

RTO Insider

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

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May 25, 2021

CPUC Proposes Adding 11.5 GW of New Resources *More Fossil Fuel Generation Included in Plan to Ensure Reliability*

By Hudson Sangree

The California Public Utilities Commission proposed Friday requiring electric providers to procure 11.5 GW of new resources between 2023 and 2026 to meet the state's reliability needs and bolster its transition to 100% clean energy.

The *proposed decision* cited the need to avoid capacity shortfalls like those that caused rolling blackouts in August and energy emergencies in September during severe heat waves. (See *CAISO Could See More Outages this Summer*)

"This procurement order is designed to achieve our ambitious greenhouse gas emissions reduction targets for 2030 and to keep us on a clear path to meeting our ultimate goal of 100% zero-carbon electricity resources by 2045," it said.

In a divergence from most state policies, the



California's last nuclear plant, Diablo Canyon, is scheduled to retire starting in 2024. | PGE

proposal would require load-serving entities (LSEs) to include more fossil fuel generation in their resource mixes by adding 1,000 to 1,500 MW in additional capacity from efficiency improvements and expansions at existing natural gas plants.

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Orders Signal Wind-down of Western Energy Crisis Disputes

By Robert Mullin

FERC issued a set of orders Thursday that indicate that the myriad disputes around the Western energy crisis of 2000/01 might finally be winding down two decades after California's nascent wholesale energy market was paralyzed by widespread market manipulation.

The most significant of the orders dealt with a complaint by California's attorney general, the state's Public Utilities Commission, Pacific Gas and Electric (NYSE:PCG) and Southern California Edison (NYSE:EIX) (the California Parties) seeking refunds from a group of companies that sold ancillary services into the state during the crisis (EL-02-71).

Thursday's order covered Hafslund Energy Trading and TransCanada Energy Trading, the two remaining respondents that had not reached a settlement in the proceeding.

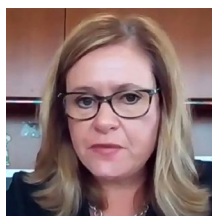
In their complaint, the California Parties

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FERC and NEPA Reform Sought to Speed Tx Expansion *Industry Experts Say House Planning, Permitting, Cost Allocation are Key Obstacles*

By K Kaufmann

Linda Apsey, CEO of independent transmission developer ITC Holdings Corp. (NYSE:FTXS), cuts to the chase when talking about the regulatory reforms needed to reach President Biden's goal of decarbonizing the U.S. power system by 2035.



Linda Apsey, president and CEO of ITC Holdings Corp. | House Select Committee

"FERC should repeal or modify unhelpful policies, like Order 1000, that have slowed regional transmission development and simply made it more complex," Apsey said during a hearing before the House Select Committee on the Climate Crisis on Thursday. "The introduction of so-called competition is not competition. It is nothing more than a regulated bureaucratic

bidding process with little appreciable benefit to the consumer."

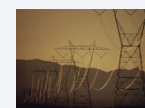
Apsey was one four speakers at the hearing on expanding and modernizing the grid, where Democrats prioritized proposals in Biden's \$2 trillion infrastructure package — such as a federal investment tax credit for transmission — and the jobs that a massive transmission buildout might create.

"We already have the innovative technologies needed to increase the efficiency, capacity and flexibility of our electric grid... and build new transmission lines so that every city, town and county can access America's affordable, abundant wind and solar energy," committee chair Rep. Kathy Castor (D-Fla.) said.

Republicans, on the other hand, called for revisions to the National Environmental Policy Act (NEPA).

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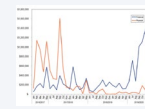
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Sweeping Nev. Energy Bill Passes Senate Unopposed
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PJM Monitor: Dominion Exit Likely to Cut Capacity Prices Outside Va.
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FERC Rejects PJM FTR Forfeiture Rule
(p.28)



Transource Tx. Project Rejected by Pa. PUC
(p.34)

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NetZero Insider is now live!
 See p.18 for this week's coverage.

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FERC and NEPA Reform Sought to Speed Tx Expansion

Industry Experts Say House Planning, Permitting, Cost Allocation are Key Obstacles

Continued from page 1

“We’ve got to take a fresh look at that [law],” said Rep. Garret Graves (R-La.), the committee’s ranking member. “Not to shortcut our review of the environmental impacts, but to make sure we’re truly focused on the best environmental outcomes but also focused on the project outcomes, the project objectives, because the worst kind of project in the world is a project that never gets finished.”

The industry view, laid out by Apsey and the other speakers, was more technical and pragmatic, focused on what they see as the key obstacles to getting projects built: planning, permitting and cost allocation.

“When it comes to planning across multiple transmission owners, across multiple states, across multiple regions, we don’t necessarily have the processes that facilitate that,” Apsey said. “We would also strongly recommend that FERC require planning studies to include state clean energy standards and realistic estimates for electrification growth.”

“Current processes focus on assigning costs to those customers who benefit immediately and directly from the investment,” said Emily Sanford Fisher, general counsel and senior vice president for clean energy at the Edison Electric Institute, the trade association for investor-owned utilities. “This does not take into consideration the broader benefits of transmission for all customers. It may be necessary to broaden the scope of benefits and beneficiaries considered, particularly as the transmission system, the generation resource mix and policy goals change and are expected to change over time.”

Project delays that increase market uncertainty can also impact vital workforce development activities, said Donnie Colston, director of the Utility Department of the International Brotherhood of Electrical Workers.

“It takes three years to train a journeyman lineman to perform transmission line construction and maintenance,” Colston said. “And we anticipate the need for at least 50,000 new power linemen over the next 10 years. While projects are held up, we are losing valuable training time.”

The ITC Impact

A recent *study* from Princeton University predicts that the U.S. will need to increase

its high voltage transmission capacity 60% by 2030. But many projects take seven to 10 years or more to even break ground because of long planning and permitting cycles, which in turn can make financing difficult. For some, the delays can be project killers, said Michael Skelly, founder and CEO of Grid United, an early-stage transmission developer.

Approved in 2011, FERC Order 1000 was intended to stimulate transmission planning and construction through competition, but Apsey and other industry insiders say it has not had the desired impact. (See *ACORE Panelists Discuss Regulatory Role in Biden Agenda*.)

Another study from the American Council on Renewable Energy found 22 transmission projects across the country that it classified as ready to go but expected only about half would be built. The report argued for a transmission ITC as a way to get the projects built. (See *Transmission ITC Could Add 20 GW of New Capacity to Grid*.)

“A well-designed tax credit for transmission can lower costs for large projects and make it easier to achieve cost allocation agreements, which is a key hurdle to project approval and construction,” Apsey said.

“What we need [are] some successes,” said Skelly, an industry pioneer who tried, unsuccessfully, to develop transmission to bring wind power from the Great Plains to the Southeast. “With a little push from things like the investment tax credit, we can get these projects done. They will unlock tens of thousands of megawatts of new generation, boost today’s level of renewable energy penetration to even higher levels and help address reliability issues.”

NEPA ‘Weaponized’

NEPA was signed into law by Republican President Richard Nixon on Jan. 1, 1970. Under original regulations and guidance, a NEPA review was intended to take no more than a year, with final reports of about 150 pages or 300 for “actions of unusual scope and complexity,” according to a 2020 *report* from the Council on Environmental Quality. The CEQ also *found* that between 2010 and 2018 the average review took more than four years, producing reports that averaged 661 pages.

Adding to delays, for many transmission projects, NEPA reviews have triggered litigation because, as Fisher said, “People don’t nec-

essarily love living near infrastructure, even when they benefit from it.”

Speaking more bluntly, Rep. Dan Crenshaw (R-Tex.) said allocating trillions of dollars for infrastructure would be pointless if NEPA litigation is “weaponized” by environmental groups and the courts. “If we don’t address the permitting issues in this country, far more stringent than most developed nations, we’re never going to get to the part where we build more transmission,” he said.

Graves recently introduced the *Building United States Infrastructure through Limited Delays and Efficient Reviews* (BUILDER) Act, which would ensure “practical project review times” and clarify “the threshold determinations for preparing an environmental document under NEPA,” according to a *press release* on the bill. It would also require potential “litigants to have participated meaningfully in the NEPA process before filing suit.”

One solution utilities are exploring is using existing rights of way to “piggyback our infrastructure,” Fisher said. Similarly, the Biden administration is looking at *using highway rights of way* for transmission.

Apsey, on the other hand, called for transmission planning that first identifies areas of high solar or wind resources, as was done in Michigan and Texas, she said. “We know where the wind blows; we know where the sun shines. Right now, we build transmission to interconnect everywhere a generator may site, whether it’s optimal or suboptimal. If we build the transmission where we know the renewable potential is, those renewable developers will locate around the transmission line.”

But any effort to find common ground of permitting reform could be derailed by partisan politics, as seen at the hearing when Graves brought up Biden’s recent decision to waive sanctions on Russia’s Nord Stream 2 gas pipeline.

“We saw President Biden being deemed a hero for shutting down the Keystone pipeline,” he said. “The same administration ... just lifted sanctions to allow the Nord Stream pipeline. I am really struggling with what appears to be the hypocrisy here, and I think we have to step in and make sure we are making the right decisions for the global environment, for our allies and for a clean energy future that’s based on America’s resources.” ■

FERC/Federal News



WIRES Study IDs Economic Impact of RTO Tx Projects

By Rich Heidom Jr.

The \$83 billion in transmission projects that have been approved by ISO/RTO boards or recommended to regulators would boost GDP by \$42 billion and local spending by almost \$39 billion during construction, according to a report released May 18 by a transmission industry trade group.

The study, conducted for *WIRES* by London Economics International (LEI), also says the projects would create about 442,000 jobs in domestic manufacturing and installation and about 9,000 permanent jobs in operations and maintenance.

“To put these numbers into context, such impacts are the equivalent of a 14% increase in the contribution to GDP currently made by the utilities sector and equivalent to more than a doubling of current employment in the utilities sector,” it said.

WIRES, whose members include American Electric Power, PPL, FirstEnergy, Duke Energy and Exelon, released the *analysis* to bolster the industry’s request for policy changes and financial incentives.

“Introducing regulatory policies and economic

stimulus measures that promote transmission investment offers a golden opportunity for accomplishing economic stimulus objectives, revitalizing local economies and moving the needle on transformative decarbonization goals,” the report says.

“We thought that approaching it on a focus of how transmission can play into helping to address economic recovery and jobs fit perfectly with the current circumstances of our time, where we are still in the process of recovering from the economic impacts of the pandemic,” WIRES Executive Director Larry Gasteiger said in an interview. “This gives concrete numbers associated with the kind of jobs you can expect to see generated from a large buildout on transmission planning.”

The report asks Congress to direct FERC to initiate a rulemaking on intra- and interregional planning to target identification of transmission to help decarbonization efforts “by incorporating dynamic generation queue data and trends into regional planning; incorporating local, state and corporate renewable energy targets and electrification assumptions into scenario planning; and considering the full range of net benefits that a transmission project provides, including the economic value of decarbonization, resiliency and achievement

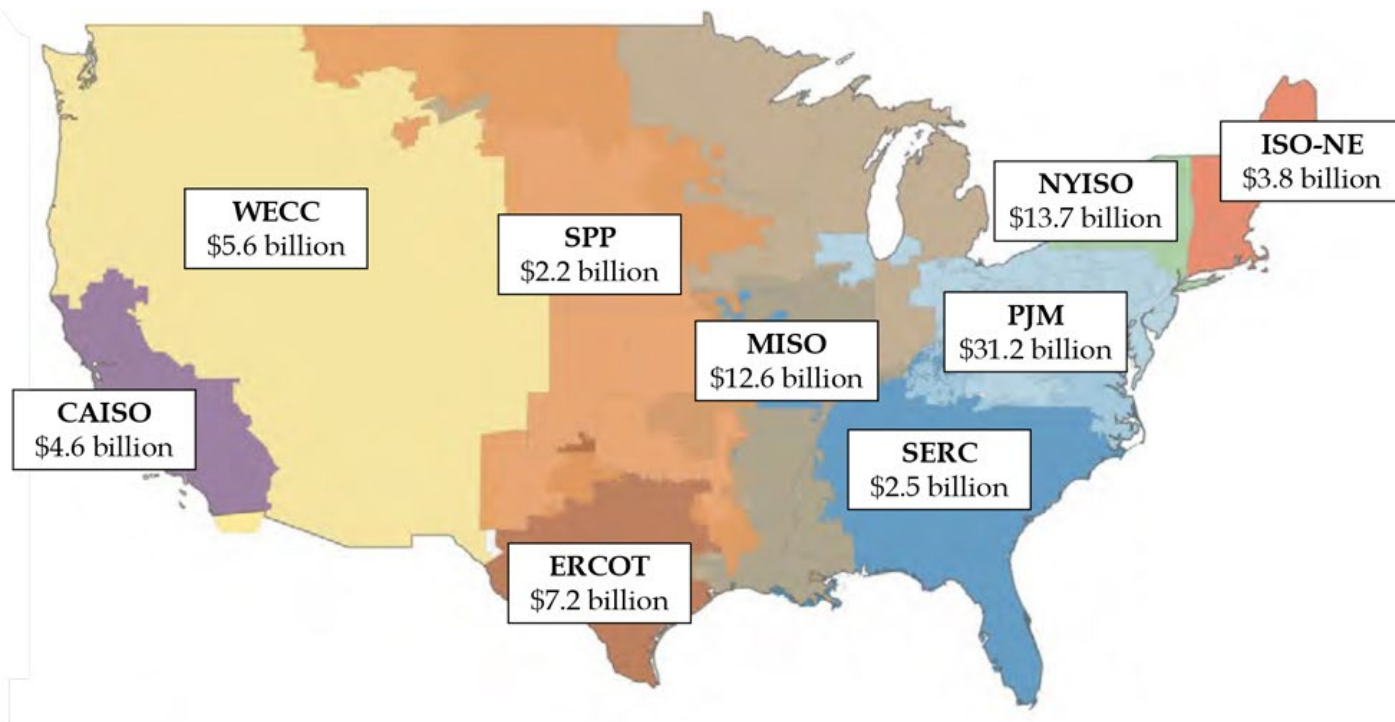
of other public policies (such as economic and environmental justice).”

It said FERC also should clarify and improve cost allocation frameworks to “avoid negotiating stalemates when multiple regions and constituents are involved” and that Congress should find ways to reduce delays in siting and permitting.

Citing the success of the investment and production tax credits in nurturing wind and solar generation, it asks for return on equity adders and other incentives to encourage the private sector “to tackle regionally significant but complex transmission projects, or projects delivering on targeted goals of decarbonization or other important drivers (e.g., resiliency).”

The report also takes issue with FERC’s proposal last month to limit the 50-basis-point ROE adder for transmission owners participating in RTOs/ISOs to the first three years (RM20-10). (See *FERC Proposes to Narrow RTO Incentive*.)

“Such a policy, if adopted, could inadvertently send a negative message to transmission owners about the benefits of remaining with an RTO/ISO, especially given the risks associated with relinquishment of control,” it said. ■



Approved or recommended transmission investments by region as of 2020 | *WIRES*

FERC/Federal News



FERC Approves Pipeline Orders After Impromptu Amendment Vote

Danly Frustrates Colleagues with 11th-hour Debate

By Michael Brooks

FERC approved two natural gas pipeline projects at a bitter open meeting Thursday after accepting a last-minute, one-sentence amendment from Commissioner James Danly to gain his support.

Chairman Richard Glick and Commissioner Allison Clements, both Democrats, dissented in part.

Since shortly after Glick joined FERC in 2017, the commission's members have disagreed on partisan lines over whether they should assess a gas infrastructure project's emissions and their effects on climate change. These latest two orders were no different, with the three Republican members rejecting the need for such an assessment and the two Democrats dissenting over its lack thereof.

But they were also highly unusual, not just in the heated debate that took place prior to their approvals, but in the manner in which they were approved.

At issue were two projects to expand capacity on existing pipeline systems: Northern Natural Gas' Northern Lights project in Minnesota (CP20-503) and TC Pipelines' Tuscarora Xpress project in northern Nevada (CP20-486).

Glick brought orders granting the projects' certificates of public convenience and necessity to a vote at the meeting despite his and Clements' partial dissents over their lack of environmental impact statements regarding climate change. All five commissioners agreed that the developers had shown that the projects were needed.

Glick and Clements had reached a compromise in March with Republican Commissioner Neil Chatterjee to assess the climate impacts of a different Northern Natural pipeline project, the South Sioux City-to-Sioux Falls A-line Replacement Project. (See [FERC Assesses Climate Impact of Gas Project for 1st Time](#).) But Glick and Clements said these latest two projects' emissions were much more substantial, warranting a full EIS.

Nevertheless, Glick said, he thought it was best to allow the orders to move forward, as he expected the majority to approve them. Glick also told reporters in a teleconference after the meeting that, although he is able to as chairman, he does not want to withhold



One of the projects that FERC approved is Northern Natural Gas' Northern Lights project, which would expand the company's system capacity along the Minnesota-Wisconsin border. | [Berkshire Hathaway Energy](#)

orders that the majority supports just because he does not, as both Chatterjee and Danly did during their tenures as chair.

Instead, Glick said, the orders contained data on the projects' emissions without any analysis, as the commission has been doing since 2019 under a compromise between Chatterjee and former Commissioners Bernard McNamee (R) and Cheryl LaFleur (D). (See [LaFleur Sides with Republicans on LNG Terminal as Glick Dissents](#).)

But Danly refused to support the orders as drafted because they "represent yet another change in the commission's analysis of greenhouse gas emissions, and they fail under the [Administrative Procedure Act] because they do not properly acknowledge the serial departure, as happened" in a ruling on the South Sioux City-to-Sioux Falls A-line Replacement project in March. (See [FERC Assesses Climate Impact of Gas Project for 1st Time](#).)

Danly had also dissented from that order for similar reasons, saying it marked a "drastic departure" from the commission's previous positions and was unfair to the developer because it was unexpected. Both he and Commissioner Mark Christie (R) said the commission should

not be changing its certificate policies until it completes its Notice of Inquiry on the subject, which Glick restarted in February. (See [Glick Hits 'Refresh' at 1st FERC Open Meeting](#).)

Danly's Motion

But Danly surprised all of his colleagues during the meeting by moving to amend both of the orders by adding a single sentence: "The forgoing analysis on greenhouse gas emissions is offered for informational purposes only, does not inform any part of this order's holding and shall not serve as precedent for any future certificate order."

He said the amendment, which he called "a simple and elegant solution," would alleviate his concerns about the orders' legality and allow him to vote for them. "What I want to avoid during a pending NOI is breaking new ground," he said.

Before Danly's motion — and without alluding to what exactly the dispute was about — both Glick and Chatterjee already sounded exasperated with the matter. Chatterjee said that "there is nothing productive about sitting in separate corners, insisting on getting 100% of

FERC/Federal News

what we'd like to see. ... Today we could have moved two critical infrastructure projects forward, and the fact that we're not is extremely frustrating to me. This is not a game."

In his prepared remarks, Christie also expressed frustration with the debate and, in a way, chastised all of his colleagues. "There are five members that agree that these projects are needed, and let's remind ourselves why: so people can heat their homes and not freeze in the winter; so people with gas stoves can cook; so people with gas water heaters can have hot water. These are needed projects; it's not a bureaucratic exercise."

