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YOUR EYES AND EARS ON THE ORGANIZED ELECTRIC MARKETS

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COVER: Senate Majority Leader Chuck Schumer (D-N.Y.) and Sen. Joe Manchin (D-W.Va.) | *U.S. Senate*

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FERC/Federal News

Schumer, Manchin Reach Climate Deal

Will be Attached to Prescription Drug Legislation in Reconciliation Package

By K Kaufman and Rich Heidorn Jr.

Senate Majority Leader Chuck Schumer (D-N.Y.) and Sen. Joe Manchin (D-W.Va.) announced Wednesday they had reached a *deal* on a climate package that Democrats will seek to enact this week on a party-line reconciliation vote.

President Biden signed on immediately, saying the $670 billion Inflation Reduction Act, as dubbed by Manchin, would provide tax credits to promote clean energy in addition to reducing the costs of health insurance and prescription drugs.

"This afternoon, I spoke with Sens. Schumer and Manchin and offered my support for the agreement they have reached on a bill to fight inflation and lower costs for American families," Biden said in a *statement*. "We will improve our energy security and tackle the climate crisis — by providing tax credits and investments for energy projects. This will create thousands of new jobs and help lower energy costs in the future."

"After many months of negotiations, we have finalized legislative text that will invest approximately $300 billion in deficit reduction and $369.75 billion in energy security and climate change programs over the next 10 years," Schumer and Manchin said in a joint statement. "The investments will be fully paid for by closing tax loopholes on wealthy individuals and corporations."

It is expected to be added to legislation to lower prescription drug prices and extend expiring health care subsidies. Senate Democrats hope to vote on the deal this week under budget reconciliation rules that would sidestep a Republican filibuster.

The announcement was a boost to weary Democrats, coming weeks after Manchin seemed to kill the last chance for climate legislation due to his alarm over inflation. Although it is far from the over $3 trillion in spending Democrats had sought earlier, its passage would give the party's candidates an accomplishment as they head into the midterm elections in November. (See *Biden: 'I Will not Back Down' on Climate Action*.)

Manchin said the plan "will advance a realistic energy and climate policy that lowers prices today and strategically invests in the long game."

Senate Majority Leader Chuck Schumer (D-N.Y.) and Sen. Joe Manchin (D-W.Va.) | *U.S. Senate*

"As the superpower of the world, it is vital we not undermine our superpower status by removing dependable and affordable fossil fuel energy before new technologies are ready to reliably carry the load," he said in a *statement*. "Rather than risking more inflation with trillions in new spending, this bill will cut the inflation taxes Americans are paying, lower the cost of health insurance and prescription drugs, and ensure our country invests in the energy security and climate change solutions we need to remain a global superpower through innovation rather than elimination."

The bill "ensures that the market will take the lead, rather than aspirational political agendas or unrealistic goals, in the energy transition that has been ongoing in our country," Manchin continued. And it "invests in the technologies needed for all fuel types — from hydrogen, nuclear, renewables, fossil fuels and energy storage — to be produced and used in the cleanest way possible. It is truly all of the above, which means this bill does not arbitrarily shut off our abundant fossil fuels. It invests heavily in technologies to help us reduce our domestic methane and carbon emissions and also helps decarbonize around the world as we displace dirtier products."

Reaction

"The entire clean energy industry just breathed an enormous sigh of relief," said Heather Zichal, CEO of the American Clean Power Association. "This is an 11th-hour reprieve for climate action and clean energy jobs.

"Congress now is inches away from passing a $369.75 billion investment in energy security and climate change programs over the next 10 years. … Passing this bill sends a message to the world that America is leading on climate and sends a message at home that we will create more great jobs for Americans in this industry."

Abigail Ross Hopper, CEO of the Solar Energy Industries Association, hailed the deal as "a major opportunity to relieve the inflation pinch on families and tackle the climate crisis" and called on Congress to "seal the deal and pass this legislation."

"With long-term incentives for clean energy deployment and manufacturing, the solar and storage industry is ready to create hundreds of thousands of new jobs and get to work building out the next era of American energy leadership," Hopper said.

Gregory Wetstone, CEO of the American Council on Renewable Energy, said he is "hopeful that the provisions in the budget reconciliation deal … will spur critical investments in renewable power, energy storage and advanced grid technologies."

"Legislation that finally moves the country beyond years of on-again, off-again renewable tax credits and establishes a long-term, full-value clean energy tax platform will help provide renewable companies with the stability they need to do business," Wetstone said. ■

FERC/Federal News

What's in the Inflation Reduction Act, Part 1

No Transmission ITC, but Key Incentives for Solar, Wind and Energy Efficiency

By K Kaufmann

The text of the *Inflation Reduction Act (IRA) of 2022* released by Senate Democrats on Thursday carries the same number (H.R. 5376) as the ill-fated Build Back Better Act passed by the House of Representatives last November, but its $670 billion falls far short of the original $2.2 trillion.

"Look, this bill is far from perfect. It's a compromise," President Biden said Thursday. "But it's often how progress is made: by compromises." He hailed the bill, rescued by Senate Majority Leader Chuck Schumer (D-N.Y.) through negotiations with Sen. Joe Manchin (D-W.Va.), as the strongest that could be passed right now to lower inflation and advance clean energy.

Energy industry leaders and advocates had already welcomed the IRA's $369.75 billion for clean energy on Wednesday, after which they started digging into the bill's 725 pages to parse out how that money is allocated and will be spent. (See *Schumer, Manchin Reach Climate Deal*.)

Reflecting Manchin's thinking on the U.S. energy transition, the bill leans toward a broad definition of clean energy technologies, encompassing solar and wind, as well as nuclear, green hydrogen and carbon capture.

For example, in its provisions on rebates for zero-emission vehicles, mentions of "qualified plug-in electric motors" have been changed to "clean vehicles," allowing fuel-cell vehicles to qualify for the incentives.

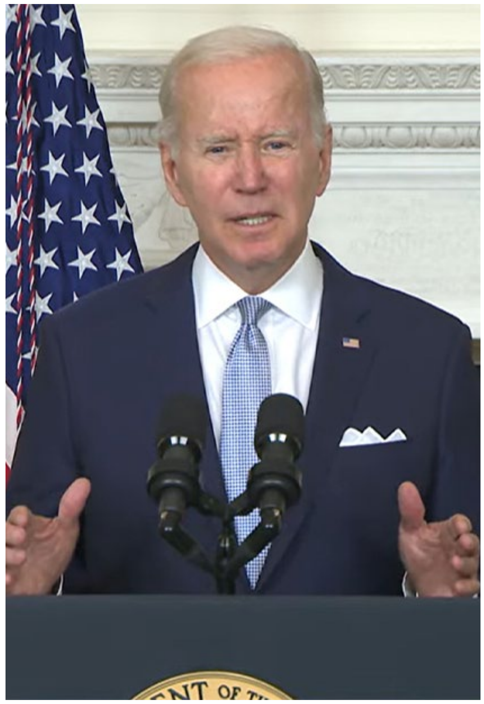
Similarly, investment and production tax credits for solar and wind are extended through the end of 2024, after which they become technology-neutral clean energy credits, according to an analysis from the American Council on Renewable Energy (ACORE).

Experts and advocates continued to comb through the bill on Thursday, nailing down details, but here are some key takeaways.

Energy Efficiency

Energy efficiency is a big winner. The top line numbers in the bill summary provided by Senate Democrats include $9 billion in rebates to help low-income consumers perform energy-efficient home retrofits and electrify home appliances.

The summary also mentions tax credits for



Speaking at the White House on Thursday, President Joe Biden urged Congress to pass the Inflation Reduction Act, with close to $370 in funding for a range of clean energy initiatives. | *The White House*

energy-efficient home improvements, which the bill spells out in more detail. For example, tax credits for installing energy-efficient windows or skylights top out at $600 per year, while credits for heat pumps and biomass stoves and boilers go up to $2,000.

Such "historic investments … will reduce energy waste, cut costs for homes and businesses and slash greenhouse gas emissions," said Steven Nadel, executive director of the American Council for an Energy Efficient Economy. "It would enable major efficiency and electrification upgrades in millions of homes and buildings to save energy and improve comfort and health, especially for low- and moderate-income households."

EVs

Manchin has often criticized EV incentives as rewarding the wealthy, who don't need rebates to afford new EVs. While the IRA does provide rebates for both new and used EVs, it also limits which cars and consumers will be eligible.

Rebates for new EVs, topping out at $7,500, will only be available for passenger vehicles that cost $55,000 or less, while the cap for electric SUVs, pickup trucks and vans will be $80,000. Income caps for prospective buyers range from $300,000 for couples filing joint tax returns to $150,000 for individuals.

The law also contains a $4,000 rebate for "previously owned" EVs, which it defines as vehicles "the model year of which is at least two years earlier than the calendar year in which the taxpayer acquires such vehicle" — so, no rebates for buying a year-old EV. The cap on sales price in this case is $25,000, and the rebate is only available on the first resale of the EV; that is, from its original owner.

The income caps for the used car rebates are $150,000 for couples and $75,000 for individuals.

Supply Chain and Transmission

The law also supports the buildout of a clean energy supply chain with new tax credits for advanced manufacturing of a range of solar, wind, storage and inverter components. The bill summary lists $10 billion for investment tax credits for "clean technology manufacturing facilities, like facilities that make electric vehicles, wind turbines and solar panels."

Christian Roselund, senior policy analyst at Clean Energy Associates, said the tax credits for manufacturing could have a big impact on the solar supply chain in the U.S. "One of the fundamental challenges to onshoring U.S. solar manufacturing has been cost and specifically [operating expense] costs," Roselund said. "It's been the cost of not just building factories … but the cost of running factories."

The bill provides a detailed list of tax credits for specific technologies. Solar cells, whether thin film or crystalline photovoltaic, will be able to claim credits of 4 cents/W, while panels will be eligible for credits of 7 cents. At present, the capacity for individual rooftop panels is about 350 to 375 W.

Industry advocates who lobbied for a transmission investment tax credit will be disappointed, according to ACORE, but it does provide:

- $2 billion in direct loans for construction and modification of transmission deemed in the national interest;
- $760 million in grants for permitting and siting and for economic development in communities with transmission builds; and
- $100 million for modeling and analysis. ■

FERC/Federal News

What's in the Inflation Reduction Act, Part 2

Boosts for CCS, Green Hydrogen, Nuclear; Penalties for Methane

By K Kaufmann

The passage of the Inflation Reduction Act of 2022 (IRA) (*H.R. 5376*) — formerly known as the Build Back Better Act — is once again hanging on the vote of a conservative Democrat, in this case Sen. Krysten Sinema (Ariz.) and not Sen. Joe Manchin (W.Va.).

