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FERC/Federal News



US Power Plant CO2 Emissions Rose 7% in 2021, Ceres Finds

Annual Analysis Cites Economy's Rebound from COVID-related Shutdowns

By John Cropley

Carbon dioxide emissions by the 100 largest electric power producers in the U.S. increased 7% from 2020 to 2021, Ceres reported Wednesday in its annual benchmarking analysis.

The jump was attributed to the economy returning to a degree of normalcy in 2021 after COVID-related shutdowns triggered a 10% drop in CO₂ emissions in 2020. But Ceres also said the increase highlights the need for power providers to take advantage of clean energy incentives recently put in place by the federal government through the Inflation Reduction Act.

The report added historical perspective that shows progress toward zero-carbon generation, even with the year-over-year increase factored in:

- Carbon dioxide emissions were about 34% lower in 2021 than at their peak in 2007.
- Sulfur dioxide emissions were down 94%, and nitrogen oxide emissions were down 88% in 2021 from 1990, when the federal Clean Air Act was strengthened.
- Zero-carbon generation — renewables, hydropower and nuclear — accounted for 40% of U.S. power generation in 2021, an all-time high.

- Power plants emitted 93% less mercury in 2021 than in 2000; federal limitations on mercury and other hazardous air emissions from coal-fired plants took effect in 2015.

The 100 largest U.S. electricity producers own 3,600 power plants that account for more than 80% of total generation and plant emissions nationwide.

Natural gas remained the leading source of generation in the U.S. in 2021, at 38%, even as coal made a big year-over-year increase to 22%.

That is a reversal from a decade earlier: In 2011, coal accounted for 42% of U.S. power production and gas only 25%.

Nuclear accounted for 19% of power generation in 2021. Renewables accounted for 13%, breaking down to roughly two-thirds wind and one-third solar, with geothermal making a tiny contribution.

Hydropower was last, at 6% of U.S. power generation in 2021.

Ceres is a nonprofit focused on creating an equitable and sustainable future. Its annual benchmarking analysis of power plant emissions is a collaborative effort with Bank of America Charitable Foundation, Constellation Energy Corp. and Entergy, and the National Resources Defense Council.

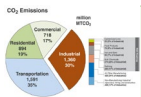


Emissions by the top 100 U.S. power producers increased 7% in 2021 over 2020, according to the annual benchmarking report by Ceres. | Shutterstock

ERM authored the analysis, which is drawn from generation and emissions data reported by the U.S. Energy Information Administration and EPA.

“While the power sector has shown marked improvement over our two decades of analysis, we need to see an acceleration of larger emissions cuts across the industry in order to reach our 2030 emissions reduction goals,” Dan Bakal, senior program director of climate and energy at Ceres, said in a news release accompanying the report. “It’s important to recognize how far we have come, but impossible to ignore how far we still have to go to meet our critical 2030 goals set by the Paris Accord. While many of the largest power producers have announced climate commitments and strategies to reduce their carbon emissions, the rapid decarbonization required demands increased ambition.” ■

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CAISO/West News

California Runs on Fumes but Avoids Blackouts

By Hudson Sangree

CAISO came dangerously close to calling for rolling blackouts last week but avoided issuing the final order to utilities thanks in part to a jarring alert sent out to millions of cell phones by the governor’s Office of Emergency Services.

A series of shrieking tones on the evening of Sept. 6 was followed by a text that said, “Conserve energy now to protect public health and safety. Extreme heat is straining the state energy grid. Power interruptions may occur unless you take action.”

The unusual alert was sent at 5:45 p.m. PT after CAISO declared an energy emergency alert 3. An EEA 3 means the ISO is “unable to meet minimum contingency reserve requirements and controlled power curtailments are imminent.”

CAISO CEO Elliot Mainzer summed up the near miss in a media briefing Wednesday, com-

paring it to a car running out of gas.

“We were well into the reserve tank of the car,” Mainzer said. “We were down to the last gallon there and dipping into our operating reserves. And we typically carry somewhere in the area of 3,000 to 4,000 MW of operating reserves, so we were very, very close to the bottom.”

Demand in CAISO hit a record high of more than 52 GW as temperatures broke records across the state, including 116 degrees Fahrenheit in Sacramento, near CAISO’s headquarters.

CAISO had ordered utilities to “arm” for load shed when a wave of consumer conservation following the cellphone alert narrowly averted blackouts. (A number of cities experienced outages because of a communications mishap with the Northern California Power Agency, CAISO said.)

LMPs throughout the state ranged between \$1,700 and \$2,300/MWh as the crisis continued, according to data posted on

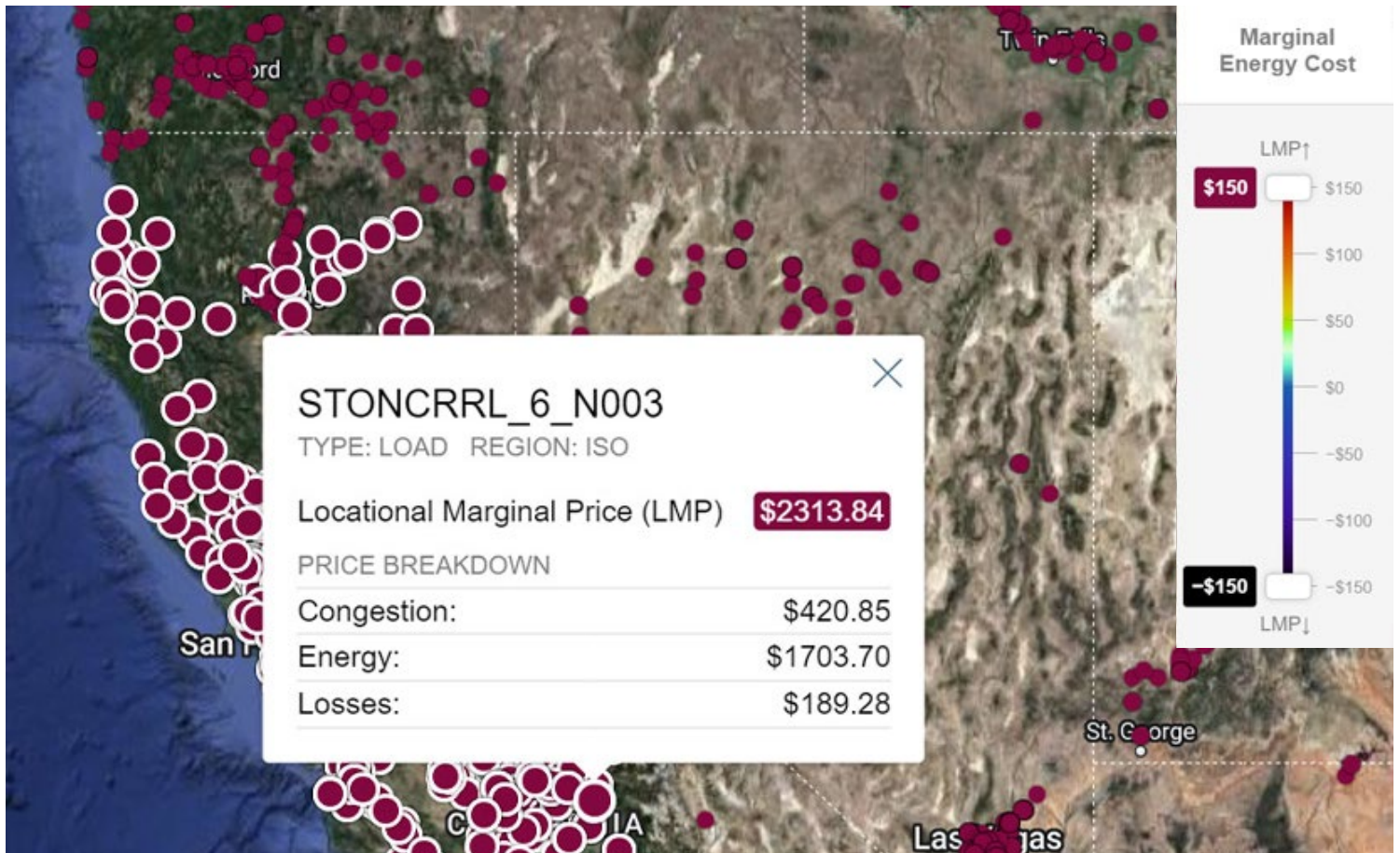
CAISO’s website.

The ISO called off the EEA 3 at 8 p.m., posting on Twitter: “Consumer conservation played a big part in protecting electric grid reliability. Thank you, California!”

The 3,500 MW of utility-scale, four-hour lithium-ion batteries installed since the state’s last rolling blackouts in August 2020 performed well and played a role in avoiding worse problems, Mainzer said.

Demand response from industrial users, and the ability to access emergency generation resources under an executive order from last year, played a part, as did more than 6,000 MW of imported hydroelectricity from the Pacific Northwest, CAISO said.

The crisis did not end Sept. 6, however. CAISO declared an EEA 2 on Wednesday afternoon, asking customers to turn up their thermostats and to postpone using large appliances such as clothes dryers and dishwashers. ■



Real-time LMPs for wholesale electricity neared or exceeded \$2,000/MWh in many areas of California last Tuesday evening. | CAISO

CAISO/West News

Utilities File Incident Reports in Latest Calif. Wildfires

By Hudson Sangree

Pacific Gas and Electric and Southern California Edison each filed incident reports with the California Public Utilities Commission last week indicating their equipment may have been involved in the two largest fires burning statewide.

PG&E said the U.S. Forest Service placed caution tape around the base of a 60-kV transmission pole close to the ignition point of the Mosquito Fire, a 47,000-acre blaze burning mostly out of control in the Sierra Nevada foothills, 50 miles northeast of Sacramento. The fire began near the Oxbow Reservoir in Placer County, where PG&E said it recorded “electrical activity” when the fire started on Sept. 6.

“Thus far, PG&E has observed no damage or abnormal conditions to the pole or our facilities near Oxbow Reservoir [and] has not observed down conductor in the area or any vegetation related issues,” the utility said in a report Thursday to the CPUC. “Our information reflects electrical activity occurred close in time to the report time of the fire. The investigation is ongoing. This information is preliminary.”

The California Department of Forestry and Fire Protection (Cal Fire) has not reported any injuries or structural damage from the Mosquito Fire, but the blaze has caused hazardous air pollution in the nearby city of Auburn and threatened rural communities in its path.

More than 400 miles to the south, the Fairview Fire has killed two people and burned more than 28,000 acres, Cal Fire and the Riverside



The Mosquito Fire started Sept. 6 in the rugged foothills of Placer County, Calif. | Cal Fire

County Fire Department said. The blaze is 53% contained, Cal Fire reported Monday.

SCE filed a report with the CPUC on Sept. 5 saying, “Our information reflects circuit activity occurred close in time to the report time of the fire” at 3:37 p.m. that day near the city of Hemet. “The investigation is ongoing.”

September traditionally marks the start of fire season in California, as autumnal off-shore breezes fan vegetation parched by dry summers. The fire season typically continues until rains begin in the late fall in the state’s Mediterranean climate.

SCE and PG&E equipment has been blamed for starting major wildfires in recent fire seasons.

The catastrophic blazes include the Camp Fire, the state’s deadliest wildfire, which was ignited by a broken PG&E transmission line in November 2018, and last year’s Dixie Fire, a nearly 1 million-acre wildland blaze started by a PG&E distribution line.

Government investigators determined that SCE power lines blown together by high winds sparked the 282,000-acre Thomas Fire in Santa Barbara and Ventura counties in December 2017. The largest fire in state history at the time, it killed a firefighter and a civilian. Mud and debris slides in its aftermath killed 21 others when heavy rains drenched fire-scarred mountain slopes, washing away homes and vehicles. ■

ERCOT News



Texas Gov. Abbott Touts ERCOT's Fall Resource Adequacy

Fall Seasonal Assessment Shows Nearly 30 GW to Spare

By Tom Kleckner

ERCOT quietly dropped its latest seasonal assessment of resource adequacy last week, saying it has sufficient installed generating capacity to meet peak demand under normal system conditions this fall.

Had it not been for a press release from Gov. Greg Abbott's office, the report might have gone unnoticed for days.

Abbott, a Republican who is seeking a third term, has been *hammered* by his Democratic opponent, Beto O'Rourke, over the ERCOT grid's near collapse during the February 2021 winter storm and the slow pace of the market reforms.

With Abbott providing a *heavy hand*, the grid operator's public communications have shriveled since the storm. ERCOT has not posted a public notice about the seasonal assessment (SARA) since May 2021. The media updates that accompanied the SARA were discontinued after the storm, although ERCOT's interim CEO and its top regulator have twice appeared for short Q&A sessions.