He said he respected the Democrats' position on the GHG issue but that he was frustrated by what he viewed as policy changes in both the A-line Replacement order and the two latest orders, citing "some members' refusal to honor the NOI process."

Danly's motion only increased his colleagues' exasperation.

"I think your motion is out of order," Glick said. "You did not provide a copy of the amendment. I didn't know you were going to make the motion. I talked to you many times yesterday; I talked to you again this morning. You didn't even mention it once. You didn't share it with anyone. ... We all say this isn't a game; let's not play games. OK?"

"This is a deliberative body," Danly responded. "Back before the prepared speeches and wooden performances of the commission's meetings that we have today, it was very common practice for orders to be edited in real time, for amendments to be made in real time, during a meeting ... and there is nothing of which I am aware — and I've looked into it — that is a new rule of procedure or a new order

that the commission issued between the time that this was in common practice and today."

Christie immediately voiced support for Danly's amendment.

Glick, formerly a staffer for the Senate Energy and Natural Resources Committee, noted that it was standard procedure for senators to offer amendments on bills in advance of committee meetings, but that apparently the commission did not have any such rules. He also said that, though he was "deeply disappointed" that Danly did not present the amendment ahead of time, he would be fine with approving it, as it would not change his vote on the orders themselves.

Chatterjee, former adviser to Senate Minority Leader Mitch McConnell, was also supportive, but he scolded Danly for the maneuver. "People are watching this. The markets are watching this. We are toying with these companies. If this sentence is what would have taken to have gotten us to the three votes, it should have been offered before the meeting. ... These kinds of methods and tactics — look, I used to do them all the time in the United States Senate — this is different. This is a regulatory body. ... I'm very frustrated with how all this went down."

"I wish I believed that this amendment was made in good faith," Clements said. She said the GHG issue is "too serious a matter to get caught up in this surprise amendment proposal."

Clements ultimately abstained from the vote on Danly's motion, while the other four commissioners voted to approve it. The commissioners then voted 3-2 on the certificates themselves.

"Back before the prepared speeches and wooden performances of the commission's meetings that we have today, it was very common practice for orders to be edited in real time, for amendments to be made in real time, during a meeting."

—Commissioner James Danly

"I do have optimism that our Notice of Inquiry on our long-outdated 1999 policy statement will give us the information we need to create a better approach," Clements said. "With the NOI public comment period closing on May 26, we are drawing closer to that time and what I hope will be — although today is dampening my optimism a little bit — an improved, modernized and fair policy statement." ■

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Cybersecurity Top Concern at DOE Budget Hearing

Granholm Says Congress Could Consider New Security, Reliability Standards for Pipelines

By K Kaufmann

Wednesday's hearing before the House Energy and Commerce Subcommittee on Energy was nominally about the Department of Energy's 2022 budget request for \$46.2 billion.



Secretary of Energy
Jennifer Granholm |
DOE

But the issue clearly top of mind for many representatives and Secretary of Energy Jennifer Granholm, the hearing's sole witness, was the recent Colonial Pipeline cyberattack and what actions will be needed to shore up U.S. cybersecurity.

The pipeline hack "was really a stark reminder of the imperative to harden the nation's critical infrastructure against these serious and growing threats like ransomware," Granholm said in her opening statement. "And in the face of an evolving array of 21st-century risks, we have to rethink our approach to security and to reassess the authorities that we can bring to bear."

The full Energy and Commerce Committee already had responded to the attack — and resulting gasoline shortages — with a spate of *bipartisan legislation*, announced May 12.

Rep. Bobby L. Rush (D-Ill.), subcommittee chair, talked up the *Pipeline and LNG Facility Cybersecurity Preparedness Act* (H.R. 3078) he and Rep. Fred Upton (R-Mich.) had reintroduced in the House. Originally introduced in 2019, the legislation would, Rush said, "further strengthen DOE's ability to respond to physical and cybersecurity threats."

Under the *Energy Emergency Leadership Act* (H.R. 3119), sponsored by Rush and Rep. Tim Walberg (R-Mich.), responding to energy emergencies and cybersecurity threats would be elevated as a core function for DOE. The bill is another retread, in this case from 2020.



Rep. Frank Pallone
(D-NJ) | DOE

But Rep. Frank Pallone (D-NJ), who chairs the Energy and Commerce Committee, believes more rigorous regulatory action may be needed, similar to the electric industry's

reliability standards developed by NERC and FERC. "No similar rigorous programs exist for pipelines, just a set of voluntary guidelines overseen by [the Transportation Security Administration], and this is a big gap," Pallone said. "I believe it's time to consider mandatory, enforceable reliability standards for our nation's pipeline network."



Rep. Cathy McMorris
Rodgers (R-Wash.) |
DOE

At the same time, Republicans such as Rep. Cathy McMorris Rodgers (R-Wash.), ranking member of the committee, framed the gas supply shortage as "a harsh reminder of how important reliable supplies of fuels are for America. It's a reminder of how critical pipe-

lines are for clean, efficient, secure delivery of the energy people and our economy need to thrive," she said.

Biden's "rush-to-green agenda" is a distraction, undermining DOE's core mission to ensure energy security, Rodgers said.

Building in Cybersecurity

Responding to questions from Rush and Pallone about what Congress can do to further support the DOE on cybersecurity, Granholm pointed first to President Biden's *recent executive order* on the issue. Specific provisions include a requirement for information technology providers serving the federal government to share information on any system breach, and an "Energy Star" type pilot program to help identify software that has been developed securely, she said.

The executive order provides "a good signal to industry on what we at the federal level will purchase and use, and therefore may also be guidance for how we might think more broadly," Granholm said.

She also pointed to efforts to beef up the DOE's Office of Cybersecurity, Energy Security and Emergency Response (CESER), with the appointment of a new acting director, Presh M. Kumar, formerly principal manager for cybersecurity engineering and risk management at Southern California Edison.

"CESER has been working on secure manufacturing and innovation, working with our Office of Fossil Energy to ensure cybersecurity is

built into new technologies to support the next generation of oil and natural gas infrastructure and systems," she said.

Upton also asked if Congress should enact a "minimum standard for critical energy infrastructure" to help prevent future cyberattacks.

"If we had standards in place, would this particular ransomware attack have been able to happen? I'm not 100% sure," Granholm said. "I do know that having good cyber hygiene, on the private side as well as on the public side, is a critical basic defense, especially for critical services like energy. I think it's an important consideration for this committee."

Upton then pressed her on permitting reform and the Democratic climate agenda, which, he said, "would essentially shut down oil and gas production and new pipelines." Granholm quickly pivoted to transmission.

"We've seen so much lag time and so many hoops that have to be jumped through to get critical infrastructure in the ground," Granholm said, pointing to hundreds of gigawatts of clean energy in transmission queues across the country. "We need to update government processes to make sure that we still protect what we intended to protect in the first place."

Back to the Budget

Granholm also took some heat, again from Rodgers, on the lack of detail on budget figures in her *written testimony* for the hearing, and dodged the Republican's request for a study on the impact of Biden's climate plan on electric system reliability and consumer energy bills.

The figures available in Granholm's statement include \$1.9 billion for DOE's Building Clean Energy Projects and Workforce Initiative. Another \$8 billion is earmarked for clean energy innovation, and \$7.4 billion will go to the Office of Science to increase understanding of climate change and develop new materials and concepts for clean energy technologies of the future. (See *Granholm Lays Out DOE's \$46.2 Billion Budget*.)

Other highlights include:

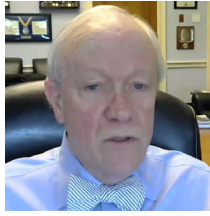
- Increased funding for a "revitalized Office of Fossil Energy and Carbon Management" that will help advance "technologies and methods such as carbon capture and storage, hydrogen and direct air capture."
- Enhanced research funding for historically

FERC/Federal News



black colleges and universities and minority-serving institutions to help build labs and upgrade computer systems, while also creating opportunities for students to develop careers in science, technology, engineering and math.

- Funding for DOE programs that “support fossil fuel workers translating their skills to new positions in various areas, from extracting critical minerals from coal mine sites and upgrading pipelines to reduce methane to



Rep. Jerry McNerney (D-Calif.) | DOE

building carbon capture and hydrogen systems on existing industrial and power plant facilities.”

The question of whether the Colonial Pipeline cyberattack will lead to the passage of bipartisan legislation is, in a

sharply divided Congress, uncertain, leaving

some — like Rep. Jerry McNerney (D-Calif.) — understandably frustrated.

“During the pipeline shutdown many Americans were waiting in long lines for gasoline, referring to this as a wake-up call to the cybersecurity vulnerabilities in our system,” McNerney said. “Each time an incident like this occurs, it’s called a wake-up call. How many wake-up calls is it going to take for us to get this right?” ■

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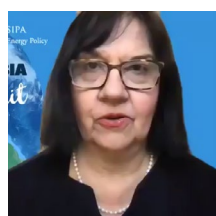


Utility CEOs Emphasize Regional Perspective

Leaders from Canada, Mexico and US Speak at CGEP Summit

By Michael Kuser

Hydro-Québec CEO Sophie Brochu on Tuesday joined CPS Energy CEO Paula Gold-Williams and Tania Ortiz Mena, head of Mexico-based Sempra Energy subsidiary IEnova, to give a full North American tour of the challenges facing the power industry during the clean energy transition.



Cheryl LaFleur, CGEP
| Center on Global Energy Policy

The panel, at Columbia University's Center on Global Energy Policy (CGEP) Energy Summit, was moderated by former FERC Chair Cheryl LaFleur, now a CGEP fellow and member of the ISO-NE Board of Directors.

"If we can take care of the human beings whose jobs are threatened by the transition, it would smooth the path for larger infrastructure projects," Brochu said. "Regional policy cannot be the summation of corporate policies, with policy first and market interests second."

Hydro-Québec is in the process of developing one of the biggest projects in North America, the New England Clean Energy Connect, to sell power to Massachusetts. (See [Renewables Boost Avangrid Q1 Earnings](#).) "But we have to ask who is disadvantaged by this project, who is threatened by this transition to clean energy," Brochu said.

Exports used to be commercially driven, but now "it's about moving the energy around at the right time of day, at the right time of the year," Brochu said. "We see our role as to sell clean, competitive and reliable energy to New York, for example, but also to help the territories develop their own wind and solar energy, which are intermittent, that we can back up with our reservoir. So it means that in the near future, New York will sell electricity to Québec, and New England will sell electricity to Québec, and we will move that energy around."

Cross-border Energy

Mexico's economy is the 15th largest in the world and the country is No. 10 in population. Taking advantage of abundant U.S. natural gas is key to its manufacturing sector, which accounts for 90% of exports, Ortiz Mena said.



Clockwise from top left: Cheryl LaFleur, CGEP; CPS Energy CEO Paula Gold-Williams; IEnova CEO Tania Ortiz Mena; and Hydro-Québec CEO Sophie Brochu. | Center on Global Energy Policy

"We need to understand energy as a global system, not from a company perspective, not from a country perspective, and I think very much of energy from a regional perspective," Mena said.

In North America, people talk about regional integration, but they very rarely talk about energy integration, she said.

"We developed the first ever cross-border wind generation facility right, and we're sending wind power into California," Mena said. Another example is a gas liquefaction plant on the west coast of Mexico to take natural gas by pipeline from Texas and ship it to Asian markets.

However, it's becoming more difficult to build major infrastructure in Mexico, especially linear, and "we need to address that directly, which in some cases means compensating people and mitigating damages," Mena said. "We need partnership with the communities."

Seventy percent of Mexico's natural gas is imported from Texas, and supplies were disrupted during the February winter storm, but "the future is electric and we need to invest in transmission, which Mexico has underinvested in for many years," Mena said.

Electric Island

Texas exports natural gas, but "on the electric side, we're like an island, and it's controversial," Gold-Williams said. "It caused some challenges

in terms of our inability to push power back and forth between all across the nation, but ultimately we do have to think more about integration and get past some of the very complex issues around policy. ...

"I know all the merits of solar and wind ... and I don't think you can effectively supply power to any community without thinking about that storage component," Gold-Williams said. "The one thing we learned in Texas in February was that our winter peak has now grown to be more impactful than our summer peak. ... We're constantly trying to take heat off of plants, and we are constrained by the types of plants that function well in our hot conditions. Ultimately, you're not going to expect wind and solar to be your primary producers in winter."

Texas is an energy-only market, which worked to the state's advantage for decades, but it doesn't send signals that are preventative and get in front of growth, she said.

"As it's pushing prices down most of the year, it grabs scarcity pricing, so it's looking for stress situations all the time," Gold-Williams said. "People will tell you that is how we incent people to make investments in infrastructure, but the flaw is that the system can only handle so much of that scarcity pricing. ... Five days of scarcity pricing sent the absolute wrong signal in the middle of a declared disaster ... and that's when we realized that the whole design was broken." ■

FERC/Federal News



Biden Admin Must Show How US Will Reach Net Zero Ahead of Glasgow Panelists Say Details Needed Before COP26 Conference in November

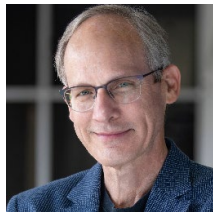
By John Funk



President Joe Biden | The White House

The Biden administration does not have specific plans to coordinate domestic efforts and prove to other nations, as well as U.S. utilities and industries, that the country is fully committed to cutting carbon emissions in half by 2030 and achieving net-zero emissions by 2050.

President Biden “has yet to announce a clear plan for achieving his pledge. He’s announced billions of dollars of new spending on green projects, but I haven’t found any clear plan with specific targets or timetables for translating spending into progress,” Richard Parker, a University of Connecticut School of Law professor and expert on climate law and policy, said in kicking off a breakout panel discussion Thursday at the annual New England Energy Conference and Exposition, held virtually this year.



Richard Parker, UConn
| Richard Parker

Parker initiated the conversation by recalling Biden’s announcement of the U.S.’ pledge on Earth Day. (See *Biden Commits US to Cutting GHG Emissions 50% by 2030*.) He also convened a two-day virtual summit that included 40 world leaders.

“I think the main goal of this Earth Day summit,” Parker continued, “was not to elicit immediate concessions from around the world, but to signal that the U.S. is back in the climate game and to promote key nations to undertake their own reassessment of their voluntary commitments under the Paris Agreement — with a goal of eliciting more ambitious pledges from delegates at the 26th meeting of the Conference of the Parties [COP26], which will be held this November in Glasgow, Scotland.”

He noted that the UN’s Intergovernmental Panel on Climate Change concluded in a 2018 report that average global temperatures had

been rising over the preceding decade and that steep carbon reductions would be needed by roughly 2030 to avoid a global average annual temperature increase of more than 1.5 degrees C (2.7 degrees F) over preindustrial levels.

Parker was joined by James Cotter, general manager of Shell’s Offshore Wind Americas, and Jason Albritton, director of climate and energy policy for The Nature Conservancy.

Albritton said achieving the kind of carbon reduction envisioned by the administration — most of it in the power and transportation sectors — will require “policy action at multiple levels,” he warned.



Jason Albritton, The Nature Conservancy | The Nature Conservancy

“We realize that getting to net zero by 2050 is not going to be easy, and there’s really no one silver bullet,” he said. “Clearly, things have changed dramatically in the last few months with the new administration in the White House, Congress changing hands at the leadership level and, clearly, climate change becoming a central part of the policy discussion where it hadn’t been in past years.” The administration’s goal is “the level of ambition that a lot in the environmental community, the business community, and mayors [and] state governors were advocating ... prior to the administration’s announcement ...

“The international community is now looking at the U.S. and what’s going to happen next. We have a commitment, but how are we going to get there? What are we going to do? What policies is the U.S. going to put in place?”

“I think what happens in the next few months ... are pretty critical. The administration has indicated it is going to put out more detail on their path to get there, but obviously that’s constrained by Congress; it’s constrained by their legal authority. What are the near-term actions is really the next question that I think everybody’s going to be watching,” he said.

Complicating any predictions is that the president’s \$2 trillion infrastructure spending proposal is the centerpiece of the administration’s agenda to address climate change, Albritton said.

“The investments and the incentives that are

included address a lot of different areas that are relevant to the climate conversation. A key piece is electrification of the transportation sector. That includes investments in charging infrastructure, conversion of fleets [to electric], tax incentives for vehicle purchases to really drive electrification of the transportation sector [and] investment in transit as a way to reduce emissions by increasing transit opportunities.

“There is a big focus on energy efficiency and weatherization both for public buildings and residential buildings as a way to reduce energy use, and a lot of attention to transmission and grid investments, which I think everyone on this call likely knows is critical if we’re going to increase clean energy deployment across the economy,” Albritton said.

While the debate on policy and politics is expected to drag on indefinitely, wind developers are already racing to get steel in the water off the Atlantic Coast. And that could create big problems in the future.



James Cotter, Shell | James Cotter

Shell’s Cotter stressed the importance of planning an integrated transmission system now to ensure that future wind farms generating as much as a combined 30 GW by 2030 — and much more later — can be integrated into the electric grid.

“Transmission is one of the most significant hurdles, especially here in the Northeast,” he said. “We should not underestimate how hard it is to physically get cables to the points of interconnection. When individual projects connect, we should ensure that they enable the highest capacity possible both over the beach and into those points of interconnection.”

In other words, allowing each project to plan its own interconnection to the existing transmission system, without an overall transmission plan designed to handle the massive amounts of offshore power that will eventually be generated, could in the long run stymie continued wind development that East Coast states envision.

“Individual projects exist to deliver by themselves, so they can and do make decisions [that] benefit themselves and maybe not the broader industry,” he warned. ■

FERC/Federal News



FERC Rejection of Weymouth Rehearing Leads to More Barbs

Tense Dispute over Mass. Compressor Station Spills into Public View

By Michael Brooks

FERC on Wednesday rejected requests for rehearing of its decision to examine safety concerns about the operation of a natural gas compressor station in Weymouth, Massachusetts, saying its investigation did not “aggrieve” the facility’s developer ([CP16-9-014](#)).

The majority’s reasoning was disputed by commissioners James Danly and Mark Christie, who argued that the commission’s action meant it had illegally reopened its approval in 2017 of Enbridge’s [Atlantic Bridge Project](#) — a \$452 million expansion of the company’s Algonquin Gas Transmission and Maritimes & Northeast Pipeline systems — of which the compressor station’s construction was a part. (See [Atlantic Bridge Project Approved by FERC.](#))

The commission opened its examination in February after receiving numerous rehearing requests from nearby residents over staff’s authorization of the expansion project to go into service in September 2020 ([CP16-9-012](#)). It asked for input on the following questions:

- Is it consistent with FERC’s responsibilities

under the Natural Gas Act to allow the station to enter and remain in service?

- Should changes in the station’s projected air emissions impacts or public safety impacts cause the commission to re-examine the project?
- How might these changes affect the surrounding communities, including environmental justice communities?
- Should FERC impose any additional mitigation measures in response to concerns that have been raised?
- What would the consequences be if FERC were to stay or reverse the September 2020 authorization order?

Since staff’s authorization, the station has been shut down three times — including the day after FERC’s latest order was issued. An Enbridge spokesperson told [WBUR](#) that the company is “performing maintenance work ... on a piece of equipment [that] helps reduce compressor unit emissions.” The company did not say whether the work was planned in advance.

