PUBLIC VERSION—REDACTED

RTO Insider

YOUR EYES AND EARS ON THE ORGANIZED ELECTRIC MARKETS

CAISO = ERCOT = ISO-NE = MISO = NYISO = PJM = SPP

MISO

FERC Staff Finds Dynegy Manipulated 2015 MISO Capacity Auction (p.7)

B. The 2015/16 Auction and Dynegy's Four Manipulative Steps

1. Timeline of Conduct Leading Up to the 2015/16 Auction

MISO

CAISO/West

Former Regulators: Demand Response Key to Midwest Capacity Crisis (p.9)

Calif. CCAs Add 1.4 GW to Clean Energy Portfolios in 2021

State Regulators Endorse New Demand Curve in MISO Capacity Auction (p.11)

(p.3)

PUBLIC VERSION—REDACTED

РЈМ

Dynegy took its first step in what OE staff found to be

Dynegy's four manipulative steps for the 2015/16 Auction.

as shown NYISO

IMM Files Comments on PJM Quadrennial Review Docket at FERC (p.14) NY Slaps Moratorium on Certain Crypto Mining Permits

(p.13)

Your Eyes and Ears on the Organized Electric Markets

Editorial

Editor-in-Chief / Co-Publisher Rich Heidorn Jr.

Deputy Editor / Daily

Deputy Editor / Enterprise Robert Mullin

Michael Brooks Creative Director Mitchell Parizer

New York/New England Bureau Chief

John Cropley

Midwest Bureau Chief

John Funk

Mid-Atlantic Bureau Chief

K Kaufmann

Associate Editor Shawn McFarland

Copy Editor/Production Editor

Rebecca Santana

CAISO/West Correspondent

Hudson Sangree

ISO-NE Correspondent

Sam Mintz

MISO Correspondent

Amanda Durish Cook

NYISO Correspondent

John Norris

PJM Correspondent

Devin Leith-Yessian

SPP/ERCOT Correspondent

Tom Kleckner

NERC/ERO Correspondent

Holden Mann

Sales & Marketing

Chief Operating Officer / Co-Publisher

Merry Eisner

SVP of Sales

Marc Ruppenstein

Account Manager

Jake Hellenschmidt

Account Manager

Kathy Henderson

Account Manager Phaedra Welker

Customer Success Manager

Dan Ingold

Marketing Manager

Eau Rikhotso

Assistant to the Publisher

Tri Bui

RTO Insider LLC

10837 Deborah Drive

Potomac, MD 20854

(301) 658-6885

2022 Annual Subscription Rates:

Plan	Price
Newsletter PDF Only	\$1,620
Newsletter PDF Plus Web	\$2,100
See additional details and our Subscriber A	areement at rtoinsider.com

In this week's issue

CAISO/West
Calif. CCAs Add 1.4 GW to Clean Energy Portfolios in 2021
FERC IDs Deficiencies in Western RA Program
ISO-NE
FERC Approves New England Generation Deal Over Competition Objections . 5
ISO-NE Finalizing Changes to Economic Study Process
MISO
FERC Staff Finds Dynegy Manipulated 2015 MISO Capacity Auction 7
Former Regulators: Demand Response Key to Midwest Capacity Crisis 9
State Regulators Endorse New Demand Curve in MISO Capacity Auction 11
TVA to Repurpose Coal Ash Dump with Solar Generation
NYISO
NY Slaps Moratorium on Certain Crypto Mining Permits
РЈМ
IMM Offers Mixed Review of PJM Quadrennial Review Docket
NJ Backs \$20 Million Spend on Tx Link for Offshore Wind Port16
SPP
SPP MOPC OKs 'Late' Tariff Change Related to EMS Upgrade
Briefs
Company Briefs
Federal Briefs
State Briefs



CAISO/West News



Calif. CCAs Add 1.4 GW to Clean Energy Portfolios in 2021

Long-duration Storage Included in New Procurements

By Elaine Goodman

California's community choice aggregators expanded their long-term procurement of clean energy by 1,431 MW over the past year, a 14% increase that includes 119 MW of longduration storage.

The new power purchase agreements bring the overall long-term procurement by the state's CCAs to 11,258 MW, up from 9,827 MW in November 2021. The figures are included in an annual report released this month by the California Community Choice Association (CalCCA), an organization representing the state's community choice electricity providers.

The 243 long-term contracts are for "newbuild" resources, including solar, wind, geothermal, demand response, biogas and energy storage. The clean energy projects are spread across California, and some are in Arizona, New Mexico and Nevada.

"CCAs are procuring the diversity of resources that are needed for the state to achieve a 100% clean electricity system, with a focus on affordability, reliability and resilience," CalCCA Executive Director Beth Vaughan said in a statement.

Vaughn said previously that the state's CCAs "continue to drive a clean energy project-building boom throughout California and the West."

The purchase agreements, ranging in length from 10 to 25 years, are for power from newly built clean energy resources. More than 4,000 MW are in operation now and almost all the rest is expected to be online by 2026.

Solar paired with storage is the largest cate-

gory of long-term clean energy procurement, contributing 4,232 MW to the total. Storage that accompanies solar is the second-largest category, providing 2,451 MW.

CCAs increasingly are turning to solar-plusstorage rather than standalone solar in solar energy contracts, according to CalCCA. The 2,016 MW of standalone solar energy procurement in this year's report is a 71 MW decrease from last year's figure.

Even with the reduction, standalone solar is the third largest clean energy procurement category for the CCAs, followed by wind, with 1,376 MW.

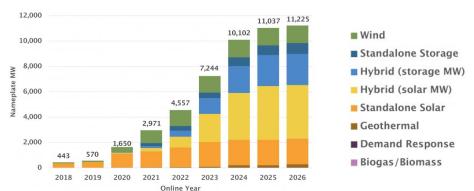
Long-duration Storage

The 119 MW of long-duration storage reported this year came from two contracts approved in early 2022 by California Community Power, a joint powers agency representing nine CCAs. One contract is with REV Renewables for 69 MW at the company's Tumbleweed project in Kern County. The other is for 50 MW at Onward Energy's Goal Line project in Escondido. The lithium-ion battery projects will have an eight-hour discharge duration.

Another addition to this year's list was demand response, which accounted for 23 MW of the power purchases.

In addition, geothermal power procurement increased this year to 287 MW, up from 14 MW as of November 2021. In one of the agreements, announced in May, Fervo Energy will supply 40 MW of geothermal power to East Bay Community Energy from a project in Churchill County, Nevada.

In April, Ormat Technologies announced an



California's CCAs have contracted for more than 11,000 MW of new clean energy resources, nearly all of which will be online in 2025. | CalCCA

agreement with Peninsula Clean Energy to buy 26 MW of energy from the company's Heber 2 geothermal facility in Imperial Valley, California.

RPS Requirements

Community choice aggregators are nonprofit providers of energy within the territory of investor-owned utilities. Customers who choose to buy power from a CCA still receive transmission and distribution service from the IOU.

This year, CCAs served about a third of the load in the territories of the state's three primary IOUs, CalCCA said. That figure is expected to increase to 36% in 2023.

And according to the California Public Utilities Commission, CCAs are playing "an increasingly significant role" in meeting state and local greenhouse gas reduction goals.

CalCCA said that the long-term contracts for clean energy are helping the CCAs meet reguirements of the state's renewables portfolio standard (RPS).

In 2021, CCAs achieved an RPS percentage of 50%, when considered in aggregate, the CPUC said in an annual RPS report released this month. That's well above the 44% RPS requirement for the 2021-2024 compliance period.