But Abbott was quick to issue a release Sept. 6 and *tweet* an image of himself sitting at the same table with outgoing ERCOT CEO Brad Jones, incoming CEO Pablo Vegas, Public Utility Commission Chair Peter Lake and several others. Vegas will replace Jones on Oct. 1. (See [ERCOT Names NiSource's Vegas as New CEO.](#))

"Met with ERCOT and PUC to discuss the strong position of Texas' electric grid heading into the fall season," Abbott posted. "Our grid is stronger and more reliable because of bipartisan reforms we passed and began implementing last year."

In the [release](#) linked from the tweet, Abbott said the state is continuing to monitor the grid's reliability. It notes he discussed the grid operator's updated planned outage scheduling process that "ensures Texas' generational fleet has the necessary time to conduct maintenance operations."

The shoulder season's traditional maintenance period couldn't come soon enough for thermal generators that have been running full bore this summer as part of ERCOT's conservative operations posture. The grid operator has regularly kept more than 3 GW of operating reserves on the sidelines and dispatched older



Texas Gov. Greg Abbott (right) meets with interim ERCOT CEO Brad Jones (left) and Texas PUC Chair Peter Lake. | Office of the Texas Governor

peaking units as reliability unit commitments.



Scott Bruns, Enverus | Enverus

Scott Bruns, director of markets for energy analytics firm Enverus, likened the situation to having a classic car in the garage.

"These units are typically older units that are not typically run or only run during the summertime when you need to support the system. And this summer, we ran these units much longer than previous years," Bruns said during a webinar Wednesday on ERCOT's summer performance. "I like to think of it as like your classic Camaro that you have for cruising. It runs well, but it has a limited number of miles left on that odometer and every time that you drive it, it's more maintenance or repairs, and it just becomes more expensive."

And not only expensive for the generation operators, but risky for the ERCOT system.

"So now, what we're doing is we're asking these Camaros to spend all the time in the driveway sitting there and idling, when you know that this is just increasing the risk on the system,"

Bruns said. "We're moving to this new future where more intermittent renewables are pulling onto the system and we're asking all of these classic cars that are sitting out along the system to provide more of these baseload reliability services. And eventually, we're going to have some issues."

ERCOT staff does not appear to think that will be a problem. The [fall SARA](#), covering October and November, indicates the system will have over 93 GW of resource capacity available during peak demand hours, more than enough to meet a projected high of 64.9 GW.

The grid operator expects to have 2.6 GW operational battery storage resources. However, they are not currently included in ERCOT's capacity contribution for fall because they are not expected to provide sustained capacity for meeting system peak loads.

The report includes six risk scenarios that reflect alternative assumptions for peak demand, unplanned thermal outages and renewable output. One of the three elevated risk scenarios (low renewable output) and the most severe extreme risk scenario (high peak load, high unplanned thermal outages, extreme low wind output) would result in rotating outages. ■

ISO-NE News

FERC Comes to Vermont and Leaves with a New England-sized Headache

By Sam Mintz

Nearly 10 years ago, FERC convened a gas-electric conference in Boston to talk about the issues facing New England's electric grid in the winter.

Last week, the federal agency came to New England again. The room was bigger, and some of the terminology has changed. Energy technology has evolved and, in many cases, improved tremendously.

But the conversation was strikingly similar, according to New England Power Generators Association President Dan Dolan, who was in attendance for both.

"It's shocking and terrifying how close the notes and talking points we had for that one could be reflected today," Dolan told FERC commissioners on Thursday at a conference center in Burlington, Vt.

Even the more specific issues around LNG supply have been identified for years, Dolan said, with no tangible action to solve them in the long term.

Experts, analysts and lobbyists laid out the problem for FERC commissioners, who surely knew what it was before they walked into the

room: a resource adequacy crisis fueled by New England's unique geographic and political constraints, which ISO-NE fears will be exacerbated by the states' push to replace fossil fuels with clean energy.

Largely acknowledged throughout the conversation was that it's too late to do anything for this winter.

"'Hope' is not a strategy," said Richard Paglia, vice president of U.S. marketing at Enbridge. Later, NERC CEO Jim Robb echoed him: "'Luck' is not a strategy."

But that's essentially what ISO-NE has accepted as its position for this year: hoping that, like last winter, the region is lucky enough to avoid the most extreme cold, which the grid operator says could lead to rolling blackouts.

An exchange between ISO-NE CEO Gordon van Welie and FERC Commissioner James Danly hinted at one possible move that the commission could make this year: initiating a Federal Power Act Section 206 proceeding to force some sort of action from the grid operator.

But van Welie urged the commissioners to be cautious about that option and only use it if it involves clear direction.



ISO-NE CEO Gordon van Welie speaks to FERC regulators. | © RTO Insider LLC

Tomorrow's Problem

The long-term solution to the region's challenges depends on who you ask.

The natural gas companies and their allies present at the meeting want to build more gas infrastructure — not necessarily new pipelines, but potential brownfield development, like changing out pipes for larger ones or adding compression, as Paglia suggested.

There was also substantial discussion about making sure that operation continues at the Everett LNG terminal, which ISO-NE highlighted in a recent problem statement, arguing that the facility is vital to the region's energy security. (See [ISO-NE: Reliability Still Depends on Mass. LNG Import Terminal](#).)

But others say the clean energy transition brings opportunities to maintain grid reliability in the same fell swoop as decarbonization. (See related story, [Clean Energy Groups Don't Buy ISO-NE's Gas Reliance](#).)

"We're taking our eyes off the prize," Liz Delaney, of solar and storage developer New Leaf Energy, told commissioners. "We need to resolve the near-term issue, and it's complicated, but at the same time we need to focus on the market mechanisms that are going to get us through the energy transition."

It's not just long-duration storage that can help, she said.

"Short-duration battery storage does have a role to play in supporting winter reliability. It's not the end-all and be-all. But we have miles to go in terms of being able to understand how to optimize battery storage," Delaney said.



The audience at last week's FERC forum in Burlington, Vt. | © RTO Insider LLC

ISO-NE News

Vermont Department of Public Service Commissioner June Tierney also urged policymakers not to skate past demand response as a powerful grid management strategy.

She pointed to the recent energy emergency in California, which saw significant conservation efforts help CAISO avoid rolling blackouts during an unprecedented heat wave. (See related story, *California Runs on Fumes but Avoids Blackouts.*)

“Let’s not underestimate the people of the United States. Let’s not underestimate the

people of New England,” Tierney said. “If they’re called upon, as millions of Californians were on their cell phones, to reduce demand immediately, they will respond.”

FERC Chairman Richard Glick called for a broader focus too, saying that he would like to see a focus on longer-term fixes like new generation, transmission buildout and energy efficiency.

“If we spend all our time thinking about how we’re going to keep the Everett LNG facility open ... today will be a failure,” Glick said.

In the end, both the short-term LNG challenges and longer-term clean energy transition got plenty of air time at the forum. But there’s still significant anxiety in the energy sector and among its regulators about what will happen when the thermometers drop and stay low.

“If the lights go out, we’re all to blame. There’s not going to be any finger pointing because we’re all on the hook,” said Phil Bartlett, chairman of the Maine Public Utilities Commission ■.



FERC Chairman Richard Glick (left) and Commissioner Allison Clements listen as panelists talk about New England's winter reliability problems. | © RTO Insider LLC

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ISO-NE News

Clean Energy Groups Don't Buy ISO-NE's Gas Reliance

By Sam Mintz

Environmental and clean energy advocates are pushing New England to get off the gas.

In a *new white paper* and at a press briefing, several regional and national environmental groups challenged the approach taken by grid operator ISO-NE as industry stakeholders head into a high-profile policy forum in Vermont last week.

The groups, which include the Sierra Club, Conservation Law Foundation, Acadia Center and others, say that New England needs to quickly pivot to clean energy, and avoid throwing “good money after bad” by investing more in fossil fuel infrastructure.

The document lays out several clean grid reliability solutions that can be pushed to the front in the short term, including expanding residential demand programs, ramping up commercial and industrial demand response, and boosting energy efficiency.

And it calls on the region to, in the long term, better utilize the existing fleet of renewables, deploy “stacked” battery storage, and make “smart expansions” to the region’s transmission system.

Amid increasingly frequent warnings about the reliability of the region’s grid in winter, New England has clean options, the groups conclude.

“New England’s leaders, with the support of federal agencies like FERC, should be accelerating efforts to deploy alternatives to gas generation that take advantage of the region’s abundant clean energy resources,” the white paper says.

The policy paper was a response to a recent statement put out by ISO-NE, in which the grid operator took a different view.

In its “problem statement” ahead of the FERC forum in Vermont, ISO-NE emphasized that even though the region is moving toward a decarbonized grid in the long-run, natural gas remains a vital generating fuel in the near term. (See *ISO-NE: Reliability Still Depends on Mass. LNG Import Terminal*.)

“Without adequate gas, the region may not be able to meet the demand for home heating and electricity — and, when reliability suffers, the clean energy transition suffers,” the grid



Mystic Generating Station is at the heart of debates around natural gas and grid reliability in New England. | Fletcher6, CC BY-SA 3.0, via Wikimedia Commons

operator wrote.

Though all involved agree that New England is moving toward weaning itself off gas in the long run, the grid operator’s message ruffled some of its most frequent critics in the environmental and clean energy sectors, who blame ISO-NE for the region’s current reliability travails.

“For years we’ve been presented by the ISO with programs and policies that did not solve any of the perceived winter reliability challenges,” Phelps Turner, senior attorney at the Conservation Law Foundation, said at a press briefing Sept. 6.

“It’s our view that if we had spent that time working on the clean energy transition, rather than constant annual fear-mongering, we would be in a much better spot today,” Turner said.

It’s a recurring message from environmental advocates, who feel that ISO-NE has moved far too slowly in following the directives of the New England states to shift to clean energy.

In that vein, the problem statement followed a familiar pattern, said Melissa Birchard, director of clean energy and grid transition at the Acadia Center: It led with identifying clean energy for the region’s long-term needs but then switched to a focus on fossil fuels in the short-term.

“We need to get off this merry-go-round,” Birchard said. “We can’t keep going through this every year and having these incredible costs that consumers are experiencing.”

Managing Expectations for Thursday

The groups did not have high expectation for the all-day forum held by FERC on Thursday in Burlington, Vt. (See related story, *FERC Comes to Vermont, and Leaves with a New England-sized Headache*.)

“They’re going to be discussing challenges and not solutions. What are the problems and how do we fix them?” said Mireille Bejjani, an organizer on the Fix the Grid campaign.

But getting a wide variety of speakers and guests in the same room could be a start to more productive conversations about how to move forward, said Caitlin Marquis, director of Advanced Energy Economy.

“We want to see a clear and transparent discussion about what the reliability risks are that we’re facing, specifically,” Marquis said. “What is the time frame of those risks? What are the grid’s needs that we need to be defining?”

In the natural gas sector, there are different hopes for the meeting.

A *group of associations* representing gas and oil generators and pipeline owners called on New England to build more pipelines and tweak market rules to give generators more certainty.

“We hope this forum will provide an avenue to discuss market design improvements and to develop sufficient natural gas infrastructure for power customers in addition to the manufacturers, businesses, and households that rely on natural gas to power their everyday needs,” the groups said in a statement. ■

MISO News

MISO Officially Opens Markets to Storage Resources

By Amanda Durish Cook

MISO has successfully opened its wholesale markets to electric storage resources in compliance with FERC Order 841, the grid operator said Sept. 6.

Effective Sept. 1, storage resources can participate in the RTO's energy and operating reserves markets as supply or demand. MISO said the resources have the "operational characteristics that support reliability and resilience as the industry continues to transition the resource fleet."

"We are excited to see this space grow with

increasing member interest and participation, particularly as we continue to adapt to the accelerating resource transition," Jessica Lucas, executive director of system operations, said in a statement. "With the introduction of electric storage resources to our market portfolio, we will continue to position MISO's grid and its members as the grid of the future."

Staff have developed a method that implements new storage-specific offer parameters required by FERC in a way that recognizes their unique physical and operational characteristics. The technology earned MISO its *first patent* last year from the U.S. Patent and Trademark Office.

The RTO said the participation model's near-term benefits are "modest due to the small volume of storage resources."

"However, the new model positions MISO ahead of the increased storage participation anticipated with higher penetration of renewables and distributed energy resources over the next five to 10 years," it said.

MISO debuted the storage participation on its legacy market platform. It had originally requested that it be given until 2025 to fully incorporate storage on its new market platform. However, FERC ordered the grid operator to build the participation models on both of its market platforms. (See *MISO: No Choice but to Double Up on 841 Compliance*.)

The RTO said that that integrating storage offers into its markets would be better served under its new market platform and argued that being forced to put together two participation models to meet the deadline would stretch its resources.