Sinema was not part of the negotiations between Manchin and Senate Majority Leader Chuck Schumer (D-N.Y.) that resulted in a deal on the bill, announced Wednesday. (See *Schumer, Manchin Reach Climate Deal*.) She has in the past opposed one of the bill's key tax provision — the closing of so-called carried-interest loophole — which could cut into the lucrative income that asset managers earn from the large investments they manage.

Meanwhile, Manchin blitzed all the major Sunday talk shows to promote the bill. "This is a red, white and blue bill," not green, he told Jake Tapper on CNN's "State of the Union."

While Sinema was not directly involved in the drafting of the IRA, Manchin said many of its provisions were influenced by her. Manchin also justified the secret negotiations between himself and Schumer because "I didn't think it would come to fruition. I didn't want to have disappoint people again," he said.

"I think that basically when [Sinema] looks at the bill and sees the whole spectrum of what we're doing and all of the energy we're bringing and all the reduction of prices and fighting inflation … hopefully, she will be positive about it," he said.

As they await Sinema's decision and a review of the law by the Senate parliamentarian, clean energy companies and advocates are lining up with other Senate Democrats to push for passage of the bill, even if the Senate does not vote on it before its planned monthlong recess begins Aug. 8. (See related story, *What's in the Inflation Reduction Act, Part 1*.)

Here are some of the key stakeholders and the provisions they support.

The Inflation Reduction Act would allow the EPA to penalize oil and natural gas projects — like Consumer Energy's Saginaw Trail pipeline — for excess methane emissions, but it would also provide incentives to help such projects reduce their emissions. | *Consumers Energy*

Carbon Capture and 45Q

The carbon capture industry has long lobbied for expanding the 45Q tax credit to apply to more projects by raising incentive amounts and lowering capture threshold amounts, the minimum CO_2 facilities would have to capture to qualify for the credit.

The IRA would deliver on both counts. Under the bill, the incentive for carbon captured and sequestered in geologic formations, such as saline aquifers, would jump from $50/MT to $85/MT. The incentive for carbon utilization — for example, for either alternative fuels or enhanced oil recovery — would increase from $35/MT to $60/MT.

The incentives for direct air capture would go as high as $180/MT for permanently sequestered CO_2 and $130/MT for carbon utilization or enhanced oil recovery.

Reductions in capture thresholds are even more dramatic. To qualify for the credit currently, CCS equipment at an electric generating facility has to capture 500,000 MT/year; under the IRA, the amount would be slashed to 18,750 MT/year. The threshold for other industrial facilities falls from 100,000 MT/year to 12,500 MT/year, and the threshold for direct air capture projects is cut from 25,000 MT/year to 1,000 MT/year.

If passed, these "monumental enhancements" could "provide the most transformative and far-reaching policy support in the world for the economy-wide deployment of carbon-management technologies," said Madelyn Morrison, external affairs manager for the Carbon Capture Coalition. "Economy-wide commercial deployment of carbon-management technologies and infrastructure [are vital] if midcentury global temperature targets are to remain within reach."

Green Hydrogen

Hydrogen production got a major boost in

FERC/Federal News

the Infrastructure Investment and Jobs Act with its $8 billion for regional clean hydrogen hubs and $1 billion aimed at reducing the cost of the electrolysis process used to produce zero-emission hydrogen.

The IRA follows up on this with a substantial production credit of 60 cents/kg for clean hydrogen, which could rise to $3/kg for facilities that pay prevailing wages and have certified apprenticeship programs.

Hydrogen production worldwide is estimated at 120 million MT, only about 1.9% of which is green, according to the International Energy Agency.

The bill would also provide reduced tax credits — 12 to 20 cents/kg — for blue hydrogen, produced from natural gas with carbon capture, depending on the level of emissions associated with any specific facility. However, a plant already receiving 45Q tax credits for carbon capture would not be able to receive the hydrogen credits.

These tax credits could make green hydrogen cheaper to produce than gray hydrogen, produced from natural gas without carbon capture, said Mona Dajani, global co-head of the Energy and Infrastructure Projects Team at New York law firm Pillsbury Winthrop Shaw Pittman.

Facilities qualifying for the $3/kg credit "will make it cheaper to produce [clean] hydrogen here in the U.S. than anywhere else in the world, because of natural gas prices," she said.

Advanced Nuclear and HALEU

The IRA provides $700 million for building out a U.S. supply chain for high assay, low-enriched uranium (HALEU), which is the higher-density nuclear fuel needed for the advanced nuclear reactors being developed.

Unlike the uranium used for existing reactors in the U.S., HALEU has a higher level of the U-235 isotope, which allows it to produce more power per unit of volume, which in turn allows for smaller reactors.

According to Judi Greenwald, executive director of the Nuclear Innovation Alliance, $500 million of the IRA funds would go to supply chain development, with $100 million each for research and development, and for the transportation system needed to support the U.S. industry.

"It's a significant investment for a really important component for advanced reactors," Greenwald said. "A key condition for the success for advanced reactors is the availability of HALEU."

At present, the Department of Energy is the only producer of HALEU in the U.S., and it can only enrich a small amount for use in research. Lawmakers on both sides of the aisle are eager to develop a domestic supply chain because Russia is the only other major producer of HALEU.

The IRA would provide another boost for advanced nuclear in the technology-neutral energy tax credits that will replace renewable energy production tax credits beginning in 2025, specifically for facilities producing zero-carbon energy. For plants complying with prevailing wage and apprenticeship requirements, the credit would be 1.5 cents/kWh.

Once a facility is online, credits would be available for 10 years, which "will make a huge difference in helping to get these early reactors built," Greenwald said. "As you build them, you learn by doing, and then they get cheaper. This is the way we're going to really help to commercialize advanced nuclear."

Two advanced reactors, one in Wyoming and one in Washington state, being built with DOE funds are scheduled to be online by 2028.

Methane Emissions

The IRA would tackle methane emissions with a mix of incentives for mitigating emissions at wells, pipelines and other facilities, and penalties for emissions exceeding certain levels.

On the incentives side, the bill would give EPA $850 million through Sept. 30 2028, for "grants, rebates, contracts, loans and other activities" aimed at reducing methane emissions. The funds could be used for monitoring and reporting emissions, installing innovative emission-cutting equipment and plugging wells on nonfederal land.

An addition $700 million is allocated for similar activities targeted at "marginal conventional wells," those that are more expensive to run because of environmental issues or low levels of production.

The bill would also authorize EPA to "impose and collect" penalties at a range of oil and gas facilities — including on- and offshore production plants, pipelines and storage — that emit more than 25,000 MT of CO_2 per year. The thresholds for different kinds of oil and gas facilities vary, but the penalties are uniform, starting at $900/MT in 2024, $1,200/MT in 2025 and $1,500/MT in 2026 and beyond.

These provisions got a chilly reception from fossil fuel groups.

"While there are some improved provisions in the spending package … we oppose policies that increase taxes and discourage investment in America's oil and natural gas," said Amanda Eversole, chief advocacy officer of the American Petroleum Institute.

The American Gas Association tweeted out praise for the bill's support for hydrogen and renewable natural gas but was mum on the methane provisions.

OSW, Permitting, Clean Ports

The IRA would reverse the Trump administration's 10-year moratorium on development off the shores of Florida and the Carolinas. It also would begin a process for exploring the feasibility of offshore wind development in Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands and the Northern Mariana Islands.

To accelerate the permitting process, the bill allocates $125 million for DOE, $100 million for FERC and $150 million for the Department of the Interior "to provide for the hiring and training of personnel, the development of programmatic environmental documents, the procurement of technical or scientific services for environmental reviews, the development of environmental data or information systems, stakeholder and community engagement, and the purchase of new equipment for environmental analysis to facilitate timely and efficient environmental reviews."

The bill would also provide $400 million through 2031 to provide incentives for businesses serving communities with high levels of air pollution to replace heavy-duty diesel vehicles with zero-emission vehicles. Another $2.25 billion would be available for zero-emission equipment at U.S. ports. ■

FERC/Federal News

Industry Groups Explain IIJA Opportunities, Policy Gaps at EESI Forum

By K Kaufmann

The Infrastructure Investment and Jobs Act (IIJA) provides $753 million to help hydropower dams improve their efficiency, safety and resilience, as well as providing production incentives for existing dams to add hydropower to their operation, according to a *fact sheet* from the National Hydropower Association (NHA).

But what it doesn't do, said NHA CEO Malcolm Woolf, is address a more pressing issue in the industry: reform of the multiyear, massively expensive federal relicensing process that is driving some dams to stop producing power and give up their licenses.

"The number of voluntary license-surrenders has been increasing," Woolf told a live and virtual audience at the Environmental and Energy Studies Institute (EESI) Congressional Renewable Energy and Energy Efficiency Policy Forum on Capitol Hill on July 25. "We had 41 facilities give [licenses] up in the 2010s. We've had another 17 in just the last two years … which becomes really dangerous when you realize that half the nonfederal fleet is up for relicensing by 2035."

Woolf was one of eight energy industry officials speaking at the live event, which focused on the opportunities created by the IIJA, the challenges of the law's implementation and the policy gaps that still need congressional action, including hydropower relicensing.

For Curt Rich, CEO of the North American Insulation Manufacturers Association, the law's $225 million to help update and implement more energy-efficient building codes represents "an unheard-of level of investment."

Curt Rich, North American Insulation Manufacturers Association | *EESI*

Malcolm Woolf, NHA | *EESI*

"The Department of Energy building code program kind of walks along at about $5 [million] to $10 million a year," Rich said. With the increased funding, and "as you train the workforce to enforce updated codes and implement updated codes, it in turn is really going to catalyze energy-efficient construction and just support all of the other initiatives that are underway across building sectors to drive energy efficiency."

Rich also sees IIJA money going to states for energy-efficiency incentives as a key driver for the industry, especially to motivate commercial or multifamily building owners to move ahead with upgrades.

"It's really hard to get people to just act in their own interest," he said. "The money for efficiency programs that will be flowing through residential, commercial and industrial buildings, principally through the states, that will provide decent incentives for building owners to act."

Bill Parsons, vice president for federal and state affairs at the American Clean Power Association, spoke about the IIJA provisions giving FERC backstop siting authority to override state opposition to interstate transmission projects as a vital step forward.

Increasing renewables on the grid will make a major buildout of the transmission grid essential, Parsons said, but he also argued that intermittent renewables should not be automatically viewed as "unreliable."

Nationally, renewables "were about 14% of the generation mix last year," he said. But "at times, in certain areas, we have been 80%. You didn't hear about it because there was no reliability issue."