That same day, during FERC’s open meeting, Chairman Richard Glick also cited several blowdowns — in which the station vents gas to relieve pressure and lower temperature — as a reason “to gather more information.” The comment period for the commission’s briefing request has ended, and it is in the process of reviewing stakeholders’ answers, Glick said in remarks opening the meeting.

In its order denying rehearing, FERC stressed that it was not reopening Atlantic Bridge’s approval, which Glick repeated on Thursday.

“Some have suggested that the February briefing order somehow opens up the certificate for the Atlantic Bridge project, which includes the Weymouth compressor station,” he said, alluding to the minority’s dissents and gas developers’ protests. “That is simply false. I will say this again: The commission has no authority to reconsider an order granting a certificate after the order is issued and rehearing of the order is denied, at least absent a remand from the courts.”

He also noted that even after granting a project a certificate of public convenience



Weymouth Compressor Station | Enbridge

FERC/Federal News



and necessity, FERC must still authorize its construction and operation in two subsequent orders — the latter of which is still pending for Atlantic Bridge — and “that while the commission asked for additional briefing, we specifically said the compressor station could keep operating.”

“If we were presented with information after a project receives a certificate, but before it is placed in service, that the project is located on top of an active fault line, should we just ignore that fact and just tell the project developer to place the project in service, no questions asked? Of course not.”

But Glick was especially critical of Danly, whom he compared to Paul Revere, “except that in this case the British are not actually coming.”

“While I appreciate that project developers would prefer to answer as few questions as possible, we have certain obligations to affected local communities and the health and safety of their citizens,” Glick said. “And even if, as Commissioner Danly’s dissent suggests, a number of pipeline companies are concerned about our February briefing order, that pales in comparison to the anxiety experienced by people that live near the Weymouth compressor station. ... At the very least, common decency suggests that our decision to seek additional briefing was the right one.”

Danly took umbrage with Glick’s remarks.

“In what I think were terms that made legally irrelevant appeals to sympathy in a manner of indignant virtue, the chairman just offered a description of this order that does not bear scrutiny,” he responded. “We do not have the power, as the briefing order suggests, to insist upon ‘additional mitigation measures,’ except

by one means only,” a condition attached to its certificate order. “If we are asking for briefing for a contemplated action that I would argue is *ultra vires*” — that is, outside of FERC’s legal authority — “then you are putting people to a burden.”

Danly said that Glick, “I have to say, somewhat snidely suggests that this is like authorizing the construction of a pipeline on a fault line and that I’m ... somehow being silly by suggesting that it’s a burden for lawyers to draft briefings. I would argue that us requesting a briefing on what things we can do that are not contemplated by the [NGA] is more akin to a district court judge, after a criminal trial is over and the defendant is found not guilty, three years later requesting further briefing on the suppression motion you won. That is a burden. ...

“Now, it may be that the commission has attempted to retrench from that position, and today’s orders are going to have a bunch of conspicuous footnotes reassuring the public” that it is not reopening its pipeline approvals, Danly said. “I would argue that ‘the lady doth protest too much’ in those cases.”

Danly also disputed Glick’s “Paul Revere” jab. He noted the many comments in response to the briefing order that made his point, including a letter from several former FERC commissioners — including Pat Wood III, Elizabeth Moler, Suedeen Kelly and Joseph T. Kelliher — that expressed concern that the order “threatens to impede the development of all infrastructure projects subject to the commission’s jurisdiction.”

“We are concerned that the Feb. 18 order deviates from the commission’s traditional respect for the finality of existing authorizations,” reads the letter, which Danly attached to his

dissent. “We are troubled by the novel assertion of authority to reconsider a long-since-final certificate order, without any suggestion that the terms of that order were violated, and long after a private company built and placed into service the facilities in question, at a cost of approximately a half-billion dollars. We are unaware of any other instance in the eight-decade history of the Natural Gas Act, where the commission has taken such a step. Certainly we cannot recall any such cases during our tenures on the commission, which collectively span 20 years.”

Commissioner Christie was also irked by Glick’s remarks. “I got here a couple months ago, and I didn’t realize — I guess I was naive — I thought we were going to talk about issues that were on the agenda and not cases that were resolved before we got to the agenda. But if you want to have debates on cases that have already been resolved, then just please let us know, and we’ll come prepared for that.”

The commissioners’ opening statements were only the beginning of what turned out to be an abnormally tense meeting. Later, during a separate debate over two other pipeline project certificate orders, Christie also admonished Glick for his remark about “common decency,” apparently taking it as a criticism of Danly.

“There are two dissents that acknowledge that these [projects] are needed ... but are dissenting because they say the order does not go far enough on the [greenhouse gas] issue,” Christie said. (See related story, [FERC Approves Pipeline Orders After Impromptu Amendment Vote.](#)) “And I respect those positions. Unlike you, Mr. Chairman ... I’m not going to accuse anybody else on this commission of lacking basic human decency.” ■



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CAISO/West News

FERC Summer Assessment Spotlights Western Drought Risks

By Holden Mann

Extreme heat and drought conditions are once again a major cause for concern in the Western Interconnection, while the ongoing COVID-19 pandemic is likely to drive uncertainty across the North American electric grid, according to FERC's *2021 Summer Energy Market and Reliability Assessment*.

In the report issued Thursday during the commission's monthly open meeting, FERC staff noted that "resource availability has improved for this summer" compared to last year, when the organization warned that ERCOT faced capacity shortages during the summer months that could require it to issue energy emergency alerts. (See *Emergency Measures Possible for ERCOT, FERC Warns*.) But while reserve margins are "expected to be adequate in all regions under normal conditions," six out of 13 NERC sub-regions may experience energy emergencies during "extreme environmental conditions."

Temperatures up Continentwide

FERC's assessment partially draws on NERC's not yet released Summer Reliability Assessment, which NERC staff previewed at the Board of Trustees' meeting May 13. (See "Reliability Assessment Preview," *NERC Board*

of Trustees/MRC Briefs: May 13, 2021.) In that presentation Mark Olson, NERC's manager of reliability assessments, explained that the above-normal temperatures expected across much of North America this summer are likely to drive up electricity demand, leading to elevated risk of energy shortfalls across the Western Interconnection, Texas, MISO and New England.

FERC's report expands on these projections, noting that the elevated temperatures could also limit supply "by affecting power plant heat rates and transmission line carrying capacity." In addition, the hot and dry weather is likely to contribute to the Western Interconnection's ongoing drought, raising the threat of wildfires as warned in a WECC webinar the previous week. (See *Western Drought Increases Wildfire Risks*.)

"Wildfires pose major operational risks as they can threaten major transmission lines, strand generation and compromise the delivery of electricity to customers," the report said. "Transmission lines also pose a liability risk as high winds or lightning, along with dry conditions, could damage equipment and potentially trigger wildfires."

Last year saw five of the six largest fires in California history, according to the state's Department of Forestry and Fire Protection,

while Colorado experienced multiple fires in 2020 that exceeded the previous acreage record set in 2002. The year was also one of the most destructive fire seasons ever recorded in Oregon. With the threat continuing to mount, FERC warned that California utilities are likely to use public safety power shutoffs to mitigate the risk of wildfires, potentially impacting thousands of customers.

Grave Conditions for California Hydro

Another potential victim of the drought in California is hydropower because of ongoing shortfalls in the snowpack in the Sierra Nevada and other mountains that provide water to the state during its dry season from May to October. The melting snow also feeds into reservoirs for hydroelectric dams and supplies cooling water for thermal generation, but the lack of snowfall in recent years is contributing to major issues for these facilities.

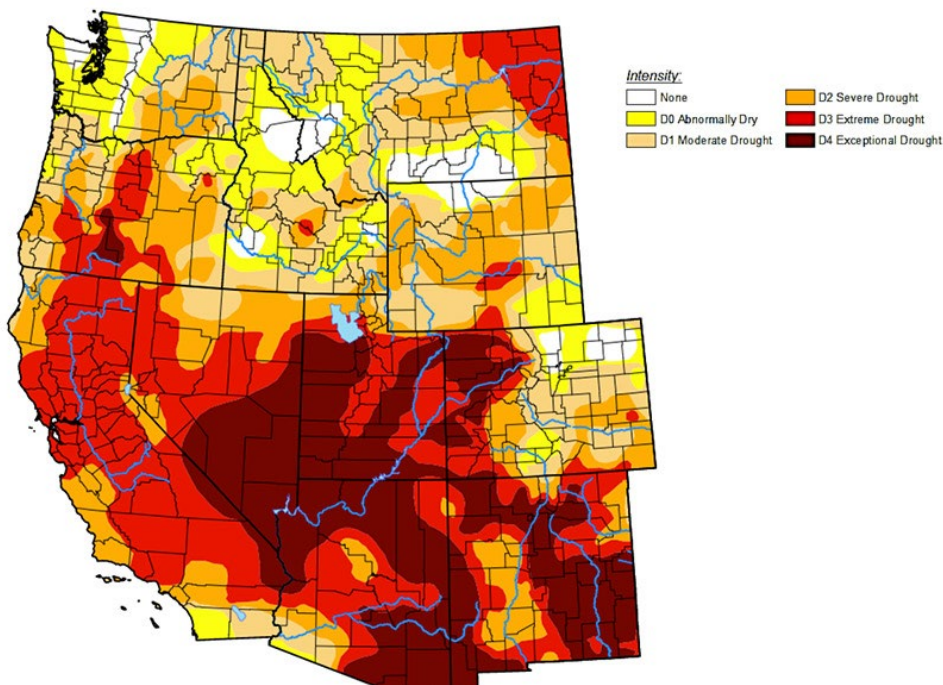
"California's snowpack is critically low, at 6% of normal levels as of May 11," FERC's Gilberto Gil told commissioners. "According to the California Department of Water Resources, this has resulted in two consecutive years of below-average levels; last year during the same period, snowpack level was 16% of normal levels."

The supply of water is likely to run out even earlier than one might first assume, as small snowpack melts faster than usual. This means California's hydropower generation could peak early in the year, with less generation available for mid- to late-summer.

There are bright spots in Western hydropower, however. Washington's Columbia river basin is near normal levels with 86% of normal snowpack, while the snowpack of the state as a whole is at 125% of normal. As a result, hydropower generation in this area may be higher than normal, helping to "mitigate upward pressure on electricity prices" in California and other Western states.

Capacity Additions Help Regions Meet Margins

Aside from the issues in the West, FERC's report notes that more than 10 GW of electric capacity is scheduled to enter operation during summer 2021. Solar, wind and battery resources make up the majority of these additions, with CAISO projected to add about 1 GW of battery storage capacity and 500 MW of solar and ERCOT adding 4.5 GW in wind, solar and batteries.



Drought conditions in the West as of May 4, 2021 | *National Drought Monitor Center, University of Nebraska-Lincoln*

CAISO/West News

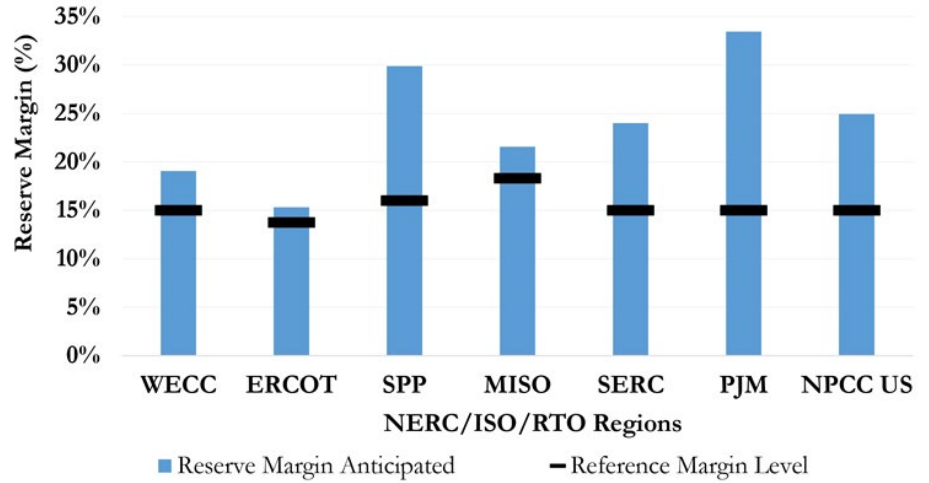
PJM is the only region predicting a net loss of capacity, with 3 GW to be retired against 2.5 GW coming online. The biggest retirement is the 2.3-GW Byron nuclear plant in northern Illinois, but 700 MW of coal-fired generation is expected to retire as well. The additions comprise natural gas, solar and wind resources.

But all regions are positioned to meet reserve margins, according to NERC's preliminary figures. PJM even looks to have the biggest cushion, with its nearly 35% anticipated reserve margin more than double its reference margin level of 15%. ERCOT, with a 15.3% reserve margin and 13.8% reference margin, has the lowest.

While these levels mean all regions should have adequate resources for normal conditions, extreme weather events, such as last year's Western heat wave or hurricanes in the SERC Reliability footprint, could create difficulties for utilities on either the demand or supply side. The COVID-19 pandemic also represents a major unknown in entities' planning: With many employers planning to end their remote work postures, the changes in commercial and residential loads will be hard to predict.

Natural Gas Findings

FERC staff also presented forecasts of summer natural gas markets during Thursday's presentation:



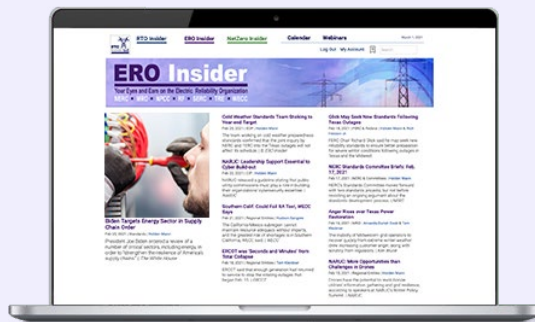
NERC's 2021 anticipated reserve margins | NERC

- Natural gas demand is expected to increase over last year, with demand — including net exports — up 2.6% to 82.9 Bcfd. This increase is attributed to a rebound in natural gas exports, up 4.6 Bcfd, or 85%, over 2020 levels. Total domestic demand is expected to decrease by 2.5 Bcfd, with the biggest decline — 4.6 Bcfd — in electricity generation because of higher gas prices relative to last year.
- Production is projected to increase 2.2% above summer 2020 levels to 91.4 Bcfd, resuming a pattern of growth every year since 2017 that was broken last year because of the pandemic. The 2021 rise is largely attributed to an increase in crude oil costs, with WTI crude spot prices up nearly \$20 on average over last summer.
- Inventories are projected to be 3,700 Bcf at the end of the injection season in October, down 200 Bcf from last year. The injection season began at 1,750 Bcf, 240 Bcf lower than at the start of the 2020 season. However, the weakened demand because of the pandemic means natural gas volumes added to storage during this year's injection season should be higher than both last year's total and the five-year average. ■

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CAISO/West News

CPUC Proposes Adding 11.5 GW of New Resources

More Fossil Fuel Generation Included in Plan to Ensure Reliability

Continued from page 1

Clean energy advocates objected to that component, but the CPUC said the state can meet its long-term clean-energy goals while using fossil fuels to support reliability in the next five years.

“The middle of this decade represents an inflection point and a transition; we need to make it through successfully in order to realize our goals,” Administrative Law Judge Julie Fitch wrote. “The potential for a destabilized electric grid and unreliable service if we fail to plan appropriately for the transition is a very serious threat to our ability to realize our long-term goals.”

The proposal would require LSEs, including community choice aggregators and the state’s three investor-owned utilities to procure — in proportion to their share of load in CAISO — 3,000 MW by 2023, another 4,500 MW by 2024, 2,000 MW by 2025, and an additional 2,000 MW by 2026. Batteries, longer-duration energy storage, solar, wind and other renewables would make up 90% of the new resource mix.

New capacity in 2023-25 would replace 2,280 MW from the state’s last operating nuclear generator, Pacific Gas and Electric’s (NYSE: PCG) Diablo Canyon Power Plant, which is scheduled to retire in 2024-25.

“We are specifically ordering that the resources from Diablo Canyon be replaced with at

“The potential for a destabilized electric grid and unreliable service if we fail to plan appropriately for the transition is a very serious threat to our ability to realize our long-term goals.”

—Administrative Law Judge
Julie Fitch

least 2,500 MW of firm, zero-emitting resources,” the proposed decision says. “We also expect that almost all of the resources procured pursuant to this order will be zero-emitting.”

The firm, zero-emitting resources are expected to be renewables paired with storage that can deliver power 5 to 10 p.m. every day.

The state will also lose 4,200 MW of capacity from retiring natural gas plants, including 3,700 MW from four once-through-cooling plants that the state ordered to close by the end of 2023. (See *OTC Plants to Remain Open, Calif. Water Board Rules.*)

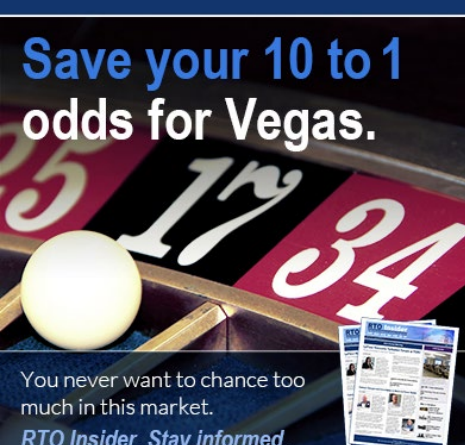
Resources intended to come online in 2026 must be long-lead-time resources, including geothermal generation and long-duration storage, the proposal says.

An alternate decision proposed by CPUC Commissioner Clifford Rechtschaffen differs from the main proposal by requiring procurement of 500 MW of conventional fossil-fueled generation by PG&E, Southern California Edison (NYSE:EIX) and San Diego Gas & Electric (NYSE:SRE) under a set of conditions that include a five-year time limit on the units’ operation.

His plan would authorize the IOUs to procure another 300 MW of thermal resources that commit to using green hydrogen, in part.

The CPUC plans to vote on the proposed decision and Rechtschaffen’s alternate at its June 24 meeting. ■

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Orders Signal Wind-down of Western Energy Crisis Disputes

Continued from page 1

alleged that violations of FERC's market-based rate quarterly reporting requirements allowed the companies to conceal market power or acts of manipulation that allowed them to charge unreasonable rates.

FERC's initial decision in 2017, which found that the reporting violations concealed no such actions or intent, was remanded to the commission by the U.S. Ninth Circuit Court of Appeals, which ruled that FERC had erred by limiting the scope of its investigation to only market-share considerations.

"To fully consider whether a reported rate was just and reasonable, the agency must consider claims and evidence beyond the hub-and-spoke" market power screen, the appeals court found. The ruling also granted FERC latitude to determine whether the sellers may have unjustly benefitted from the manipulation even if they didn't perpetrate it.

In Thursday's order, FERC affirmed its initial decision, finding that the "California Parties have not established a basis for ordering refunds based on quarterly reporting violations."

The commission reaffirmed an earlier finding that both companies had violated FERC's reporting rules: Hafslund failed to include required transaction-specific prices or volumes, or dates of service in its reports, while TransCanada reported transactions on an aggregated — rather than transaction-specific — basis.

