pacific to Buy, Test 20 Battery-electric Locomotives



Union Pacific Railroad announced last week that it will purchase

20 battery-electric locomotives for about \$100 million in what the company said will be the largest investment in battery technology by a U.S. railroad.

The locomotives, which use no fuel and have no emissions, are expected to be fully delivered by late 2024 and will be tested in Nebraska and California before wider deployment.

Progress Rail will supply half of the locomotives, while the others will be purchased from WabTec Corp.

More: [Omaha World-Herald](#)

Federal Briefs

Another Mountain Valley Pipeline Permit Struck Down by Court



In a written opinion last week, the 4th U.S. Circuit Court of Appeals found "serious errors" with the U.S. Fish and Wildlife Service's conclusion that building the Mountain Valley natural gas pipeline across mountainsides would not jeopardize endangered species in its path and, thus, threw out another permit.

The court concerned about two fish — the Roanoke logperch and the candy darter — faulted the Forest Service and the wildlife agency for failing to adequately assess the environmental impact of a 303-mile pipeline.

Mountain Valley said it is reviewing the court's decision and evaluating its next steps.

More: [The Roanoke Times](#)

Biden Administration to Reinstate Mercury Pollution Rules

The EPA last week said it will resume enforcing limits on the release of mercury from coal-burning power plants. Mercury



is a neurotoxin that poses a particular danger to the brain development of children and fetuses.

The agency had limited mercury emissions from coal plants since 2012, but under the Trump administration it concluded that the rule's cost to industry outweighed its benefits and therefore it was no longer "appropriate and necessary." That finding allowed the administration to stop enforcing the mercury limit. The Biden administration is proposing to return to an Obama-era method of calculating the impact in a way that considers collateral benefits when estimating the gains expected from lower mercury emissions. Using that method would enable the EPA to conclude that the costs of the rule to industry is offset by public health benefits such as prevention of disease and premature deaths. That would provide the legal justification to enforce the existing mercury regulations.

The EPA will open the proposal for a 60-day comment period and is expected to finalize the policy later this year.

More: [The New York Times](#)

Biden Officials Push to Hold Up \$11.3B USPS Truck Contract



The EPA and the White House Council on Environmental Quality last week sent letters to the U.S. Postal Service

urging it to reconsider its plan to spend up to \$11.3 billion on as many as 165,000 gasoline-powered delivery trucks. The officials cited the damage the polluting vehicles could inflict on the climate and Americans' health.

Postmaster General Louis DeJoy, who oversaw the decision to award the truck contract to Oshkosh Defense, signed off on a plan calling for only 10% of the new trucks to be electric. Postal Service vehicles make up a third of the government's fleet, and the EPA warned the agency last fall that its environmental analysis of the contract rested on flawed assumptions and missing data.

The EPA also asked the USPS to hold a public hearing on its plans; however, it denied a similar request from California regulators on Jan. 28.

More: [The Washington Post](#)

EPA Orders Alliant to Shut Down Iowa Coal Ash Pond



The EPA last week said Alliant Energy must shut down the coal ash storage pond

at its Ottumwa Generating Station in Iowa due to groundwater contamination.

The EPA is concerned about Alliant's ability to address contamination from its unlined storage pond, which is located near a source of water for Ottumwa and other communities downstream. Regulations that went into effect in April 2021 require utilities to cease placing waste into all unlined impoundments.

Documents also show higher than standard levels of cobalt in the groundwater.

More: [KYOU](#)

Global EV Sales Doubled in 2021

Global electric vehicle sales more than doubled in 2021 to 6.6 million vehicles and accounted for 8.6% of the global light-duty vehicle market, according to the IEA.

China, Europe and the U.S. combined to account for about two-thirds of the global market.

Tesla led the world in global sales with 936,000 units last year.

More: [Axios](#)

Republicans Demand Investigation of Granholm's Financial Conflicts of Interest

Congressional Republicans John Barrasso and Cathy McMorris last week wrote a letter to Energy Department Inspector General Teri Donaldson demanding that the

Energy Department's internal watchdog investigate agency chief Jennifer Granholm's late stock filings.

The lawmakers' demands come in response to a report that revealed Granholm had violated a federal conflict-of-interest and transparency law by failing to report up to \$240,000 in stock sales in a timely manner over the past year. Granholm reported making nine stock trades between April 30 and Oct. 26, 2021, but did not disclose the sales to the Office of Government Ethics until Dec. 15 and Dec. 16 — weeks or months, respectively, past a 30-day deadline prescribed by the Stop Trading on Congressional Knowledge Act of 2012.