CEO John Bear wrote to FERC in May to support a deferral, saying a 2022 launch could delay and "severely" compromise MISO's "efforts to address growing reliability and resilience concerns and meet members' carbon-reduction goals."

The RTO reported over the summer that it was testing its new energy-storage participation software. Its electric storage model uses eight commitment statuses, including injecting, withdrawing or toggling between the two. Resources can also designate themselves as emergency injecting, emergency withdrawing, available, not participating or on outage. ■



Connexus Energy solar and storage site in Minnesota | Connexus Energy



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MISO News

MISO's 2022 Tx Planning Cycle Exceeds \$4B

By Amanda Durish Cook

MISO's final 2022 Transmission Expansion Plan (MTEP 22) clocks in at 384 new projects and about \$4.3 billion in construction costs.

MTEP 22's \$4 billion value is a marked increase over a 2021 plan that included 335 projects worth \$3 billion, but more in line with the 2019 and 2020 cycles' spending. The draft MTEP 22 called for \$3.8 billion in spending over 364 new transmission projects. (See [MISO Annual Transmission Package Nears \\$4B.](#))

The plan comprises 40 baseline reliability projects at \$535 million; 67 projects to accommodate generator interconnections at \$523 million; and \$3.3 billion in 275 "other" projects for reliability, load growth and addressing aging facilities. MTEP 22 also includes two market participant-funded projects at \$7.7 million.

MISO will recommend the MTEP 22 report for the Board of Directors' approval in early December.

The plan's costliest project is the \$120 million for new static synchronous compensators necessary to reinforce the system in preparation for Ameren Missouri's retirement of its 1.2-GW Rush Island coal power plant. The project's expense is tied with Entergy Arkansas' new \$120 million Sandy Bayou 500/230-kV substation, which will tap into its existing Driver-Shelby 500-kV line to accommodate the state's load growth.

Four of the other 10 most expensive projects are in East Texas to meet increasing load there.

Enviros: Plan for Growing Load, Aging Infrastructure

During a Thursday West Subregional Planning meeting, Clean Grid Alliance's Natalie McIntire said MISO and stakeholders should have a better understanding of which aging infrastructure needs replacement sooner so the grid operator can pursue larger, more cost-effective projects that could supplant the need for future projects.

"It seems when you have an asset that has such a long life, you should have a better idea of when a replacement is necessary more than a year or two in advance," she said.

McIntire asked why stakeholders don't get more notice of projects addressing age and condition before the release of MTEP reports. Staff responded that transmission owners like-

ly inspect facilities on a rotating basis, making it difficult to get a sweeping picture of aging elements.

"We've been asking for this for years, and it doesn't seem that we're going to get a good answer. ... You can't inspect all of your facilities in a year, but you should have a clearer picture of ... when assets are getting to the end of their life, maybe five to 10 years in advance," McIntire said. She said it appears MISO is giving its transmission owners too much deference in assessing system needs.

Iowa Office of the Consumer Advocate's Tim Tessier also called for more transparency from transmission owners on aging facilities so the RTO can plan more comprehensive upgrades.

MTEP 22's inclusion of several late additions by Cleco and Entergy for substation work in MISO South raised some eyebrows among clean energy advocates, who have said the region needs more cohesive transmission planning.

Cleco applied for expedited treatment to include the \$15 million, 230-kV Marthaville substation and the \$15 million, 138-kV Vernon substation in western Louisiana. Entergy requested the go-ahead to install two additional 230-kV breakers into its existing Legend substation near the Louisiana-Texas border. It also asked to construct a new 230-kV substation for about \$1 million in the same area and a \$32.6 million, 115-kV substation in northern Mississippi.

Both transmission owners said the substation projects are necessary to accommodate industrial load growth and can't wait for the MTEP 23 cycle.

Southern Renewable Energy Association (SREA) Executive Director Simon Mahan said that though MISO allows stakeholders to propose study alternatives for expedited projects, the stakeholder community generally lacks insight into the grid operator's and TOs' analyses to suggest substitutions. He said stakeholders are in the dark regarding the extent of study alternatives, and he said he's unaware of the RTO ever opting for a stakeholder-proposed alternative to an expedited project request.

SREA's Andy Kowalczyk asked whether all the late industrial load growth applications in one cycle should prompt MISO to embark on a planning study on MISO South's projected load growth. He said he is concerned over the length of agreements with industrial custom-



Xcel Energy line work in Northern Minnesota | Xcel Energy

ers and the possibility of stranded costs for transmission facilities.

"Is this the most economical way to be planning?" he asked during a Wednesday South Subregional Planning meeting.

Edin Habibovic, MISO's senior manager of expansion planning, called Kowalczyk's query "a good question," saying market competition makes it difficult to get early data from industrial customers about their expansion plans and energy needs. He also said TOs are often bound by non-disclosure agreements about load-growth projects.

MISO will review the MISO South expedited requests with stakeholders again during October's Planning Advisory Committee meeting.

Stakeholders Ask for Special MTEP 23 Studies

The RTO has also been gathering input from stakeholders on the special studies it should conduct under MTEP 23.

Last month, MISO project manager Sandy Boegeman warned that the grid-operator's long-range transmission planning (LRTP) is currently drawing a lot of manpower and resources, possibly limiting the ad hoc planning studies for MTEP 23. MTEP 22 didn't contain any supplementary studies for the same reason.

The Organization of MISO States has asked the RTO to continue concentrating on LRTP planning and pay special attention to finding projects that expand the Midwest-South transfer constraint.

Other stakeholders have asked MISO to study the historic levels of congestion in MISO Midwest, potential impacts from widespread adoption of energy storage, and future thermal generation retirements in Illinois under the state's Climate and Equitable Jobs Act. ■

MISO News

Whitmer Backs Palisades Reopening Plan

By John Lindstrom

LANSING, Mich. — Gov. Gretchen Whitmer on Friday fired a major shot boosting efforts to reopen the now-shuttered Palisades Nuclear Plant along Lake Michigan’s shores by telling the U.S. Department of Energy the state will take steps toward finding state funding and “facilitating” a power purchase agreement with the generating plant if it wins a federal grant.

In a letter to U.S. Energy Secretary Jennifer Granholm — herself a former Michigan governor — backing a proposal by Holtec International for a Civil Nuclear Credit Program grant, Whitmer said reopening the plant, closed last spring, “is a top priority” for the state as it provides hundreds of jobs, paying on average more than \$117,000 a year and producing as much as 800 MW of “reliable, clean power.”

“I will do everything I can to keep this plant open, protect jobs, increase Michigan’s competitiveness, lower costs and expand clean energy production,” Whitmer said in the [letter](#).

Less than two full months after the nearly five-decade-old Palisades closed, Holtec in July proposed a plan to remove radioactive materials. That proposal was controversial because it called for using Great Lakes barges.

Whitmer had said little about nuclear energy in the state in the early days of her administration and as it worked on a net-zero-emissions plan. Shortly before the plant’s closing, Whitmer expressed support for seeking federal aid to keep it open.

While nuclear energy is a controversial topic among environmentalists, keeping the plant



Palisades Nuclear Plant | *Entergy*

open was cited by many as critical to the state’s goal of reach net zero before 2050.

The plant was closed on May 20, 11 days before its May 31 decommissioning date, when its fuel supply ran out and a PPA the plant had with CMS Energy ended. Holtec took possession of Palisades from Entergy this past June.

With Palisades closed there are currently two nuclear plants operating in Michigan: the Cook plant, operated by American Electric Power subsidiary Indiana Michigan Power, and Fermi

2, operated by DTE Energy.

Holtec CEO Kris Singh said Whitmer’s support has been “instrumental” in the company’s efforts to win the federal grant to reopen Palisades.

Whitmer said that while the state and company wait for an answer from DOE, the state will “continue to efforts to diversify economic opportunities in Southwest Michigan through the Michigan Department of Treasury’s Energy Transition Impact Project,” as well as other economic development programs. ■

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NYISO News

Report Updates NY OSW Cable Routing Study

NYSERDA Assessing Solutions to Potential Limitations off Long Island

By John Cropley

The New York State Energy Research and Development Authority this month issued an update on the potential challenges to routing transmission cables to the fleet of wind turbines planned off the New York coast.

NYSERDA has been working since August 2021 on the Offshore Wind Cable Corridor Constraints Assessment as part of the state's drive to achieve a carbon-free power grid.

Five OSW projects totaling 4.5 GW are under development in New York; the state's Climate Leadership and Community Protection Act mandates that 9 GW of OSW generation be in place by 2035.

The assessment is targeted for completion late this year. It seeks to:

- document the environmental, technical and stakeholder constraints of potential under-sea and overland cable corridors;
- document the opportunities, concerns, impacts and risks of these corridors;
- inform future policy actions to maximize benefits associated with the new OSW infrastructure; and
- minimize conflicts and impacts while following a timeline that reaches the 9-GW goal by the 2035 deadline.

In its progress report submitted Sept. 1 to the New York Public Service Commission, NYSERDA said the Cable Working Group, which is performing the assessment, broke New York's waters into four separate areas, each with different characteristics and potential constraints on installation, operation and maintenance of OSW cables.

Offshore, specific zones and subzones were identified with similar characteristics and constraints. On land, zone boundaries were drawn to optimize existing rights of way used for electric or gas transmission, elevated roadways and passenger rail lines in the densely constructed region.

In the South Shore Approach Area — the Atlantic Ocean south of Long Island — commercial fishing, including bottom trawling, recreational fishing and existing utilities (pipelines, telecommunications and transmission cables) present the most significant challenges to OSW cables,

the assessment has determined.

In the Long Island Sound Approach Area — waters north and east of Long Island, from Block Island Sound to the East River — marine geology, commercial and recreational uses, aquatic resources and cultural concerns are flagged. There is, for example, a strong tidal current, shallow zones, scour, boulder fields, a hard seabed, slopes greater than 10%, sensitive resources such as cold-water coral, shipwrecks and, in the westernmost end, anchorage areas.

In the New York Harbor Approach Area — the Upper and Lower harbors and the Hudson and East rivers — surface traffic is a major concern, with federally designated navigation channels and anchorage areas, heavy commercial shipping and passenger ferry traffic, narrowing waterways and the presence of pleasure craft.

In the Landfall and Overland Area — New York City and Long Island, and the places on both where undersea cables would make landfall and interconnect with the grid — the potential constraints are many and varied. Most prevalent is topography, as slopes exceeding 15% exist in all 25 zones designated on shore. There are potential environmental justice

concerns in 23 of the 25 zones. Federal Highway Administration review and authorization would be required to site transmission lines along FHA-funded highways. Fish and wildlife habitats, public beaches, recreational fishing and eelgrass are other potential constraints.

The preferred approach would be to avoid negative impacts from all the potential constraints identified, but the assessment suggests steps to minimize or mitigate those impacts that cannot be avoided.

The assessment recommends that OSW cable routing incorporate accepted siting principles and industry experience but also notes that bringing 9 GW of power from the sea to land will require innovation in design, operation and maintenance that goes beyond standards set by previous projects and addresses the specific considerations for each site in New York.

NYSERDA issued a request for information Aug. 30, seeking feedback on whether the draft assessment accurately captures the most significant potential constraints and opportunities arising from the initiative. The comment period closes Oct. 14. ■



A working group is identifying potential constraints on routing power lines from wind turbines off the shore of Long Island, shown here. | Shutterstock

NYISO News



NYISO Offshore Wind Profiles to Plot Development Potential

NYISO last week shared an update on a consultant’s effort to model 20-year offshore wind power profiles that will assess the potential outcomes for greater wind farm development along the Northeast coast.

DNV’s renewable profile modeling will produce three hourly OSW power profiles based on data from 2000 through 2021 for three areas. The designated areas include New York Harbor, Long Island shore and Long Island East End, though they are dozens of miles off those respective shorelines in some cases. These areas will be further broken out into seven zones that represent the potential development areas for future offshore wind projects.

NYISO engaged DNV to conduct the simulated profile study after the National Renewable Energy Laboratory released its updated 20-year wind dataset that included meteorological data but did not include relevant power profiles for those wind farm zones.