Parsons also raised concerns about the IIJA's Made in America preference on projects receiving federal dollars: for example, funds for building out the electric vehicle and lithium supply chains. While a domestic energy storage supply chain is "critically important," he said, it is "unrealistic" to require a 100% U.S. supply chain on projects receiving IIJA funds.

"We don't hold many other industries to a standard of 100% sourcing domestically," he said.

Pitching to the audience of congressional staffers at the event, Parsons additionally pointed to a crew-mandate bill passed in the House of Representatives last month as part of the defense authorization bill, which would require crews on U.S. ships working on offshore wind or oil projects to be American citizens or permanent residents, or from the same country as the vessel's flag.

"It's literally going to freeze the first 19 offshore wind projects in [their] tracks," he said. "We need to train people to crew [these ships], but we need to be realistic about time frames as it relates to mandates and how these vessels are crewed if we don't want to freeze the offshore wind industry before it has a chance to begin."

The Digital Energy Workforce

The IIJA provided $62 billion to the Department of Energy, which Kelly Speakes-Backman, principal deputy assistant secretary for the department's Office of Energy Efficiency and Renewable Energy, said is "the biggest investment to the department since our founding. It stands up 60 entirely new programs, and it expands 12 existing ones."

In the nine months since President Biden signed the bill into law, $13 billion in funding has been made available, and about half of the 60 new programs have issued requests for information, drawing thousands of pages of industry and public input, she said.

"That's one thing you'll see about the way we do our business these days: really making sure that it is locally placed information to draw from to build out our program," Speakes-Backman said.

Joy Ditto, CEO of the American Public Power Association, also talked about the importance of community engagement in making sure the IIJA is implemented to benefit smaller communities. While the law's many programs and funding announcements are a huge opportunity for the nation's 2,000 publicly owned utilities, Ditto said, many of her members, especially smaller utilities, have challenges just applying for the money, either because of limited staff and expertise, or they are not sure if they will qualify for specific programs.

"A lot of our focus now is just enabling our members to interface with the federal government, giving them resources to access funds as they become available," Ditto said.

The close connection between workforce development and ensuring the success of IIJA projects was another key theme at the forum. As of 2021, the U.S. energy workforce stood around 7.8 million, with 40% of that total employed in "net-zero-emissions-aligned" jobs, according to DOE's recently released *U.S. Energy and Employment Report*.

But Jeannie Salo, North America vice president for government relations at Schneider Electric, was adamant that those workers and others coming into the energy sector need to be trained with digital jobs skills.

"We often talk about the digital economy," Salo said. "There is no other economy; it's just the digital economy, and digitization is at the core of everything we need to do to be more efficient, to transform our infrastructure."

"The barriers are training that's tied to real jobs and [the] lack of awareness of clean energy careers at all in secondary schools," she said. Schneider is upskilling its workers at a "smart factory" in Kentucky, she said, which is helping the company attract and retain workers.

Jason Walsh — executive director of the BlueGreen Alliance, a coalition of labor unions and environmental groups — agreed, saying a well trained and credentialed workforce "is going to matter more than ever."

Bill Parsons, ACP | *EESI*

"The climate crisis is so urgent, we've only got one shot to do this right," Walsh said. "And so verifiable, credentialed skills for the workers that do that work are going to be absolutely fundamental because they're not going to get another go."

At the same time, Walsh said the clean energy transition will require investment and workforce development levels well beyond the IIJA.

"The clean energy, energy-efficiency economy is inherently more labor intensive than an economy based on fossil fuels and waste," Walsh said. "Manufacturing and installing sources of our fuel rather than burning them — that creates jobs. In the building sector, energy efficiency turns the wasted energy into work, so that goes from no jobs to lots of jobs." ■

FERC/Federal News

Need for Nuclear, Grid Reliability Top Fed Officials' Concerns

Officials Say Renewables not Enough to Meet Demand; Microgrids Needed for Defense

By John Funk

Officials from the departments of Energy and Defense spoke at the Congressional Renewable Energy and Energy Efficiency Policy Forum at the Dirksen Senate Office Building in D.C. on July 25 to express their concerns about the growing threats to the grid.

Andy Bochman, senior grid strategist for national and homeland security at the Idaho National Laboratory, acknowledged "the imperative for the United States to move as rapidly as possible from carbon-emitting fossil fuels."

Adding that "one can't help but imagine a grid with many more wind turbines and solar panels that are currently deployed," he said additional renewables will not be enough.

"We're going to need to add much more power to the grid in the near- and mid-term future than renewables alone can provide. There are also some serious grid stability issues to address like voltage support and other ancillary services, which become much more challenging with high penetration of variable generation sources," he explained.

"We've been closing coal plants without fully accounting for the lost baseload generation they provide. Renewables are necessary and super helpful in reducing emissions, but with few exceptions, they're not ready to play that role, at least not on their own. Gas plants do provide baseload, but they must also be [eventually] phased out."

Bochman suggested the solution lies in the further development and installation of small modular nuclear reactors, one of which the Idaho lab has assisted in developing. The new plants would be built at the site of former coal plants in order to take advantage of existing transmission lines.

"It's maybe a tough sell for some, but overall, the public's attitude towards new nuclear energy is improving swiftly as climate concerns begin to eclipse fears of nuclear energy, and a recent Pew study confirms this.

"There are still plenty of well founded objections to overcome, but small modular reactors and other advanced nuclear designs do meaningfully address most of them," Bochman argued, adding that the Idaho lab has developed new cybersecurity technology incorporated into the software control system of a small nuclear plant.

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Military Microgrids

Joseph Bryan, DOD's chief sustainability officer and senior adviser for climate, said that the Pentagon has been concerned about the reliability of the commercial power system as it affects the operations of its bases throughout the country.

"Our military installations ... are in communities around the country, and they rely almost exclusively on the commercial electric grid for power. And what we all know in this room is that the commercial electric grid is at risk from a couple of different threats. One [is] climate-induced severe weather, from hurricanes to extreme heat, which we're experiencing in real time [from] wildfires out west.

"We also have a risk from cyberattack. We know that critical infrastructure around the world and even in the United States — think about things like the Colonial Pipeline attack last year — that our adversaries are interested in targeting our critical infrastructure," he said.

That has led DOD to embrace energy efficiency and build its own distributed generation "to take our facilities off the grid and relieve pressure on the commercial grid," he added.

To do this, the department has embraced renewable generation, batteries and efficiency "to preserve the [commercial] grid and preserve our own mission by being more efficient and [using] distributed generation."

"A solar storage [facility] ... attached to critical missions can ensure that those functions stay up and running, even if you lose the commercial grid. So, the grid goes down, and you have an efficient operation that has battery backup and PV or other renewable energy assets that do not require logistic support or don't require fuel deliveries to an installation in times of crisis; that can be important." ■

FERC/Federal News

FERC NOPRs Would Require 'Candor,' Improved Accounting for Renewables

By Rich Heidorn Jr.

FERC issued two rulemakings Thursday that would impose a "duty of candor" in communications and set new accounting regulations for renewables.

The Notice of Proposed Rulemaking that would amend the Uniform System of Accounts (USofA) to create new accounts for non-hydro renewables was approved unanimously, while the NOPR to address the current "patchwork" of requirements regarding truthful communications (*RM22-20*) moved forward on a 4-1 vote, with Commissioner James Danly dissenting.

The latter would require truthful communications with the commission, RTOs/ISOs, their market monitors, NERC and its regional entities, and other companies under FERC jurisdiction in the electric, natural gas and oil industries and markets, including transmission or transportation providers.

Gabe Sterling, FERC Office of Enforcement | *FERC*

"In the past, different duties of candor have been adopted by the commission governing specific types of communications from certain organizations and persons and related to discrete areas of the commission's jurisdiction," Gabe Sterling, of the Office of Enforcement, said during a *presentation* at FERC's open meeting. "This existing patchwork of requirements is insufficient to encompass all of the situations in which the commission must be assured that it is receiving accurate communications that are necessary for it to adequately conduct its regulatory oversight."

The proposal, intended to capture communications that have not been explicitly included in existing requirements, is based on 18 C.F.R. section 35.41(b), approved nearly 20 years ago to govern communications by electricity sellers with market-based rate authority.

It would require covered entities to submit "accurate and factual information and not submit false or misleading information or omit material information."

"We cannot do our job if we're getting bad information … which arguably, we've gotten at times," said Chair Richard Glick.

FERC proposed the creation of a single accounting class for energy storage projects like AES' Lawai Solar Project in Kauai, Hawaii, to end the need for reallocating costs between production, transmission and distribution accounts based on usage of the asset. | *National Renewable Energy Laboratory*

"It doesn't really seem like a lot to say you have to tell the truth when you're coming to the commission," he added. "What blows my mind is that we actually don't require that in many instances."

As with section 35.41(b), entities would not be accused of violations if they can demonstrate due diligence to prevent false statements.

That wasn't enough protection for Danly, however, who said the rulemaking was too expansive and vague.

He said the rule lacks the "ordinary safe harbor provisions" to protect First Amendment rights and that the commission failed to define "due diligence" or potential penalties for violations.

"The number of people that are covered by this is huge," he said. "I am worried that people are going to be reticent to comment [negatively on the NOPR] because [it] would be construed as some kind of a declaration that they don't believe that truth is necessary."

Commissioner Mark Christie — a Republican, like Danly — said his colleague's concerns were misplaced.

"I'm not worried at all about anybody's reluctance to comment," he quipped. "If people are queasy about commenting about the truth, all they've got to do is just hire their lawyer to do it."

Commissioner Allison Clements also dismissed Danly's criticism, saying "we are not going down the extreme path that" he suggested.

"I take seriously what Commissioner Danly said," Commissioner Willie Phillips said. "We have to right-size it. I think the team has thought about that in the questions that they have proposed, and I too look forward to the comments."

Those comments will be due 60 days after publication in the *Federal Register*.

In his dissent, Danly said the proposed rule could result in legal action against a landowner angry about construction noise who "says something like 'I've never heard such a racket,' but in fact she had heard such a racket at a Poison concert in 1988? Absurd? Yes. Duty of candor violation? Also, yes."

In his press conference after the meeting, Glick said he became concerned about the issue when it came up in a 2019 order regarding connected entities (Order 860, *RM16-17*). "I

FERC/Federal News

was just appalled that we didn't move forward with [the duty of candor] part of the order; that we couldn't even require people to tell the truth," he said. (See *FERC Reduces MBRA Data Requirements*.)

He conceded that "there's a lot of detail that has to be worked out."

"We're asking for comments; we're looking forward to reading those comments and making changes based on those comments. But at least let's try to move forward with something," he said.

Anyone found violating the rule could be subject to Enforcement action. But the NOPR said "it is not the commission's intention to investigate or penalize all potential violations of the proposed regulation. As a general matter, we do not intend to penalize inadvertent errors, especially those of limited scope and impact."