"The CCAs' generation has increased to keep pace with RPS requirements through 2023, even exceeding the 2023 forecasted target," CPUC said in the report.

But current forecasts show online generation starting to drop in 2024 for 16 of the 25 CCAs, the report said. Considered in aggregate, the RPS percentage is projected to drop to 41% in 2024. CPUC said that's due to expiring contracts and the launch of new CCAs that have little to no RPS procurement.

The RPS target grows to 60% in 2030, and most CCAs will need more renewable resources, CPUC said.

Another RPS requirement is that 65% of procurement should come from long-term contracts, considered to be 10 years or longer.

All the CCAs are expected to meet the long-term procurement requirement for the 2017-2020 compliance period, CPUC said. And most have met, or are close to meeting, the long-term procurement requirement for 2021-2024.

CAISO/West News



FERC IDs Deficiencies in Western RA Program

By Hudson Sangree

FERC sent a deficiency letter to the Western Power Pool last week, asking it to provide more information on the tariff filing for its proposed Western Resource Adequacy Program, a first-of-its-kind effort to ensure large swaths of the Western Interconnection have sufficient resources to meet summer and winter peak demand.

The WRAP would have two main "time horizons," a forward-showing program requiring participants to show they have sufficient capacity months in advance of summer and winter peaks, and an operational program, focused on the allocation of resources in real-time and day-ahead time frames.

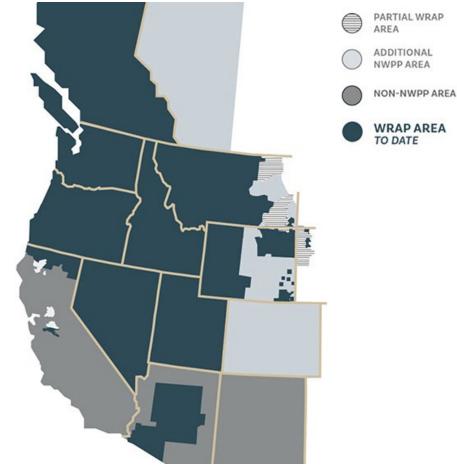
The WRAP's tariff filing said that to participate in the operational program, entities would have to have market-based rate authority to "engage in such transactions to the same extent they would require market-based rate authority if they conducted the same bilateral wholesale transaction for a non-WRAP purpose," the commission noted.

FERC asked how "participants with marketbased rate mitigation or those without market-based rate authority will be treated in the WRAP operations program" and asked WPP to explain "to the extent these procedures are not described in the tariff yet, please describe where WRAP might address the circumstances described above."

FERC did not give specific examples, but in 2016 it denied Berkshire Hathaway Energy subsidiaries permission to sell wholesale power at market-based rates in four neighboring balancing authority areas, including the PacifiCorp East, PacifiCorp West, Idaho Power and NorthWestern Energy areas. Berkshire had failed to prove that its units did not exercise horizontal market power in the region, the commission said. (See Berkshire Market-Based Sales Restricted in 4 Western BAAs.)

The BHE subsidiaries included PacifiCorp and NV Energy, which together cover much of the interior West. Both have been active in designing the WRAP and are among the 26 participants that signed up for its current non-binding phase, which did not require FERC approval.

Whether FERC might allow the utilities to participate in WRAP with market-based rate authority remains in question. In 2017, the



The WRAP has signed up 26 participants in the Western Interconnection. | © RTO Insider LLC

commission gave PacifiCorp and NV Energy permission to sell power into CAISO's Western Energy Imbalance Market at market-based rates, reversing its previous finding that had restricted the companies to submitting only cost-based offers. That reversal partly hinged on the utilities providing analysis that showed there was little congestion between WEIM BAAs after NV Energy's energy into the market, supporting the argument that member BAAs should not be considered submarkets subject to market power. (See PacifiCorp, NV Energy Gain EIM Market-Based Rate Authority.)

Other questions FERC asked WPP to respond to dealt with the WRAP's requirement that participants secure transmission rights in the forward-showing program and WRAP's intention to hire an "independent evaluator to provide an independent assessment of WRAP's performance."

WPP filed the proposed WRAP tariff with FERC on Aug. 31 and had been hoping to win FERC approval by the end of the year. WPP

asked would-be participants to confirm their commitments to the binding phase of the program within the next few weeks. (See Western Power Pool Board Approves WRAP Tariff.)

"While this may alter the timeline for FERC approval of the tariff, it does not change our timeline for securing additional commitment from our participants by mid-December," WPP CEO Sarah Edmonds said in an emailed statement. "This is an important deadline and next step toward implementing the WRAP and addressing urgent resource adequacy concerns."

As for FERC's questions, "we knew this was a possible, if not expected outcome and were prepared for it." Edmonds said. "These letters are common in complex tariff filings. They simply seek more information and are not a reflection - good or bad - on the merits of the application. Our team is compiling the requested information, and we will respond by the deadline. I remain confident we can resolve the process and ultimately gain approval."

ISO-NE News



FERC Approves New England Generation Deal Over Competition Objections

JERA Acquiring 1,600 MW of Gas-fired Generation in Maine, Mass.

Federal regulators last week signed off on a Japanese company's plan to buy three gas-fired generators in New England, despite opposition from consumer advocates who had argued that the deal would lead to undue consolidation in the region.

The investment firm Stonepeak asked FERC this summer for approval to sell two units at Canal Generating Station in Sandwich, Mass., totaling 1,457 MW, and another 160-MW unit in Bucksport, Maine, to JERA, a joint venture between two Japanese utilities, Tokyo Electric Power's TEPCO Fuel & Power and Chubu Electric Power (EC22-71).

Massachusetts Attorney General Maura Healey and the advocacy group Public Citizen had both challenged the acquisition saying that it would give JERA — which already owns 50% of two other gas units totaling more than 400 MW in Massachusetts — too large a share of the generation market. (See Mass. AG, Public Citizen Raise Alarm Over Proposed Generation Deal).

But FERC sided with the buyer and seller, accepting their argument that the transaction would not have an adverse effect on vertical or horizontal competition.

Although JERA will own more than 18% of the capacity cleared in the Southeastern New England zone, FERC wrote that "Applicants' analysis shows that, when considering ISO-NE as a whole, the proposed transaction does not increase market concentration such that there will be an adverse effect on competition."

FERC also shot down protests arguing that the



The Bucksport power station, one of the units involved in the deal I JERA

deal could have adverse effects on rates and on regulations. And it refused a request from Public Citizen to make public the confidential purchase price of the deal, finding no reason

to break with the standard of allowing the submitter to keep prices confidential.

- Sam Mintz







ISO-NE News



ISO-NE Finalizing Changes to Economic Study Process

By Sam Mintz

ISO-NE is finalizing changes to its economic study process as it works through the NEPOOL stakeholder gauntlet.

The changes are intended to improve responses to stakeholder requests for economic studies to fill gaps not covered by the ISO's reliability studies. Such requests have evolved

to more and more complex topics, such as ancillary services, resource adequacy, high-level transmission reliability and capacity markets.

Under the current process, ISO-NE puts together a rough scope for all the studies requested by stakeholders and then prioritizes them based on the region's needs.

The new proposal would change that process by setting up an analysis framework and using

it to run "consistent reference scenarios." After that initial run, stakeholders and the ISO could request new sensitivities to test the effect of a specific change to the study's assumptions.

ISO-NE is also proposing to change the cycle of economic studies to align with the regional system plan (RSP) cycle, moving from every year to every two years.