The lawmakers gave Donaldson until Feb. 28 to conduct a review and deliver her findings to Congress.

More: [Business Insider](#)

State Briefs

REGIONAL

Study Finds OSW Farms in Gulf of Mexico Could Create 17,500 Jobs



As many as 17,500 jobs are likely to be created if two wind farms in the Gulf of Mexico take shape off the coasts of Texas and Louisiana, said a report by the American Clean Power Association.

The industry group estimates a pair of offshore wind projects would create between 7,300 and 14,700 jobs during a three-year construction period and up to 2,800 permanent positions associated with operations and maintenance.

The association's offshore wind employment estimates are almost 50% higher than a similar Gulf-focused assessment published by the National Renewable Energy Laboratory in 2020. But much has changed in the industry over the past two years, as turbines have grown bigger and more efficient, and proposed projects have increased in number and size.

More: [Nola.com](#)

ARIZONA

Court Rules SRP Liable for Higher Solar Rooftop Rates

The 9th Circuit Court of Appeals last week ruled that Salt River Project can be held liable for violating antitrust laws through its policies of charging higher rates for electricity to its customers who choose to install rooftop solar panels.

The court rejected arguments by SRP that its activities and pricing structure are protected by state and federal laws. However, the judges said there is sufficient evidence that can show the price structure was designed to deter the competitive threat of solar energy systems and force consumers to exclusively purchase electricity from SRP.

According to court records, SRP once encouraged the use of solar systems, but that changed in 2014 when it adopted a new pricing plan that says that solar customers who still need to be hooked up to the utility for times when solar is not available can be charged up to 65% more than prior plans. Rates for non-solar customers went up about 3.9%.

The case will be sent back to a trial judge who will determine the extent of the utility's conduct and the damages to customers.

More: [Arizona Capitol Times](#)

CALIFORNIA

Ventura County Questions Gas Compressor Site



The Ventura County Board of Supervisors last week passed a resolution requesting

the Public Utilities Commission and other state agencies take a closer look at Southern California Gas Company's compressor site.

The resolution asks the PUC to assess the neighborhood compatibility of the SoCalGas modernization and expansion project in the county. It also requests the state Environmental Protection Agency consider a potential relocation of the compressor and perform a comprehensive health study of the nearby population.

SoCalGas plans to replace three gas compressors with four new ones with more horsepower. The PUC approved the plan in 2019.

More: [Ventura County Star](#)

COLORADO

Lawmakers Reject Bill to Protect Natural Gas Use

The House Energy and Environment Committee last week rejected state Republican attempts to protect the private and public

use of natural gas, propane, solar panels, micro wind turbines or small hydroelectric power for cooking, hot water, heating or electricity.

Opponents of the bill said its inclusion of renewable energy options is purposefully deceptive and part of a larger scale attempt to prop up the fossil fuel industry. Meanwhile, proponents of the bill testifying for the fossil fuel industry said the bill is important for consumer choice.

Recently, California researchers published a study that found that even when they're not running, U.S. gas stoves are putting 2.6 million tons of methane into the air each year.

More: [U.S. News](#)

GEORGIA

Georgia Power to Finish Shift from Coal by 2035



Commission.

The utility's plans call for shuttering 12 coal units (3,500 MW) by 2028, which the utility plans to offset with 2,356 MW in natural gas. Georgia Power also said it plans to increase its renewable capacity by adding 2,300 MW in the near term.

A PSC vote is expected by the summer.

More: [Georgia Public Broadcasting](#)

INDIANA

Court Rejects CenterPoint's Billing Method for Rooftop Solar Owners

The Indiana Court of Appeals last week reversed a Utility Regulatory Commission order from last April that changed and reduced how CenterPoint would credit its solar customers.

Customers with solar are credited in a one-to-one exchange at CenterPoint's retail rates through net metering. Net metering is being phased out under a 2017 state law changing how solar customers are billed to a smaller credit based on 125% of utilities' wholesale rates, which is about 70-80% lower than what customers receive at retail rates. The Court of Appeals ruling said the state law, SEA 309, still required billing to be calculated by the difference between power used and power returned to the grid.

CenterPoint has 30 days to either ask for a rehearing or petition the Indiana Supreme Court to take the case.

More: [Evansville Courier & Press](#)

LOUISIANA

Climate Task Force Approves GHG Reduction Plan



Gov. **John Bel Edwards'** Climate Initiatives Task Force last week unanimously approved a plan to reduce the state's greenhouse gas emissions to net zero levels by 2050.