Renewable Accounting Rule

The second rulemaking (*RM21-11*) would be the latest in a number of revisions that the USofA has received in response to changing technology, laws and market conditions since its creation by FERC's predecessor, the Federal Power Commission.

The NOPR, which resulted from a January 2021 Notice of Inquiry, proposes four changes:

- the creation of dedicated production accounts for wind, solar, and other non-hydro renewable assets. Because the current USofA does not have unique accounts for non-hydro renewables, utilities characterize them as "other production." The new categories will result in more uniform and transparent reporting, FERC said.
- the creation of a single class for energy storage accounts to end the need for utilities to reallocate costs between production, transmission and distribution accounts based on usage of the assets. The commission said the current practices are impractical and a significant burden on the filing entities.
- the codification of the accounting treatment of renewable energy credits (RECs) and similar financial instruments. It would result in the creation of dedicated inventory accounts for RECs, consistent with previous commission guidance on emissions allowances.
- the creation of dedicated accounts for computer hardware, software and communications equipment. The NOPR seeks comment on whether FERC should also create such accounts for natural gas pipelines, oil pipelines and service companies.

Kimberly Horner, of the Office of Enforcement, said the new accounts for renewables "would provide utilities with the ability to report in a more transparent manner to better inform the ratemaking process and also inform the public of their investments in these technologies."


Kimberly Horner, FERC Office of Enforcement | *FERC*

She said the current handling of energy storage assets is burdensome because the cost of the same asset must be reallocated among the different accounts based on their usage, which frequently changes. "The new proposed accounting would instead propose one account, and it would reduce the burden by allowing for the cost of the same asset to be recorded in one account, rather than continuously reallocated," she said.

In addition to the proposed changes, the NOPR seeks comment on whether FERC's chief accountant should issue guidance on accounting for hydrogen applicable to public utilities and licensees and natural gas companies.

Comments are due 45 days after publication in the Federal Register. ■

Michael Brooks contributed to this article.

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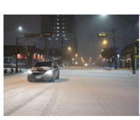
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FERC Proposes Allowing RTOs to Share Credit Info

CAISO, ISO-NE, NYISO, SPP Pushed to Enact Collateral Requirements

By Michael Brooks

WASHINGTON — FERC on Thursday proposed allowing RTOs and ISOs to share credit-related information about market participants, fulfilling one of the main requests the grid operators made at a technical conference last year (*RM22-13*).

The Notice of Proposed Rulemaking, approved unanimously at the commission's monthly open meeting, would require the grid operators to revise their tariffs to eliminate confidentiality provisions that prevent them from sharing such information. They would also be allowed to use received information for the same purposes for which they use information from their own market participants.

Allowing this information sharing "could improve the accuracy of credit exposure and risk assessments across multiple electric power markets," the commission said in a statement. "It also could enable market operators to respond to credit events more quickly and effectively, thereby minimizing the overall risks of unexpected defaults by market participants."

At a technical conference in February 2021, RTO credit risk officials told FERC that although they meet monthly with their counterparts to share best practices, confidentiality rules prevent them from sharing market participant-specific information, even if the participant may pose a credit risk in multiple markets. (See *RTOs: Let Us Share Trading Info*.)

The commission agreed this is a problem.

"Negative credit events affecting a market participant's credit standing in one market may impact its credit standing in other markets," FERC said in its proposal. "An RTO/ISO that cannot obtain market participants' credit-related information arising from their activities in other organized wholesale electric markets may not be able to fully protect its organized wholesale electric market from mutualized default risk."

The commission also specified that information sharing must not be predicated on a market participant's prior notice or consent. "A market participant facing financial difficulty would have little incentive to consent to credit-related information sharing," it said.

Comments on the NOPR are due 60 days after publication in the *Federal Register*.

Collateral Requirements

The technical conference stemmed from PJM's debacle with GreenHat Energy, which FERC accused of defrauding the RTO by acquiring a massive 890 million-MWh portfolio of financial transmission rights with only about $550,000 in collateral. When it defaulted on the portfolio in 2018, its three principals made off with $13 million and left PJM members holding a $179 million bag, FERC said in a January *lawsuit* after the company failed to pay $242 million in fines. (See *FERC Levies $242M in Fines on GreenHat, Owners*.)

FERC cited GreenHat in a second unanimous order Thursday requiring CAISO, ISO-NE, NYISO and SPP to show cause as to why they shouldn't revise their tariffs to include provisions ensuring FTR market participants maintain sufficient collateral (*EL22-62, et al.*).

The commission said that after considering remarks at the technical conference and comments in that docket, it believes "that two specific practices may be particularly critical to effectively managing credit risk for FTRs": a mark-to-auction mechanism and a volumetric minimum collateral requirement. Three of the grid operators cited in FERC's order already implement one practice, but not the other; CAISO implements neither.

The first practice requires that participants maintain sufficient collateral to support the change in value of the FTR positions they hold based on the most recent auction prices for those FTRs. The commission noted that GreenHat's losing positions went unnoticed by PJM because the RTO used historical FTR values. Since the company's default, PJM — along with ISO-NE, MISO and NYISO — revised their tariffs to implement mark-to-auction mechanisms.

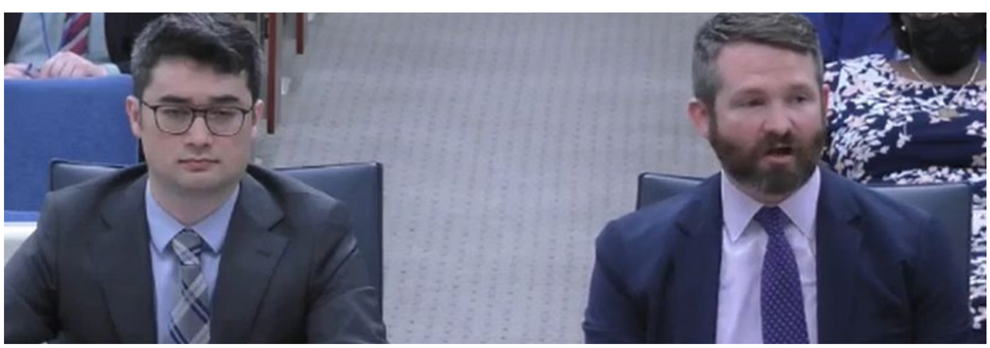
"While CAISO has limited opportunities to update the collateral requirements of [congestion revenue rights], it does not have a robust mark-to-auction FTR collateral requirement similar to what has been adopted recently in other organized wholesale electric markets," FERC said. "SPP's current TCR [transmission congestion rights] collateral requirements also do not include updating of collateral requirements based on the current value of a market participant's TCR portfolio for all TCR positions."

In addition, a minimum collateral requirement based on volume ensures that a market participant is required to cover potential defaults even when it has offsetting positions, FERC said.

"In some RTOs/ISOs, market participants are allowed to net FTRs with negative collateral requirements against FTRs with positive collateral requirements within the market participant's portfolio, which can lead to large, risky FTR portfolios that require little or no collateral," FERC said. "This can be a problem if future congestion is significantly different than historical congestion because the collateral held by the RTO/ISO may be insufficient for a portfolio's risk."

MISO, PJM and SPP all instituted volumetric minimum requirements after GreenHat's default. "While [CAISO, ISO-NE and NYISO] establish minimum capitalization and participation requirements, they appear to lack any volumetric minimum collateral requirement that scales with a participant's FTR portfolio to ensure participants cannot minimize their required collateral without correspondingly reducing their risk," FERC said.

CAISO, ISO-NE, NYISO and SPP must file their responses within 90 days. ■



FERC staffers James Burchill, OEPI, and Patrick Metz, OGC, explained the orders in a presentation to commissioners on July 28. | *FERC*

CAISO/West News

Study Tallies Economy-wide Benefits of Western RTO

By Robert Mullin

Adoption of an RTO could yield significant economic benefits for the West, adding billions to the region's annual gross product and generating tens of thousands of new jobs, according to a new report.

Released last week by Advanced Energy Economy (AEE), the *Western RTO Economic Impact Study* was prepared by Energy Strategies and Peterson & Associates. It draws on analysis Energy Strategies performed for a state-led study published last year to quantify the electricity system benefits of a Western RTO.

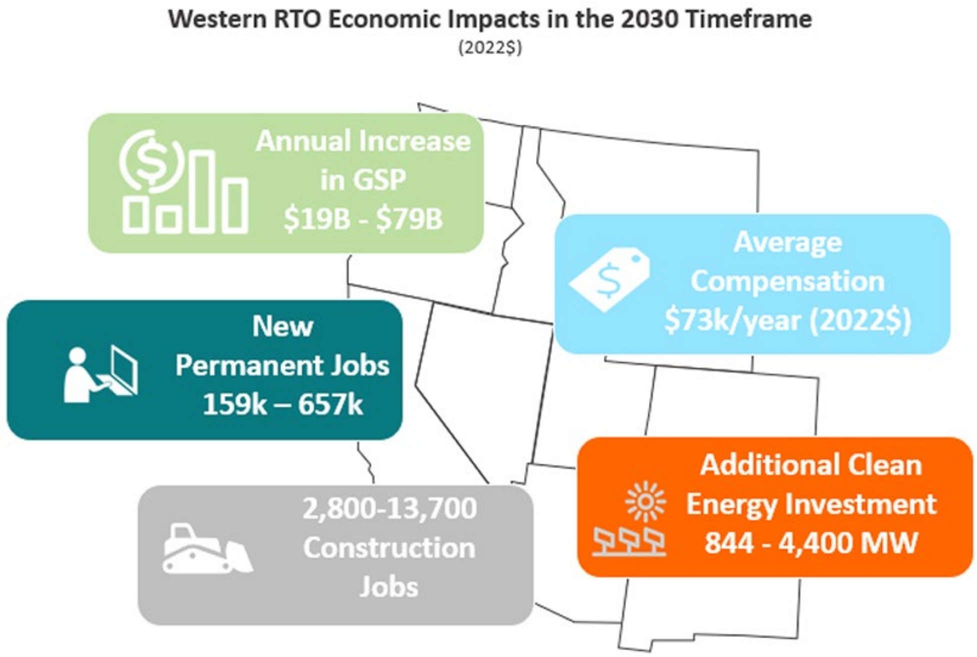
Speaking on a call July 26 to discuss the study, Energy Strategies' Caitlin Liotiris said that while previous RTO-related studies have focused on the savings to the Western electricity system itself, there has not been much research on how those savings "might flow into the broader economy and can create ripple effects, creating additional jobs and attracting more businesses from more competitive electricity prices."

"And this study really aims to fill that gap, looking at high-level impacts to the Western region as a whole," Liotiris said, adding that state-by-state summaries will be coming out in the future.