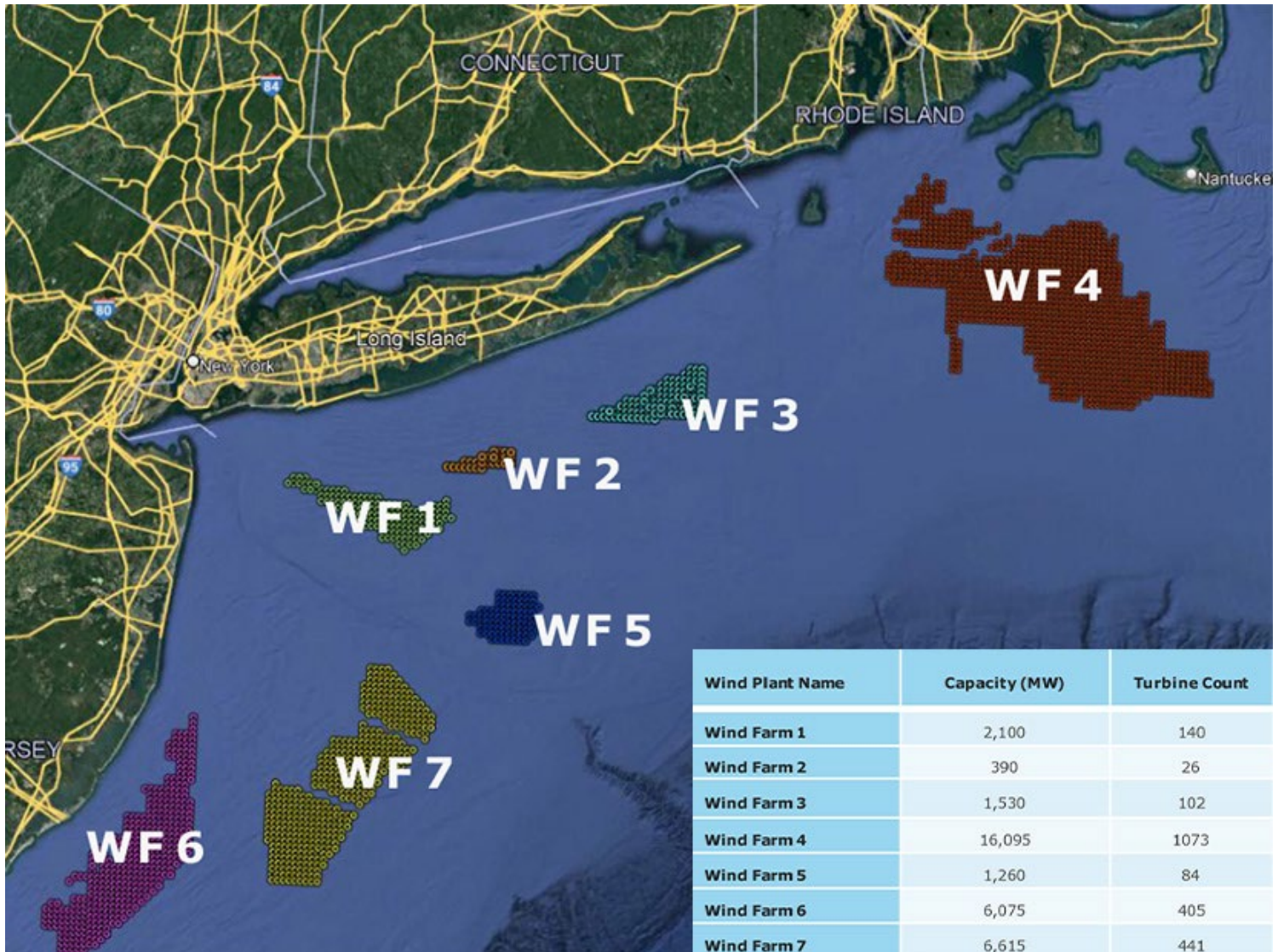
The profiles will be built from mesoscale weathering modeling, high-resolution hourly wind mapping, averaged wind farm turbine constructs, NASA’s MERRA-2 global modeling program, and other critical inputs or assumptions that ensure complete buildouts for each development area.

DNV will also use its “WindFarmer” program

to create wind turbine power curves that simulate energy production based on the distribution of wind speed and direction, while still accounting for potential losses, such as wake interactions, shutdown history, density variations and extreme weather event disruptions.

The update came during NYISO’s Installed Capacity Working Group meeting Wednesday. NYISO is expecting DNV’s final offshore wind power profile presentation early in the fourth quarter of 2022 and plans to make those hourly wind profiles available to the public soon afterward. ■

— John Norris



The offshore wind power study will create hourly profiles at these seven designated wind farm sites south and east of New York. | NYISO

NYISO News



NYISO Proposes Fixes for Interconnection Backlog

By John Norris

NYISO is planning to narrow the scope of its system reliability impact studies (SRIS) and revise its *pro forma* interconnection agreements in response to resource challenges and the unprecedented increase in the number of generator interconnection requests.

ISO officials outlined the proposed changes at the Transmission Planning Advisory Subcommittee (TPAS) and Electric System Planning Working Group meeting Aug. 31.

Despite an increase in staffing, the workload for the ISO's interconnection studies (IS) team has doubled since 2018 when six engineers managed 120+ studies, about 20 per engineer. This year, the ISO's nine engineers are managing 346+ studies, an average of 40 each.

Productivity also has been hampered as the ISO had to replace five engineers on the IS team between January 2021 and March 2022, meaning two-thirds of the team lacked interconnection experience.

These problems have been exacerbated by labor market shortages, which prevented consultants from taking on more projects, and more customers requiring personalized attention because of their unfamiliarity with NYISO processes, Thanh Nguyen, senior manager of interconnection projects, said.

NYISO attorney Sara Keegan said the volume of interconnection requests is also taxing the ISO's legal team.

As a result, Nguyen said the ISO plans to eliminate from the SRIS for large facility interconnections the voltage deviation analysis and harmonic analysis and perform other analyses — NPCC A-10 testing, transfer assessments and sub-synchronous torsional interaction screenings — on a case-by-case basis.

The streamlining of the SRIS process is in addition to other changes the ISO has made to address the growing interconnection queue and address the labor shortage, including a salary study that resulted in pay increases for engineers and the planned hiring of staff to help guide project developers through the interconnection process. (See [NYISO Details 2023 Budget & Compensation Updates](#).)

Stakeholders agreed that elements of the SRIS study were redundant for projects that go through class year studies.

In addition, Keegan said the ISO will seek FERC approval for changes to its *pro forma* interconnection agreements and the creation of a *pro forma* engineering, procurement and construction (EPC) agreement for some system upgrade facilities (SUFs) and system deliverability upgrades (SDUs).

Keegan said the ISO will propose revising the small (SGIAs) and large generator interconnection agreements (LGIAs) to add placeholders to address recurring variations that have necessitated non-conforming agreements and clarify security, invoicing and oversight cost rules, among other changes.

The *pro forma* EPC agreement would cover SUFs and SDUs not addressed in LGIAs or SGIAs because the upgrades are required for affected systems or for multiple projects, Keegan said. She noted that FERC has approved such an agreement for MISO and has proposed an agreement for affected system in its generator interconnection Notice of Proposed Rulemaking (NOPR) in June ([RM22-14](#)). (See [FERC Proposes Interconnection Process Overhaul](#).)

NYISO anticipates presenting the interconnection agreement related tariff revisions at either the Oct. 3 or Nov. 1 TPAS meeting and is targeting Q1 2023 for a Section 205 filing with FERC. NYISO also anticipated additional revisions in 2023 as part of a project proposed by the Alliance For Clean Energy New York and through an expected compliance filing from FERC's final order on the generator interconnection NOPR.

Nguyen also outlined plans to revise the base case inclusion rules used in the interconnection studies to ensure the studies incorporate transmission and class year projects that may impact each other by using existing system capacity or requiring similar upgrades.

The ISO said it expects discussion of proposed tariff changes through the third quarter.

RNA Draft Report Finds No Immediate Needs

The 2022 Reliability Needs Assessment (RNA) found that there were no reliability needs on the New York bulk electric grid through 2032.

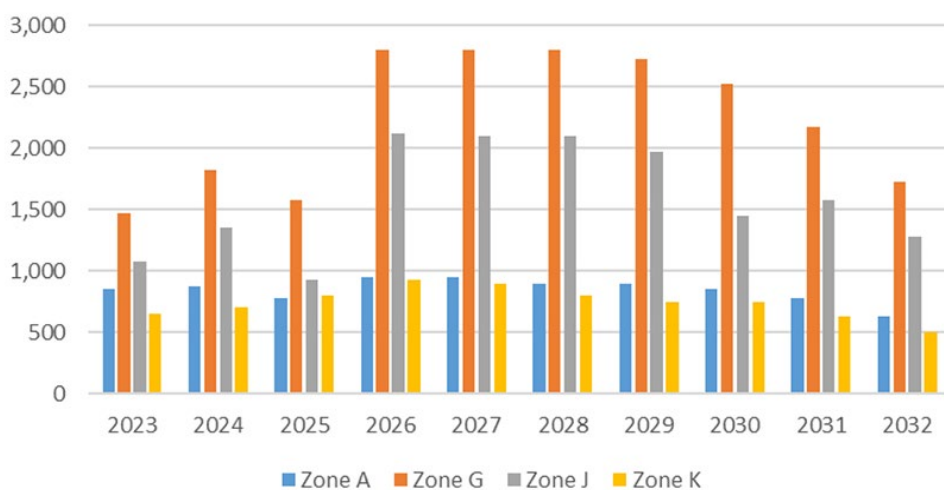
While the report found the ISO's grid will meet all reliability criteria based on forecast demand and expected weather, it said the reliability margin could be narrowed or eliminated, based upon changes in forecasted system conditions.

"Delayed implementation of projects in this plan, additional generator deactivations, unplanned outages, changes in load patterns and extreme weather could potentially lead to deficiencies in reliable electric service in the coming years," the report said.

The report said reliability margins will likely shrink in the future because of the unavailability of simple cycle combustion turbines because of environmental rules, including the state Department of Environmental Conservation's Peaker Rule, which will reduce nitrogen oxides emissions from CTs in a phased implementation from 2023 to 2025.

"Additionally, significant load-increasing im-

Zonal Resource Adequacy Margins



Key zonal resource adequacy margins | NYISO

NYISO News



pacts are forecasted due to expected growth in electric vehicle usage, large cloud-computing data centers and other electrification (i.e., conversion of home heating, cooking, water heating and other end-uses from fossil-fuel based systems to electric systems),” the RNA said. “However, additional resources

planned to be in-service in the near-term horizon, such as the Champlain Hudson Power Express connection from Hydro Quebec to New York City, provides a boost to the margins. Additionally, the NYISO is forecasting over the next 10-year period a decrease in energy usage due to energy efficiency initiatives and

increasing amounts of behind the meter solar generation.”

“While we don’t have reliability needs in the study period, the margins are not far from tipping,” the ISO’s Laura Popa told the two committees.

The RNA is the first step of the ISO’s reliability planning process. The grid operator plans to issue its 2023-2032 Comprehensive Reliability Plan in 2023. Any needs identified in the short-term reliability process in year one through year three will be addressed in its quarterly short-term assessments of reliability.

Comments or questions were due Sept. 6. The ISO is targeting Sept. 19 for its third RNA draft and then submitting the report for board approval in November. ■



NYISO large generator interconnection procedure | NYISO

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NYISO News

Hochul Insurance Investment Helps Shore up CLCPA Targets

By John Norris and John Copley

New York Gov. Kathy Hochul on Sept. 1 [announced](#) \$6.5 million in funding to support research of innovative insurance policies or products that will promote the adoption of clean technologies.

The Insurance Innovation for Climate-Technology Solutions program will target insurance for residential and commercial renewable energy products that will both develop new business models and enable future climate technology solutions and be funded through the state’s 10-year, \$5.3 billion Clean Energy Fund, according to the New York State Energy Research and Development Authority (NYSERDA).

A new program administrator will be awarded up to \$1.5 million to create the program by working with insurance management experts to develop, fund and test innovative risk models that better address climate change. The remaining \$5 million will be used for competitive grants expected to be announced in 2023.

The program will help overcome barriers to bringing new insurance products to the market in the face of increasingly costly

extreme weather events. It is another step by the Hochul administration in support of New York’s 2019 climate and energy legislation, the Climate Leadership and Community Protection Act (CLCPA), the sweeping climate and energy initiative that calls for 70% of the state’s electricity to be generated through renewable sources by 2030 (70x30) and 100% through zero-emission means by 2040.

Many businesses have significantly re-evaluated their risk model projections to factor in the potential costs of coverage associated with climate change, especially the natural disasters that seem to be coming with greater frequency and cost. New York estimates that Hurricane Sandy caused \$19 billion in damages and lost economic activity in New York City alone.

State Sen. Neil Breslin, an Albany Democrat who chairs the Senate Insurance Committee, said in a news release that the Innovation for Climate-Technology Solutions program “is critical for economic stability” because it will “enable businesses to better manage risk and prepare for the negative impacts climate change may have on them.”

NYISO Climate Vulnerabilities

NYISO recently [assessed](#) the impacts that cli-



New York Gov. Kathy Hochul | Darren McGee, Office of Governor

mate change would have on the resilience and reliability of New York’s power grid.