At the NEPOOL Transmission Committee meeting on Nov. 22, ISO-NE presented some minor revisions to its proposed tariff changes, which were approved by the committee.

The grid operator is aiming to get a final vote on the study changes at the January Participants Committee meeting, with a FERC filing to follow shortly after.

DECR Tariff Changes

Also at the TC meeting, ISO-NE presented its latest work on aligning buyer-side mitigation rules to allow distributed energy capacity resources (DECR) to take part in Forward Capacity Auction 18, set for Feb. 5, 2024.

The tariff updates will reflect the minimum offer price rule (MOPR) changes accepted by FERC in May and the ISO's compliance filing for FERC Order 2222, which has not yet been approved by the federal agency.

The tariff changes would modify buyer-side mitigation rules throughout the post-MOPR process to ensure that DERs can be included in the FCA.

They would also modify proposed DECR qualification rules in Section III.13.4A and address the qualification process cost reimbursement deposit requirement.

The tariff changes also clean up some definitions, dates and cross references related to the 2222 compliance proposal.

The ISO is working to get those changes finalized by March 2023 to be ready for FCA 18. ■



ISO-NE is working on updating its economic study process and new tariff language for DERs in the capacity market. I ISO-NE

Northeast news from our other channels



NY PSC Accepts NYSEG Proposal to Address Gas Leak Fire

NetZero Insider



NY CAC Debates the 'Nomenclature' of Natural Gas



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



FERC Staff Finds Dynegy Manipulated 2015 MISO Capacity Auction

III. Seeks \$469M in Refunds

By Amanda Durish Cook

FERC's Office of Enforcement has concluded that Dynegy "knowingly engaged in manipulative behavior" during MISO's 2015/16 capacity auction — rejecting the commission's 2019 order that cleared the company.

As a result of enforcement staff's heavily redacted 85-page report, the commission will now consider briefs on whether Dynegy should refund \$429 million to Illinois ratepayers (*EL15-70*).

The commission announced a second look at Dynegy's behavior in June after the D.C. Circuit Court of Appeals ruled that FERC hadn't sufficiently supported its decision to accept the Southern Illinois capacity price produced in the 2015/16 auction. (See FERC to Take 2nd Look at 2015 MISO Capacity Auction.)

OE's report, issued in September, said Dynegy participated in a fraudulent scheme to "corner the relevant portion of the market, consisting of those megawatts that MISO would likely need to clear the auction and that could be offered into the auction at a zero price if not held on Dynegy's unsold books."

Dynegy, which was acquired by Vistra in 2018, took four steps outside of market fundamentals to make sure it could set prices in the capacity auction, FERC said. Staff described the utility's actions in the report's redacted portion and said Dynegy made sure it increased the odds that one of its resources offered into the auction at a non-zero price would become the marginal resource and set the clearing price for Southern Illinois.

FERC staff said Dynegy's malfeasance began a year ahead of the 2014/15 auction when it purchased 3,152 MW in MISO Zone 4 in Illinois, and 1,241 MW in a neighboring zone, from Ameren. FERC said Dynegy failed to set the price in that auction, when no zone cleared above \$16.75/MW-day.

"After failing to set the price in the 2014/15 auction, Dynegy saw an opportunity to set the price in the 2015/16 auction." FERC staff said.

In the April 2015 auction for 2015/16, MISO saw clearing prices of \$3.48/ MW-day or lower in all zones except Zone 4, which cleared at \$150/MW-day.

The OE report was compiled using evidence from a three-year, non-public FERC investiga-

tion that included testimony from 11 Dynegy witnesses and more than 500,000 pages of documents. The original investigation, which began on a vote by the entire commission in 2015, was ended by then-chair Neil Chatterjee in 2019 without giving notice to his fellow commissioners.

That prompted a dissent by current Chair Richard Glick when the commission voted 3-1 in July 2019 that Dynegy had not committed market manipulation and that the \$150/MW-day clearing price was just and reasonable. The commission said a clearing price isn't unjust simply because it's higher than expected (EL15-70).

Glick contended Chatterjee prematurely "cut short" the investigation. Chatterjee said he was acting within his purview as chair and did not need to consult with his colleagues. (See FERC Clears MISO 2015/16 Auction Results.)

Staff's report gives no indication of Chatterjee's reason for closing the probe. The report said the original investigators agreed in mid-2017 that Dynegy had engaged in market manipulation and that the company's responses in 2017 and 2018 failed to change staff's conclusion.

Vistra Rejects Staff Findings

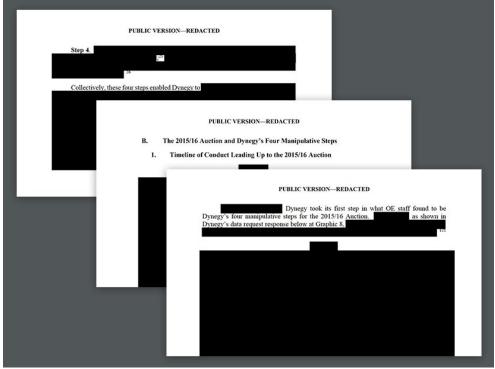
Vistra said last week it "strongly disagrees with staff's allegation in this report" and contends that it "acted in accordance with all applicable market rules and procedures."

"This matter has thoroughly been investigated several times and adjudicated," Vistra spokesperson Meranda Cohn said in an emailed statement to *RTO Insider*. "When FERC cleared Dynegy in 2019, they found that no market manipulation occurred and that the MISO 2015/2016 capacity auction results were just and reasonable. No new facts, circumstances or evidence have come to light in the three years since this decision."

Cohn said in the "years-long process, the same allegations have been periodically repeated but have routinely been disproved by experts and independent regulatory authorities, including FERC and the Independent Market Monitor for MISO."

Financial Impact not Disclosed

OE staff calculated the financial impact of Dynegy's actions, but the details were redacted.



FERC staff's report on Dynegy's bidding behavior was heavily redacted. | FERC

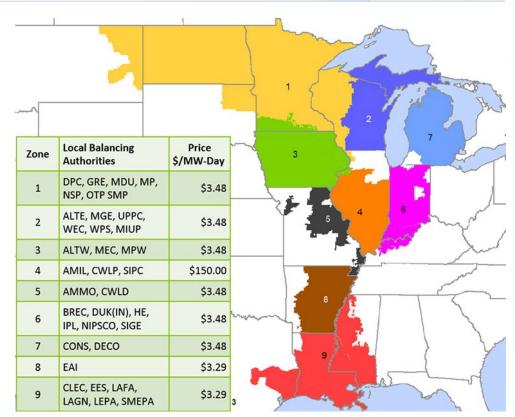
Public Citizen and the Illinois Attorney General asked FERC in February to recoup \$428.6 million, plus interest from June 1, 2015, to load serving entities in Illinois in MISO Zone 4 to reimburse their customers.

Tyson Slocum, the director of Public Citizen's energy program, told RTO Insider he believed the company raised capacity costs by about \$100 million, an estimate he said was "confirmed by reams of non-public Enforcement staff conclusions."

In addition to the \$100 million in direct rate impacts, Slocum said, there are "hundreds of millions of dollars in cascading rate impacts."

In ordering OE staff to reconsider Dynegy's actions in June, the commission said it would determine any remedy in a later phase of the proceeding. On Oct. 7, the commission ordered initial briefs on the remand report by March 1, 2023, and reply briefs on May 1, 2023.