Last year's state-led study, which was a collaboration among energy offices from Colorado, Idaho, Montana and Utah, found that an RTO covering the entire U.S. portion of the Western Interconnection could save the region $2 billion in annual electricity costs by 2030. (See *Study Shows RTO Could Save West $2B Yearly by 2030*.)

The AEE economic impact study focuses on a similar time frame, finding that an 11-state RTO could generate $18.8 billion to more than $79.2 billion in additional gross regional product (GRP) by 2030, equivalent to 0.4 to 1.6% of the region's current GRP. The study also found that an RTO could help create between 159,000 and 657,000 permanent jobs at an average total compensation (including benefits) of $73,000 a year.

"The analysis shows that the growth from lower electricity prices may be substantial, ranging from about 51,000 to 230,000 jobs, and would affect industries crucial to the West's long-term economic prospects," the study said. "Notably, things like data center expansion or new data center location in the West, which one would expect to be affected by lower electricity costs afforded by a Western RTO, shows up as a substantially affected industry. Manufacturing and construction also show up as industries likely to be impacted, on aggregate, across the West."



| AEE

Other financial benefits include incremental tax contributions ranging from $619 million to $2.4 billion a year and 2,800 to 13,700 temporary construction jobs in 2030 from the development of clean energy resources needed to meet additional corporate demand.

Tim Nadreau, assistant research professor at Washington State University and one of the study's authors, said that the economy-wide benefits from a Western RTO would likely fall in the lower end of the study's estimates, with the higher end "certainly feasible if market conditions improve."

Nadreau said the study leaned on three separate analyses, with the first considering the increased purchasing power for consumers stemming from the $2 billion in electricity savings estimated in last year's state-led study, and how that additional money will ripple through the larger economy.

The second analysis focused on the potential for increased business activity in the West resulting from lower electricity rates, assuming improved recruitment of businesses into region and increased business formation and expansion.

The third leg of the study's analysis looked at increased investment in clean energy and "backstop technologies" to largely meet corporate demand, and to comply with some state and local initiatives.

"The range of results is really a reflection of the uncertainty in the market response for businesses and firms," Nadreau said. "So business relocation, business growth and business formation — there are a lot of factors that go into that, and uncertainty in the markets contributes to those decisions. But the lower energy costs are a driving factor in those business decisions."

Corporate Buildout

Rising corporate demand for clean energy would contribute significantly to the economy-wide benefits of an RTO, according to the study.

"On one hand, many states in the West are already on a path to significant clean energy penetration (with six targeting 100% clean electricity in the coming decades), indicating there is likely to be significant clean energy development across the West regardless of the region's wholesale electricity market status," the study states. "On the other hand, corporate buyers tend to drive further renewable energy

CAISO/West News

investments in areas with RTOs, and previous studies have found that in order to achieve these state clean energy goals, more organized wholesale electricity markets (which provide needed system flexibility) may be required."

Citing data from the Clean Energy Buyers Alliance, the study notes that the volume of clean energy capacity associated with corporate buyers rose from 3.22 GW in 2015 to more than 11 GW in 2021.

In calculating the low-end estimates in the AEE study, the authors assumed that corporate deals nationwide would fall to 50% of 2020 levels, equating to 5,250 MW of deals per year from 2025 to 2035, while high-end estimates assumed a continuation of the 2020 growth rate of 10,500 MW annually.

CEBA data show that 82% of corporate clean energy deals in 2020 occurred in organized electricity markets, which served only about two-thirds of the nation's demand, meaning those markets contained 25% more corporate deals than their straight-load ratio, "suggesting that organized wholesale markets facilitate clean energy development used to meet corporate sustainability goals," the study said.

Applying that 25% above-straight-load ratio to an organized Western market, the study found that from 2025 to 2035, the region would see an additional 1,888 MW of clean energy development on the low end of estimates and 9,409 MW on the high end.

"The West is home to some of the best wind resources in the country, though many wind resources are currently far from load and their development may be hampered by the additive transmission costs to bring them to a large load. However, the transmission cost structures would be modified under an RTO, making remote resources, such as wind, more attractive and more likely to be developed under an RTO framework," the study said.

The study also noted that the Southwest is home to "high-quality" solar resources, and the authors assumed that solar contracted to corporate buyers would include a battery storage component.

Time is of the Essence

"I think one of the highlights of this study really shows how if we can move more rapidly to an RTO, there's huge savings for customers, but there's also a huge upside for new investment, new jobs and how that ripples out through the rest of the economy. And that was really how we tried to approach this debate in Colorado," state Sen. Chris Hansen (D) said July 26. Hansen sponsored a bill (SB 72) passed by Colorado lawmakers last year requiring utilities with transmission assets in the state to join an RTO by 2030.

"I guess my only concern [is that] 2030 seems like a long time because at my age, I'm not even buying green bananas right now, so we need to get this done," said Colorado Sen. Don Coram (R), another SB 72 sponsor.

"I'm very concerned about the Colorado River. We've got 40 million people dependent on the Colorado River; power production could be at risk. And without this grid set up to relieve that gap, we're treading on thin ice here. So I think it's very important that we as a region get this organized," Coram said.

"The study confirms what we've known in Nevada for some time: that joining a Western RTO will save consumers on energy costs, create jobs and allow for more transmission of Nevada's abundant clean energy resources," said David Bobzien, director of the Nevada Governor's Office of Energy.

Bobzien said the expanded transmission resulting from an RTO will foster increased sharing and trading of renewable energy, helping to reduce electricity prices and help Nevada meet its clean energy and carbon-reduction goals.

"We'll also be able to offer companies with sustainability targets the opportunity for clean energy procurement as well, as more Western states and utilities pursue clean energy policies and climate goals," he said. ■

California Sees First V2G Reliability Project

By Hudson Sangree

Small fleets of electric school buses near San Diego will be part of the first vehicle-to-grid (V2G) project to participate in a program intended to boost reliability during electric emergencies, such as the rolling blackouts that hit California in August 2020.

The Lion Electric buses in the Cajon Valley Union School District will be aggregated with others in the nearby Ramona Unified School District to form a participating resource under the Emergency Load Reduction Program (ELRP), *started* last year by the California Public Utilities Commission.

The state's three large investor-owned utilities — Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) — manage the five-year ELRP pilot, which CAISO can call on as a last resort when shortfalls are imminent, as they were during electric emergencies the past two summers.

In the Cajon Valley school bus yard, SDG&E installed six 60-kW, bidirectional DC fast chargers able to participate in the ELRP, which pays business customers $2/kWh to export energy or reduce demand in grid emergencies. The first set of bidirectional chargers went live on SDG&E's grid last month.

A V2G project participating in the ELRP is a first, said Jacqueline Piero, vice president of policy for Nuvve, a V2G technology developer that is partnering with the school districts and SDG&E in the effort.

"It's a great demonstration of how electric vehicles don't need to just be providing emergency backup," Piero said. "They can actually be substantively contributing to the reliability of the grid in an aggregated manner."

Nuvve previously worked with the Torrance Unified School District near Los Angeles on a demonstration V2G bus project, but it was connected to school district buildings and not to SCE's grid. A similar project at the University of California, San Diego, supplied electricity to the university's microgrid but did not connect to SDG&E's system.

Bidirectional EV charging, allowing vehicle fleets to connect to the grid, was not permitted prior to September 2020, when the CPUC changed its interconnection rules, letting fully integrated V2G projects move forward.

"We're really just now being able to take advantage of the updates in the interconnection rules," Piero said. "So even though we did a project in Torrance where we were doing real work with their demand charges, we were not interconnected, and we were not allowed to export."

The company was part of a V2G project in Denmark that showed connected vehicles could provide frequency response and other grid support services. It was one of dozens of V2G demonstration and pilot projects *started* in Europe, the U.S. and Asia over the past 10 years.

California is home to more than 1 million EVs and is under a mandate to sell only emissions-free passenger vehicles, primarily EVs, starting in 2035.

Earlier this year the CPUC *signed* onto the U.S. Department of Energy's Vehicle to Everything (V2X) agreement, a "collaboration for accelerating development and commercialization of vehicle-to-everything technologies, which include vehicle-to-grid, vehicle-to-building and vehicle-to-load capabilities, by validating the technologies and demonstrating the commercial viability of such technologies."

The effort is intended to bring together cutting-edge resources from the department's National Laboratories, state and local governments and utilities to "evaluate technical and economic feasibility as we integrate bidirectional charging into energy infrastructure," DOE said in a news release.

One of the electric school buses to be used in the V2G project was on display at the NARUC Summer Policy Summit in San Diego on July 18. | *© RTO Insider LLC*

SDG&E was a signatory to the V2X agreement, along with PG&E, SCE and the California Energy Commission.

"Electric fleets represent a vast untapped energy storage resource and hold immense potential to benefit our customers and community, not just environmentally but also financially and economically," SDG&E Vice President of Energy Innovation Miguel Romero said in a joint news release with the Cajon Valley school district and Nuvve.

PG&E and Ford said in March they would test the V2G potential of the automaker's F-150 Lightning electric pickup trucks. Bus and commercial truck fleets with predictable schedules and more capacity are optimal V2G candidates.