The [study](#) found that climate disruptions could significantly reduce resource output during the winter, replacing fossil fuels would make meeting peak electricity demands more difficult, and better planning would make identified vulnerabilities more manageable.

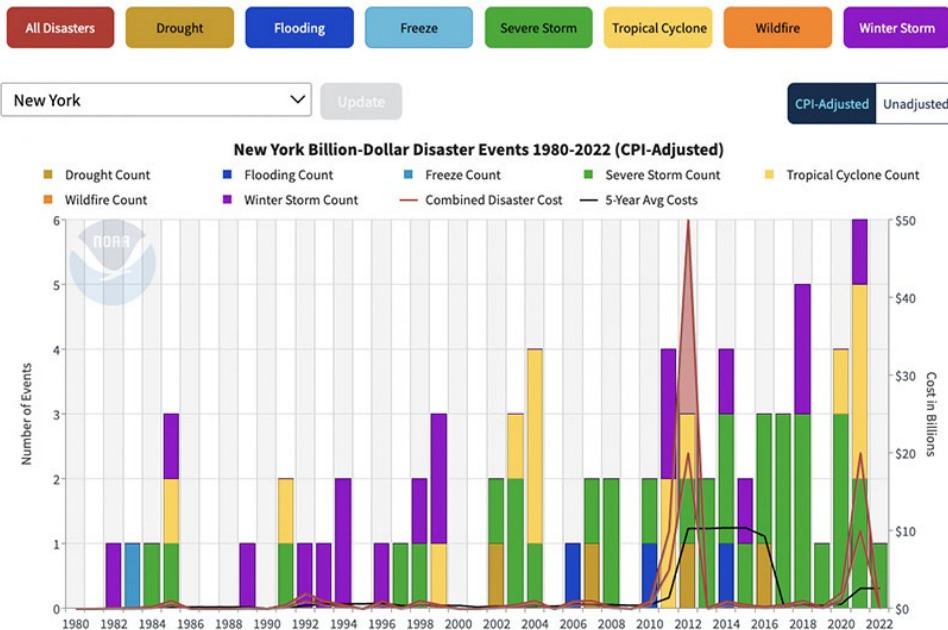
Specifically, NYISO found that utility-scale battery storage would fill many of the reliability gaps created when carbon-fueled power generation is taken offline, which tracks closely with [recent](#) findings from Potomac Economics’ “Outlook” review.

Greater transmission capacity also will be needed to maximize renewable energy access, while dispatchable emission-free resources, such as green hydrogen, will be needed to act as load failsafes when intermittent renewable generators are taken offline because of meteorological disruptions.

Application Process

NYSERDA will competitively select a program administrator and is [accepting applications](#) from qualified organizations through Oct. 12. Applicants are asked to demonstrate economic benefits, and their proposals will be evaluated by a scoring committee.

Applicants must show how they can promote the research and development needed to bring new insurance products and services to market, including soliciting new insurance ideas, managing the development and growth of the program, and reducing risk for climate technology services. ■



Timeline of natural disaster cost and frequency for New York (1980-2022) | National Centers for Environmental Information

NYISO News

NY Funds Long-duration Energy Storage Projects

Bulk of \$16.6M in Awards Goes to Constellation Nuclear Facility

By John Cropley

New York on Thursday announced \$16.6 million in funding for long-duration energy storage projects that tie into renewable energy and said it is accepting proposals for \$17 million in additional grants for similar projects.

The \$16.6 million is divided among five recipients, but most of it will go to Constellation's Nine Mile Point Nuclear Station on the shore of Lake Ontario, north of Syracuse. The plant will receive \$12.5 million to demonstrate nuclear-hydrogen fueled peak power generation paired with a long-duration hydrogen energy storage unit.

The other recipients are:

- Borrego Solar Systems: \$2.7 million to develop, design and construct two standalone energy storage systems and perform field demonstrations of a six-hour zinc hybrid cathode energy storage system in New York City to help demonstrate that zinc hybrid technology is economically competitive with lithium-ion.
- JC Solutions: \$1.2 million to develop a 3D concrete printed marine pumped hydroelectric storage system that integrates directly with offshore wind development in support of grid resilience and reduced reliance on fossil fuel plants to meet periods of peak electric demand.
- Power to Hydrogen: \$100,000 to develop a reversible fuel cell system for hydrogen production and energy and to help facilitate the system's readiness for demonstration and commercial adoption.
- ROCCERA: \$100,000 to evaluate and demonstrate a novel commercially viable solid oxide electrolyzer cell prototype for clean hydrogen production together with a corresponding scalable, more efficient manufacturing process.

Nine Mile Point is a two-reactor facility that can produce up to 1.907 GW of power. In



New York state has awarded \$12.5 million to Constellation's Nine Mile Point Nuclear Station to demonstrate nuclear-hydrogen fueled peak power generation paired with a long duration hydrogen energy storage unit. | *Constellation Energy*

2021, it received a U.S. Department of Energy grant toward demonstration of integrated production, storage and usage on site.

That project, in partnership with Nel Hydrogen, Argonne National Laboratory, Idaho National Laboratory and the National Renewable Energy Laboratory, set out to generate an economical supply of hydrogen for potential use in the marketplace as a carbon-free fuel.

Hydrogen is a natural byproduct of nuclear energy, and a hydrogen storage system was already in place on site. A proton exchange membrane electrolyzer was installed as part of the project.

Gov. Kathy Hochul announced the \$16.6 million in funding Thursday at the 2022 Advanced Energy Conference in New York City. She also announced \$17 million in competitive funding available for projects that advance development and demonstration of scalable technologies for long-duration energy storage — at

least 10 hours' duration at rated power.

Proposals will be accepted through Oct. 17 and must include only technologies that have not yet been commercialized.

Submissions should advance, develop or field-test hydrogen, electric, chemical, mechanical or thermal-electric storage technologies that will address cost, performance, siting and renewable integration challenges, such as grid congestion, hosting capacity constraints and lithium-ion siting in New York City.

The two pools of grant money come from the Renewable Optimization and Energy Storage Innovation Program administered by the New York State Energy Research and Development Authority.

To date, the program has boosted 356 projects with more than \$225 million in funding, resulting in \$956 million in additional investments and 46 commercialized products, the Hochul administration said. ■

Northeast news from our other channels



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PJM News



PJM Planning Committee Briefs

Planning Committee Reviews Capital Budget

The Planning Committee reviewed a \$45 million capital budget proposal during its meeting last week, a potential \$3 million increase over current funding.

Nearly half of the suggested budget goes toward current applications and systems reliability, with \$22 million allocated toward items such as dispatch tool enhancements, data analytics and cybersecurity. Spending on facilities and technology infrastructure would also increase to \$12 million.

Less spending is being requested for application replacements and retrofits, which would reduce by a fifth down to \$8 million, while new products and services as well as interregional coordination would remain static.

The spending plan was also reviewed by the Market Implementation Committee last week and will be considered by the Finance Committee on Sept. 22 and 28. The Finance Committee will draft a recommendation letter to the PJM Board of Managers, which will consider approving the budget on Oct. 4.

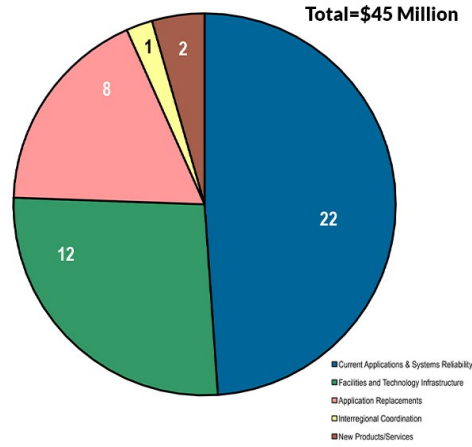
Reserve Requirement Study Recommends Increasing FPR and IMR

The PC also received a presentation of the 2022 Reserve Requirement Study results, which recommends increasing both the forecast pool requirement (FPR) and installed reserve margin (IRM) compared to the 2021 study results. This year's study results recommend an IRM of 14.9% for the 2023/24 delivery year, rather than the 14.8% favored in last year's study for that year, and a FPR of 1.0930 next year, as opposed to 1.0901 recommended in the 2021 study.

The recommended IRM would fall to 14.8% in 2024/25 and continue down to 14.7% for the following two years. The FPR would decline to 1.0926 in 2024/25 and would sit at 1.0918 for the next two years.

The study also proposed winter weekly reserve targets for the upcoming season, recommending 21% maximum monthly available reserves for December, 27% for January and 23% for February. The WWRT was set using RTO-aggregate outage data from the 2007/08 delivery year through last year.

The PC will take another look at the study in October, when it is scheduled to vote on the FPR, IRM and WWRT. From there, the



Preliminary 2023 capital budget | PJM

Operating Committee is slated to vote on the WWRT in November, and the FPR and IRM are set to be voted on by the Markets and Reliability Committee and Members Committee in October through November. The PJM Board will consider final approval in December. The study's assumptions were endorsed by the PC in June, and its load model selection was endorsed in August.

Tx Refunds Could Date Back to 2014

PJM could be required to refund transmission cost allocations dating to 2014 as a result of an appellate court ruling last month that remanded FERC decisions on two North Jersey transmission projects, PJM attorney Pauline Foley told stakeholders.

The D.C. Circuit Court of Appeals said FERC failed to explain why the solution-based distribution-factor analysis (DFAX) method should be used to assign the costs of two

North Jersey transmission projects but not for a similar project in Artificial Island, partially supporting appeals by two merchant transmission operators. (See [DC Circuit Faults FERC on Cost Allocation of NJ Transmission Projects.](#))

The case involves \$1.3 billion in transmission upgrades authorized by PJM to address short-circuit problems between Public Service Electric and Gas's Bergen and Linden switching stations and repairs to and around the utility's Sewaren substation.

If FERC decides not to try to justify its distinction between the projects "we do not have a cost allocation to replace solution based DFAX for the Bergen-Linden and Sewaren projects," said Foley, who noted the RTO has approved the allocations for the projects in late 2013 and early 2014. "Depending on what FERC determines, refunds could date back as far as 2014," she said.

Annual Pre-qualification Window Opens for Competitive Planning Process

The annual one-month pre-qualification window for transmission developers seeking to submit projects under the competitive planning process has opened. Applications to qualify as designated entities can be submitted through Sept. 30 at [ProposalWindow-Prequal@pjm.com](#).

To remain qualified, participants are required to confirm or update their pre-qualification information at least every three years. The Competitive Planner Tool now contains a new Pre-qualification Submission feature allowing form-based submissions and the ability to attach public or confidential versions of documents. ■

— Devin Leith-Yessian and Rich Heidorn Jr.



2022 forecast pool requirement (FPR) waterfall chart | PJM

NOW HIRING

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Successful applicant must have a bachelor's or master's degree in accounting or finance; five to seven years of corporate or public accounting experience; previous experience in utility accounting with electric transmission experience preferred; strong analytical, problem-solving, leadership and communication skills; and advanced knowledge and expertise using Excel and ERP systems with preference given to Oracle. Knowledge of FERC processes, Regulated Property, and generally accepted accounting principles and Financial Accounting Standards Board's codification is preferred.

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PJM News



PJM TEAC Briefs

Dominion Adds \$25M to Data Center Alley Upgrades

VALLEY FORGE, Pa. — The price tag on Dominion Energy’s “Data Center Alley” transmission upgrades in Northern Virginia has grown by \$24.6 million to \$627.6 million.

Dominion told the Transmission Expansion Advisory Committee last week that it needed to increase the scope of the reliability project to clear capacity from two planned substations, including reconductoring seven 230-kV lines and upgrading terminal equipment. The new Wishing Star substation will be constructed near the existing Brambleton substation, while the Mars substation would be sited near Dulles Airport.

The reconducting of 11.4 miles of 230-kV lines totals about \$29 million, and the terminal equipment is estimated at \$12.65 million. Eliminating upgrades to the Brambleton substation and Loudoun breaker replacements will save \$17 million.

According to the immediate needs statement presented by PJM Senior Manager Sami Abdulsalam, data centers in Dominion’s transmission zone in Northern Virginia have been

experiencing “unprecedented load growth” since 2018, which is expected to continue past 2027. (See *PJM Sees Additional \$603M ‘Data Center Alley’ Tx Spend.*)

Although Dominion is already working on more than \$200 million in supplemental and baseline transmission upgrades in the area, PJM says it expects numerous reliability violations in the 2024/25 timeframe and without additional upgrades it expects there will not be sufficient transmission to serve the load beyond that period. The required service date for Dominion’s solution is June 1, 2025.

Nearly \$200 Million in Additional Transmission Projects

FirstEnergy and Dominion presented several other projects to serve new load customers and replace aging infrastructure.