Cohn said that Vistra will "continue to vigorously defend Dynegy's conduct." She said FERC staff's actions are "unwarranted, without merit, beyond the scope of the remand order and inconsistent with prior decisions and action by FERC." ■



2015/16 MISO PRA results | MISO

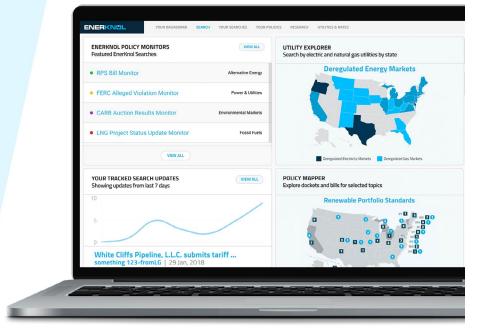
ENERKNUL

Our users don't have FOMO.

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

START DISCOVERING TODAY

BEGIN YOUR FREE 7-DAY TRIAL AT ENERKNOL.COM



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

ENERKNOL.COM



Former Regulators: Demand Response Key to Midwest Capacity Crisis

By Amanda Durish Cook

Two former FERC chairmen and a state commissioner are pessimistic that MISO will be able to rein in shortages or high capacity prices anytime soon and said demand-side management would assuage the situation.

Former FERC chair and Voltus Chief Regulatory Officer Jon Wellinghoff said during a Nov. 21 webinar, sponsored by his company, that today's grid fragility in the Midwest can be traced to an increased amount of renewable energy and extreme weather conditions.

"We've got a situation now in which our grid is being increasingly tested by extreme weather events that are being driven by climate change, but the steps that we need to take to combat climate change and mitigate our emissions include increased dependency on weatherdependent resources," former FERC chairman Neil Chatterjee said. "This is a challenging conundrum, and it's one that policymakers and grid operators have really been wrestling with."

Voltus CEO Gregg Dixon said an ongoing transition to renewable resources and increased electrification demand alongside severe weather are "putting an even greater strain on an already antiquated grid."

"We are a month away from winter, and the headline is: 'It does not look good' ... And summer of 2023 does not look a whole lot better," Dixon said, referencing NERC's recent reliability assessment.

The agency has warned that MISO risks winter blackouts after its most recent capacity auction uncovered a 1.2-GW deficit heading into the June 1, 2023, planning year. The Independent Market Monitor has said the footprint's real risk lies in summer 2023.

Chatterjee said with "the absence of federal legislative guidance" on decarbonization, states must devise their own strategies to cut carbon while ensuring resource adequacy.

Former Arkansas Public Service Commission chairman Ted Thomas said MISO's role as reliability coordinator and states' obligation to ensure resource adequacy can never be "cleanly" separated.

"So, there's always this tension that plays out with all of these policy issues," he said.

Thomas said until now, state regulators have always resisted the downward-sloping demand curve in the MISO capacity auctions, viewing it as a "slippery slope" to a mandatory, PJM-style

He said that when the price "shot up" during the 2021-22 planning year auction, regulators' response was, "MISO, what are you going to do about it?" Thomas said a few years ago, changing the demand curve's slope would have been viewed by regulators as an overstep.

He said a sloped demand curve will produce gradually increasing capacity prices, instead of extremely low prices one year that skyrocket the next.

"To me, the issues we're seeing in MISO are simple: There's just not enough generation," Chatterjee said. "States have made it clear that they are primarily responsible for resource adequacy ... Yet for years, merchant generators have been sounding the alarm that they couldn't continue to lose money year-over year and that market revenues were not sufficient."

Chatteriee said some states and load-serving entities believed they could continue to buy capacity from the MISO auction at rockbottom prices.

"Why pay to build or contract for generation when it's available for a fraction of the cost in the MISO auction?" he said. "And the end result of that is that badly needed generation has retired, and now the entire region is going to be at an elevated risk of load loss for the foreseeable future."

Dixon said Voltus expects that MISO Midwest capacity prices will continue to "cap out" at the cost of new generation entry, making Midwestern capacity "perhaps the most expensive in the world."

"Which is really ironic because it used to essentially be for free," Dixon said.

Thomas said MISO is better preparing for "oddball weather any time of the year" by shifting focus from a summer peak and switching to capacity accreditation based on unit availabil-

He also said MISO South members' continuing resistance to adding more transfer capability between MISO Midwest and the South regions "balkanizes the RTO footprint" to the detriment of resource adequacy.

Thomas prescribed large customer aggregation to leverage demand response to address reliability crises. He said residential and commercial customers need a combination of renewable energy, demand response and energy efficiency measures "to escape the hit of these commodity prices." Third-party aggrega-



Former FERC Chairman Neil Chatterjee | © RTO Insider LLC

tors can apply competitive pressure to utilities to "up their game," he said.

"I think utilities are going to have to recognize that they're going to have to compete and evolve their business models or continue to face pressure. Pressure from regulators, pressure from consumers," Chatterjee said.

Wellinghoff said customers in states that have opted out of demand response and are unable to participate in a wholesale market's aggregation should register their displeasure with FERC. He said the commission should revoke the ability for states to opt-out, especially considering the flexible load that tomorrow's electric vehicle fleets can supply.

Chatterjee agreed that FERC should remove the demand response opt out, saying that tight supply conditions are not going to resolve themselves.

"We tend to only react after bad things happen. And to me right now, we're seeing FERC drag its heels on the DR opt out; we're seeing resistance at the state level," Chatterjee said. "To me, it's going to take something negative to

trigger change, to trigger movement."

He added that there's "real risk in MISO right now of not having enough capacity on one or two very, very hot days."

"To me, it seems like a few factories turning off could make a real difference. Sadly, it will probably take an event like that to, in my view, lead to policy changes that are necessary," Chatterjee said.

Thomas said the Midwest could use universal access to advanced metering infrastructure and aggregation alongside a faster roll out of MISO's proposed 2030 compliance with Order 2222, which allows aggregators of distributed resources into the wholesale energy markets. (See MISO Stakeholders Protest RTO's Order 2222 Implementation Timeline.)

After that, Thomas said, the grid operator could probably "have a cold one and lean back and watch entrepreneurs and business looking out for their own interests" help decarbonize the grid, reduce costs and bolster system reliability.



Former Arkansas PSC Chairman Ted Thomas | © RTO Insider LLC

"If you're going to have scale-variable resources, you've got to have scale-variable load," he said. "That's the cheapest option, and we need to make that happen."





State Regulators Endorse New Demand Curve in MISO Capacity Auction

By Amanda Durish Cook

The Organization of MISO States (OMS) has released a position statement in support of a downward-sloping demand curve in MISO's capacity auction.

MISO's state regulators drafted language that said the existing vertical demand curve may not sufficiently value the reliability contribution of excess capacity and might cause load-serving entities to over-rely on the RTO's market to procure capacity. They also said the vertical design might be hastening resource retirements and is likely not sending price signals that would spur investment in new generation.

The regulators said the grid operator's current resource adequacy "has led to capacity shortfalls in part of the MISO footprint, may fail to maintain appropriate price signals and may not lead to reliability going forward."

MISO has been seriously weighing adopting a sloped demand curve since early summer, after the spring capacity auction laid bare a 1.2 GW capacity deficit across MISO Midwest. (See MISO Promises Stakeholder Discussions on Capacity Auction Reform.)

The Kentucky Public Service Commission and the Public Service Commission of Wisconsin abstained from voting on the statement, and the Manitoba Public Utilities Board did not participate in drafting the letter. However, the Kentucky commission added that it "strongly believes that MISO must immediately endeavor to address the most prominent issues with its capacity market, through actions which include, but are not limited to, implementing a downward-sloping demand curve."