"School buses are an excellent use case for V2G," Nuvve CEO Gregory Poilasne said in the news release. "They hold larger batteries than standard vehicles and can spend peak solar hours parked and plugged into bidirectional chargers. Nuvve's technology enables the grid to draw energy from a bus when it is needed most, yet still ensuring the bus has enough stored power to operate when needed." ■

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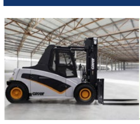

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ERCOT Technical Advisory Committee Briefs

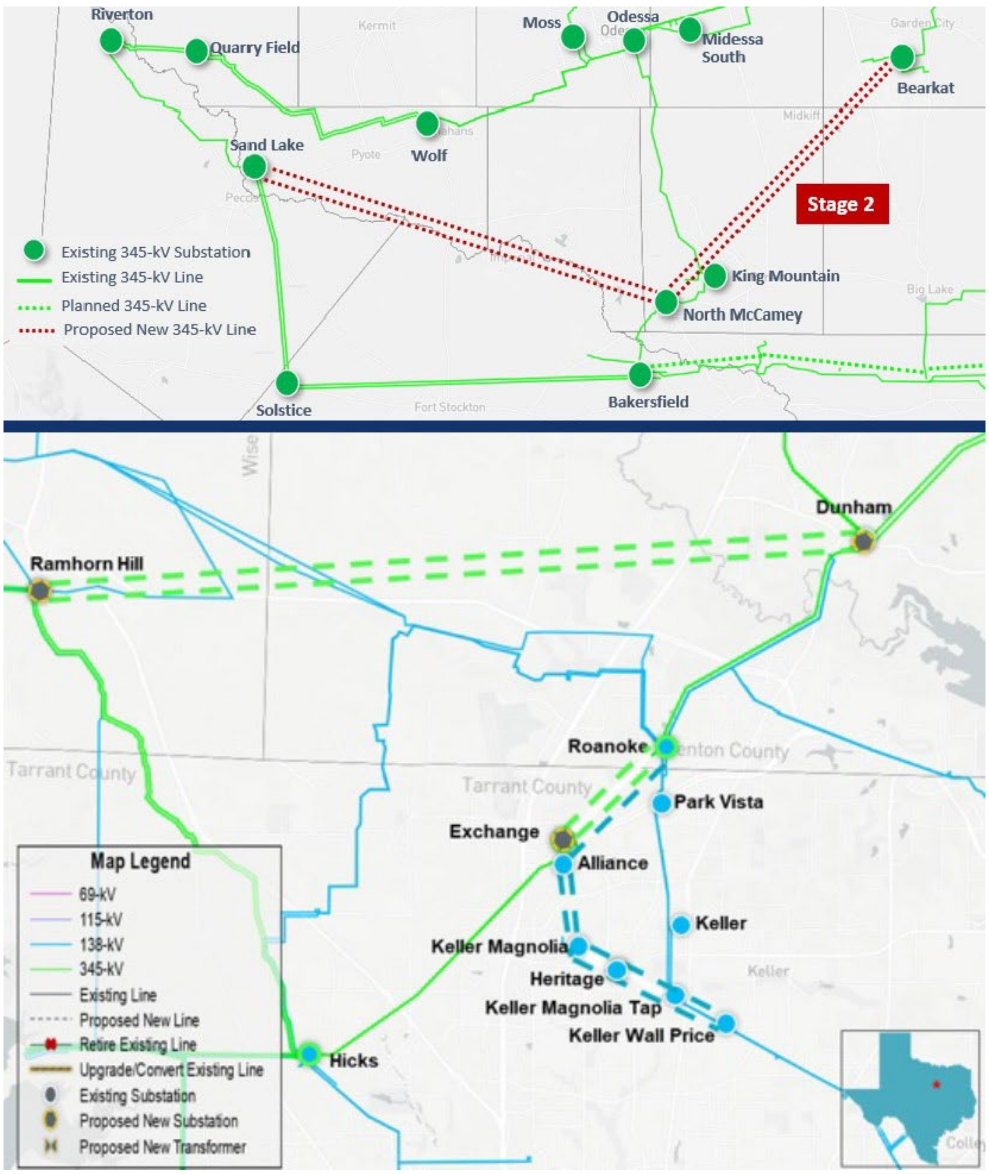
Members Endorse Two Tier 1 Transmission Projects

ERCOT stakeholders endorsed two transmission projects with a combined capital cost of more than $760 million during last week's Technical Advisory Committee meeting.

The Regional Planning Group classified both the Bearkat-North McCamey-Sand Lake project in West Texas and the Roanoke upgrade project north of the Dallas-Fort Worth area as Tier I projects because their costs exceed a $100 million threshold. Their status requires they receive TAC endorsement and the Board of Directors' approval.

ERCOT staff said during the Wednesday meeting that it chose one of the first project's three options to address reliability needs driven by rapid load growth in the Permian Basin's Delaware Basin and to improve the region's ability to import power. The recommended option will result in building two double-circuit, 345-kV transmission lines totaling about 165 miles, with the two segments meeting in McCamey, a former oil boomtown since labeled "the Wind Energy Capital of Texas" by the state legislature.

Bearkat-North McCamey-Sand Lake has a projected cost of $477.6 million in 2021 dollars, up from $371 million in 2019 dollars, and an estimated completion date of June 2026.



The Bearkat-North McCamey-Sand Lake 345-kV project (top) and the Roanoke upgrade | *ERCOT*

The Roanoke upgrade project involves 7 miles of 138-kV lines, 26 miles of 345-kV lines, four 345/138-kV transformers and five 138-kV low-voltage buses. Staff analyzed four options, choosing the one they say provides better operational flexibility and long-term load-serving capability for future load growth.

Oncor, the incumbent transmission service provider, expects to complete the upgrades by May 2025 at an estimated capital cost of $285.9 million.

The company has a hand in both projects. It paired with Lower Colorado River Authority Transmission Services and Wind Energy Transmission Texas to submit the first project to the RPG. It was alone in suggesting the upgrade project.

TAC approved the projects as part of its combination ballot, where they were included with unopposed revision requests and other measures. The board will consider both projects during its Aug. 16 meeting.

Staff Defer Comment on CSAPR

Staff told TAC they were unsure as to whether the Supreme Court's recent decision voiding the Obama-era Clean Power Plan would affect a federal rule's implementation that limits nitrogen oxide emissions. (See *Supreme Court Rejects EPA Generation Shifting*.)

Texas is one of more than 20 states that, under EPA's Cross-State Air Pollution Rule (CSAPR) plan, must establish NO_x emissions budgets beginning with the 2023 ozone season (May 1-Sept. 30). The agency says the reductions are necessary to address upwind states' interstate transport obligations.

Staff were non-committal when asked whether the high court's 6-3 decision in ***West Virginia vs. EPA*** would scuttle the CSAPR. The court rejected EPA's assertion that "generation-shifting" was the "best system of emissions reductions" available and invoked the "major questions doctrine" that agency decisions involving "economic and political significance" require them to show "clear congressional authorization."

Senior Corporate Counsel Katherine Gross noted that CSAPR was proposed under a different section of the Clean Air Act than was the CPP.

"At this point, we're not sure of the significance

ERCOT News

of this case, and we don't want to speculate too much about what it will mean for the ozone transport rule," Gross said. "If the EPA rule here does have a significant economic impact, the EPA is going to need to be able to point to very clear congressional authorization, which they were not able to do in the Clean Power Plan rule, according to the court. And if they're not able to do that, then that rule is going to be susceptible to being overturned."

Gross said ERCOT would defer to the state's Office of the Attorney General and the Public Utility Commission, both of which filed comments with EPA asking for the CSAPR rule's withdrawal as it pertains to Texas (*EPA-HQ-OAR-2021-0668-0007*.)

The AG's Office *alleged* the agency "acted arbitrarily and capriciously in several distinct ways, abused its discretion and failed to observe procedures required by law."

"Regional actors are in the best position to determine how to meet the 2015 ozone transport obligations, but EPA failed to consult the necessary experts and denied states, specifically Texas, the opportunity to regulate where appropriate," the office said.

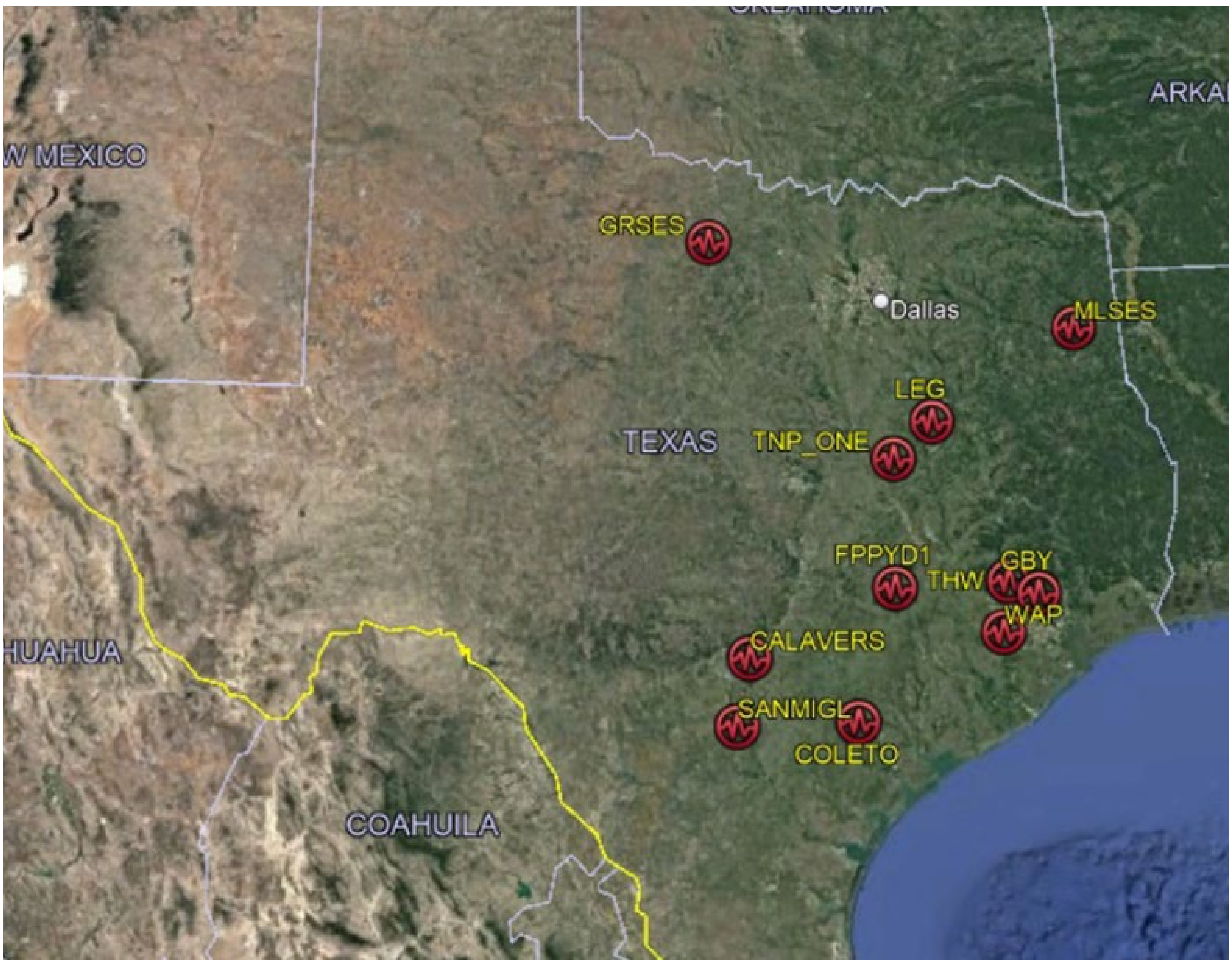
The PUC *said* the transport implementation plan will have "significant, detrimental impacts on reliability" in the ERCOT region, as well as those portions of the state served by SPP and MISO.

ERCOT staff in June told the board that its preliminary analysis of the CSAPR rule assumed that over 10 GW of installed thermal generation would leave the market by 2026, requiring up to $1.5 billion to resolve local reliability issues. (See "10 GW Thermals Could Retire with EPA Rule," *ERCOT Board of Directors Briefs: June 21, 2022*.)