Dominion is planning to construct two new substations for new data centers in Culpeper County, Va. The Germanna substation is being considered along the Remington-Gordonsville line at a \$55 million cost for a 139-MW data center complex.

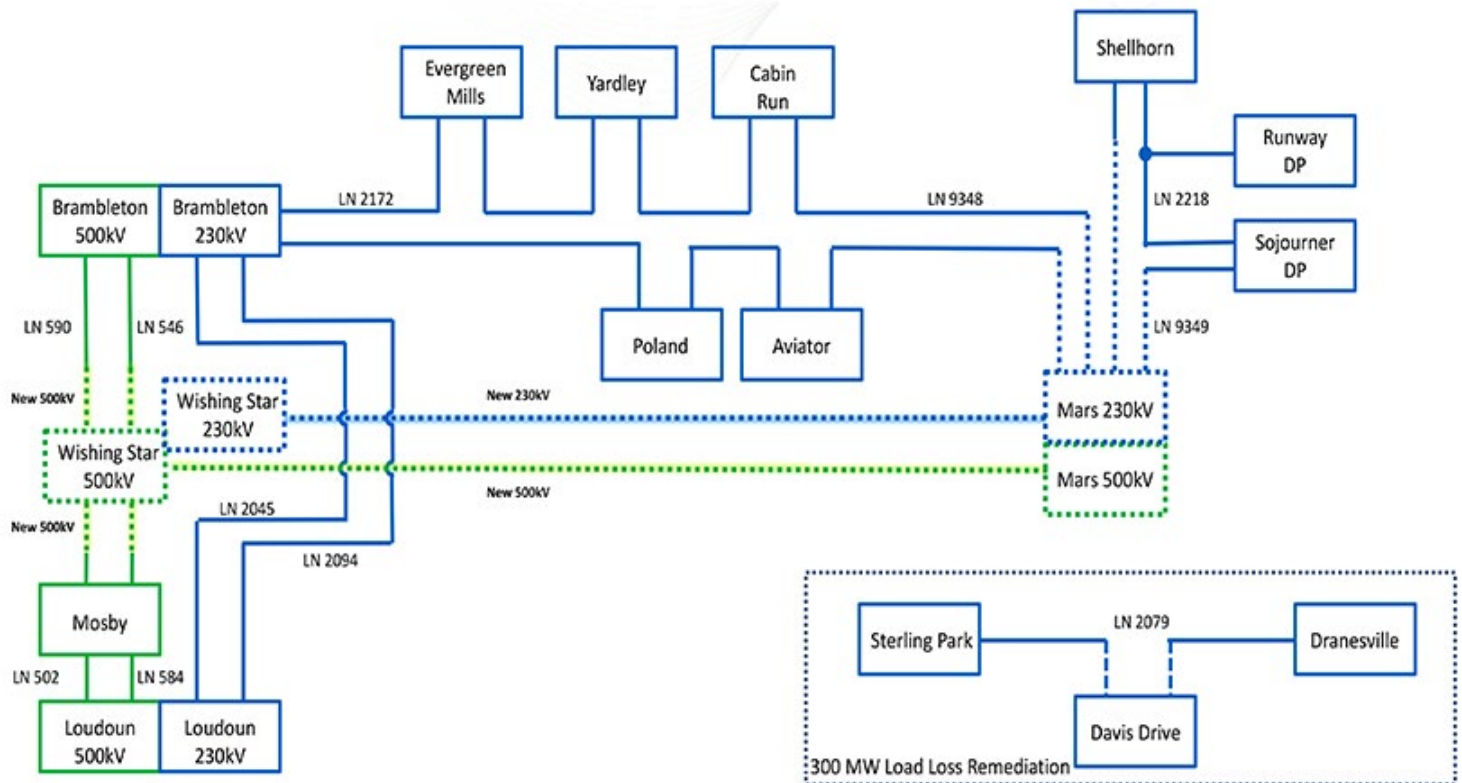
Rappahannock Electric Cooperative has asked

Dominion to increase capacity at the existing Mountain Run delivery point and to construct a new substation nearby for an estimated \$60 million. The project, which is still conceptual, would service a new 350-MW data center.

Dominion also presented a project to rebuild approximately 7.9 miles of double circuit line on the Braddock-Ox line in Prince William County, Va., at a \$43.5 million price tag in response to the identification of thermal violations on the line.

Other projects:

- Dominion is planning to replace two aging transformers, Farmville and Clubhouse, for \$6.4 million and \$6.6 million, respectively. Both units were constructed in 1981.
- Dominion is engineering a new single 230-kV feed for a crypto mining customer in Battleboro, N.C., for \$750,000.
- FirstEnergy is constructing a \$4.9 million 230-kV circuit breaker and equipment feeding into a new 230/234.5-kV transformer in Frederick County, Md. The installation will supply a new customer request with a 30-MW anticipated load.



Upgrades to Data Center Alley in Dominion zone | PJM

PJM News



- FirstEnergy presented a \$15.1 million project to build a new Sage Substation, near the Doubs-Eastalco lines in Frederick County, Md., to serve a new customer with an anticipated 240-MW load.

PJM Outlines Phase 2 of OSW Study

PJM is embarking on the second phase of an offshore wind transmission study requested by the Organization of PJM States Inc., which will consider scenarios for the injection of 8,600 to almost 20,000 MW into Delaware, Maryland, New Jersey and Virginia.

Phase 1 of the study, released last year, looked at five scenarios to identify regional transmission solutions to accommodate the coastal states' offshore wind goals, as well as all PJM states' renewable portfolio standards. It identified costs of \$627 million to \$3.2 billion for injections of 6,400 to 17,000 MW. (See *Tx Upgrades for PJM OSW, Renewables Could Cost \$3.2 Billion.*)

Phase 2 includes three short-term scenarios (study year 2028) assuming 2,022 or 4,000 MW from Maryland, 3,906 MW from New Jersey and 2,640 MW from Virginia, per state requests. Five additional scenarios target year 2035, most of them using the same injections

for Maryland, 7,648 MW from New Jersey and 2,640 or 5,200 MW for Virginia.

The final scenario, requested by Pennsylvania, will assume no offshore wind as a way to separate the OSW cost impacts from that of transmission needed to support other resources needed to meet state RPS requirements.

The new study will use an updated 2022 load forecast and provide a "much more in-depth and granular" market efficiency analysis than Phase 1, said PJM's Matthew Bernstein. The market efficiency analysis will be performed on at least two scenarios, he said.

The study will include a retirement scenario to offset the increased renewable penetration levels assumed in the studies, based on formal deactivation notices and federal and state policies.

Each scenario will include a generator deliverability thermal analysis for summer, winter and light load conditions and identify transmission solutions for each reliability violation, including costs.

The results of the two scenarios based on current policies are expected to be completed by the end of the year. The sensitivity analyses requested by the states will be available in early 2023, PJM said.

PJM Reviewing Responses to Tx Proposal Windows

PJM received more than 30 proposals in response to two recent transmission proposal windows.

The RTO's 2022 Multi-Driver Proposal Window 1, which closed Aug. 8, generated 14 proposals from three entities to solve potential reliability violations on multi-driver facilities. The proposals, eight greenfields and six upgrades, ranged from \$215,000 to \$127 million. None included cost containment.

PJM expects to begin preliminary evaluation of the proposals in early September and complete its selection by the end of the year for board approval in February 2023. PJM will coordinate with MISO in its evaluations.

PJM also received 17 proposals from seven entities in response to Reliability Proposal Window 1, which closed Aug. 30.

The proposals — six greenfield projects and 11 upgrades — ranged in cost from \$260,000 to \$386.7 million and addresses 275 flowgates. Seven of the proposals included cost containment measures. ■

— Devin Leith-Yessian and Rich Heidorn Jr.

Mid-Atlantic news from our other channels



[Growing Pains Continue for Maryland Community Solar Pilot](#)



[NJ BPU Backs Utility Benchmarking for 30,000 Buildings](#)



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PJM News



PJM Operating Committee Briefs

Cybersecurity Update

PJM Chief Information Security Officer Steve McElwee briefed the Operating Committee last week, saying that cyberattacks against the U.S. and its allies remain a principal concern. Although attacks from Russia and associated entities have declined, Iran has been increasing its offensives, he said.

Among the major forms of attack seen recently are ransomware, which encrypt a computer and lock users out of data and functionality, and distributed denial of service attacks, essentially bombarding a server with requests to overwhelm a network.

PJM has been hardening its systems by retiring weak encryption tools, blocking international and anonymous traffic and prioritizing external vulnerability remediation, McElwee said.

Committee Endorses Maximum Emergency Package

The committee overwhelmingly endorsed a package from PJM addressing the supply chain for generators and concerns regarding the impact of increased environmental restrictions on maximum emergency generation actions. The PJM option received 92% support over a second package from the Independent Market Monitor, which would have added clarifications and changed references to “fuel” to “fuel and consumables.”

The IMM proposal also would have allowed for resources with less than 10 days of fuel and consumables inventory to be made unavailable for economic dispatch, with a penalty equal to the daily capacity values.

Renewable Dispatch Proposal Vote Delayed

The OC agreed to postpone voting on a joint PJM/Monitor proposal intended improve the dispatch of renewable generators after several stakeholders expressed concern about certain elements.

The proposal would require intermittent resources with capacity commitments to offer economic maximum megawatts equal to or greater than their hourly forecast. Several stakeholders said this could result in renewable output being held back by an under-forecasted value being used.

Other stakeholders were concerned about the elimination of the curtailment flag, which PJM uses to indicate to generation operators that

their units have been curtailed and that they should adjust their output accordingly. The proposal would instead use existing basepoints to reflect the RTO’s desired dispatch.

Several committee members said they did not share these concerns but that they would not oppose delaying a vote to address them.

PJM staff agreed to send the proposal back to the DER & Inverter-Based Resources Subcommittee for work and bring it back to the committee for a vote at its meeting next month. They said a one-month delay on approval would still allow for implementation before the second quarter of 2023.

Delays to Scheduled Go-live Date for PPL DLR

The scheduled go-live date for PPL’s dynamic line ratings has been moved out by two weeks, with implementation now slated for Sept. 27 for the day-ahead market and Sept. 28 for real-time. PPL had already delayed rollout from July to this week because additional work was needed for changes to its energy management system with its vendor. (See “PPL Delays DLR Implementation to September,” *PJM Operating Committee Briefs: July 14, 2022.*)

Review of IROL-CIP Solution Postponed

Discussion of creating a mechanism for generators to receive reimbursement for compliance with NERC reliability standard CIP-002-

5.1 was postponed because of concerns raised by the Monitor.

The PJM proposal would have allowed generators deemed critical to interconnection reliability operating limits by NERC to submit their capital and recurring costs to PJM and the Monitor for review and possible monthly payments. According to the problem statement, designation as a critical generator can carry a “significant additional burden.”

PJM staff noted that they have adequate time to explore other avenues.

Committee Approves Slate of Manual Revisions

The committee approved several changes by acclamation, with little discussion and no debate:

- tariff and manual changes to streamline the process of scheduling internal network integration transmission service; (See “Issue Charge OK’d on Internal NITS Process,” *PJM Operating Committee Briefs: July 14, 2022.*)
- revisions to Manual 14D and Manual 13 to conform with NERC standards EOP-011, IRO-010 and TOP-003; and
- changes to Manual 10, 12 and 13, associated with reserve price formation. ■

— Devin Leith-Yessian and Michael Brooks



| Shutterstock

PJM News



PJM Market Implementation Committee Briefs

DR Data Proposal Rejected

VALLEY FORGE, Pa. — The PJM Market Implementation Committee narrowly rejected a proposed issue charge from curtailment service provider CPower Energy Management that would have sought to expand access to data from retail demand response customers.

Stakeholders cited pending legislative efforts at the state level and concerns about utilizing statistical sampling instead of collecting data from households directly. (See [NJ Eyes Rules to Protect, Gather Advanced Metering Data.](#))

Paul Sotkiewicz, of E-Cubed Policy Associates, questioned if statistical sampling could be an adequate substitute for direct household data and said that the belief that residential use tends to be homogenous may be a poor assumption. If sampling was to become standard, he said that could discourage states from pushing smart metering technology down to the residential level.

“I don’t find it very appealing that either because somebody didn’t do their due diligence ... that PJM and the rest of its membership should be beholden to that and have to settle for statistical sampling,” he said.

Two Alternatives on VOM Advance to MRC

Two competing proposals from PJM and Constellation Energy to address variable operations and maintenance costs advanced to the Markets and Reliability Committee meeting on Sept. 21.

The PJM proposal, which passed with more



Jason Barker, Constellation Energy | © RTO Insider LLC

than 70% support, would include default adders for minor maintenance and operating costs, clarify the definitions of major and minor maintenance, create a new review process and timeline, and clarify the requirements for supporting documentation.