MISO operator manning control room | MISO

OMS said it "looks forward to contributing to the final design of a revised demand curve" and said its "support of a revised demand curve is contingent on reviewing and approving MISO's final proposal."

OMS also warned that it will oppose a minimum offer price rule in the capacity auction.

During the OMS' annual meeting in October, North Dakota Commissioner Julie Fedorchak said the organization's members still need to know the final shape of the proposed curve

and understand the options for states to self-supply or opt out in meeting their reliability needs.

Fedorchak also said the sloped demand curve's formation should be done in conjunction with other resource adequacy measures, like improved scarcity pricing and a new generation valuation that can provide necessary system attributes. She said a sloped demand curve is "just one tool" in the guest for resource adequacy.







Registration opens Jan. 3

Don't miss IPF—the premier offshore wind energy conference in North America.

■ BUSINESS NETWORK & OFFSHORE WIND

HOST SPONSORS









TVA to Repurpose Coal Ash Dump with Solar Generation

By Amanda Durish Cook

The Tennessee Valley Authority will embark on a \$216 million pilot project to install solar panels on top of a sealed coal ash dump following the Board of Directors' funding approval earlier this month.

TVA plans to close in place a 300-acre coal ash dump at its 1.2-GW Shawnee Fossil Plant in Paducah, Ky., with a patented system that includes a geosynthetic liner and closure turf. The federal agency said it will attach a 100-MW solar array to the site without disturbing its integrity.

The Shawnee project is "a first-of-its-kind project in the nation that could potentially be duplicated at other suitable locations," TVA said. It said the project will support its decarbonization goal and will preserve greenfield sites for other economic developments.

TVA still must submit the project for review under the National Environmental Policy Act and other regulatory and environmental approvals.

TVA doesn't yet know when the solar project

will achieve commercial operation.

"At this time, it is premature to know a specific timeframe, but the process is underway," TVA spokesperson Ashton Davies said in an emailed statement to *RTO Insider*. She said TVA intends to begin the solar installation as it wraps up the site's closure.

During the November board meeting, TVA COO Don Moul called the pilot a "revolutionary new approach to install utility-scale solar on closed landfills."

"Directly attaching the mounting mechanisms to the turf layer without penetrating the liner maintains the integrity of the closed coal combustion residual impoundment," Moul said. "This makes available to us the potential to use similar sites across the TVA footprint."

Moul said the project alleviates "land constraints" while advancing TVA's goal of building 10 GW in solar generation by 2035.

The agency's goal is to achieve net-zero carbon emissions by 2050, which some conservation groups have called too gradual. The agency's decarbonization target drew scrutiny from the U.S. House of Representatives' Committee on

Energy and Commerce. (See TVA Defends Rates, CO2 Reduction Plans in House Inquiry.)

Next year, TVA will contract with a third party to conduct a decarbonization study to analyze how it can further slash emissions.

"Moving quickly on this solar cap installation at the Shawnee site allows us to move further and faster as we build out towards our renewable generation goals," Moul said.

Moul said Shawnee was "by and far" best situated for an initial project. He said TVA's footprint has the potential to house up to 1,000 MW in solar generation atop sealed coal ash dumps.

"We're very excited that this is a first step in some of the intentional actions we'll be taking towards decarbonization," he said.

Moul said while he wouldn't "presuppose" the environmental review process, he said TVA estimates having the system online within two years.

He also said TVA will look into whether the Inflation Reduction Act will cover the project's funds. ■



Shawnee Fossil Plant | TVA

NYISO News



NY Slaps Moratorium on Certain Crypto Mining Permits

First-in-nation Measure Seeks to Limit Environmental Impact

By John Cropley

New York has imposed the nation's first moratorium on permitting for certain new cryptocurrency mining operations.

The move drew criticism from business advocates and the digital currency industry but was applauded by environmental advocates concerned about the greenhouse gas emissions generated to feed the huge electrical demand of crypto mining.

Gov. Kathy Hochul signed the two-year moratorium into law Nov. 22, and it took effect immediately. It blocks approval or renewal of air emissions permits for carbon-fueled power plants that provide behind-the-meter electricity to operations that use proof-of-work authentication methods to validate blockchain transactions.

Existing operations and applications filed before Nov. 23, 2022, are not subject to the moratorium. Nor are those that rely on zero-emissions sources of electricity, such as New York's abundant hydropower.

New York is widely regarded as one of the most expensive and highly regulated states in the nation. Its upstate region, where crypto mining operations have been established or proposed, has seen a decades-long loss of industry and population.

Hochul acknowledged this in her memorandum of approval.

"As the first Governor from Upstate New York in nearly a century, I recognize the importance of creating economic opportunity in communities that have been left behind," she wrote.

She said the effort to support economic development and job creation upstate would continue but gave priority in this case to protecting communities from greenhouse gases and addressing the global climate crisis.

Crypto mining uses huge amounts of electricity.

Greenidge Generation Holdings (NAS-DAQ:GREE) in its 2021 10-K filing said its Dresden, N.Y., and Spartanburg, S.C., datacenters are rated at a combined 51 MW.

The Dresden facility has become a poster child or a flashpoint of sorts for the debate over the environmental impact of crypto mining. Its re-permitting process attracted nearly 4,000

public comments.

The circa-1937 plant sits on the west shore of the largest of the Finger Lakes, squarely in the middle of one of upstate New York's most scenic and tourist-friendly regions.

It was coal-fired for most of its existence, but Greenidge converted it to natural gas and bought it back online at 106 MW in 2017, with a claimed 70% reduction in emissions. Greenidge says it is committed to carbonneutral crypto mining by using low-carbon energy sources and offsetting its carbon footprint.

That's not enough for climate activists, whose opposition is due not just to the emissions from burning natural gas but the environmental impact of extracting it with hydrofracking. New York has banned fracking, but it is in widespread use in Pennsylvania, 50 miles south of Dresden. The Marcellus Shale formation underlies the entire region.

Opponents cheered in June when the New York state Department of Environmental Conservation denied Greenidge's application to renew its Title V permit for the Dresden plant on the grounds that it did not meet the requirements of the state's Climate Leadership and Community Protection Act.

Greenidge decried the "arbitrary and capricious" decision and said DEC never once engaged it in discussion in the three months after it proposed an additional 40% reduction in greenhouse gas emissions at the Dresden plant.

The facility continues in operation while Greenidge appeals the denial.

But opponents are hoping that is only tempo-

Seneca Lake Guardian, one of the groups advocating for the moratorium on new crypto mining, called on Hochul to take the next step and shut down Dresden and similar facilities.

The group's vice president, Yvonne Taylor, said in a prepared statement: "Thank you, Gov. Hochul, for stepping up to protect New Yorkers from corporate bullies who want to exploit communities like mine in the Finger Lakes ... Gov. Hochul did the right thing by putting real New Yorkers over the failing outside speculators who choose not to mine crypto in more efficient ways that don't destroy the climate, environment, and local economies."



New York has placed a moratorium on permits for fossil fuel-burning cryptocurrency mining operations such as this one, operated by Greenidge Generation Holdings in Dresden, N.Y. | Greenidge Generation

The environmental group Earthjustice said it hoped New York's moratorium would be a precedent for the rest of the nation, as "crypto mining is a major threat to climate security and needs to be closely regulated."

Others have supported the Dresden operation as a high-tech infusion of good new jobs and new property tax revenue in a region that is often lacking in both.