Woody Rickerson, vice president of system planning and weatherization, told TAC that the thermal units staff "retired" in its analysis do not have the necessary emissions-reduction equipment and "seemed likely candidates" to be retired or retrofitted.

TAC Liaisons with R&M Trimmed

TAC Chair Clif Lange, with South Texas Electric Cooperative, told members that the committee's leadership continues to work with



Thermal generation "retired" from service in 2026 for ERCOT's CSAPR analysis | *ERCOT*

ERCOT News

several board members to iron out its reporting relationship under ERCOT's new structure. (See *ERCOT Technical Advisory Committee Briefs: June 27, 2022*.)

He said TAC's proposal to have as many as 11 liaisons with the board's newly created Reliability and Markets Committee was found to be "cumbersome" and "unwieldy." Lange said that in meeting with Directors Bob Flexon, the committee's chair, and Peggy Heeg, they agreed that TAC's chair and vice chair would act as liaisons. Segment representatives would be present should the R&M Committee want to hear from them.

Lange said the directors have additional changes they would like to see and they will continue to work with stakeholders on the details.

ERS Budget Increase Endorsed

The committee endorsed a Nodal Protocol revision request (*NPRR1142*) and its accompanying Other Binding Document revision request (*OBDRR042*) that had been granted urgent status by the Protocol Revision Subcommittee. The measure increases the annual budget for emergency response services (ERS) from $50 million to $75 million and gives ERCOT the ability to contract ERS for up to 24 hours in a standard contract term.

The NPRR is a result of a July PUC *order* that also allows the grid operator to broach the budget by up to $25 million for contract term renewals (*53493*).

Morgan Stanley's Clayton Greer cast the lone opposing ballot in the 28-1 vote, saying he had requested information from ERCOT, still outstanding, on how many loads were already offline before ERCOT deployed them.

"We have waivers that allow loads to go offline when prices are high. We're paying people to do what they would already do on their own," he said. "There's no additional value to this. I would rather see a capacity market where we pay all capacity that's online."

Staff said they wouldn't have the data available until the end of August.

"We're more than happy to bring this analysis to whatever stakeholder meeting would like to see it," ERCOT's Mark Patterson said.

RUC Scaling Factor to 100%

TAC members agreed with staff's recommendation to change the reliability unit commitment's (RUC) scaling factor from 20% to 100%, adding the measure to the combo ballot that passed unanimously.

ERCOT instituted a 20% scaling factor in 2018 with *NPRR864*, which modified the start-up and minimum energy costs for resources with a cold start time of one hour or less. This allowed the grid operator to defer commitment decisions and provide market participants additional time to self-commit their resources.

However, that has changed with ERCOT's new conservative operations posture that makes greater use of the RUC process. Staff said the scaling has led to operators needing to make many of their RUC decisions outside of the process's economic-based recommendations, leading to inefficient commitments.

Changing the cost-scaling factors to 100% will help ensure the commitment decisions better reflect the economically optimal commitment decision, ERCOT said.

"We've just seen more manual commitments occurring this year because of a desire to commit resources further in advance of the peak hours," ERCOT's Dave Maggio said.

The combination ballot also included six NPRRs, single changes to the Planning Guide (PGRR) and the Retail Market Guide (RMGRR), and a system change request (SCR):

NPRR1085: improves the physical responsive capability calculation and dispatch's validity by requiring quicker updates from qualified scheduling entities (QSEs) on telemetered resource status, high sustained limit and other relevant information.

NPRR1133: clarifies the responsibilities of DC tie facility owners and operators for reporting DC tie model data.

NPRR1134: removes references to first available switch date (FASD) after recent mass transition/provider of last resort events indicated ERCOT's use of FASD when processing switch transactions created an unintended negative experience for customers being transitioned from a bankrupt retailer.

Clayton Greer, Morgan Stanley | © *RTO Insider LLC*

NPRR1135: modifies the definition of real-time generation resources with an offline non-spin (OFFNS) schedule to allow non-zero values for the billing determinant only if the resource is offline when it telemetered OFFNS. This ensures an accurate settlement when an online resource erroneously telemeters OFFNS.

NPRR1136: adds clarifying language to the logic in place as fast frequency response is developed to ensure a QSE does not replace a regulation service with fast-responding regulation service.

NPRR1137: replaces the annual requirement to review the OBD list with a four-year review cycle.

PGRR101: clarifies that a DC tie's owner will provide the appropriate dynamic model data to its tie operator, which will then provide the data to ERCOT.

RMGRR168: synchronizes ERCOT's role and responsibilities with current market transactional solutions upon the removal of the "out-of-cycle" switch term and market process.

SCR822: creates a new daily integration report and dashboard for energy storage resources similar to the current wind and solar integration reports and dashboards.

— Tom Kleckner

South news from our other channels

Texas RE Warns Utilities Not to Wait on CIP Compliance

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

MISO News

FERC Allows MISO to Exclude Tx Projects from Competition

By Amanda Durish Cook

| © RTO Insider LLC

FERC last week said that MISO can exclude certain transmission projects from competitive bidding eligibility, characterizing the change as a "reasonable adjustment to the MISO competitive transmission process."

The commission on July 26 said it was appropriate for MISO to assign projects to incumbent transmission owners when at least 80% of their total cost are upgrades to a TO's existing facilities (*ER22-1955*).

The ruling will apply to associated upgrades in the four tranches of MISO's long-range transmission plan (LRTP). The RTO's Board of Directors approved the first LRTP portfolio on July 25, the same day the order was considered effective. (See *MISO Board Approves $10B in Long-range Tx Projects*.)

MISO in May filed a request to change its competitive transmission process by skipping over competitive bidding's "short segments and conductor only" work in its larger grid-expansion efforts.

FERC said the grid operator's proposal is similar to that already approved for SPP. It said the exclusion will allow MISO to "better balance the expansion of competitive transmission opportunities with administrative efficiency, as well as to reduce uncertainty about which transmission projects are eligible for consideration pursuant to that process."

MISO's planning team has said some upgrade-heavy, smaller projects will be necessary to accommodate the long-range projects and are not suited for competition.

Some MISO stakeholders protested at FERC, saying the RTO should separate a project's upgrade work from new transmission facilities, regardless of cost.

A MISO consumer alliance comprised of the Coalition of MISO Transmission Customers, the Resale Power Group of Iowa, the Wisconsin Industrial Energy Group, the Iowa Office of Consumer Advocate and the Citizens Utility Board of Wisconsin said MISO failed to describe the impact the proposal would have on the LRTP portfolio, the process it plans to use to determine exempted upgrades and the associated cost consequences to consumers by precluding competition. The alliance pointed out that ratepayers tend to save about 15 to 20% in transmission costs when projects are competitively bid.

FERC held that a project upgrading an existing transmission facility doesn't result in a new transmission facility.

Stakeholders earlier this year expressed displeasure that MISO filed for tariff changes to its competitive transmission rules without first consulting the stakeholder community. However, the commission accepted staff's explanation that they discovered potential smaller, associated projects late in its LRTP development and filed quickly so as not to hold up the portfolio.

The grid operator's TOs said the revision is necessary to "enable the efficient, timely processing of needed LRTP projects that MISO has identified and to avoid delays and other inefficiencies that would otherwise result." ■

MISO News

MISO Reacts to Ill. Legislators' Criticism of Capacity Shortfall

By Amanda Durish Cook

MISO last week responded to blistering criticism from Illinois lawmakers, insisting that it and its members "fully understand the need for urgency when it comes to building new transmission and adding new generation to the electric grid."

"It is important to remember that MISO since its inception has been by design and by rule both fuel agnostic and policy neutral," the grid operator said in a statement to *RTO Insider*. "Our responsibility is to maintain a reliable electric grid and manage one of the world's largest energy markets through collaboration with state officials and member utilities seeking to accomplish their energy goals and strategies. This includes supporting the clean energy goals of our states and member utilities."

MISO pointed out that it has in total interconnected about 30 GW of wind generation and 2 GW of solar generation across its footprint. It said it has acted with resolve to shorten the time it takes for it to study, assign system upgrades and interconnect developers' new generation through its interconnection queue.

Two Illinois lawmakers who sponsored the state's Climate and Equitable Jobs Act held a press conference last month to criticize MISO over failing to bring renewable energy in its interconnection queue online to solve its current capacity deficiency. (See *Illinois Leaders Blast MISO Inaction on Capacity Crisis*.)

Also last month, the Illinois Commerce Commission (ICC) opened a docket directing Ameren Illinois to perform a cost-benefit analysis of remaining in MISO versus departing for PJM or another grid operator (*22-0485*). The ICC gave Ameren a year to produce the study and said it should cover between five and 10 years from mid-2024, focusing on "reliability, resource adequacy, resiliency, affordability, equity and the impact on the environment, and the general health, safety and welfare of the people of Illinois."

| Ameren Illinois

Chair Carrie Zalewski said the ICC feels it "appropriate to explore whether membership in MISO continues to provide net benefits to Ameren Illinois' electricity customers."

MISO said it was "not invited to nor made aware" of the legislators' press conference.

"We are always available to meet with public officials and provide independent facts and information to help them better understand our industry. This collaboration and information exchange has never been more vital, especially as we work together towards providing consumers with low-cost, uninterrupted power now and in the future," the RTO said.

The grid operator disputed the legislators' claim that 34 generation projects from the state wait in the queue. MISO said it's in fact processing 95 generation interconnection requests totaling more than 15 GW for the state.

"MISO is and continues to be 'on the job' of ensuring reliability is maintained while managing through this unprecedented number of unique requests to connect new resources," it said.

The RTO said that since 2015, it has connected about 2.1 GW worth of new wind and solar resources in Illinois. It said it has also approved another 4.4 GW of renewable energy and natural gas generation that is now just waiting on completion by developers. The grid operator insisted that its interconnection process "continues to be one of the most efficient in the electricity industry."

MISO also said that $1.6 billion worth of projects from its recently approved $10.3 billion long-range transmission plan (LRTP) will be built in Illinois. (See *MISO Board Approves $10B in Long-Range Tx Projects*.) It added that an additional $445 million of new transmission approved through its annual MISO Transmission Expansion Plan cycles is set to come online by 2025.

"All this investment will help support Illinois' state energy policy objectives," the grid operator said. ■

MISO News

Stakeholders Troubled over MISO Response to FERC Planning NOPR

By Amanda Durish Cook

MISO's response to FERC's proposed transmission planning rule will emphasize its worry that it could be too arbitrary and bog down the RTO with compliance check marks.