The Constellation package, which passed with 54%, contains the same provisions as the PJM document, but it would include nuclear refueling costs and associated major maintenance under a generator’s capacity offer rather than its VOM energy offering.

Constellation’s Jason Barker said that defining refueling as a variable cost is inconsistent with how maintenance is conducted on nuclear units.

“This is a significant change in that respect because they are deeming most, if not all, the maintenance done in a reactor fueling as variable,” when nearly all of it is fixed, he said. (See “Variable Operations & Maintenance Cost Development,” [PJM Market Implementation Committee Briefs: Aug. 10, 2022.](#))

Rather than vote for their preference of the two proposals, Barker encouraged stakeholders to vote against them both, pushing the revisions back to the Cost Development Subcommittee for additional rewriting. He said those meetings tend to see less participation and said a better package could be formed there through input from more voices. Instead, the MRC will consider both proposals.

IMM, PJM to Collaborate on Manual Revisions Prior to MRC

The MIC endorsed a slate of manual revisions to conform with FERC’s order approving revised energy price formation rules (EL19-58, ER19-1486), but discussion regarding the impact some of the changes will have on hydropower resources led to a request that PJM staff work with the Independent Market Monitor to finetune the language.

The committee endorsed by acclamation revisions to manuals 11, 27, 28 and 29. But before it did, the Monitor raised concerns that the Manual 11 changes were inconsistent with the Operating Agreement’s provisions and would limit the amount that hydro resources could offer as reserves.

The Monitor did not have proposed revisions to present, and some stakeholders expressed frustration that its presentation was only posted the day prior to the meeting. Barker noted



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

that the tight time frame before the Oct. 1 implementation of the manual revisions could make it challenging for hydro operators, such as Constellation, to get a firm understanding of any changes before they’re responsible for compliance.

PJM and Monitor staff pledged to work together, with input from hydro stakeholders, on a friendly amendment that the Monitor would offer at the MRC when the revisions are brought up for a vote at that committee.

Other MIC Business

Because other agenda items ran over their allocated time (See related story, [PJM, Monitor Debate Black Start Fuel Requirements Proposals.](#)), work on an IMM proposal addressing capacity offer opportunities for generation with co-located load was postponed. A special session of the MIC will be scheduled to continue discussion of the issue.

The MIC also reviewed PJM’s proposed capital budget, which would increase spending to \$45 million, a \$3 million increase over current funding. The budget was first presented at the Planning Committee the day before and was also shown to the Operating Committee the next day. (See related story, “Planning Committee Reviews Capital Budget,” [PJM Planning Committee Briefs: Sept. 6, 2022.](#))

Finally, the committee endorsed routine revisions to Manuals 18 and 18B, deleting outdated information, correcting and clarifying existing provisions or practices, and adding administrative updates. ■

— Devin Leith-Yessian

PJM News



PJM, Monitor Debate Black Start Fuel Requirements Proposals

By Michael Brooks

VALLEY FORGE, Pa. — PJM and its Independent Market Monitor got into lengthy debates at two different committee meetings last week over each other's proposed fuel requirements for black start resources (BSRs) as they tried to win last-minute stakeholder support.

Voting on the proposals opened online after the Operating Committee's meeting concluded Thursday and will close today at 5 p.m. ET. In a unique situation, voting is open to both the OC and Market Implementation Committee; stakeholders who are members of both need only participate in one committee's vote, and PJM will remove any double votes. A special joint *teleconference* of the committees is scheduled for Friday to review the results.

Because the issue was assigned to both committees, each heard identical presentations from PJM and the IMM last week — and sat through nearly identical debates on the proposals' merits among RTO staff, Monitor Joe Bowring and stakeholders who were confused by certain elements. Both Wednesday's MIC and Thursday's OC meetings threatened to run long, but the committees' respective chairs deferred or shortened other items on their agendas to keep things on schedule.

Both proposals are the culmination of a four-year-long process intended to ensure that BSRs are available when they are needed. They would create two tiers of service, the higher of which provided by fuel-assured BSRs. While the criteria of "fuel assured" varies by resource, they can include dual-fuel capability, on-site fuel storage and connections to multiple gas pipelines.

Each transmission zone would be required to have at least one fuel-assured BSR. Such resources would be selected based on their level of fuel assurance. Also included are additional reliability criteria to mitigate extreme cases in which the unavailability of non-fuel-assured BSRs would result in a large increase in zonal restoration time.

The main differences between the proposals were highlighted at last month's committee meetings. The Monitor's plan, for example, would not allow intermittent resources, other than run-of-river hydro, to be BSRs because they cannot currently meet the requirements. (See *Members near Vote over PJM, IMM Black Start Fuel Requirements*.)

At last week's meetings, Bowring argued that



| LS Power

PJM's package of revisions — jointly proposed with Brookfield Renewable and the D.C. Office of the People's Counsel — could result in overpayment for BSRs, as an existing hypothetically "perfect" BSR — one that meets all the physical standards to be fuel assured — would not be required to offer to provide the higher-tier service and meet the performance obligations that came with it; therefore, PJM would not recognize its fuel-assured status.

In such a scenario, Bowring argued that PJM would be required to select another fuel-assured BSR in the same zone in the procurement process, resulting in customers paying twice for the same service. He said all resources that already meet the physical standards to be fuel-assured should also be required to meet the proposed requirements to be designated as such, report on their current status and not receive payment if they cannot not provide the service.

"Customers are already paying these resources to be fuel assured," Bowring said. "PJM should simply require those resources to meet that obligation."

Several stakeholders took this to mean that

the Monitor was proposing that all existing BSRs become fuel assured. Bowring repeatedly clarified that was not in the proposal, though he did state that all new black start resources should be required to be fuel assured.

PJM staff noted that every transmission zone already has at least one fuel-assured BSR. They acknowledged that the Monitor's hypothetical scenario was possible, but they argued it was highly unlikely, as the RTO would not necessarily be required to procure another fuel-assured resource and that it could look for other mitigation steps. Bowring responded that the fact that it's possible "makes my point for me."

"The zones meet the fuel-assurance requirement based on resources that already meet all the physical standards to be fuel assured but that are not required to become formally fuel assured under PJM's proposal," he said. "That is the 'paying twice' problem."

If approved the proposals would go before the Markets and Reliability Committee for a first read next week and voted on at the committee's meeting next month. ■

SPP News



4 Arizona Entities Commit to Developing SPP's Markets+

Four Arizona electricity providers have joined seven Pacific Northwest entities to support the next phase of SPP's Markets+ development.

SPP on Sept. 6 *announced* that Arizona Electric Power Cooperative, Arizona Public Service, Salt River Project and Tucson Electric Power said in an Aug. 31 letter that they intended to work with the RTO to build a Western market that includes "both a workable governance framework and a robust market design."

"This will be an important milestone that will enable us to collectively move forward to the next phase," the entities said.

Last month, seven entities from the Pacific Northwest offered similar support to SPP,

following a commitment from the Bonneville Power Administration. (See *SPP's Markets+ Offering Attracts 6 More Western Entities.*)

"Adding the desert southwest region to the development of this market adds more value for all participants, and we very much appreciate the contributions from these entities thus far," SPP CEO Barbara Sugg said in a statement.

The four companies serve more than 20 GW of combined peak demand. The Pacific Northwest group accounts for 50 GW of combined peak demand.

SPP plans to have the Markets+ draft service offerings, based on stakeholder input, available for comment by the end of this month; the final

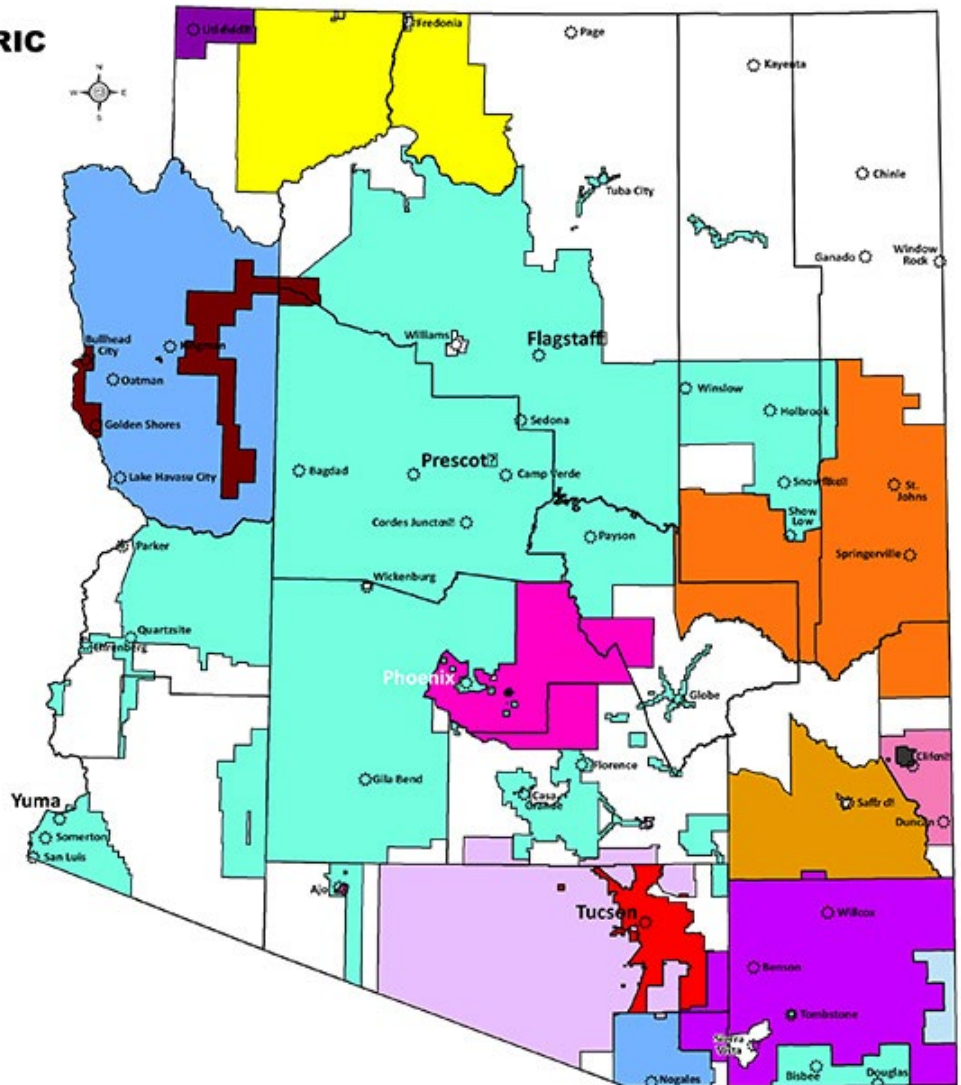
service offering is scheduled to be distributed Nov. 18. Participants will make financially binding commitments in the first quarter of 2023, at which point the market protocols and tariff language can be drafted.

Markets+ is a conceptual bundle of services that centralize day-ahead and real-time unit commitment and dispatch, provide hurdle-free transmission service across its footprint and pave the way for the reliable integration of a rapidly growing fleet of renewable generation. It is designed for utilities that aren't ready to pursue full RTO membership. ■

— Tom Kleckner

STATE OF ARIZONA - ELECTRIC

- Ajo Improvement Company
- Arizona Public Service
- City of Mesa
- Columbus Electric Co-op
- Dixie Escalante Rural Electric Association
- Duncan Valley Electric Cooperative
- Garkane Power Association
- Graham County Electric Cooperative
- Mohave Electric Cooperative
- Morenci Water & Electric Company
- Navapache Electric Co-op
- Salt River Project
- Sulphur Springs Valley Electric Co-op
- Trico Electric Cooperative
- Tucson Electric Power
- UNS Electric, Inc.



Arizona's utilities. Not shown: Arizona Electric Power Cooperative, which owns and operates Apache Generating Station and 866 miles of lines. | *Arizona Corporation Commission*

Company Briefs

GE Banned from Building Turbine Due to Patent Infringement



U.S. District Judge William Young last week barred General Electric from making and selling its Haliade-X wind turbines in the U.S.

after a jury found the turbines infringed a patent owned by Siemens Gamesa.

Young said Siemens was entitled to the ban because it suffered irreparable harm, including a significant loss of market share to GE, based on the infringement. However, he did allow GE to continue making and operating the turbines for existing projects

off Massachusetts and New Jersey. Siemens will receive royalty payments of \$30,000 per megawatt.

More: [Reuters](#)

Duke Energy Names New CFO



Brian Savoy took over as chief financial officer for Duke Energy on Sept. 1.

Savoy succeeded Steve Young, who became chief commercial officer after serving as CFO since 2013.