"The Business Council does not believe the legislature should seek to categorically limit the growth and expansion of any business or sector in New York," said Heather Briccetti Mulligan, CEO of the Business Council of New York State. "We plan to further engage and help educate them regarding this industry and the benefits it provides to the local, regional, and state economy."

And the digital community was aggrieved.

"We are severely disappointed in Gov. Hochul's decision to approve a moratorium on digital asset mining operations that use proofof-work (PoW) authentication methods to validate blockchain transactions," the Chamber of Digital Commerce said. "To date, no other industry in the state has been sidelined like this for its energy usage. This is a dangerous precedent to set in determining who may or may not use power. The PoW mining industry has been spurring economic growth, job creation, and inclusion for historically underrepresented populations in New York, while also creating financial incentives for the buildout of renewable energy infrastructure."

PJM News



IMM Offers Mixed Review of PJM Quadrennial Review Docket

By Devin Leith-Yessian

PJM's Independent Market Monitor offered limited support for major provisions in the RTO's quadrennial review filing before FERC, while urging the commission to order revisions to some of the proposal's methodologies and figures (ER22-2984).

In a Nov. 16 filing, IMM Joe Bowring signaled support for PJM's plan to switch to the use of a forward-looking energy and ancillary services (EAS) offset, rather than relying on historical figures for the calculation, but said the use of long-term financial transmission rights (FTR) is unnecessarily complicated and inaccurate, and cannot be implemented because of the timing of the auctions.

"The more direct, simpler, more transparent, and more accurate approach starts with the forward curves and calculates hourly and nodal forward prices based on historical LMPs. which are a more reliable and more transparent method of calculating locational price differences. PJM should be required to use this approach rather than its proposed approach to the calculation of the forward-looking EAS offset," the Monitor wrote.

In addition to reducing the overstatement of the net cost of new entry (CONE), and therefore capacity prices, the Monitor said the main benefit of a forward-looking EAS offset would be to better align with how investors look at the market. PJM's proposal to use FTRs would conflict with that aim, he said.

The Monitor also said the RTO should be required to reconsider the static offset figure should FERC or PJM stakeholders make any significant changes to reactive ancillary service payments, given that revenues from that service factor into the EAS offset. PJM is proposing to set expected revenues using a payment estimate of \$2,546 per MW-year.

The Monitor supported PJM's proposal to calculate net CONE using a combined cycle (CC) power plant as the reference resource instead of a combustion turbine (CT) unit. The filing said that the change better reflects the type of facilities being added to the PJM fleet, noting that no significant number of CTs have been interconnected to the grid since 1999.

With respect to setting the variable resource requirement curve, the Monitor said PJM did not go far enough in its proposal to steepen the slope a quarter of the way towards vertical (effectively purchasing less additional capacity



Monitoring Analytics President Joe Bowring | © RTO Insider LLC

over the expected peak load), suggesting that the curve instead be rotated halfway toward vertical.

If the amount of capacity purchased in the 2023/24 Base Residual Auction was reduced in accordance with the IMM recommendation, a total of \$1,790,941,751 in capacity would have been purchased, a decrease of \$405,503,039 or 18.5% compared to the actual total of \$2.196.444.791, according to IMM estimates.

"The shape of the VRR Curve directly results in load paying substantially more for capacity than load would pay with a vertical demand curve," the filing said.

PJM Response

In its response to the Monitor's filing, PJM told FERC that the market designs drafted in collaboration with the consulting firm Brattle Group would provide the necessary reliability expected in the future. It also noted that the IMM had missed the docket's comment deadline by nearly a month.

"Brattle cautioned against adopting a curve that is tuned to support exactly a one-in-ten Loss of Load Expectation ("LOLE") at this time due to the lower net [CONE] and greater fleet

turnover than observed in prior quadrennial reviews. In other words, the PJM proposed curve is just and reasonable because it avoids the untenable risk associated with a VRR Curve that barely meets the 0.1 LOLE standard given the current market conditions," PJM said in its response, filed Nov. 17.

The response also says that many of the IMM concerns regarding the use of FTRs had already been addressed by the commission in its 2019 order on PJM's Reserve Market Enhancements. (EL19-58)

"In short, the Market Monitor's concerns with the use of long-term FTR have already been thoroughly litigated and should not be relitigated here," PJM

Generators Expand on Protests

J-Power USA and the PJM Power Providers Group also filed responses to a PJM retort to their quadrennial review protests before FFRC..

Arguing that PJM should use a shorter amortization period within the Commonwealth Edison Locational Deliverability Area (LMP). J-Power said that the RTO has been misunderstanding the Illinois Clean Energy Jobs Act (CEJA) and case law in the state. In its Nov. 18

PJM News



protest, the company said that under CEJA, the reference resource would be required to cease operations within the amortization period outlined in the filing.

"Like PJM, Brattle improperly conflates the provision of CEJA prohibiting gas-fired resources from increasing their emissions above current levels, which contains an exception for publicly-owned resources, with the separate provision requiring all gas-fired resources to reduce their emissions to zero by January 1, 2045, which has no similar exception."

Referencing a section of the PJM response detailing how CEJA would allow for a CC unit to remain in operation if needed to provide reliability, J-Power said it is not realistic for large numbers of facilities to be constructed and maintained for that sole purpose. In an affidavit submitted on behalf of J-Power, Paul Sotkiewicz of E-Cubed Policy Associates wrote that there are currently no technologies available to convert a gas-fired unit to run entirely on hydrogen and that current carbon capture and storage capabilities do not meet CEJA requirements.

"A Reference Resource is intended to be a representative example, rather than some kind of exceptional resource. It is downright absurd to imagine that it would be the 'norm' for gas-fired resources in Illinois to have to be retained for reliability, or that a rational developer would sink hundreds of millions of dollars of at-risk capital into a resource based on the hope that system conditions will miraculously work out so that the resource is required for system reliability years in the future," J-Power

P3, a group that represents PJM power producers, also took aim at the RTO's choice to use a CC facility as the reference resource, saying that a CT is more reflective of a "pure capacity unit" as opposed to a more frequently dispatched generator.

"By using a combustion turbine as the reference unit, the VRR curve response to changes in energy market conditions is only impacted by net energy revenues projected to be earned during scarcity hours when the combustion turbine operates," P3's Nov. 14 response says.

While PJM has not recently seen construction

of CTs, P3 argued that the resource type offers a possible solution to the need for flexibility to complement the installation of renewables.

"P3 absolutely concedes and acknowledges that more CCs have been built in PJM than CTs over the last 10 years in PJM. While a historical fact, it says absolutely nothing about the resources PJM will need in the future. PJM's future needs are going to require flexible units (likely in the form of natural gas and coal) particularly if there is significant renewable energy penetration," the group's filing says.

P3 also noted recent comments by PJM CEO Manu Asthana that that the RTO could see 40 GW of generation in the RTO retire by 2030. With the region's load expected to increase in the future, the group argued, FERC would undermine reliability by accepting a capacity market built on the assumption that PJM is oversupplied with capacity.

"To P3, this sounds like PJM is indeed on the cusp of a reliability crisis and the impact of the instant filing will coincide directly with the predicted reliability challenges in PJM," the group wrote.



PJM News



NJ Backs \$20 Million Spend on Tx Link for Offshore Wind Port

Deal Aims to Protect Project from Supply Chain Holdups

By Hugh R. Morley

The board of the New Jersey Economic Development Authority (EDA) voted this month to back a \$20 million purchase agreement with Atlantic City Electricity (ACE) to ensure the utility avoids potential supply chain delays in the delivery of construction materials needed to develop the 12-mile transmission line tying the New Jersey Wind Port to the grid.