But the commission said it was "unpersuaded" by the California Parties' contention that compliant quarterly reporting during the period in question also included a requirement to report hourly transactions.

"We acknowledge the importance of compliant quarterly reporting, but find that California Parties have failed to draw a connection between the purpose and importance of this reporting and any purported requirement to report all transactions on an hourly basis," the commission wrote. "Moreover, given the commission's consistent emphasis on the need for transaction-specific reporting, we find that nothing in the Initial Decision's findings on this issue diminishes the importance of compliant quarterly reporting and the essential role it plays in the commission's market-based rate program."

FERC also found that, the potential existence

of an hourly reporting requirement notwithstanding, its initial decision "correctly relied upon numerous other grounds" that compliant quarterly reports would not have provided the needed information to detect "telltale patterns of manipulation" or signs of market power.

The commission also rejected the California Parties' argument that its findings would have been different even if hourly data had been included in a compliant set of reports.

"Although the initial decision did find that hourly data would have been necessary to detect the signs of manipulative trading schemes, the Initial Decision also emphasized that California Parties relied on numerous other sources of information, such as data responses, email communications, transcripts of trader tapes, and bid information, that would not have been included in compliant quarterly reports," FERC wrote. "Thus, we find that the initial decision correctly concluded that noncompliant quarterly reports did not inhibit the commission's identification of manipulative trading strategies in this case."

Offset Claims

In another order stemming from the energy crisis, the commission dismissed as moot the California Parties' request to rehear an order related to cost offsets provided to generators that had been required to refund a portion of their crisis-era sales into to the now-defunct California Power Exchange (CalPX) due to market mitigation ([EL00-95-301](#)). The offsets permitted the generators to claw back costs they'd incurred above the final mitigated market clearing price (MMCP).

In a previous decision, FERC accepted offset claims from Shell and Hafslund, prompting the California Parties to file a petition for review by the Ninth Circuit. The court then granted the commission a voluntary remand to reconsider the offsets granted to the two companies. The commission subsequently issued an order to establish an evidentiary hearing to examine whether the cost offset claims submitted by the companies included costs associated with the transactions "that constituted certain types of transactions that violated the then-current CAISO and CalPX tariffs."

The California Parties subsequently entered into a settlement agreement with Shell that resolved the dispute over cost offsets, but they continued to pursue the matter over Hafslund, saying the commission erred in failing to set for hearing all the offset-related issues briefed



The Western energy crisis of 2000-01 subjected California's grid to repeated blackouts due to manipulation of the state's young power market. | California Dept. of Water Resources

before the Ninth Circuit.

FERC dismissed the complaint, noting that an administrative law judge in 2018 determined that "undisputed" expert testimony showed that Hafslund had no basis for a cost offset, meaning its refund liabilities were not affected by the company's cost offset claim.

Winding Down CalPX

In a third order, the commission accepted for filing the California Parties' settlement overlay compliance filing, which reconciled refund calculations made by CAISO and CalPX with the dollar amounts already paid under settlement agreements among the California Parties and more than 60 market participants ([EL00-95-291](#)).

The order approved "the proposed steps for accomplishing market clearing and the wind-down of CalPX," including implementing a final clearing process; instituting a process for the retention and ultimate destruction of CalPX's books and record, addressing its lease obligations and closure fee expenses, and paying expenses to close its bankruptcy case; and implementing a "hold harmless" provision releasing CAISO and CalPX from any liability around the final market clearing.

Moot

The commission also dismissed as moot Sacramento Municipal Utility District's (SMUD) request for rehearing of an order that addressed compliance filings submitted by sellers who committed tariff violations during the crisis. The commission noted that SMUD and the California Parties have since settled their dispute ([EL00-95-310](#)).

FERC also said issues raised by the Salt River Project in its request for rehearing had been addressed by the commission in a prior order. ■

CAISO/West News

Sweeping Nev. Energy Bill Passes Senate Unopposed

By Elaine Goodman

A bill that proponents say will help Nevada “capture its place in the new energy economy” unanimously passed the state Senate Friday as the legislative session races toward the finish line.

Senate Bill 448, by Sen. Chris Brooks (D), was passed 21-0 after emerging from the Senate Committee on Growth and Infrastructure Wednesday night. The committee’s approval followed a nearly three-hour hearing on the bill on May 17.

Brooks introduced the wide-ranging energy bill on May 13, just weeks before the state’s 120-day legislative session ends on May 31.

SB448 seeks to boost the state’s transmission network, and sets a deadline of Jan. 1, 2030, for transmission providers in the state to join a regional transmission organization.

Another focus of the bill is transportation electrification. SB448 would provide for an initial investment by NV Energy of \$100 million from 2022 to 2024 for a variety of electric vehicle charging programs.

The bill would also address energy storage by adding storage facilities and hybrid generation-and-storage facilities to the Renewable Energy Tax Abatement Program. The program currently gives tax breaks to renewable energy facilities.

Diversifying the Economy

Michael Brown, executive director of the Nevada Governor’s Office of Economic Development (GOED), spoke during last week’s hearing, calling SB448 “landmark legislation” and urging its adoption.

“This is really an opportunity to help build and diversify the Nevada economy,” he said.

Brown said when a Midwest-based manufacturer met recently with GOED about potentially operating in the Silver State, the company’s first question was about renewable energy.

“They wanted to know how we were producing it, how it was transmitted, what the prices were,” Brown said. “That’s a game changer. We’ve not had that before.”

David Bobzien, director of the Governor’s Office on Energy, also spoke in support of SB448.

Bobzien said the bill’s provision for an RTO in Nevada dovetails with recent discussions and studies on the topic. For example, in the Western Interconnection Regional Electricity Dialogue, or WIRED initiative, state officials and utility representatives are working together to develop recommendations on resource adequacy, transmission planning and greenhouse gas accounting. (See *Group Hopes West Can be Wired for Collaboration*.)

“So, the timing of this legislation couldn’t be better,” Bobzien said.

Streamlining Greenlink

SB448 seeks to streamline approval of NV Energy’s Greenlink North transmission project. In March, the Public Utilities Commission of Nevada approved construction of Greenlink West, a 525-kV transmission line that will run north-to-south along the western edge of the state. (See *Regulators Greenlight NV Energy’s Greenlink West*.)

Greenlink North would connect Greenlink West with the existing One Nevada line in the eastern part of the state, forming a transmission triangle.

PUCN approved the conceptual design, permitting and land acquisition for Greenlink North, but NV Energy must return for approval of construction. Under SB448, NV Energy would be required to file a plan for the Greenlink North project with PUCN by Sept. 1.

PUCN would be required to approve the project as long as NV Energy’s plan met criteria such as expanding transmission access to renewable energy zones and promoting economic development in the state. Greenlink North would then be in service by the end of 2028, under SB448.

Cost Concerns

Laura Granier, speaking on behalf of the Nevada Resort Association, said the group was concerned about the potential for the Greenlink projects to increase utility rates. Granier also described the timeline for the bill as “challenging.”

“We are 14 days from sine die and faced with major policy changes and a proposed directive for billions of dollars of utility expenditures that could lead to rate hikes and additional costs or surcharges for customers,” Granier said.

NV Energy CEO Doug Cannon said the



Nevada Senate Bill 448 seeks to boost the state’s transmission network and potentially place it under the oversight of an RTO. | *Environmental Protection Agency*

company cannot recover its costs for the project until it is finished. Then, the company’s proposed cost recovery would be reviewed by PUCN in a public process.

“It’s not a risk-free proposition,” Cannon said. “We don’t know ultimately what the Public Utilities Commission will approve.”

Bringing more renewable energy online may ultimately reduce electric rates, proponents said. Brooks presented a slide showing that as NV Energy’s megawatts of renewable energy have increased, the cost to customers has decreased.

SB448 would also form a Regional Transmission Coordination Task Force to advise the governor and legislature on RTO-related matters. The committee would include members from utilities, gaming, labor, environmental groups, the solar and geothermal industries, and the state Assembly and Senate.

In response to suggestions during the hearing, Brooks filed an amendment to the bill that would add an assembly member and a senator from the minority party to the panel.

Before Friday’s passage by the full Senate, the bill was amended to include a provision requiring that 20% of expenditures in a proposed plan to accelerate the adoption of electric vehicles be devoted to incentives for behind-the-meter investments in EV charging infrastructure or stations.

Another amendment clarifies that both bundled retail customers and other eligible classes of customers will have non-discriminatory access to utility plans that provide investments and incentives for the deployment of EV charging infrastructure at single-family and multi-use dwellings and are also designed to serve historically underserved communities. ■

CAISO/West News

CAISO Updates Board Selection Policy

By Hudson Sangree

The CAISO Board of Governors approved changes Wednesday to the ISO's criteria for recommending new board members to California's governor.

The updates, the first in 16 years, are intended to broaden the pool of nominating committee members and candidates to reflect changes in the electric industry.

"The policy has not been substantively revised since its adoption in 2005," CAISO General Counsel Roger Collanton wrote in his [memo](#) to the board. "While the existing board selection process has worked well over the years, we have determined, with the benefit of stakeholder feedback, that certain aspects of the policy should be updated to account for changes in the industry and the ISO's markets since 2005."

"The ISO's footprint and market have evolved

considerably since 2005, with new market offerings, technologies and types of market participants," Collanton wrote. "In light of these changes, and with the benefit of stakeholder input, management recommends certain relatively modest revisions to the policy to better align the process with current circumstances."

Among the approved changes are additions to the stakeholder sectors of the Board Nominee Review Committee, which identifies and recommends qualified candidates to the governor.

When the board selection policy was established in 2005, community choice aggregators and energy storage resources did not exist, Collanton pointed out. Stakeholders from those sectors can be considered for the nomination committee under the revised policy.

Another change was to update candidate qualifications "to align with the development of the grid and market and with experience through recent board member searches," his memo said.

The section of the policy dealing with candidate qualifications was updated to "more specifically reference, under the general category of electric industry expertise, certain characteristics that have more recently gained importance, including experience in forward-looking electric industry technologies, expertise in grid security and operations and experience in other industry sectors closely linked to the electricity sector."

The revised policy also includes adjustments to categories of qualifying nominee experience, including adding a reference to experience as a "law professor or other prominent legal professional and nonprofit management experience."

"The updated and expanded set of qualifications should enhance the pool of available board candidates and ensure that the board collectively has the experience needed to meet the current and future challenges of the ISO's evolving markets and grid," Collanton wrote. ■

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CAISO/West News

PG&E to Sell San Francisco HQ for \$800M

By Robert Mullin

Pacific Gas and Electric will sell its iconic San Francisco headquarters to a real estate venture for \$800 million, the company said Monday.

The deal with Hines Atlas US includes PG&E properties at 77 Beale St. and 245 Market St., in the heart of the city's high-priced financial district.

The sale comes nearly a year after PG&E emerged from an extended bankruptcy process stemming from its role in sparking some of the most destructive wildfires in California history, including the 2018 Camp Fire, which killed 85 people and destroyed the town of Paradise. (See [Lawyers Close PG&E Bankruptcy Case](#).)

It represents what is supposed to be a significant cost-cutting measure for the company, which is moving its headquarters to lower-priced Oakland, across the San Francisco Bay, beginning next year.

"We are working hard every day to make fundamental changes at PG&E and become the utility our customers expect and deserve," PG&E CEO Patti Poppe said in a statement. "We've made a commitment to keep customer costs as low as possible, and one way we're following through on that is by selling non-core assets including real estate."

Closing of the transaction is contingent upon approval by the California Public Utilities Commission. The utility is also asking the PUC for permission to return up to \$420 million of the proceeds from the gain on the sale to its

customers over five years.

"This offset would help moderate rate growth as the company continues to make significant safety and operational investments," PG&E said.

PG&E said its new Oakland headquarters will use space more efficiently and better accommodate new working arrangements in a post-COVID-19 pandemic environment. It will also reduce commute times for most of its headquarters-based employees, many of whom already live in the East Bay, the company said.

"We're so excited to deepen our ties to the wonderful Oakland community. As an economic and innovation hub for California, Oakland is the perfect place for PG&E to call our hometown," Poppe said. ■



PG&E's sale includes its main headquarters building at 77 Beale St. in San Francisco. | [Minesweeper](#), CC-BY-SA-3.0 via [Wikimedia Commons](#)

ISO-NE News

Panel Tackles the Vision of New England's Future Grid



Clockwise from top left: Michelle Gardner, NextEra Energy; Justice Nyarko, Daymark Energy Advisors; Sam Lines, Able Grid Energy; Carissa Sedlacek, ISO-NE; and Ben D'Antonio, Eversource Energy | *New England Energy Conference and Exposition*

By Jason York

New England states have long-term clean energy and decarbonization goals and mandates. They will require extensive electrification of the transportation and heating sectors, boosted by renewable resources and emerging grid-scale technologies from existing developers and new entrants in the wholesale markets administered by ISO-NE.

In October 2020, the states also shared their *collective vision* of the future regional grid through the New England States Committee on Electricity (NESCOE), replete with significant changes in market design, transmission system planning, and governance of the RTO. For their part, ISO-NE and NEPOOL stakeholders have *Future Grid* efforts to explore potential pathways forward to ensure a reliable and efficient clean-energy grid in light of state energy and environmental laws.

Last week at the annual New England Energy Conference and Exposition, hosted by the Connecticut Power and Energy Society and the Northeast Energy and Commerce Association, panelists discussed the convergence of these issues and paths forward during “Now is the Moment: Envisioning the New England Power System.”

Carissa Sedlacek, director of planning services at ISO-NE, said the RTO would perform Phase 1 of the Future Grid Reliability Study as the 2021 Economic Study for NEPOOL. The

study will look at 34 different scenarios and go beyond the RTO's traditional 10-year planning horizon. It will also analyze “bookend” scenarios of various resource buildouts and provide insight into the reliability impact of a system with a significant amount of renewable generation. Preliminary results such as production costs for initial scenarios are expected in June.

“Because none of us have a crystal ball, we have no idea what the future is going to hold, but by doing all of these different scenarios, hopefully we'll have some bookend results that will influence future policy and future buildout of the system,” Sedlacek said.

Additionally, the Pathways to the Future Grid process will identify, explore and evaluate potential market frameworks that may help support the evolution of a power grid reflective of states' policies. The 2050 Transmission Study, in support of the NESCOE vision statement, helps states determine how to expand the system to incorporate wind, hydro and distributed energy resources.

“All of these studies will influence, and give us information, that can help shape state policies, federal policies, and also inform stakeholders as they consider how to build their portfolios to participate in the New England markets,” Sedlacek said.

Seeing Both Sides

Ben D'Antonio, formerly with NESCOE as an attorney and analyst specializing in the interac-

tions between public policies and wholesale electricity markets, helped craft scenarios that are part of the Phase 1 study. In April, D'Antonio joined Eversource Energy as its manager of transmission strategy and economic analysis. The region's largest utility has a pledge to be carbon neutral by 2030.

D'Antonio said decarbonizing the entire economy is a “challenging and complex thing to do.”

“There are lots of folks trying to take a look at what economy-wide decarbonization might look like, and I think that several studies show relatively directionally consistent outcomes,” D'Antonio said. “To achieve economy-wide decarbonization, we're going to have to electrify the heating and transportation sectors. We're going to need to change the resource mix in New England so that the electric sector can dramatically reduce its emissions profile. To do all that, we'll probably need some additional transmission and a modern grid to continue to operate the system reliably, and it's a very different future.”

D'Antonio said that electrification increases demand by 65% in the next 30 years. He added that balancing resources will be needed to reduce curtailment from some renewables and optimize system emissions.

“I don't think we want to curtail renewables so that we can put on a fossil thermal unit if we can avoid it,” D'Antonio said. “We're probably going to need some kind of multiday dispatch-

ISO-NE News

able resource mix, and we don't know if that's going to be some component of storage, some component of thermal resources like we have, or maybe some other things that we're going to probably need in this future system of ours."

Market Barriers

Sam Lines, East Coast markets director for Able Grid Energy Solutions, said his company is a developer of standalone energy storage projects, mostly at transmission scale, including a 250-MW project that cleared the 15th Forward Capacity Auction. Lines said battery technology is "changing incredibly quickly," but there are "barriers to projects getting in the ground," including ISO-NE's minimum offer price rule (MOPR), which "potentially prevents batteries and other resources from clearing in that market and getting a share of their revenues."

Michelle Gardner, senior director of regulatory affairs in the Northeast for NextEra Energy, said there are "some pretty massive changes coming policy-wise."

"We've had kind of a decades-long conflict looking at state public policies and our competitive markets, and I think a lot of us that have

been following these issues are seeing that coming to a climax," Gardner said. "Those market impacts are going to be quite significant in terms of both exit and entry from the market."

Gardner said impacts from any change or elimination of the MOPR would be significant.

"Taking MOPR off the table allows you to have a little bit of a more robust discussion on some of this," Gardner said. "From a state perspective, they want the ability to look at both new and existing resources and make decisions about what they want."

Carbon Free by 2050?

The panelists were asked whether New England's electric grid will produce 100% carbon-free power by 2050.

"We'll do a lot of scenarios and a lot of assessments to figure it out," Sedlacek said. "I like the idea of planning to be 100% carbon-free for 2050 with the hope that we can."

Gardner said she is "105%" sure and that "it's going to happen sooner than we think."

Lines said, "Getting to 98% and 99% will happen much quicker than people realize," and the

remaining gap could be covered by advancements in technology.

"People have consistently, materially underestimated technology advancements," Lines said. "I don't think we know what exact technology it's going to be that covers that last gap, but we can't underestimate how quickly technology is advancing, and certain technologies are gaining that scale and coming into the money. I think we're going to close that gap with a combination that we may not be thinking of right now."

D'Antonio said from an economy-wide perspective, "it's hard to decarbonize fully."

"I think up to 80%, people have a general idea of how to do that, but once you get past 80%, wringing out those last CO₂ emissions and other greenhouse gas emissions out of the broader economy is very expensive and quite difficult," D'Antonio said. "I just don't know how we're going to get to that last part, and all the analysis I've seen says getting to 100% is going to require some kind of active measure to take carbon out of the air. So, getting out the very last piece is pretty difficult. I hope Michelle's right." ■

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MISO News



FERC Rejects MISO Request for 2nd Order 841 Delay

By Amanda Durish Cook

FERC last week refused MISO an extra three years to fully incorporate electric storage resources into its markets ([ER19-465](#)).

The commission was unconvinced by the RTO's contention that Order 841 compliance, currently slated for mid-2022, would postpone the launch of a new market platform. The decision wasn't unanimous, with Commissioner Mark Christie deferring to MISO's reasoning.

MISO last year secured a compliance extension until June 6, 2022, to debut storage offers in its markets. Earlier this year, it requested a second extension until March 1, 2025, explaining that it needed the time to fully migrate to its new market platform before allowing full storage participation.

The grid operator now must navigate both storage's acceptance and its market platform replacement simultaneously, a feat staff previously said was infeasible.

Jeff Bladen, MISO's executive director of digital strategy, said last month that Order 841 compliance and the new, modular platform were an either/or undertaking. He said taking the time to add droves of ESR registrations on MISO's vintage platform could delay the new platform's go-live date two or three years.