Savoy has been with Duke since 2001, holding several leadership and finance roles — most recently the position of chief strategy

and commercial officer.

More: [The Wall Street Journal](#)

Piedmont to Build Lithium Plant in Tennessee

Piedmont Lithium recently announced it will build a \$600 million lithium processing plant in Tennessee to supply the electric vehicle industry.

Piedmont said it expects the Etowah facility to begin production in 2025 and believes it will be the largest lithium hydroxide processing site in the U.S., with a target of 30,000 metric ton per year.

More: [Reuters](#)

Federal Briefs

House Dems Push Against Manchin's Permitting Reform

More than 70 House Democrats are signing on to a letter pressing Democratic leaders to not include a side deal with Sen. Joe Manchin on reforming the permit process for energy projects in a bill funding the government.

The language was offered to Manchin to win his vote on the Inflation Reduction Act. However, Democratic lawmakers are asking Speaker Nancy Pelosi and Majority Leader Steny Hoyer not to include the reforms championed by Manchin into a stopgap funding measure that Congress is expected to take up this month. Without a stopgap measure, the government will shut down on Oct. 1.

Furthermore, Sen. Bernie Sanders and other lawmakers have threatened to block the bill if it includes Manchin's desired changes to energy permitting.

More: [The Hill](#), [ABC News](#)

McCarthy Leaving White House, Podesta Returns

Gina McCarthy, President Biden's top domestic climate adviser, announced last week that she will leave her role in the White House on Sept. 16.

The White House said Ali Zaidi, McCarthy's deputy, will lead the Climate Policy Office after she departs. John Podesta, chairman of



the Center for American Progress, will join the administration as a senior adviser for clean energy innovation and implementation. Former Secretary of State John Kerry will remain in his post as Biden's top

international climate envoy.

McCarthy headed the EPA for four years during the Obama administration. Prior to that she spent much of her career as an environmental regulator in New England.

More: [POLITICO](#)

Renewables Made up 25% of US Generation in Q2

Renewable energy accounted for 24.8% of the electricity generated in the U.S. in the second quarter of this year, according to the EIA.

Renewable generation (254,754 GW) jumped ahead of coal, which declined 7.1% in the quarter to 190,547 GW (18.5%). Natural gas leads the way at 37.9%.

More: [Inside Climate News](#)

Report: China Ban to Limit Solar Supplies

U.S. solar developers will struggle to access equipment supplies for at least the next year due to panel imports being stalled by a new law banning goods from China's Xinjiang

region over forced-labor concerns, according to a report from the SEIA and Wood Mackenzie.

The quarterly solar market report projects a 40% growth for the industry over the next five years due to the passage of the Inflation Reduction Act, which provides a decade of subsidies for renewable energy projects. However, installations this year and next will be constrained by tight supplies. In the second quarter, the market installed 4.6 GW of solar capacity, down 12% from a year earlier.

More: [Reuters](#)

EPA Denies Cheniere Energy Request for LNG Pollution Waiver



The EPA last week denied a request by Cheniere Energy, a leading U.S. producer of liquefied natural gas, to exempt two Gulf Coast plants from the National Emission

Standards for Hazardous Air Pollutants rule.

An agency spokesman said it denied Cheniere's request to waive a rule that limits emissions of formaldehyde released by gas-fired turbines. Dozens of turbine operators faced a Sept. 5 deadline to comply with the rule, which is being reinstated after an 18-year stay.

The company had warned that new requirements on LNG plants in Texas and Louisiana could disrupt gas supplies to Europe.

More: [The Associated Press](#)

Company Briefs

ARIZONA

APS Aims to be Carbon-free by 2050

 Arizona Public Service last week announced its goals of retiring all coal generation by 2031 and transitioning fully to carbon-free energy by 2050.

The company said its plan includes heavy reliance on three factors: nuclear energy, new technology and natural gas.

APS currently generates 11,719 MW, with 5,146 MW coming from nuclear, microgrid and renewables. The remaining 6,573 MW come from natural gas (5,216 MW, 45% overall) and coal. To complete the carbon-free transition, APS must increase energy production among sources such as nuclear and renewables, with the Palo Verde nuclear generating station key to the transition.

More: [Arizona Daily Sun](#)

ARKANSAS

Thomas Leaving PSC

Ted Thomas last week announced he will resign from the Public Service Commission on Oct. 1 despite having four years left in his appointment.

Thomas said the move had been in the works before his recusal from the PSC's investigation of allegedly unauthorized net-metering practices for solar customers of cooperatives. Several companies had requested Thomas' recusal.

More: [Arkansas Times](#)

CALIFORNIA

Jury Awards Payout to Kern County Victims of PG&E Natural Gas Explosion



A Bakersfield family was awarded \$73.6 million last week, the highest civil jury verdict in Kern County history, in relation to a massive explosion and fire that occurred Nov. 13, 2015.

A driver of a bulldozer struck an underground, high-pressure natural gas transmission line owned by Pacific Gas and Electric. The blast sent two flames shooting high into the air, destroying a new home, several

vehicles, and forcing a family to flee their home. The permit to dig in the field had been expired for eight days at the time of the incident.

The jury found Big N Deep responsible for 50% of the fault, PG&E 40% and Ag-Wise Enterprises 10%.

More: [Bakersfield.com](#)

New Generators Activated to Help Avoid Rolling Blackouts

New power generators operated by the Department of Water Resources were activated in Roseville and Yuba City for the first time on Sept. 5 to help meet the increased demand during an extended heat emergency.

The four natural gas-powered generators combined can generate up to 120 MW for the grid.

The DWR has also worked with Pacific Gas and Electric and Southern California Edison to access and operate dozens of backup generators that can provide an additional 80 MW, but only during a level 2 emergency.

More: [KCRA](#)

State Sees Some Problems Amid Heat Wave

While it was reported the state was able to stave off a rolling blackout last week amid a heat wave, all was not perfect.

Some northern cities experienced blackouts due to a mistake that appeared to stem from a miscommunication between Northern California Power Agency and CAISO. Alameda, Healdsburg and Palo Alto each reported rolling outages despite none being ordered.

Elsewhere, batteries kicked in at times when they were not needed. The batteries began discharging in the middle of the afternoon when there was still plenty of other supplies available to meet demand. That depleted the cushion before it was more critically needed in the early evening, when the state was on the brink of rotating blackouts.

Backup generators also failed at the Santa Clara Valley Medical Center and left parts of the facility without power for about four hours. No patients were put in life threatening situations, hospital officials said.

More: [San Francisco Chronicle](#), [Bloomberg](#), [The Mercury News](#)

Utilities to Pay Customers to Unplug During Flex Alerts

Amid a statewide call for energy conservation during the recent heat wave, public utilities are offering a power saver rewards program that gives credits to residents for reducing energy use on flex alert days.

Utilities will calculate how much energy a customer normally uses during peak hours of 4 p.m. to 9 p.m.; if they use less on flex alert days they will earn a credit of \$2 for every kilowatt hour they save.

Credits will not show up on bills until next year.

More: [KGO](#)

COLORADO

CORE Electric Tries to Pull Out of Comanche Stake

The CORE Electric Cooperative, the state's largest cooperative, is seeking to pull out of its stake in Xcel Energy's Comanche 3 coal-fired plant and recoup its investment in the unit due to increased outages.

CORE, which has a 25% non-operating ownership in the \$1 billion unit, already has a multimillion-dollar lawsuit against the Public Service of Colorado that alleges mismanagement of the plant. CORE said it got zero electricity from the unit in 2020 due to outages. In the lawsuit, CORE said that because of the shutdowns it was forced to buy replacement electricity from Xcel for \$38.5 million — about \$20 million more than the co-op's anticipated cost of Comanche 3 electricity.

A 2021 investigation by Public Utilities Commission staff found that since 2010 the plant had more than 700 days of unplanned shutdowns. Since the PUC report was issued, the plant has logged more than 125 days of unplanned shutdowns.

More: [The Colorado Sun](#)

FLORIDA

PSC Again Approves Duke Solar Program

The Public Service Commission last week approved a revised decision supporting a Duke Energy solar-power program, carrying out an order from the state Supreme Court.

The PSC last year approved Duke's Clean

Energy Connection program, which involves building 10 74.9-MW solar plants. However, the League of United Latin American Citizens of Florida challenged the approval to the Supreme Court, arguing the program would improperly shift costs and financial risks to Duke customers who would not participate. The court then issued an order that required the commission to revise its decision. Justices said the decision "leaves the court guessing as to the reasoning."

With the PSC's ruling, the issue goes back to the Supreme Court.

More: [Citrus County Chronicle](#)

IOWA

Linn County Approves NextEra Solar Projects

The Linn Country Board of Supervisors last week voted 2-1 to approve two NextEra Energy solar projects.

The Duane Arnold Solar I project proposes to use 316 acres to place photovoltaic arrays capable of generating up to 50 MW. The Duane Arnold Solar II project would use 815 acres to place arrays capable of generating 150 MW. It would also include a 75-MW, four-hour storage facility.

The state utilities board has already approved both projects.

More: [The Gazette](#)

LOUISIANA

Clean Hydrogen Plan Wins \$50M Federal Grant

H2theFuture, a regional 25-member economic development coalition led by the Greater New Orleans Development Foundation, has been awarded \$50 million from the Economic Development Administration to help industries move from fossil fuels to green hydrogen in steel making, oil refining, chemical and fertilizer production, and transportation.

The state will supplement the grant with \$24.5 million. Funds will subsidize electrolyzer research, job training, new business development, building offshore wind power dedicated to hydrogen production and a fueling barge.

The EDA's regional challenge competition is awarding \$1 billion in grants to assist the growth of regional industry clusters, restoring U.S. competitiveness under local leadership.

More: [Greater New Orleans Inc.](#)

MICHIGAN

Comcast to Source Renewables for Half of State Operations



Comcast last week said it has entered into agreements with Consumers Energy and DTE Energy to purchase wind and solar energy to power half its operations in the state.

Comcast's participation in both programs will be supported by new renewable energy projects that represent a combined annual volume of about 52,000 MWh over 10 years.

More: [Grand Rapids Business Journal](#)

OHIO

PUC Says NOPEC Must Defend its Right to Remain an Aggregator

The Public Utilities Commission last week ordered NOPEC to show cause and explain why its certificate to do business should not be revoked by Sept. 28 after the aggregator announced plans to lower bills for 550,000 customers by purging them from its rate plans.

NOPEC recently said it would temporarily drop 97.5% of its customers and pick them back up in spring 2023. Most of its customers were paying 12 cents per kWh, while the standard service offer in FirstEnergy territories was between 6.7 and 6.8 cents. By dropping customers, NOPEC could save people money.

In its written decision, the PUC said NOPEC's plans "cast doubt upon" NOPEC's ability to be an aggregator. The plan would lead to short-term savings but could also create long-term problems for electricity customers across the state.

More: [Cleveland.com](#)

OREGON

PGE Customers Regain Power Following Preventive Shutoffs



Portland General Electric has restored power to 90% of the 37,000 customers who lost power to mitigate wildfire risk, a spokesperson said on the night of Sept. 11.

PGE shut off power in 10 "public safety power shutoff" areas to prevent lines damaged by high winds from sparking new fires or worsening existing ones.

More: [The Oregonian](#)

VIRGINIA

Halifax County OKs Large-scale Solar Farm

The Halifax County Board of Supervisors last week unanimously approved a conditional use permit and siting agreement for Dominion Energy's 90-MW Clover Creek Solar facility.

Construction of the 841-acre facility is expected to begin in 2024.

More: [The Gazette-Virginian](#)

Hanover County Approves Solar Farm

The Hanover County Board of Supervisors unanimously approved a conditional use permit for a 5-MW solar farm that will sit on 22 acres.

Ameresco Solar, the company responsible for the facility, agreed to pay the county \$420,000 over the next 40 years. After its 40-year lifespan, the company is expected to disassemble the panels and restore the site "to its original condition as closely as possible."

More: [WRIC](#)

Lawmakers Fail to Reach Deal on SCC Pick

The state legislature failed to fill the third and final vacant seat on the Corporation Commission last week prior to the session ending.

The Republican-led House adjourned sine die, an action that would end the special session. But the Democratic-controlled Senate didn't adjourn sine die, putting the two chambers at odds over whether the special session is over or not. The state Constitution says neither legislative chamber can adjourn for more than three days without the other's agreement.

The difference is significant because when the legislature isn't in session, Gov. Glenn Youngkin gains additional powers to make appointments and set the dates of special elections to fill vacant General Assembly seats. A Youngkin spokesperson declined to comment on whether the governor intends to make an appointment to fill the SCC vacancy, which was created when the House let former Commissioner Angela Navarro's appointment expire.

More: [Virginia Mercury](#)

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