The EDA also started the process of issuing \$160 million in tax exempt bonds to pay for construction of the wind port through 2023. The agency's board voted Nov. 16 to support an "Official Intent Resolution" that sets the bonding process in motion, but the board would have to take another vote for the bond issue to move ahead, according to the memo.

The project has so far obtained \$478.2 million in state funds, and the bonded finance would "secure the balance of funding" needed for completion of the first two phases of the projects, according to a Nov. 16 memo from EDA CEO Tim Sullivan to the board.

The two board votes reflect the EDA's commitment to pushing aggressively ahead with the project, which officials say will be the nation's first custom-built port serving the wind. It is the cornerstone of the state's drive to become a manufacturing and logistics hub for the nascent industry, not only in New Jersey but for other East Coast offshore wind projects as

The purchase agreement is designed to ensure the smooth advancement of the wind port project, which broke ground in September 2021. The agreement "is necessary to safeguard the purchase of materials with long lead times or are at risk of delays due to global supply chain disruption," Sullivan said in the memo outlining the expenditure.

The deal will bring the total cost of the connection — a 69-kV transmission line on a greenfield site — to \$25.88 million. The board in April approved an expenditure of \$5.14 million for the utility to move ahead with a detailed



Shutterstock

design of the line. The design is 60% complete and on schedule, according to the memo.

Providing Power for Tenants

The wind port, located at Alloways Creek in Salem County, will include a 30-acre marshalling area for component assembly and staging; a dedicated, overland, heavy-haul transportation corridor; and a heavy-lift wharf with a dedicated delivery berth and an installation berth that can accommodate jack-up vessels.

The port was conceived to serve New Jersey's own offshore wind industry. The state Board of Public Utilities (BPU) has so far awarded three wind projects in two solicitations since 2019: the 1,100-MW Ocean Wind 1 and 1,148-MW Ocean Wind 2, both developed by Ørsted, and the 1,510-MW Atlantic Shores, a joint venture between EDF Renewables North America and Shell New Energies US. The BPU is planning to hold a third solicitation early in 2023.

The developers of the three approved offshore projects have agreed to use the port, but the state also wants to attract business from non-New Jersey projects. The EDA said in October 2021 that it had received 16 non-binding offers for companies looking to become tenants at the port, among them Siemens Gamesa Renewable Energy. (See NJ Wind Port Draws Offshore Heavy Hitters.)

Nacelle manufacturers MHI Vestas and Gener-

al Electric have committed to creating nacelle plants at the port, and German manufacturer EEW Group is building a monopile factory in the nearby Port of Paulsboro.

The ACE agreement is important to the wind port because it is located in a remote part of South Jersey, adjacent to three nuclear plants operated by PSE&G, and has no tie to the grid, according to the EDA.

"The approval of long lead items ahead of full construction is necessary to safeguard the construction schedule with materials facing long lead times or risks of disruption due to broader supply chain volatility," according to Sullivan's memo. "It also recognizes the authority's negotiated cost obligations to staff's recommended inaugural subtenant should a power line connection not be in place by the start of the sublease."

If the link isn't ready on time, the project could have no power supply to provide tenants and would have to share the cost of providing temporary power solutions, "such as diesel generators," the memo said.

Sullivan laid out the expenditures anticipated to be made from the \$20 million, which include: \$16.9 million for steel poles and anchor bolt cages; \$204,00 for conductors; \$71,000 for circuit breakers and \$62,000 for static wire.

Mid-Atlantic news from our other channels



NJ's \$2M Agrivoltaics Study Advances

NetZero

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

SPP News



SPP MOPC OKs 'Late' Tariff Change Related to EMS Upgrade

SPP members on Monday unanimously approved a revision request that will allow staff to complete an energy management system upgrade in a timely fashion and reduce project costs.

The Markets and Operations Policy Committee met briefly and virtually to approve the staff request. It still must be reviewed by the Reliability Compliance Advisory Group and the Operating Reliability Working Group after having already been endorsed by the Transmission and Regional Tariff working groups.

The revision request (RR524) updates Attachment C of SPP's tariff to reflect revisions to the real-time response factor calculation process. The process is being updated to better align with industry best practices by using a standalone process and the Eastern Interconnection's NERC interchange distribution calculator.

SPP COO Lanny Nickell said staff discovered late during the EMS upgrade that the tariff's current requirements do not specify the use of certain software in the calculation. Their new language gives a "very detailed description," as

required by FERC, of SPP's available flowgate capability calculations.

"We caught it late. Apologies for doing this," Nickell said. "We would have loved to have covered this in October [during MOPC's last meeting], but it was something we noticed

SPP plans to file the tariff change with FERC in December, enough time to meet the new EMS cutover deadline of Feb. 21. ■

- Tom Kleckner

	Current AFC Calculation		
Inputs	process	New AFC Calculation Process	Notes
Software Application	EMS RTRFCALC	TARA	
			IDC Model updated
and the second second			Monthly based on
Network Model	EMS State Estimator Model	Eastern Interconnect IDC Model	EMS SE Model
Load Forecast	SDX	SDX	No changes
Transmission Outages	SDX	SDX	No changes
Generation Outages	SDX	SDX	No changes
	ATTO 12.002 22.00 MINISTRUMENTS (ATTO 10.00		
Flow Gates	As modeled in RTRFCALC	Based on EMS flow gate list	Same set, no changes
		Based on Tagdump that TARA can	
Interchange schedules	Based on NSI from OATI	process	Same results
Reservations	Applied in WebTrans	Applied in WebTrans	No changes
			Block dispatch will
	10.000		be based on actual
	Based on actual dispatch in		dispatch. Similar or
Dispatch Forecast	last Month	Based on block dispatch file	same results.
		Based on EMS database and	
POR - POD and Zonal set		maintained as needed in same way	
up	Defined in EMS database.	as we maintained EMS DB	Same results
Outputs			
Base loading defined flow			
gates	Base loading flow gates	Base loading flow gates	Same results
Shift factors for defined			
flow gates for defined			
POR/POD and zones	Shift factors	Shift Factors	Same results

SPP's current AFC process, compared to the new process. | SPP

Company Briefs

Duke Energy Acquires 100-MW Solar Farm in Miss.

Duke Energy Sustainable Solutions last week announced it is acquiring the 100-MW Wildflower Solar project from Clearway Energy Group in Mississippi.

Toyota has signed a 15-year virtual power purchase agreement for up to 80 MW from by the project.

Construction of the project is expected to start later this year, and it would become commercially operational by the end of next year.

More: Duke Energy

LG Chem to Open EV Battery Plant in Tenn.

LG Chem last week announced plans to

invest \$3.2 billion to develop a cathode materials plant for electric vehicle batteries in Montgomery County, Tenn.

LG Chem CEO Hak Cheol Shin said construction of the plant will begin in the first quarter of 2023, with mass production scheduled to start in late 2025. The factory is projected to produce 120,000 tons of cathode battery materials annually, which is enough to power batteries in 1.2 million

The deal still needs a technical sign-off from the State Funding Board, which meets again in December.

More: Nashville Tennessean

Campbell Soup Enters Renewable PPA with Enel

The Campbell Soup Company and Enel



North America last week announced a 12-year virtual renewable power

purchase agreement that will support Campbell's goals to reduce greenhouse gas emissions.

Through the agreement, Campbell will purchase power and the associated renewable energy credits from a 115-MW share of Enel's Seven Cowboy wind project in Oklahoma. The energy credits will reduce Campbell's Scope 2 greenhouse emissions and allow the company to make progress toward achieving its goal to reduce its combined Scope 1 and 2 emissions 42% by fiscal year 2030.