The grid operator has also said that the same vendor and RTO personnel are working on both the storage-participation model and the market system enhancement (MSE). (See [MISO: Market System Replacement or 841 Compliance](#).)

MISO in 2017 originally estimated it would fully migrate to its \$160 million modular market platform in 2023 but has lately revised that date to anywhere from 2024 to mid-2026.

Some stakeholders seemed blindsided by MISO's second extension request and said a 2025 target would imperil generation-and-storage projects hoping for an interconnection to the RTO's grid. Several utilities and clean energy companies protested the second deferment, arguing it would jeopardize necessary

investments in energy storage technology. Others, like Entergy and the MISO transmission owners, said the delay was necessary to avoid duplicative efforts on both the old and new market platforms.

FERC said MISO didn't explain how fast-tracking completion of its new market platform from 2025 to late 2024 at the expense of prompt Order 841 compliance would be a boon to reliability. The RTO argued that it expects wind and solar generation to reach 30% of its total load as early as 2026, straining the system and threatening reliability.

But FERC said MISO's 2026 prediction is still ahead of its expected 2025 platform replacement finish.

"Although MISO asserts that its existing infrastructure is inadequate to accommodate a 30% renewable energy penetration level and that additional infrastructure is needed to access the diverse resource distribution across its footprint, MISO has not identified specific MSE upgrades and the corresponding reliability issues that those upgrades would address, nor has MISO identified specific reliability violations that might occur due to renewable resource penetration if the MSE were implemented in 2025 instead of late 2024," FERC said.

Christie took MISO at its word and said a new platform will better manage wind and solar resources, boosting reliability.

"MISO recognizes that it cannot prioritize both [platform] implementation and compliance with Order No. 841 at the same time. Some sort of trade-off is inevitable," Christie wrote in a dissent. "Balancing the competing concerns implicated by each, MISO has determined that replacing its existing market system platform should take precedence at this time over implementing new tariff provisions for energy storage resources. In this balancing of priorities and challenges, I am disposed to trust MISO's sound judgment."

The commission also said that MISO's existing options for storage participation — its stored energy resource type II (SER Type II) resource category and storage as a transmission-only asset classification — are poor substitutes for Order 841's full market participation. FERC pointed out that its 2018 acceptance of SER Type II was conditioned on the understanding that MISO would use it as a temporary measure. (See [FERC OKs MISO Plan to Expand Storage](#).) ■



Energy storage in Minnesota | [Connexus Energy](#)

MISO News

MISO Members Greenlight Stakeholder ID Rules

By Amanda Durish Cook

MISO members last week overwhelmingly voted to demand more transparency of stakeholders during public meetings.

The Advisory Committee passed rules by a 21-3 margin during its May 19 meeting that will require stakeholders to state their full name and their company before commenting during meetings. Consultants must reveal their client or clients or — if the consultant is working under a nondisclosure agreement — name the MISO sector that best aligns with the client. (See [MISO Members Aim for Mandatory Consultant Transparency](#).)

Planning Advisory Committee (PAC) Chair Cynthia Crane said the measure is designed to give the stakeholder community context

behind other stakeholders' questions and requests of MISO.

"The intent here is to clarify stakeholders' position, and we do not think this will stifle dialogue," Crane said.

A small but vocal minority of MISO members disagreed.

"This represents a monumental change to the traditional stakeholder process," Madison Gas and Electric's Megan Wisersky told fellow members. "It's unnecessary, and it serves no practical purpose. Most of us understand the context if we don't fully know the 'who.' We can put two and two together."

"One incident is insufficient to change statute," Wisersky continued, adding that the worst laws are usually proposed by politicians after a

single event.

Wisersky was apparently referring to Entergy consultant David Harlan's repeated refusal to divulge his client over multiple PAC meetings in 2019 and 2020. (See [Entergy Consultant Under Fire for Covert Role in MISO](#).)

She said consultants allow companies to pose "non-conforming and political questions" to MISO without fear of being on the "wrong side of a cultural or political idea."

"We are not immune to that fear at MISO," Wisersky said.

Clean Grid Alliance's Natalie McIntire disagreed that the problem only surfaced once and said the example on everyone's minds was "egregious only because the party was misleading." She said anonymity through the use of consultants is more common in MISO than some think.

Union of Concerned Scientists' Sam Gomberg said the new procedures only require "a simple identification" and are not a step to "an authoritarian regime."

"I have to disagree that this is some sort of move to cancel culture," he said. "I think this is a critical piece to having open and honest discussions."

Gomberg said the rules will end an "unfair advantage by consultants to game the conversation and game outcomes through anonymity." He said consultants can be deliberately misleading about the interests that they represent to try to manipulate the RTO's stakeholder process.

Tom Butz, senior consultant with Power System Engineering, said he juggles so many clients that it's difficult to keep track of on whose behalf he might be speaking. Some members also said that when consultants pose clarifying questions during staff presentations, they're sometimes doing it for their own edification.

Members were less sure about attaching penalties to stakeholders who refuse to name their company or client affiliations. Several said imposing a six-month ban on speaking during meetings — an option kicked around — was too draconian. Others said stakeholder committee chairs during meetings could decline to recognize or mute stakeholders who have refused to disclose who they're representing.

"These are public meetings," Wisersky said. "You can't just ban somebody from a public meeting unless they're being disruptive." ■



A MISO Advisory Committee meeting in December 2019 | © RTO Insider LLC

MISO News

FERC Reduces Entergy's Return on Equity

Clement, Christie Seek Changes

By Rich Heidorn Jr.

FERC on Thursday reduced Entergy's base return on equity to 10.37% from 11%, applying the methodology it adopted for MISO transmission owners in Opinion 569-A a year ago ([ER13-1508-001](#)).

The order reversed an initial decision issued in 2015 by the presiding administrative law judge governing sales of energy and capacity among the Entergy operating companies (NYSE:ETR). It also addressed briefs submitted in response to a 2019 order seeking input on the commission's methodology.

The commission said it was not persuaded by the briefs to change its methodology, choosing to continue using the procedure it laid out in Opinion 569-A, which incorporated the risk premium model (RPM) into ROE calculations along with the discounted cash flow (DCF) and capital asset pricing models (CAPM) ([EL14-12, et al.](#)).

That ruling reversed the stance the commission had taken in Opinion 569 in 2019, which rejected use of the RPM. (See [FERC Ups MISO TO ROE, Reverses Stance on Models](#).)

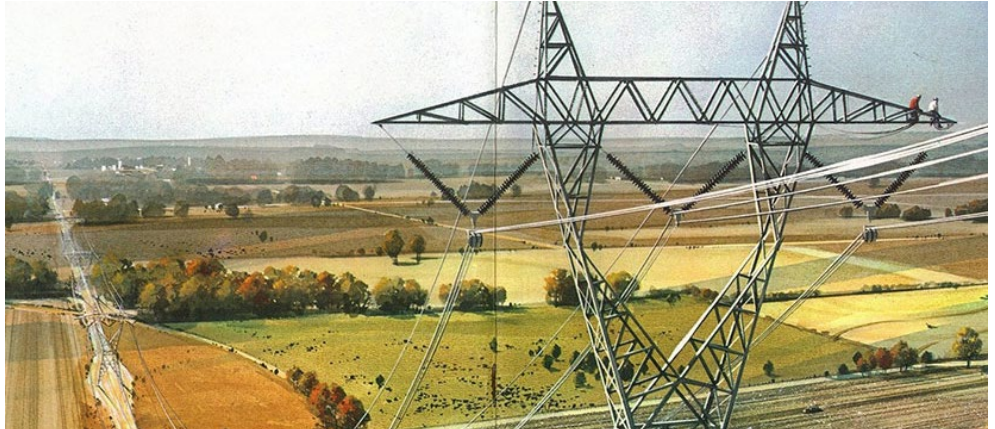
In 569-A, FERC said that in future proceedings, "parties will have an opportunity to argue that the base ROE methodology ... should be modified or applied differently because of the specific facts and circumstances of the proceeding involving that party."

But, the commission said, "no party has demonstrated that the methodology applied in those proceedings should not be applied to the facts and circumstances of this proceeding."

It ordered Entergy to revise its unit power sales tariff and submit a report quantifying refunds with interest within 30 days. The new rate was made effective Dec. 19, 2013, when the tariff took effect, prompted by Entergy Arkansas' withdrawal from the Entergy System Agreement.

Commissioner Mark Christie (R) concurred in Thursday's order, saying that the commission's policy is flawed because "it replaces judgment with rote application of preset formulae." He called for a general proceeding to consider changes to the methodology.

He also said the commission should set procedural deadlines requiring FERC to act much more quickly in future ROE proceedings.



| Entergy Arkansas

"We are today putting into place an ROE with an effective date of Dec. 19, 2013 — roughly seven and a half years ago — ostensibly on the theory that these rates are required to incentivize investment in a future that began, at this point, several years in the past," he said. "Although a certain amount of 'lag' is perhaps inherent in any regulatory system, I do not accept that this degree of delay is inevitable. Going forward, I believe we can and should do better."

He added, "As indicia of why this commission's ROE policy needs to be revisited, I would note that as of May 14, 2021, the 30-year U.S. Treasury bond — one of the most commonly used benchmark 'safe' investments — was yielding 2.36%. Thus the ROE approved in this order represents a risk premium of approximately 800 basis points. As compared to the 10-year Treasury bond, which was yielding 1.64% May 14, 2021, the ROE approved herein represents a risk premium of nearly 900 basis points."

He acknowledged that rates on Treasury bonds were somewhat higher in December 2013 — with 30-year bonds slightly below 4% and 10-year bonds slightly below 3%. "On a going-forward basis, however, as well as for most of the past eight years, the risk premium represented by a 10.37% ROE is extraordinarily generous for a regulated utility."

Commissioner Allison Clements (D) dissented, saying the 569-A methodology including the RPM does not protect consumers.

"The order of magnitude of transmission investment required to achieve [decarbonization, resilience and replacement of aged

infrastructure] is unprecedented, which translates into a massive opportunity for utilities and transmission developers. But the value proposition for consumers is in no small part dependent on this commission's rigorous scrutiny of the rates charged for transmission service, of which ROE is a central component," she said.

"Given this context, I believe the commission must revisit its existing ROE policy. I appreciate that this policy has been unsettled for years, a state that increases investment uncertainty and extends litigation," she added. "To be sure, I share the goal of a stable ROE policy that will speed rate proceedings and allow for timely ROE updates as market conditions change. But we should not double down on the desire for near-term stability to strong detriment of consumer protection, and I worry our current ROE policy does just that."

But FERC Chair Richard Glick, who had dissented on inclusion of the RPM in the May 2020 order, indicated at the commission's open meeting Thursday that he wasn't eager to reopen the issue.

"When we issued opinions 569-A and 569-B, I expressed concerns about the commission's decision to add the risk premium model, because the first ROE order had thoroughly explained why the risk premium model is not an appropriate tool for assessing a just and reasonable ROE," he said. "I continue to have my concerns, but I also believe we cannot keep on changing our ROE methodology. Companies need to have some level of regulatory certainty if they are going to continue to make multimillion- — in some cases, multibillion- — dollar investment decisions." ■

MISO News

FERC Terminates More Boyce Hydro Licenses

By Amanda Durish Cook

FERC last week terminated three more Boyce Hydro hydroelectric licenses for projects in Michigan, the latest chapter in the continuing fallout of the utility's 16-year ownership of the derelict Edenville Dam.

The commission rescinded licenses for the Secord, Smallwood and Sanford hydroelectric projects on the Tittabawasee River, saying Boyce, which filed for bankruptcy last year, lost the properties through condemnation and legal proceedings (*P-10809-051*, et al.).

Strong storms, an inadequate spillway and years of negligence led to the Edenville Dam's failure last May. The ensuing flood surge also caused the Sanford Dam to fail and damaged the Secord and Smallwood dams, forcing the evacuations of 10,000 people and leading to a national disaster declaration. FERC had already revoked Boyce's license for the Edenville Dam before the disaster. (See *Michigan Dam with Prolonged Safety Issues Fails*.)

The four lakes in Gladwin and Midland counties affected by the spillovers (Secord, Smallwood, Wixom and Sanford) remain dry lake beds. The Four Lakes Task Force, a volunteer group comprised of local lake association leaders dedicated to restoring the lakes, now owns the land where the hydroelectric projects sit. The group recently published restoration *plans* estimated to cost as much as \$300 million.

In a *press release*, FERC said it was coordinating "the safe repair and management of the facilities" with the Four Lakes Task Force and the Michigan Department of the Environment, Great Lakes and Energy.

The commission also said that Four Lakes "has no intent to generate hydropower" from any of the dams and that the state of Michigan supports the decision.

Four Lakes Task Force President Dave Kepler has said FERC's termination of Boyce Hydro's licenses are crucial to being able to move forward with lake restorations.

Boyce Hydro filed for bankruptcy in July 2020. FERC still slapped the utility with a \$15 million fine in April for its inaction after the breaches.

The commission said the penalty's recovery is second to the "recovery of damages by victims of the dam breaches." It noted that "Boyce Hydro's liquidation plan ensures that the victims' recovery will be before any recovery of the penalty."

Boyce was owned by Las Vegas architect Lee Mueller, an heir of the Boy Scouts of America's founder. Mueller and family members purchased the four dams in order to *avoid* paying taxes on the sale of an Illinois property. Michigan has sued Mueller over the flooding.

FERC tried for 15 years to get Boyce Hydro to address safety violations at the Edenville Dam, which included failing to increase the spillway's capacity; performing unauthorized dam repairs and excavation; neglecting to file a public safety plan or follow its own water monitoring plan; and failing to acquire all property rights. ■



Edenville Dam following the breach | Michigan Department of Environment, Great Lakes, and Energy

MISO News

More Unexecuted FSAs in MISO Self-funding Squabble

FERC last week ushered through three more unexecuted facilities service agreements (FSAs) between MISO, wind developers and transmission owners.

The unexecuted FSAs are a continuing protest against a 2018 commission order reinstating MISO transmission owners' unilateral rights to self-fund network upgrades. Wind developers are leaving FSAs unsigned of late, hoping that interconnection customers will again be able to self-fund the upgrades necessary to connect to the RTO's system. (See *MISO TOs' Self-funding Option Tested Again.*)

The unexecuted FSAs stem from Next Era Energy's 200-MW Heartland Divide II wind project in Iowa with transmission owner MidAmerican Energy (*ER21-834, ER21-836 and ER21-837*).

Once again, the wind developer asked FERC to direct MISO to amend the FSAs by including a provision for the self-funding option's possible reversal.

Once again, FERC declined.

In accepting the FSAs, the commission said it disagreed with NextEra's argument for an amendment. FERC also said it wouldn't take action on allowing interconnection customers to "retroactively annul and reverse... initial funding elections" should it later alter or eliminate the TO self-funding option.

The FSAs "appropriately reflect the state of the law as of the date the agreement becomes effective," the commission said.

FERC Chair Richard Glick and Commissioner Allison Clements have said that MISO TOs' ab-



Heartland Divide II | NextEra Energy

solute right to self-fund could be unfair. They said TOs could engage in preferential treatment among interconnection customers and that customers unable to finance upgrades at more favorable rates could be forced to reimburse TOs at a predetermined rate of return.

The two commissioners did not weigh in on the overall fairness of MISO's self-funding options in the latest orders. ■

— Amanda Durish Cook

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PJM News



PJM Monitor: Dominion Exit Likely to Cut Capacity Prices Outside Va.

By Michael Yoder and Rich Heidom Jr.

PJM ratepayers will likely see capacity prices drop as a result of Dominion Energy's decision to exit the market, according to a report released by the RTO's Independent Market Monitor on the eve of the long-awaited Base Residual Auction.

Monitoring Analytics' [report](#), released May 18, a day before the beginning of the BRA for delivery year 2022/23, concluded that Dominion Energy Virginia ratepayers could see either dramatic cost increases or modest reductions as a result of the utility's decision to leave the RTO's capacity market and institute a fixed resource requirement (FRR).

Dominion confirmed earlier this month that it chose the FRR option for the 2022/23 delivery period for more than 60 of its generating units, totaling more than 18.1 GW. That number represents about 11% of the 163.6 GW that cleared in PJM's 2021/22 BRA in May 2018, the last time the auction was run. (See [Dominion Opts out of PJM Capacity Auction](#).)

The IMM report included a variety of scenarios, two of which it said bracket the likely impact of Dominion's departure by assuming an FRR is established for the Virginia portion of the Dominion load-serving entity, with the rest of Virginia remaining in the PJM capacity market.

If the Dominion/Virginia FRR area procures its entire capacity obligation at a rate equal to the 2021/22 offer cap for the Dominion Zone (\$234.13/MW/day), the IMM said net load charges for the area would increase by \$559.7 million (60.1%) compared to the results of the 2021/22 BRA, assuming Virginia load paid capacity market prices prior to implementation of an FRR.

If the Dominion/Virginia FRR area procures its capacity at equal to the clearing price in the 2021/22 BRA (\$140/MW/day), net load charges would drop \$39.9 million (4.3%) compared with the 2021/22 results.

In both scenarios, the Rest of RTO clearing price would drop by \$13.21/MW/day (9.4%) compared to the results of the 2021/22 auction, while the Duke Energy Ohio/Kentucky clearing price would decrease by \$11.53/MW/day (8.2%).

'Unique' Situation

The Monitor said its analysis used the same



Chesterfield Peaking Station | Dominion Energy

methodology as its earlier reports on the potential impact of the FRR option in Illinois, New Jersey, Ohio and Maryland. (See [PJM Monitor Finds Capacity Exit Costly for NJ](#) and [PJM Monitor Defends FRR Analyses in MOPR Debate](#).)

But Monitor Joe Bowring said the analysis of Dominion's FRR is "unique" because it is vertically integrated and subject to cost-of-service regulation.

"The actual price for capacity in Virginia would continue to be the result of the regulatory process, and the actual impacts would be determined by the details of the state regulatory process," the report said.

"Customers in Virginia pay a net cost of capacity that is a result of regulated cost-of-service rates net of the impact of the sale and purchase of capacity in the PJM capacity market," the report said. "If customers pay the market price of capacity and receive offsetting revenues equal to the market price of capacity, customers are indifferent to the capacity market price and pay the regulated cost of capacity."

But the Monitor said it "did not evaluate the extent to which customers currently pay more under regulated rates than the market price of capacity [or] the extent to which customers

would lose benefits from the loss of revenues from the sale of capacity in the PJM capacity market."

In an interview with *RTO Insider*, Bowring said it's likely that Virginia ratepayers have paid more for capacity than the PJM market price in the past. "We know for a fact that the overall cost-of-service rate for any power plant is typically significantly greater than the capacity market price," he said. "I think it's a fair assumption that they are paying more, but we didn't actually check that. The key point is they're paying [cost-of-service rates] now ... and the only question is the degree of the offset that the state regulators provide."

BRA Opens

Wednesday marked the opening of the sell offer window for the 2022/23 BRA after delays resulting from FEREC's expansion of the minimum offer price rule. The auction is scheduled to run until today, with PJM posting the results on June 2.

PJM was encouraging participants to submit offers as early as possible, pushing for submissions by Friday so that they could more easily be revised by today. It encouraged participants to review the [capacity exchange user guide](#) to find more information. ■

PJM News



FERC Rejects PJM FTR Forfeiture Rule

By Rich Heidom Jr.