The plan calls for various industries to use wind, solar and other renewable resources to power their operations. It also calls on companies to switch from carbon-based fuels to hydrogen-based fuels.

The final version of the plan includes an appendix listing dissents filed to the individual actions by task force members. Lindsay Cooper, a policy adviser in the governor's coastal activities office, said dissents were filed on 29 of the plan's 84 action proposals. No action had more than five dissents, while 18 actions only had one person objecting to them.

More: [Nola.com](#)

Entergy Seeks \$450M from FEMA to Harden Grid



Entergy last week said it is seeking \$450 million in federal grants to pay for eight projects aimed at making its electricity infrastructure less vulnerable to super storms.

The utility's Louisiana and New Orleans subsidiaries are seeking the money, together with the state's Department of Homeland Security and Emergency Preparedness, under the Federal Emergency Management Agency's Building Resilient Infrastructure and Communities program. The grants would cover work not already included in the estimated \$4 billion needed to repair the company's southern infrastructure after storms hit the state in 2020 and 2021.

The winners of the grants will be announced this summer. FEMA said it plans to distribute as much as \$1 billion.

More: [Nola.com](#)

MICHIGAN

First Wireless EV-charging Road in US to be Built Near Mich. Central Station

The first wireless electric vehicle charging road system in the country will be built near Michigan Central Station in Detroit by start-up Electreon, officials announced last week.

The foundation of Electreon's wireless charging technology is electromagnetic induction. The company installs copper coils under the asphalt, through which it transfers energy from the grid and creates a magnetic field. Receivers installed on the floor of the vehicle capture the energy and transmit it to the battery and motor.

The mile-long stretch of public road, which will be designed to wirelessly charge EVs while they are stationary and in motion, is expected to be complete by 2023.

More: [Crain's Detroit Business](#)

MONTANA

NorthWestern's Plan for State's First Storage Project Advances



The Public Service Commission last week voted unanimously to proceed with NorthWestern's application to purchase energy storage at a battery facility over the next 20 years at an estimated cost of \$145 million.

The utility first announced the project last spring as part of a plan to add 350 MW of energy capacity by contracting storage and hydropower while also constructing a gas-fired plant near Laurel. NorthWestern plans to charge the 50-MW facility with power purchased on the open market.

However, there has been no disclosure about transmission costs, and it remains to be seen if the storage plans are in customers' interests, utility analyst Gary Duncan told the PSC.

More: [Independent Record](#)

NEW MEXICO

Bill to Ban Spent Nuclear Fuel Storage Advances

The House Energy, Environment and Natural Resources Committee last week voted 5-4 to advance a bill that would ban the storage or disposal of spent nuclear fuel in the state and would essentially kill Holtec International's plans to build a repository for

high-level radioactive waste in the Carlsbad area.

Lawmakers and regulators who back the bill say although the state can't interfere with how the Nuclear Regulatory Commission regulates the waste, it can block storage sites that could cause adverse environmental impacts.

The bill will go to the House Judiciary Committee.

More: [Santa Fe New Mexican](#)

VIRGINIA

Senators Reject Proposals to Cut Off Campaign Cash from Dominion Energy



The Senate Privileges and Elections Committee last week voted 11-4 to reject

proposals that would have ended Dominion Energy's ability to give massive sums of campaign money to the lawmakers who

regulate it.

The bills from Sens. Chap Petersen (D) and Richard Stuart (R) would have ended the utility's ability to bankroll lawmakers' campaign funds. Petersen said he has wanted to end Dominion's ability to influence lawmakers ever since the utility won major legislation in 2015 that temporarily stripped regulators of their ability to order refunds or rate cuts if the utility earned profits above the margin it agreed to under the law.

Virginia is one of few states with no limits on campaign donations to state lawmakers, who are allowed to use the money for anything they want.

More: [Richmond Times-Dispatch](#)

WEST VIRGINIA

Bill Lifting Restrictions on Nuclear Plant Construction Passes Legislature

The House of Delegates last week voted 76-16 to approve a Senate bill that would



lift state restrictions on nuclear power plant construction. The bill will now be sent to Gov. Jim Justice for approval.

State code currently states that nuclear fuel and power pose a hazard to the health, safety and welfare of citizens and bans nuclear facilities unless the proponent of the facility can prove it is safe, dispose of waste properly, and be economically feasible for ratepayers.

"It builds nothing. It spends nothing," said Del. Brandon Steele (R). "It puts us in a position where we can talk to regulators; we can talk to the federal government; we can talk to the industry and figure something out."

More: [Charleston Gazette-Mail](#)

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