The contract is expected to begin in July 2023.

More: Campbell Soup

Federal Briefs

DOE Announces \$550M for Communitybased Clean Energy Projects



The Department of Energy last week said it will make \$550 million available to state, tribal and local governments to use for energy

conservation and the development of clean energy resources.

The DOE's Energy Efficiency and Conservation Block Grant Program is designed to develop local programming and deploy clean energy technologies to cut emissions, reduce energy costs, and help meet President

Biden's goal of a net-zero economy by 2050. Communities can use the funding to build out EV infrastructure or deploy community solar.

Applications for the program, which is funded by the Bipartisan Infrastructure Law, will open in January.

More: DOE

US Industrial Greenhouse Emissions Rise 4%

U.S. greenhouse gas emissions climbed by 4.1% from major industrial sources in 2021, according to data recently released by the EPA.

The increase is the largest year-on-year rise in emissions tallied across more than a decade of reporting by the Greenhouse Gas Reporting Program. The emissions, which are equivalent to 2.7 billion metric tons of carbon dioxide, represent about half of all U.S. climate pollution.

The biggest emitter of carbon dioxide was the Southern Company's James H. Miller Jr. plant in Alabama at 20,834,019 metric tons.

More: Inside Climate News

State Briefs

ARIZONA

Corp. Comm. Approves Solar Daytime **EV Charging Program**

The Corporation Commission last week approved a new electric vehicle charging tariff for Arizona Public Service Company that encourages EV charging during the day.

The tariff establishes a new "off peak" period for commercial customers from 9 a.m. to



3 p.m. and a new "on-peak" period for the remainder of the day. EV owners can now receive discounts of \$0.04223 per kWh if they charge their EVs at commercial establishments during the off peak hours.

More: Arizona Corporation Commission

COLORADO

Judge Allows Lawsuit Blaming Xcel Energy for Marshall Fire to Continue

First Judicial District Judge Christopher Ze-



nisek last week rejected a motion by Xcel

Energy to dismiss a class action lawsuit that blamed the utility for causing or contributing to the Marshall fire on Dec. 30, 2021.

The lawsuit alleges that Xcel equipment "substantially caused or contributed to the cause, origin and continuation" of the fire, which burned more than 6,000 acres and destroyed more than 1,000 homes and businesses. Xcel sought to have the lawsuit dismissed on grounds that it was unfounded and that the company was not negligent in the upkeep of its equipment. However, Zenisek denied the motion, allowing the lawsuit to move forward.

The cause of the fire remains undetermined.

More: Colorado Hometown Weekly

FLORIDA

Transportation Sector Responsible for Most Greenhouse Gasses

Transportation accounts for 42.2% of the state's greenhouse gasses, according to 2018 data gathered by the Florida Climate Institute.

The number was slightly larger than the percentage releases by utilities, which stood at 40.3%. In fact, by 2018, state utilities had decreased their emissions by 19% while tailpipe emissions grew by 12%.

More: Tampa Bay Times

IOWA

Linn County Extends Solar Moratorium



The Linn County Board of Supervisors last week voted to extend a moratorium on utility-scale solar installations through March.

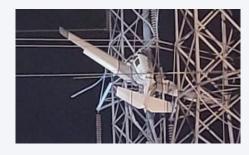
The supervisors originally adopted the moratorium in October to last through Dec. 31 with the idea that it could be extended up to three times through 2023 while the county ordinance governing the projects is reviewed.

"By the March deadline, we will have a better idea of how much time is actually needed," Planning and Development Director Charlie Nichols said. "It won't be open-ended like now. We should be close to completion or at least developed enough to know how much time we need."

More: The Gazette

MARYLAND

Plane Hits Pepco Tx Tower, Cutting Power to 100.000 Customers



A private plane collided with a Pepco transmission tower near Gaithersburg, Md., on Sunday, forcing the utility to cut power to almost 100,000 homes and businesses for several hours before the pilot and passenger could be rescued.

The single-engine Mooney M20J hit the tower northwest of the Montgomery County Airpark about 5:40 p.m. Photographs showed the plane entangled in cabling and the latticework of a Pepco tower more than 80 feet from the ground. Crews worked to secure the airplane to the tower before the pilot and passenger were rescued after midnight, using a bucket on a crane. The plane was removed about 3 a.m. Monday, after power had been restored at 1:34 a.m.

Although it was misty and rainy in the Washington area Sunday, officials said it was unclear that weather played a part in the accident. The full extent of damage to the lines and to the towers that support them also was not immediately clear.

More: The Washington Post

NEVADA

NV Energy Restores Power Following Transformer Fire



NV Energy restored power to more than 21,000 customers

in Douglas County after a transformer fire caused power outages on Nov. 21.

Deputies reported a transformer fire at the

Buckeye Power Substation around 5:30 a.m. It was still burning nearly two hours later as NV Energy workers were figuring out how to switch out power.

There is no word on what caused the transformer to fail.

More: Nevada Appeal

OHIO

Clark County Rejects Ban on Large Wind, Solar Farms

The Clark County Commission last week unanimously rejected a proposal to restrict the creation of all large solar and wind farms in unincorporated parts of the county.

The decision was made after the 2021 passage of Senate Bill 52, which allows a board of county commissioners to prohibit the construction of utility-scale wind or solar facilities altogether or in certain designated zones in unincorporated areas. The rejection of the blanket restriction means developers of solar or wind facilities will undergo the same process they currently go through before and after breaking ground.

Six of the 10 townships in the county requested the commission restrict their areas from development; however, the commission cited concerns with prohibiting the legal use of property.

More: Springfield News-Sun

TENNESSEE

Enviro Groups, TVA to Argue over Rolling Contracts

Attorneys for the Tennessee Valley Authority and three environmental nonprofits will argue before U.S. District Judge Thomas Parker later this week about whether a lawsuit questioning the legality of TVA's 20-year, rolling electricity contracts should proceed to trial or be dismissed.

The nonprofits — Memphis-based Protect Our Aquifer, Energy Alabama and Appalachian Voices — have sought to prove TVA's 20-year contracts violate two different sets of federal laws. The Southern Environmental Law Center, which represents the nonprofits, has argued the contracts violate the Tennessee Valley Authority Act of 1933, the law that governs TVA, and the National Environmental Policy Act, which requires environmental review of federal agency policy decisions. They also argue the contracts fund a utility that is reluctant to combat climate change and is putting continued strain on the natural resources throughout

its footprint. TVA has argued the plaintiffs don't have standing to sue and haven't demonstrated harm.

More: Memphis Commercial Appeal

VIRGINIA

State to Share Cost of Amos. **Mountaineer Wastewater Upgrades**

The State Corporation Commission last week reversed course from a previous ruling and said Appalachian Power's Virginia customers will now share in the cost of wastewater treatment projects at the John

Amos and Mountaineer power plants in West Virginia.

The SCC approved a \$21 million investment at Mountaineer and a \$63.5 million investment in Amos, to be paid for by Appalachian Power's state customers. Last month, the commission's senior hearing examiner recommended approval of the request, with the condition that state ratepayers not share the cost of any uneconomic operation of the

The projects will keep both plants operating past 2028.

More: West Virginia Public Broadcasting



National/Federal news from our other channels



PNNL: 'Households Do Not Make Rational Decisions' on EE Upgrades





NERC Calls for Flexibility in CISA Cyber Reporting Rules



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