FERC on Thursday rejected the financial transmission rights forfeiture rule PJM has been using for more than four years, saying it was overly broad and could discourage legitimate hedging activity.

The commission also dismissed FTR trader XO Energy's complaint challenging the rule, saying its case is now moot ([ER17-1433](#), [EL20-41-001](#)).

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

In January 2017, FERC ordered PJM to change how it implements the rule, saying the RTO's focus on individual transactions failed to capture the impact of a market participant's overall portfolio of virtual transactions on a constraint ([EL14-37](#)). (See [FERC Orders Portfolio Approach for PJM FTR Forfeiture Rule](#).)

PJM responded with two compliance filings later that year and began billing forfeitures based on the new approach in September 2017 — retroactive to the beginning of the year — even though the commission had not approved the rules.

Refunds Possible

FERC's ruling Thursday found PJM's FTR forfeiture trigger unjust and unreasonable and ordered the RTO to propose a replacement within 60 days that uses "either a different threshold or an alternative approach to triggering forfeiture that strikes a more appropriate balance between deterring manipulative behavior and not burdening legitimate hedging activity."

It said PJM's compliance filing also must include information to help the commission to determine whether it should issue refunds and surcharges.

PJM triggered forfeitures if the net distribution factor (dFAX) between the transaction bus and the worst-case scenario bus is at least 0.75 — meaning at least 75% of the energy flowing between the two points is reflected in the constrained FTR path.

The commission said PJM's filings complied

with its January 2017 directive to use a portfolio approach when determining the impact of a market participant's virtual transactions on constraints related to its FTR positions and that it apply the forfeiture rule to all FTRs, including counterflows. FERC also approved PJM's use of the load-weighted reference bus and its treatment of all virtual transactions held by entities that share common ownership as part of the same portfolio.

But it rejected PJM's 1-cent FTR impact test — which determines whether the net flow impacts the absolute value of an FTR by 1 cent or greater — as unjust and unreasonable because "it does not always reflect a material or significant increase in the value of an FTR to justify forfeiture of FTR profits."

"The 1-cent threshold is in an overly broad application of the FTR forfeiture rule that is likely to disrupt legitimate hedging activity without providing an increased level of deterrence of manipulative activity," the commission said.

FERC cited a PJM sensitivity analysis that found the new rules were capturing far more transactions than the prior test and noted that from 2016 to 2017, forfeitures under the new rules increased by \$9.1 million.

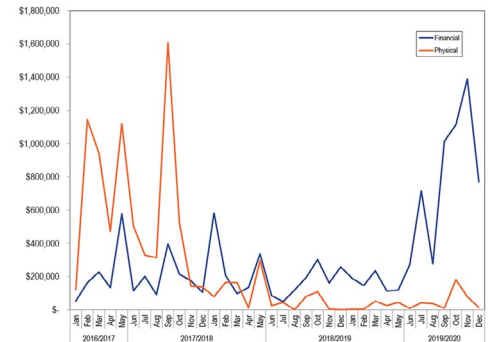
Protesters complained they were forced to curtail their virtual energy trading because the trigger caused forfeitures on electrically distant FTR paths that were difficult to predict in advance of submitting bids and offers.

1-Cent Threshold

"The *de minimis* 1-cent threshold may result in forfeitures from incidental overlaps between a virtual energy portfolio and FTR position that would not amount to cross-product manipulation," FERC said. "PJM offers no support for a finding that such a *de minimis* impact creates the appropriate balance between identifying potential manipulation and not disrupting legitimate hedging activity."

The commission acknowledged the difficulty in designing a test that avoids triggering any forfeitures because of legitimate hedging. "But while an appropriate balance may trigger some forfeiture due to potentially legitimate conduct, the record indicates that PJM's method could be adjusted to affect significantly less legitimate conduct while at the same time still providing deterrence to manipulative conduct," it said.

PJM violated the filed rate doctrine by imple-



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

menting its compliance filings prematurely, FERC said. To consider whether refunds should be issued, the commission said PJM must provide it information on how the RTO would calculate refunds and surcharges; details of the parties who would receive refunds or be charged surcharges; and information on the magnitude of the refunds and surcharges. "We are reserving judgment as to whether or not to impose refunds; that decision will be informed by PJM's subsequent filing," it said.

XO Energy, of Landenberg, Pa., challenged the tariff changes in an April 2020 complaint, saying it quit PJM's virtual market in December 2019 after receiving \$4.3 million in forfeitures. The company asked FERC to order the RTO to change the forfeiture rules or abandon it and adopt "a structured market monitoring approach" like the one used by MISO ([EL20-41](#)).

Thursday's order dismissed XO's complaint as moot "as it challenges a rate that is not in effect." The commission also rejected several rule changes requested by the protesters as outside the scope of PJM's compliance filings.

XO released a statement through attorney Ruta Skukas of K&L Gates saying it is eager to work with PJM and other stakeholders "to develop a more thoughtful and balanced FTR forfeiture rule."

"This rule will be particularly significant as the volume of renewable resources increases in the PJM footprint and asset owners begin to hedge their intermittent output in the FTR and real-time markets," it said. "Further, XO believes that refunds will be a significant needed component going forward, as PJM unlawfully over-collected forfeitures for over three years." ■

PJM News



GreenHat Energy, Owners Face \$229M FERC Fine

By Michael Yoder

FERC threatened GreenHat Energy and its owners with \$229 million in civil penalties Thursday over the company's 890 million MWh default of its financial transmission rights portfolio in PJM in 2018.

In a report released as part of a commission Order to Show Cause, FERC Office of Enforcement staff alleged that GreenHat's owners violated the Federal Power Act and PJM's tariff and Operating Agreement by engaging in a "manipulative scheme" in the FTR market. The show-cause order directs the participants to demonstrate why GreenHat should not be assessed a civil penalty of \$179 million and owners John Bartholomew and Kevin Ziegenhorn assessed civil penalties of \$25 million each (IN18-9).

GreenHat, Bartholomew, Ziegenhorn and the estate of Andrew Kittell, who was the third owner of the company, must also explain why they should not be required to disgorge \$13.1 million in unjust profits, plus interest. Kittell died in California in January at the age of 50.

"Enforcement staff's investigation and report raise very serious allegations about market manipulation that cost consumers in the PJM market nearly \$180 million," FERC Chair Richard Glick said. "This commission takes very seriously our responsibility to ensure that FERC-jurisdictional markets operate competitively and free from fraudulent schemes that harm other market participants and impose excessive, unjust costs on consumers."

GreenHat acquired the largest FTR portfolio in PJM between 2015 and 2018 but defaulted on the portfolio in June 2018, leaving PJM stakeholders to cover more than \$179 million in the market to the present. When the company defaulted, FERC said, GreenHat had only \$559,447 in collateral on deposit with PJM. (See *Doubling Down – with Other People's Money.*)

Enforcement alleged that GreenHat's conduct was "unlawful" in several ways, including:

- sending false price signals into the PJM market by purchasing FTRs "based not on expected profitability" but on the FTRs it could acquire with "minimal" collateral;
- making deliberately false statements to PJM to try to avoid a collateral call; and
- rigging FTR auctions by using inside information about Shell Energy North America's seller-side auction offers in designing its own buyer-side bids for the same FTRs.

In April, FERC rejected GreenHat's contention that the commission erred in its November order in a dispute between the company and Shell, partially granting Shell's petition for declaratory order (EL20-49). (See *FERC Rejects GreenHat Arguments in Shell Case.*)

PJM agreed to pay two trading firms \$12.5 million to end a dispute over the GreenHat default under a settlement filed with FERC in October 2019. Apogee Energy Trading and Boston Energy Trading and Marketing (BETM) accepted credits of \$5 million and \$7.5 million, respectively, to resolve claims of economic harm that resulted from the RTO's decision



GreenHat listed its address as 826 Orange Avenue, Suite 565, Coronado, Calif. — a UPS store between a nail salon and a RiteAid. | Google

to not liquidate GreenHat's entire portfolio of FTRs during the 2018/19 planning period. (See *PJM to Pay \$12.5 M to Settle GreenHat Dispute.*)

Enforcement's report said that while the alleged portfolio scheme created "enormous losses that were borne by all other PJM members," the actions were "highly profitable" for GreenHat and its owners. The investigation found GreenHat made four deals in which it sold FTRs for a total of \$13.1 million.

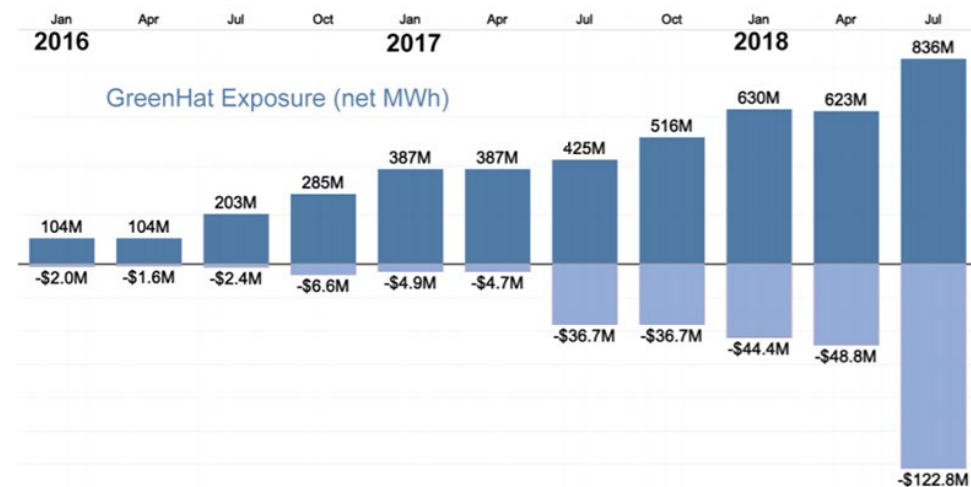
PJM's Board of Managers commissioned a report on the GreenHat debacle in October 2018, four months after the default. The report, released in March 2019, led to the resignations of several prominent PJM officials, including CEO Andy Ott in May of that year. (See *Report: 'Naive' PJM Underestimated GreenHat Risks.*)

FERC said the GreenHat parties have 30 days to respond to the commission's order.

"Today's order offers another reminder that the commission has a solemn responsibility to investigate and penalize participants that engage in market manipulation," Glick said. "This is going to continue to be an important priority of mine."

Commissioner James Danly issued a concurrence with the order, saying he still has questions he wants answered that will aid his decision on the issue.

"In the light of this massive default, it's necessary for the commission to make an official pronouncement on whether or not there was manipulation," Danly said. ■



GreenHat's significant growth in exposure and MTA loss | PJM

PJM News



Glick Highlights FERC Role in Reforming Tx Development

By Michael Yoder

The U.S. electric sector is undergoing a dramatic transformation that will bring significant benefits to consumers and stakeholders — and new transmission will be key to unlocking them, FERC Chair Richard Glick said last week.

Speaking at the first session of PJM's interconnection policy workshop May 18, Glick told RTO members that the biggest challenge to the clean energy transformation is determining the best path forward.

Glick believes that transmission planning will play such a key role in the green energy revolution that he's bumping it to the top of the commission's agenda.

"I think we're going to be spending a significant amount of the commission's time in the next year on transmission reform issues," Glick said.

"It's no secret" that the grid will increasingly rely on renewable resources as a growing number of states look to lower carbon emissions, he said. Many of the best locations for solar and wind are found in locations far from load centers, requiring a "robust" transmission grid.

While the FERC chair is a "big believer" in the role of distributed energy resources in the transition to renewables, he said there's no way to address ambitious state and federal carbon-reduction goals without addressing the transmission system.

"We're going to have to access those remotely located renewable resources, and transmission is certainly the way to unlock those resources," Glick said.

FERC will seek to take a lead role in transmission coordination because of its "significant jurisdiction" in regulating the sector, Glick said, while lending its expertise to the Department of Energy in coordinating projects like the offshore wind poised to be installed along the East Coast.

Glick said transmission planning is a difficult subject to address because of conflicting views among stakeholders, along with legal, policy and regulatory constraints. But he hopes that FERC will outline a plan of action before the end of summer for moving forward on transmission.

"It's a very significant part of my agenda, and I think we really need to give it all the thought we can, as it's an extremely important part of



FERC Chairman Richard Glick | PJM

the transformation to the clean energy future," Glick said.

Key Transmission Planning Issues

Glick said the industry must still "unlock the process" of interregional transmission planning. At the same time, the commission must also figure out the "intra-regional" transmission planning process, helping to anticipate what kind of generation will be built in the future. He said it will be important to get a holistic picture of the generation mix in a region instead of focusing on one or two generating projects at a time.

In terms of planning, Glick said FERC must ensure that grid operators are closely examining not only the growing number of projects in their interconnection queues, but the locations of those projects as well, finding ways to better integrate the planning and interconnection queue processes.

Cost allocation will also play an important role in the commission's agenda, Glick said, calling it a "very tricky" subject. FERC regulations have generally been aligned with allocating costs in a manner roughly commensurate with the benefits, Glick said, but it can be difficult determining exactly who are the beneficiaries and then allocate costs correctly. FERC must look beyond the "traditional" theory of beneficiaries, he said, pointing to other ways stakeholders can benefit from a new transmission project such as through reduced congestion and improved power flows. The commission must also consider reliability improvements as a benefit of new transmission.

Glick said FERC is also looking to address participant funding of network upgrades, say-

ing it is "perplexing" that a generation owner building a new power plant has to pay the costs for a network upgrade while those coming later in the queue can benefit from the upgrade without having to pay for it.

"FERC needs to revisit our participant funding policies, and that's going to be an important debate as we move forward," he said.

Glick was asked about ways the commission can accelerate the interconnection process as the 2030 deadline for many state carbon and clean energy goals draws nearer.

"Time is of the essence" in planning to achieve environmental goals, he said, and FERC must "expedite the process" to make it happen, including modifying the interconnection process along with other regulatory processes.

PJM Perspective

PJM CEO Manu Asthana said it was important for Glick to give remarks during the first stage of the interconnection workshops. He said Glick's experience on both the regulatory and legislative sides of policies gives the commission a chance to take steps in reforming the interconnection process.

Asthana said there's no single answer to addressing interconnection issues, but it's a "series of tradeoffs" to make the necessary changes. He said stakeholders must start thinking about the correct tradeoffs to reform the interconnection process.

"It's very clear to me that we need to do some things differently," Asthana said. "And some of those things may require structural changes as opposed to tweaks." ■



PJM CEO Manu Asthana | PJM

PJM News



Duke Rejects Hedge Fund Elliott's Breakup Pressure

Move Would Split Florida and Midwest from Duke's Carolinas-based Operations

By John Funk

Backed by state leaders, Charlotte, N.C.-based Duke Energy last week rejected hedge fund Elliott Management's proposal to break up the company into three regionally focused, publicly traded utilities.

Elliott — whose management of funds invested in Duke make it one of the company's top 10 investors, it claims — released an *open letter* to Duke's board of directors on May 17 critical of the company's performance. It suggested that the board create three utilities, each with its own board and management, the Carolinas, Florida and the Midwest.

The separation "should create \$12 [billion] to \$15 billion of line-of-sight near-term value for shareholders," the letter argued. Elliott manages about \$42 billions in funds.

Duke within hours *issued its response*: No.

"Today's announcement by Elliott is the latest in a series of proposals that the hedge fund has offered to Duke Energy since July 2020, the company said. "Throughout, Duke Energy's board of directors has reviewed their proposals in depth and determined that they are not in the best interests of the company, its shareholders and other stakeholders."

Following the release of Elliott's letter, Duke's share price fell 2.4% over three days, closing Wednesday at \$101.16, down from the previous Friday's close of \$103.60. Usually, utilities targeted by Elliott see a gain in share price.

The essence of Elliott's argument is that for its size — nearly 8 million electric customers in six states — Duke should be earning much more than it has over the last several years.

Elliott's idea would make Duke's Florida utility a separate company and create another company consisting of operations in Indiana, parts of Ohio and parts of Kentucky.

To accomplish this split, Elliott also suggested that the board create an "independent board committee, including new highly qualified independent directors, and assisted by independent outside advisers." The hedge fund noted that it "has worked with major utilities in similar circumstances, collaborating with directors and management teams to deliver dramatic improvements in operating performance, enhance portfolio configuration and unlock shareholder value."



Oconee Nuclear Station on Lake Keowee near Seneca, S.C. | Duke Energy

In its response Duke pointed out that Elliott had initially suggested that the company issue "up to \$7 billion of common equity ... to Elliott, essentially transferring up to 10% of Duke's value to Elliott." The company rejected that.

Elliott then proposed the company spin off its Florida and Midwest operations, according to Duke.

"This 'shrink-the company' strategy that underlies all of Elliott's proposals runs counter to the strategic direction of the entire industry at a time when scale is needed to efficiently finance the company's unprecedented capital investment and growth opportunities," Duke explained its opposition to that idea.

Elliott then demanded an unspecified number of new board seats as well as the initiation of a "strategic review" without further explaining the purpose of that review, according to Duke's statement.

The fund's letter spurred multiple *responses* from North Carolina, South Carolina and Indiana state officials, all in support of Duke.

"Beyond the pride of a home-state company, though, is the reality that Duke delivers

reliable, cost-effective energy to millions of North Carolinians," North Carolina Gov. Roy Cooper said in a joint statement with leaders of both houses of the state legislature. "There are natural concerns that come with putting our state's energy future in the hands of a Wall Street hedge fund, and we would expect the North Carolina Utilities Commission to strictly scrutinize any such arrangement." ■

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PJM News



PJM MRC Preview

Below is a summary of the issues scheduled to be brought to a vote at the PJM Markets and Reliability Committee meeting on Wednesday. Each item is listed by agenda number, description and projected time of discussion, followed by a summary of the issue and links to prior coverage in *RTO Insider*.

RTO Insider will be covering the discussions and votes. See next Tuesday's newsletter for a full report.

Markets and Reliability Committee

Consent Agenda (9:05-9:10)

Members will be asked to endorse the following manual changes and tariff revisions:

B. *Manual 03: Transmission Operations*, with revisions resulting from a periodic cover-to-cover review. Stakeholders endorsed the changes at the May Operating Committee meeting after complaints that PJM didn't have the updated language available for the first read. (See "Manual 03 Changes Endorsed," *PJM Operating*

Committee Briefs: May 14, 2021.)

C. *Manuals 11: Energy & Ancillary Services Market Operations, 14D: Generator Operational Requirements and 18: PJM Capacity Market*, with revisions addressing public distribution microgrids. The OC in December unanimously endorsed new rules, and the MRC received a first read at its meeting the same month. (See "Public Distribution Microgrids," *PJM MRC/MC Briefs: April 21, 2021.*)

D. *Manual 21: Rules and Procedures for Determination of Generating Capability*, with revisions resulting from a periodic cover-to-cover review. Stakeholders unanimously endorsed the minor changes at the May Planning Committee meeting. (See "Manual 21 Updates Endorsed," *PJM PC/TEAC Briefs: May 11, 2021.*)

E. *Manual 36: System Restoration*, with revisions resulting from a biennial review. The changes were unanimously endorsed at the May OC meeting. (See "Manual 36 Changes Endorsed," *PJM Operating Committee Briefs: May 14, 2021.*)

Endorsements (9:10-9:55)

1. New Service Requests Deficiency Review

Requirements (9:10-9:30)

Stakeholders will be asked to approve the proposed *solution* and tariff *revisions* to address deficiency review requirements for new service requests. PJM is proposing to change new service application deadlines to better manage the large number of requests. (See "New Service Requests," *PJM MRC/MC Briefs: April 21, 2021.*)

2. Critical Infrastructure Stakeholder Oversight (CISO) (9:30-9:55)

Members will be asked to endorse the proposed solution and corresponding revisions to *Manual 14B, Manual 14F* and the *Operating Agreement* to address the avoidance of facilities from being designated as critical infrastructure under NERC reliability standard CIP-014. Stakeholders endorsed the package, including associated manual language, with 77% support at the February PC meeting. (See "CISO First Read," *PJM MRC/MC Briefs: March 29, 2021.*) ■

— Michael Yoder

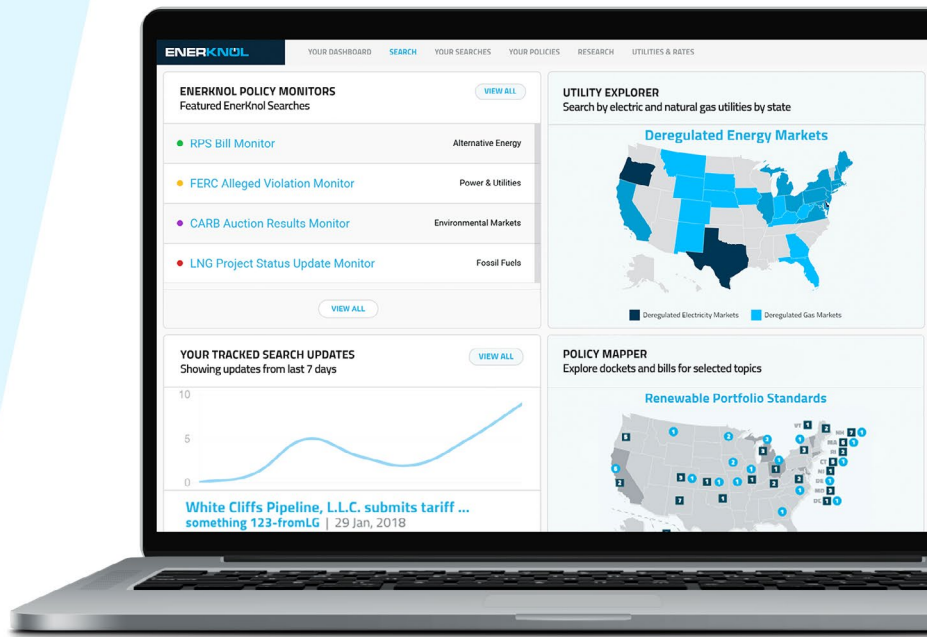
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PJM News



FERC Accepts PJM Fast-start Tariff Changes

By Michael Yoder

FERC on Thursday accepted PJM's compliance filing on its rules for fast-start resources, allowing tariff changes to take effect by July on an issue that has been before the commission since 2017 (ER19-2722).

The commission determined in a December order that PJM partially complied with its April 2019 ruling that the RTO's fast-start pricing practices were unjust and unreasonable because they did not allow prices to reflect the marginal cost of serving load. PJM's second compliance filing in February sought to answer the commission's directives on several issues. (See [Mixed Ruling for PJM on Fast-Start Pricing](#).)

"PJM's proposed tariff revisions set forth the physical operating characteristic requirements for fast-start resources, consider certain resource types fast-start resources by default and, for other resource types, set forth a process for determining whether the resource can meet the fast-start resource physical operating characteristics," the commission said.

Revisions

FERC ruled in December that PJM failed to provide sufficient detail on its process for determining eligibility for fast-start resources. The commission agreed with commenters that the proposed definition, which would have allowed PJM's Office of the Interconnection to deem a resource capable of meeting eligibility criteria based on its operating characteristics, gave the RTO too much discretion.

In response to the commission's directive, PJM proposed adding a new section to its Operating Agreement defining which resources are considered fast-start and a description of the process by which a resource may become a fast-start resource or lose its status. The definition states that a fast-start resource is "capable of operating with a notification time plus start-up time of one hour or less, and a minimum run time or minimum down time of one hour or less, based on operating characteristics."

The new section also includes a list of resource types qualifying as fast-start resources, including economic load response participant resources, fuel cells, combustion turbines, diesel, hydropower, battery, solar, landfills and wind.

For other types of resources capable of meeting fast-start operating requirements,



PJM control room. | PJM

PJM proposed a process where a resource can obtain written approval from the RTO, "after advice and input from the Independent Market Monitor," to have the fast-start designation. The market seller has to provide documentation supporting the capability to meet required operating characteristics, including historical operating data showing the ability to provide energy on one hour's notice.

"We find that this tariff language sufficiently identifies those resources eligible to submit fast-start pricing offers and does not provide PJM with too much discretion in identification of fast-start resources," FERC said in the order.

The December order also found that PJM proposed several new types of uplift payments that were not directed by the commission and instructed the RTO to remove those provisions, including:

- providing for make-whole payments for following dispatch instructions;
- uplift payments for virtual transactions, price-sensitive demand and dispatchable exports; and
- lost opportunity cost payments to day-ahead scheduling reserve resources.

The commission in December also rejected PJM's proposal to apply the offer cap requirements of Order 831 to the composite energy offers under its fast-start pricing proposal. (See [New FERC Rule Will Double RTO Offer Caps](#).)

PJM's revisions call for only adjusting fast-start offers in the pricing run "when a fast-start resource has been selected in the dispatch run and the resource's submitted composite energy offer exceeds \$1,000/MWh" and will "continue to independently verify the incre-

mental energy offer, start-up cost and no-load cost."

Market Monitor Protest

The Monitor argued that PJM did not comply with the commission's directive to properly define the eligibility of fast-start resources, saying that the revised language still gave the RTO "too much discretion" and that there are "no clear standards for verifying which resources that submit start-up plus notification times of less than one hour and minimum run times of less than one hour are capable or not capable of operating according to those parameters."

It recommended that the commission direct PJM to define a fast-start resource "based only on operating parameters, require that the parameters be accurate based on the resource's physical capability and prevent resources that do not start in the defined time period from setting price as fast-start resources."

FERC rejected the protest, saying PJM "added sufficient detail" regarding the process for determining fast-start resource eligibility.

"We find that the Market Monitor's general concern regarding the submittal of inaccurate offer parameters by resources and the standards for verification of those parameters are outside the scope of the commission's [Federal Power Act] Section 206 finding," FERC said.

PJM said Friday it is currently re-evaluating the feasibility of a July 1 implementation date and "the risk associated with implementing during a summer peak month." The RTO will update stakeholders on the implementation process at the Markets and Reliability Committee's meeting Wednesday. ■

PJM News



Transource Tx Project Rejected by Pa. PUC

Independence Energy Connection Lines Now in Limbo

By Michael Yoder

The future of the controversial Independence Energy Connection (IEC) transmission project in Pennsylvania and Maryland is in doubt after the Pennsylvania Public Utility Commission (PUC) rejected siting applications filed by Transource Energy.

The PUC voted 4-0 during the commission's public meeting on Thursday to *reject* a series of related applications and petitions filed by Transource for the siting and construction of high-voltage electric transmission lines in Franklin and York counties. Details of the decision were not made available until Monday when the PUC served copies of the commission's orders to several hundred different parties involved in the case.

On Thursday, the commission elected to amend and adopt the *recommended decision* issued in December by PUC Administrative Law Judge Elizabeth H. Barnes, finding that Transource "failed to show need for the project within the meaning of commission regulations and the Pennsylvania Public Utility Code." The PUC commissioners did not comment on the project during the vote, which was included with several other agenda items voted on in a

single motion.

"We shall deny Transource's siting applications based upon our finding that the company failed to establish, by a preponderance of evidence, the need for the proposed high-voltage transmission lines," the commission said. It rescinded the certificate of public convenience issued to Transource in 2018, which granted the authority to furnish electric transmission services in Franklin and York counties.

The project had received a certificate of public convenience and necessity (CPCN) from the Maryland Public Service Commission last June. (See *Md. PSC OKs Independence Energy Connection Deal*.)

The Ohio-based company's transmission line proposals, known as the IEC East and West projects, were the subject of several rounds of investigation and litigation before the PUC and other state and federal agencies since 2017.

Transource's plan for the eastern section of the project originally proposed extending 15.8 miles of transmission lines from a new Furnace Run substation in York County, Pa., to the Conastone substation in Harford County, Md. An updated configuration released in October 2019 and designed in consultation with PJM

increased the size of the new substation in Pennsylvania and added four miles of lines connecting to an existing right of way that would feed into two upgraded Baltimore Gas and Electric substations. (See *UPDATED: Transource Files Reconfigured Tx Project*.)

The western segment of the IEC project called for a 230-kV double circuit transmission line running 28.8 miles from Franklin County, Pa., into Washington County, Md.

The PUC's actions officially denied all of Transource's applications and petitions submitted to the commission, including:

- The application for approval of siting and construction for the East and West portions of the IEC project (A-2017-2640195; A-2017-2640200);
- The amended application related to the East portion of the project, which was submitted by Transource and PPL Electric;
- The petitions for waiver of local zoning regulations related to the construction of substations in Franklin and York counties; and
- Applications seeking approval for eminent domain action involving 77 landowners in Franklin and York counties (A-2018-



Transource's proposed alternative plan for the eastern segment of its Independence Energy Connection project | ISO-NE

PJM News



3001881, et al.)

Project History

PJM had selected Transource's market efficiency proposal in August 2016 to reduce congestion along the RTO's AP South interface. The congested interface was included in its inaugural window for proposing such projects as part of PJM's implementation of FERC Order 1000.

Then PJM CEO Andy Ott called it "PJM's largest-ever market efficiency project," saying the \$383 million IEC project would save ratepayers \$622 million in congestion costs over 15 years and that the eastern portion would relieve the Graceton-Conastone 230-kV line, which was the most congested line in PJM's 2016 long-term *analysis*.

But the project quickly received criticism from some PJM stakeholders and landowners in Maryland and Pennsylvania who questioned the need for the transmission lines. (See *Protesters Doubt PJM Analysis of Transource Alternative*.)

Court Ruling

Judge Barnes's decision in December played heavily in the PUC's decision, with the commission citing 233 findings of fact and 16 conclusions of law made by the judge.

The commission said Barnes was "not persuaded" that Transource had carried the burden by a "preponderance of the evidence" to establish

need after viewing the evidence of the case. Barnes found opposing arguments made by interested parties to be "more persuasive," the PUC said, concluding that data used by PJM regarding congestion on the AP South interface was "not reliable enough to form the basis of need" for the project. (See *PJM Analysis of Transource Alternative Challenged*.)

Barnes also found Transource's argument to be "unpersuasive" regarding additional benefits to Pennsylvania based on the "late-asserted alleviation of reliability violations." The basis of the Independence project "has always been and remains, for the purpose of alleviating of economic congestion on the AP South reactive interface," Barnes said.

The PUC rejected Transource's arguments regarding the commission's jurisdiction to provide an independent determination of the need for the project. Transource argued that the need of the project was satisfied under existing Pennsylvania standards and that "factors relied upon by PJM and the methodology and process for PJM-approval of a project should be the only criteria relevant to this commission's review and such criteria is not subject to critical analysis."

The commission said Transource's argument was "flawed" because the need, established by FERC standards and implemented by PJM, may or may not be "consistent with the standard for need under Pennsylvania law."

"It is for this commission, not PJM, to decide

whether the PJM planning perspective is, or is not, in line with the Pennsylvania standard for 'need' under the code, commission regulations and relevant case law," the PUC said.

Reactions

The next steps for the Independence project remained in question on Monday as parties involved in the project were reviewing the details of the PUC order.

Transource Energy Director Todd Burns said in a statement that his company was "disappointed" by the commission's decision and was evaluating the order.

"PJM has shown this project is a necessary investment to address market inefficiencies and reliability issues," Burns said, "These problems do not go away with today's action, and ultimately they will need to be addressed. Pennsylvania will play an important role in transmission grid expansion given the evolving electrical needs in this region and the growing influx of new generation that is expected."

Officials at PJM said they were also reviewing the PUC's decision and that it "appreciates the commission's consideration."

"PJM will commence the appropriate planning studies to determine next steps, including identifying any potential reliability issues due to removal of the project from the Regional Transmission Expansion Plan," the RTO said in a statement. ■

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SPP News



FERC Sides with Tri-State over Interconnection Procedures

By Tom Kleckner

FERC last week stuck to its ruling that Tri-State Generation and Transmission Association's transitional process for interconnection customers is just and reasonable, overriding rehearing requests by a pair of solar developers ([ER21-410-001](#)).

The commission in January accepted Tri-State's tariff modifications to its large generator and small generation interconnection procedures (LGIP and SGIP) and its proposed queue reform. It found the transitional process to be a reasonable means of implementation and resolving the backlog, and that it was consistent with other precedent. (See [FERC Accepts Tri-State GI Procedures](#).)

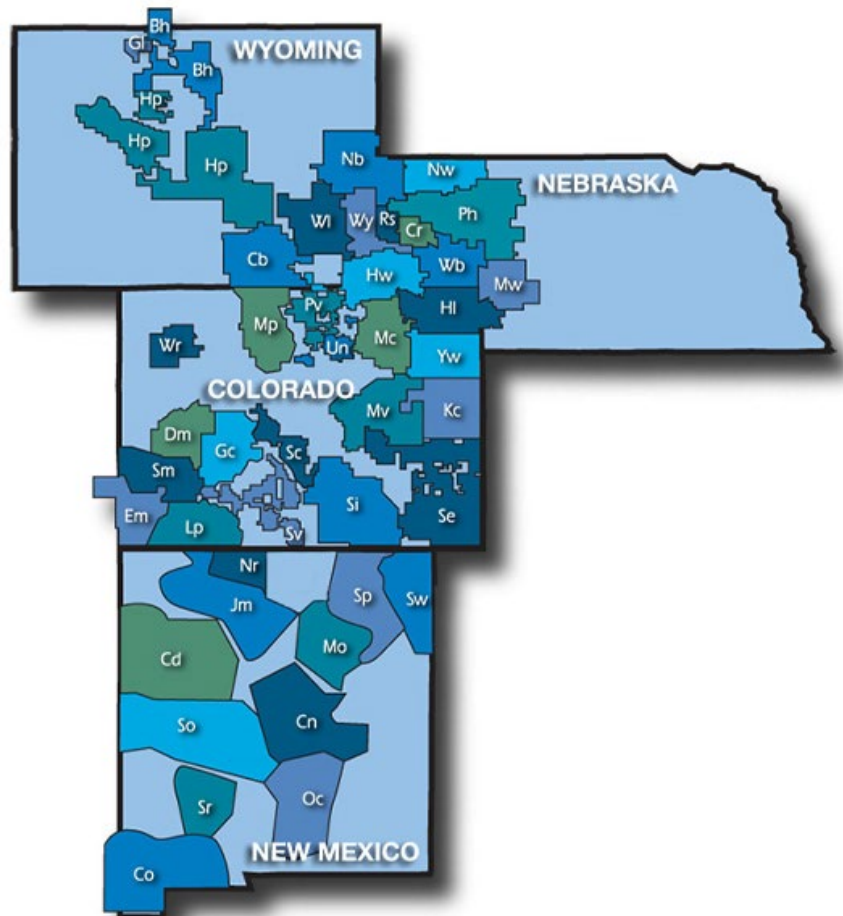
Keota Solar and Arevia Power challenged the sufficiency of the process that allows interconnection customers 60 days and an additional cure period to meet readiness and site-control requirements. Under Tri-State's transitional process, interconnection customers have three options to demonstrate readiness: a contract for sale; inclusion in a resource plan; or acceptance of a provisional large generator interconnection agreement.

FERC said it continued to find Tri-State's process to be consistent with or superior to the *pro forma* LGIP and, "therefore, is just and reasonable."

"Given Tri-State's stated challenges in operating its interconnection queue," the commission said, "the proposed transitional process [is] a reasonable means of implementing the queue-reform proposal and resolving the interconnection queue backlog.



FERC's order sticks with Tri-State's transitional interconnection process, rejecting complaints by solar developers. | [Tri-State G&T](#)



Tri-State's footprint | [Tri-State G&T](#)

"Petitioners' rehearing objections to the readiness criteria indicate frustration with the fact that their respective projects are not ready and cannot proceed in the transitional serial

process," FERC added.

The commission also denied Keota's separate request for remedial relief under the Federal Power Act and a one-time waiver of certain requirements in Tri-State's LGIP, which established eligibility for the transitional process's late-stage interconnection requests ([ER21-1206](#)).

The solar developer, after missing several deadlines, requested a limited waiver from requirements that it make a readiness demonstration before entering the transitional process; pay a deposit equal to 100% of the costs for transmission facilities and network upgrades identified in system studies; and subject itself to punitive withdrawal penalties equal to nine times the total study costs.

FERC denied the request, saying the circumstances didn't meet the criteria for granting the waiver and finding that Keota had not demonstrated that it acted in good faith. ■

SPP News



North Dakota PSC Hosts Reliable Grid Discussion

SPP's Nickell: 'Anecdotal Evidence' Points to Gas Supply Issues During Uri

By Tom Kleckner and Amanda Durish Cook

SPP COO Lanny Nickell last week pointed to a lack of gas generation as the primary culprit behind the first-ever load sheds in the grid operator's 80-year history during February's Winter Storm Uri.

RTO staff is still working to obtain "specifics about the data," Nickell said during a May 20 technical conference hosted by the North Dakota Public Service Commission, but the lack of gas supplies for fossil plants contributed to the loss of 35 GW of generation capacity.

"The best I can tell, from anecdotal evidence in talking to members, production was the largest reason gas didn't show up," Nickell said. "I've also been told there were pipeline issues. I don't know whether the pipeline issues were driven by production issues or something else. I don't know for sure, but I've heard both issues presented as possible drivers for a lack of supply."

SPP has said gas generation accounted for about 60% of the unavailable generation during Uri's peak Feb. 15-16. The RTO is working with its members to better understand what happened as it develops a comprehensive report to be released in July. (See [SPP Launches Review of Storm Response](#).)

The grid operator twice reached its maximum energy emergency alert status and called for load sheds totaling nearly 3.3 GW over a four-hour time period. SPP returned to normal operations on Feb. 20. (See [ERCOT, MISO, SPP Slough Load in Wintry Blast](#).)

Nickell reminded the commission that the RTO's responsibility for grid reliability includes balancing supply and demand and ensuring the grid's equipment is always operated within reliability limits.

"During this event, there were times when we were trying to do both," he said. "It appeared the solutions conflicted. At times, we had to dispatch generation down to protect transmission elements, but that goes against the need to make sure we balance supply and demand. We take responsibility ... as an organization, we are responsible for protecting the transmission grid."

PSC Chair Julie Fedorchak asked Nickell who is responsible for the diversity of the fuel mix or ensuring dual-fuel capabilities. Referencing an earlier analogy from Basin Electric Power Cooperative's Tom Christensen, who pinpointed fuel, not the number of vehicles, as the key to an effective package-delivery system, she said, "If you don't have the fuel, you can't run the power plant."

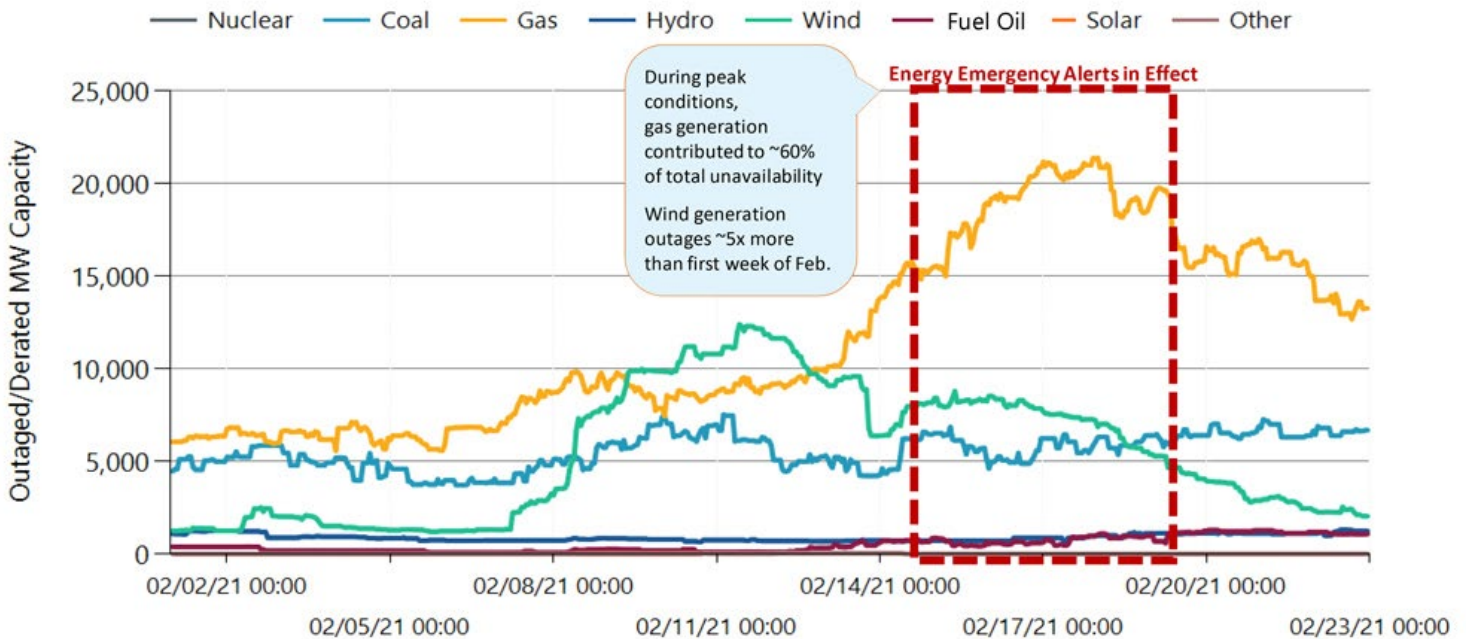
"We've never advocated for fuel diversity," Nickell said. Like other grid operators, SPP makes a point of being fuel agnostic. "I hope to see this in the final report — that as the RTO, we do need to step up, we do need to show some leadership in determining and assessing the minimum characteristics we need identified in the fuel mix. Right now, it's entirely on the members to show up."

He said SPP will have to "step up" and express what types of attributes, such as quick-starting resources, are needed in the fuel mix.

"We're going to have to inform our stakeholders and the country as to what is needed to keep the lights on, especially as we see this transition to more and more renewables," Nickell said.

Commissioner Randy Christmann, hinting at the unavailability of wind generation during the winter event, asked Basin Electric's Valerie Weigel, whether dispatchable resources are not being compensated and "encouraged to disappear."

"We have a great opportunity to participate with SPP and develop market products that can compensate dispatchable resources for the services they provide," Weigel, Basin's director of asset management, said, noting she is involved in the work to build a "multitude of



Gas resources accounted for most of SPP's generation outages during the February winter storm. | SPP

SPP News

producers ... for all various fuel types.”

Christmann queried Weigel about load-serving entities' responsibility to help SPP meet 112% of the system's peak load, which is based on peak summer loads. “Does February tell us 112% is too low of a number?” he asked.

Weigel said several working groups are discussing reserve margins for winter peak loads.

“I think we're going to have to start performing winter seasonal assessments, and maybe spring and fall assessments, about what the requirement should be during those times to ensure the capacity we feel should be there is there,” he said.

The technical conference included two groups of cooperatives' utilities along with SPP and MISO, who both manage parts of the North Dakota grid. The two grid operators were placed in separate groups.

Fedorchak painted the event as an “informal discussion” as the attendees discussed ensuring long-term reliability and the “major transformation of the electric grid.”

“We can't go beyond where our technology is able to take us, where our infrastructure

is able to take us, where all the pieces have to fit together,” she said. “We have to ensure that we as regulators, you as the industry, are not getting too far in front. We have to be the ones that say this is as far as we go. February is an example of going too far. Yes, it was bad weather, but let's make sure we keep [the grid] resilient moving forward.”

North Dakota is the ninth state in which SPP has testified about its response to Uri before regulators and legislators, joining Arkansas, Kansas, Louisiana, Missouri, Montana, Nebraska, New Mexico and Oklahoma.

South Dakota Commissioner Kristie Fiegen, who chairs SPP's Regional State Committee, sat in on the discussion.

MISO Probing Emergency Steps

MISO, spared from having to shed load during Uri, said it's examining its emergency phases to possibly make them more user-friendly.

“We operate the fleet that is provided to us,” Senior Director of Operations Planning J.T. Smith told the commissioners, adding that the grid operator is trying to gain more insight into its resources' capabilities.

Smith said it would be helpful if the RTO could access demand response resources without first declaring an emergency and called for a re-examination of emergency declarations, which he said don't always result in load shed.

“One of the things that's tough about a capacity emergency is that you can move very quickly ... into load shed,” Smith said.

When MISO enacts a second-level emergency, the situation can rapidly devolve into the process' more severe steps. The grid operator calls for available maximum energy from offline resources at step 1A, with load shed taking place at step 5. The emergency must reach 2A before MISO can direct its load-modifying resources.

The commissioners asked whether MISO is considering ways to give members more warning as emergencies rapidly intensify. Smith said staff has recognized “inadequacies” in the step-based process.

MISO only directed utilities to make public appeals in its Entergy region, Smith said.

“Do I think we saw a lot of reduction? Not necessarily,” he said. “What I didn't see was major impacts from public appeals.” ■



SPP's Lanny Nickell (lower left) addresses the North Dakota Public Service Commission during a technical conference on the February winter storm. | North Dakota PSC

Company Briefs

EV Startup Canoo Under SEC Investigation

Tony Aquila, CEO of electric vehicle startup Canoo, last week said the Securities and Exchange Commission has opened an investigation into the newly public company.

The company said in a regulatory filing that the SEC has characterized the probe as a “fact-finding inquiry” and that the agency has not yet concluded whether anyone violated the law. It covers Canoo’s merger with a special purpose acquisition company, plus its “operations, business model, revenues, revenue strategy, customer agreements, earnings and other related topics, along with the recent departures of certain of the company’s officers.”

Canoo said it plans to fully cooperate with the investigation.

More: [The Verge](#)

Ford, SK Innovation Venture to Build 2 EV Battery Plants



Ford and SK Innovation last week announced a joint venture that will

build two North American factories to make batteries for electric vehicles by the middle of the decade.

The joint venture, called BlueOvalSK, is the beginning of Ford’s plan to integrate

key parts of the EV supply chain. The companies have signed a memorandum of understanding, but details on the ownership structure and factory locations have yet to be finalized.

Ford said the two plants would produce the equivalent of 60 GWh of electricity per year.

More: [The Associated Press](#)

Georgia Nuclear Plant Delayed Until 2022

Georgia Power last week said its Vogtle Nuclear Power Plant will be delayed until 2022 due to delays in the completion of testing.

Company officials said testing began in late April, would take three weeks longer than expected and is unlikely to be completed before late June, which will add more time to construction and startup.

The additional month will add \$48 million to the cost of the two nuclear units. The project is now projected to cost more than \$26 billion, up from a 2012 price tag of \$14 billion.

More: [The Associated Press](#)

Google Launching Geothermal Project in Nevada



Google last week announced it will be launching a “first

of its kind” geothermal project in Nevada, which it hopes will add carbon-free energy to the grid that serves the company’s data centers and infrastructure.

Google will partner with clean-energy startup Fervo to develop the project. Google said it will develop artificial intelligence and machine learning that will be aimed at boosting productivity. It will use fiber-optic cables inside the wells so Fervo can gather data on flow, temperature and performance, which will allow Fervo to identify where the best resources exist.

More: [Las Vegas Review-Journal](#)

RWE to Set Up Airborne Wind Energy Test Site in Ireland



RWE AG last week announced it has secured planning

permission to build an airborne wind energy test facility in County Mayo, Ireland.

The facility will first demonstrate a 150-kW system that is comprised of a ground-based winch generator, a launch and land platform, and an aircraft-shaped device. A larger commercial-scale 1-MW system is expected to be tested at a later stage.

Construction is set to start later this year.

More: [Renewables Now](#)

Federal Briefs

Colonial Pipeline Confirms It Paid Hackers



Colonial Pipeline last week confirmed it paid \$4.4 million to DarkSide hackers who broke into its computer systems.

CEO Joseph Blount said he authorized the payment because the company didn’t know the extent of the damage and wasn’t sure how long it would take to bring the pipeline’s systems back. Blount said Colonial paid the ransom in consultation with experts who previously had dealt with the group, which rents its ransomware to partners who carry out the attacks.

Colonial Pipeline said after it learned of the May 7 ransomware attack, the company

took its system offline and needed to do everything in its power to restart it quickly and safely. The company then made the decision to pay the ransom, a spokesman said.

More: [The Associated Press](#)

Glick Names Cole Top Environmental Justice at FERC



FERC Chairman Richard Glick last week announced the appointment of **Montina Cole** to serve as senior counsel for Environmental Justice and Equity, effective June 1.

Cole, an executive and attorney with nearly 30 years of energy law experience, is princi-

pal of Jai Green Consulting LLC and the Law Office of Montina Cole. She served as senior attorney in the Climate & Clean Energy Program at the Natural Resources Defense Council.

More: [FERC](#)

Supreme Court Gives Big Oil a Win in Climate Fight with Cities

The Supreme Court last week voted 7-1 to remand Baltimore’s lawsuit against fossil fuel companies to the Court of Appeals to reconsider the industry’s demand that it review a lower-court decision to have the case proceed in state courts. The city filed the 2018 suit to compel the companies to help pay for the costs of climate change.

Baltimore argued that the companies’ “pro-

duction, promotion and marketing of fossil fuel products, simultaneous concealment of the known hazards of those products, and their championing of anti-science campaigns” harmed the city. The lawsuit said Baltimore “is particularly vulnerable to sea level rise and flooding,” and that it has spent “significant funds” to plan for and to deal with global warming.

More: [The New York Times](#)

TVA Identifies Proposed Tx Line Route in Tenn.

The Tennessee Valley Authority last week unveiled its proposed 5.4-mile route for a new transmission line running through Knox and Loudon Counties in Tennessee.



TVA said the upgrade will allow for better service for the counties through Hardin Valley. While the new route will require a new right of way, TVA selected

the route to have the least impact on the area. Still, a National Environmental Policy Act review remains in process.

Construction is expected to begin next winter.

More: [Daily Energy Insider](#)

White House Council Opposes Nuclear, Carbon Capture Projects

The White House Environmental Justice



Advisory Council recently expressed opposition to nuclear and carbon capture projects, as well as projects that expand capacity for fossil fuel

production.

The volunteer advisory council, which is made up of leaders in the environmental justice movement, listed such projects as “examples of the types of projects that will not benefit a community,” in a set of recommendations issued to the White House. The report did not specify why the panel considers the projects not to be beneficial.

More: [The Hill](#)

State Briefs

CALIFORNIA

CARB Adopts EV Mandate for Uber, Lyft

The Air Resources Board last week mandated that ride-hailing companies Uber and Lyft have electric vehicles account for 90% of all miles driven by 2030.

Both companies have set goals of converting their fleets by the same year but said hitting those targets is unrealistic without additional government subsidies for EVs and charging infrastructure.

The total cost of meeting the 2030 standard could reach \$1.73 billion, according to the Union of Concerned Scientists.

More: [Reuters](#)

LA City Council Calls for Permanent Closure of Aliso Canyon Gas Facility

The Los Angeles City Council last week unanimously called for the permanent closure of the Aliso Canyon Natural Gas Facility operated by SoCal Gas. Council members acknowledged that they don't have the authority to shut down the facility and that the action is in the hands of the Public Utilities Commission.

The methane leak at the facility was discovered in October 2015 and continued to leak for four months. It is the largest gas blowout in history.

SoCal Gas released a statement after the vote, saying, “Aliso Canyon is a state-of-the-art storage facility. State regulators and

independent experts have called the safety enhancements at the field the most comprehensive in the nation.”

More: [KCAL](#)

LA County Transportation Projects Given Nearly \$40M



California Transportation Commission

mission last week allocated more than \$39 million to Los Angeles County transportation infrastructure projects, including more than \$27 million to the Los Angeles County Metropolitan Transportation Authority to buy 78 light rail vehicles.

The Long Beach Transit/Electric Commuter Express was allocated \$6.5 million to purchase five zero-emission battery electric buses and construct charging infrastructure to create a zero-emission over-the-road coach commuter route between Long Beach and UCLA.

The Los Angeles Regional Transit System Integration and Modernization Program received \$5 million to complete environmental documentation for the Vermont Transit Corridor.

More: [NBC Los Angeles](#)

Oil Industry Spends Millions Fighting Climate Bills

In the first quarter of 2021, the state's oil and gas industry spent more than \$4.3 million on lobbying. A significant portion of it was used to oppose legislation that would

bolster the state's progress toward reducing greenhouse gas emissions, impose tighter regulations, and ensure justice for communities most impacted by pollution and climate change.

Nine companies or associations spent more than \$100,000 lobbying in the quarter, including the California Independent Petroleum Association (CIPA). Two of them — Chevron and the Western States Petroleum Association (WSPA) — spent more than \$1 million. Most oil and gas companies in the state are represented by either WSPA or CIPA.

More: [Capital & Main](#)

INDIANA

DeKalb County 'Pauses' New Solar Farms



DeKalb County Commissioners last week declared a 60-day moratorium on applications for new commercial solar farms in the county. The decision comes in response to reports that a private company is signing leases for a 1,600-acre solar farm.

County Attorney James McCanna said the

moratorium is “to give the county an opportunity to study” what should be included in an ordinance to regulate solar farms. It does not affect solar installations for residential use.

More: [The Butler Bulletin](#)

KENTUCKY

PSC Approves Columbia Gas Increase

The Public Service Commission last week approved Columbia Gas of Kentucky’s request for an increase in its natural gas prices.

The cost, effective June 1, will increase by 50 cents to \$4.9177 per Mcf.

More: [WSAZ](#)

PSC Sets Rooftop Solar Rate

The Public Service Commission last week set the net metering rate at a little more than 9.5 cents per kWh. The price is less than the one-to-one retail rate Kentucky Power customers previously received, but more than twice what Kentucky Power wanted to pay to solar generators.

The order, which set rates for customers in the eastern part of the state with Kentucky Power, took into account the costs and benefits that rooftop solar customers provide, including the avoided costs of carbon, distribution capacity and environmental compliance.

The state’s solar industry makes up fewer than 1% of the peak load capacity at any of the state’s power companies.

More: [WFPL](#)

MONTANA

Gianforte Vetoes Bill Raising Fees on EVs



Gov. **Greg Gianforte** last week vetoed a bill that would have significantly increased fees on electric vehicles. Gianforte said in his veto letter that he believed the fees were too high.

Light vehicle owners would have paid an additional \$195 annual fee, while a heavy truck owner would have paid up to \$375 annually, which would be almost double the fee of any other state.

More: [Independent Record](#)

NEW YORK

PSC Approves Indian Point Sale to Holtec



The Public Service Commission last week approved the sale of Entergy’s Indian Point nuclear power facility to Holtec International. The approval comes with a handful of benchmarks Holtec must meet, including keeping a minimum of \$400 million in a trust for 10 years to ensure the shutdown and remediation of the site are finished.

The PSC approved a negotiated agreement that involved the two companies, the state, Westchester County and local governments, the Public Utility Law Project, and Riverkeeper, Gov. Andrew Cuomo announced. An Indian Point Nuclear Decommissioning Oversight Board will also be formed.

More: [Rockland/Westchester Journal News](#)

OREGON

PUC Adopts Rules for Preemptive Blackouts

The Public Utility Commission last week adopted temporary rules governing preemptive blackouts for the upcoming wildfire season, as well as new requirements for quicker and more detailed reporting when equipment is implicated or impacted by fires.

The rules immediately apply to Portland General Electric, PacifiCorp and Idaho Power and would bring the state up to speed with regulations governing public safety power shutoffs in California. They lay out requirements for utilities related to public education, notifications to public safety agencies and customers, as well as after-action reporting requirements. Utilities would retain the ultimate responsibility for the decision to pull the plug, but the rules require them to formalize the protocols they use to make the decision.

More: [The Oregonian](#)

TENNESSEE

TVA, RWE to Build Solar Farm

The Tennessee Valley Authority announced last week that its partnering with RWE Renewables to build a \$140 million solar farm in Shelby County.

TVA Spokesman Scott Fiedler said the 150-MW site will be used to power a Facebook data center in Gallatin. Facebook will use

140 MW, while the remaining 10 MW can be used on TVA’s system.

Once approved by environmental reviews, the project is expected to be completed by 2023.

More: [Local 24 Memphis](#)

VIRGINIA

SCC OKs Appalachian Power Rate Increase

The State Corporation Commission last week approved an Appalachian Power request to raise rates to cover transmission costs for the electricity it delivers to about 500,000 customers in the state.

Effective July 1, the average residential customer will see an increase of about \$11 in their monthly bill.

The company said the request was made because of a 50% increase since 2018 to the service charge the utility pays to PJM. The increase is one of several rate adjustment clauses, or riders, that Appalachian is asking the SCC to approve this year.

More: [The Roanoke Times](#)

WASHINGTON

Utilities Can Start Disconnections at the End of July

The Utilities and Transportation Commission last week adopted a resolution authorizing electricity and gas utility disconnections beginning July 31.

The first disconnection notices could be sent out as early as June.

More: [King 5](#)

WISCONSIN

PSC Approves Solar Farm

The Public Service Commission last week voted unanimously to approve Alliant Energy’s 150-MW Onion River solar project in Sheboygan County.

The 1,400-acre farm was protested by locals based on the use of crop land, potential loss of property values and the process through which private developers secure leases before seeking regulatory approval, however the PSC dismissed the objections.

The PSC has approved eight solar farms with a collective capacity of nearly 1,400 MW and a footprint of about 10,700 acres.

More: [Wisconsin State Journal](#)

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