The grid operator plans to send comments to the commission this month warning against an overly prescriptive rulemaking. It will say it is concerned over the notice of proposed rulemaking's level of detail and specifics and that "ongoing compliance will impede ongoing expansion."

However, some stakeholders said last week they are worried that MISO's fixation on specifics could leave the nation with another toothless transmission rulemaking.

MISO staff said its transmission planning already covers the NOPR's suggestion for scenario-based regional transmission planning (*RM21-17*). (See *FERC Issues 1st Proposal out of Transmission Proceeding*.)

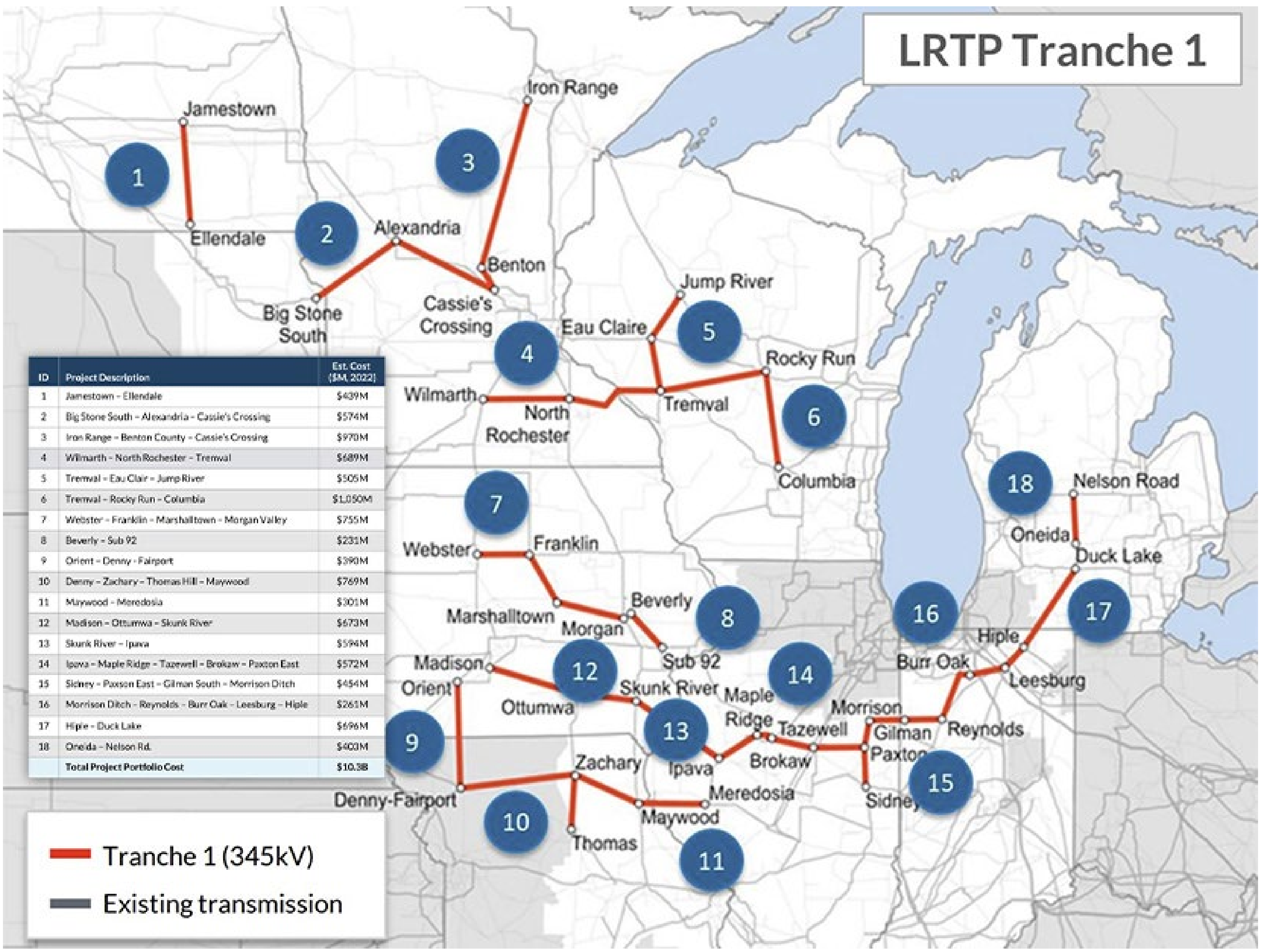
During a Planning Advisory Committee meeting Wednesday, MISO's Jackson Evans said that while the RTO supports the aim of long-term, scenario-based planning, grid operators need flexibility "to meet the unique needs of the regions and their stakeholders."

"There's really no one way to do this correctly," Evans said. He said MISO doesn't want to be forced to "take resources away from its existing planning and devote them to compliance."

Evans said an overly prescriptive rule might imperil the grid operator's ongoing planning under its long-range transmission plan (LRTP) and its joint targeted interconnection queue (JTIQ) study with SPP.

"MISO was a leader in this area before this week," Evans said, referencing the Board of Directors' approval of the $10.3 billion LRTP on July 25. (See *MISO Board Approves $10B in Long-range Tx Projects*.)

MISO said FERC should "order direct changes to regions it deems to be insufficient in meeting objectives" and said the commission should exercise its authority under Federal Power Act



ID	Project Description	Est. Cost ($M, 2022)
1	Jamestown – Ellendale	$439M
2	Big Stone South – Alexandria – Cassie's Crossing	$574M
3	Iron Range – Benton County – Cassie's Crossing	$970M
4	Wilmarth – North Rochester – Tremval	$689M
5	Tremval – Eau Clair – Jump River	$505M
6	Tremval – Rocky Run – Columbia	$1,050M
7	Webster – Franklin – Marshalltown – Morgan Valley	$755M
8	Beverly – Sub 92	$231M
9	Orient – Denny – Fairport	$390M
10	Denny – Zachary – Thomas Hill – Maywood	$769M
11	Maywood – Meredosia	$301M
12	Madison – Ottumwa – Skunk River	$673M
13	Skunk River – Ipava	$594M
14	Ipava – Maple Ridge – Tazewell – Brokaw – Paxton East	$572M
15	Sidney – Paxson East – Gilman South – Morrison Ditch	$454M
16	Morrison Ditch – Reynolds – Burr Oak – Leesburg – Hiple	$261M
17	Hiple – Duck Lake	$696M
18	Oneida – Nelson Rd.	$403M
	Total Project Portfolio Cost	**$10.3B**

MISO's first long-range transmission portfolio was approved in late July. | *MISO*

MISO News

Section 206 and "tailor its focus" to regions that are not performing robust planning.

Stakeholders Push Back

Multiple stakeholders said FERC Order 1000's failure to spur transmission projects is evidence that the commission should be more prescriptive, not less, when it comes to planning.

"I'm not saying we need a nanny state, but we need a prescriptive set of requirements," the Union of Concerned Scientists' (UCS) Sam Gomberg said during a cost-allocation meeting July 26.

Others said MISO should assume there's always room for improvement and that FERC's final rule could help the RTO achieve better quality planning.

"I think it would be arrogant to assume we're doing it 100% right and we're perfect," Customized Energy Solutions' Ginger Hodge said during the PAC meeting.

Andy Kowalczyk of activist group 350 New Orleans suggested MISO highlight the ingredients of its planning success with FERC to help shape minimum requirements. "I strongly urge MISO to lean not too hard into flexibility," he said.

"MISO is a leader in transmission planning, but that doesn't mean we can and shouldn't do better," Sustainable FERC Project attorney Lauren Azar said.

Azar said MISO's planning aims can be swayed or stymied by stakeholders, who are in some instances able to "thwart" transmission planning. She pointed to the 2017 regional transmission overlay, which failed to yield a project, as an example. (See *Early Release for MISO Long-Term Tx Overlay Study*.)

"We're more than five years behind in building out a grid," she said.

Azar said some nationwide standards could help MISO and the nation overcome resistance to grid expansion.

Mississippi Public Service Commission attorney David Carr disputed the idea that the 2017 regional overlay study was ever meant to result in projects. He characterized the study as MISO's response to the Clean Power Plan, which was ultimately struck down.

Basking in LRTP's Afterglow

MISO took a victory lap after approving its first LRTP portfolio.

During an executive update July 26, Aubrey Johnson, vice president of system planning, said he was "pleased and excited" that the board voted in favor of the LRTP's 18 lines. He said staff will now study a second set of transmission needs for MISO Midwest that considers a more rapid fleet change and decarbonization.

"Growing pressures on the fossil fuel industry are accelerating retirements," Johnson said. He added that new renewable energy additions aren't currently keeping pace as a reliable, accredited replacement.

"It is clear that the future is going to look very different than the past," he said.

With the LRTP's approval, MISO and SPP's JTIQ study investment will shrink from $1.65 billion to $1.06 billion. The portfolios contain the same two 345-kV projects in North Dakota and Minnesota. MISO decided several months ago that it would independently pursue the projects under its regional planning; it has said SPP's share of benefits from the projects are negligible and not worth pursuing in cost splits. (See *MISO Stakeholders Uneasy Over Long-range Tx, JTIQ Overlap*.)

The NOPR and long-term planning discussion come as MISO's cost-allocation stakeholder group mulls new benefit metrics for transmission projects that strengthen the grid's reliability and resilience. On July 26, the group discussed how to quantify the benefits of a line's ability to withstand extreme weather events and valuing a minimum transfer capability.

Climate scientist Rachel Licker, with UCS, said it's clear that climate change is driving more common and longer-lasting heat waves, which will intensify air conditioning demand. She said MISO may be underestimating future demand for cooling in its modeling. Licker added that nighttime lows are no longer dipping to historic averages, making air conditioning use at night more common.

Gomberg said MISO should value transmission that helps achieve decarbonization to avoid more devastating heat waves and storms, which can decimate power lines and equipment. ■

NYISO News

New York Issues 3rd and Largest OSW Solicitation

State Seeks Up to 4.8 GW in ORECs Proposals

By Michael Kuser

New York officials on Wednesday issued the state's third and largest-ever offshore wind energy *solicitation*, seeking proposals for up to 4.8 GW in new projects on federal leases in the New York Bight.

The state has already contracted 4.3 GW in OSW projects toward meeting the 2035 goal of 9 GW set in the Climate Leadership and Community Protection Act (CLCPA).

"New York is proud to continue leading the way in offshore wind development while establishing a blueprint for building a locally-based green economy," Gov. Kathy Hochul said in a *statement*. "Today we are putting words into action and making it clear that New York state is the national hub of the offshore wind industry."

The New York State Energy Research and Development Authority (NYSERDA) is seeking proposals by Dec. 22 to award OSW renewable energy certificates (ORECs) next spring of 2 to 4.8 GW.

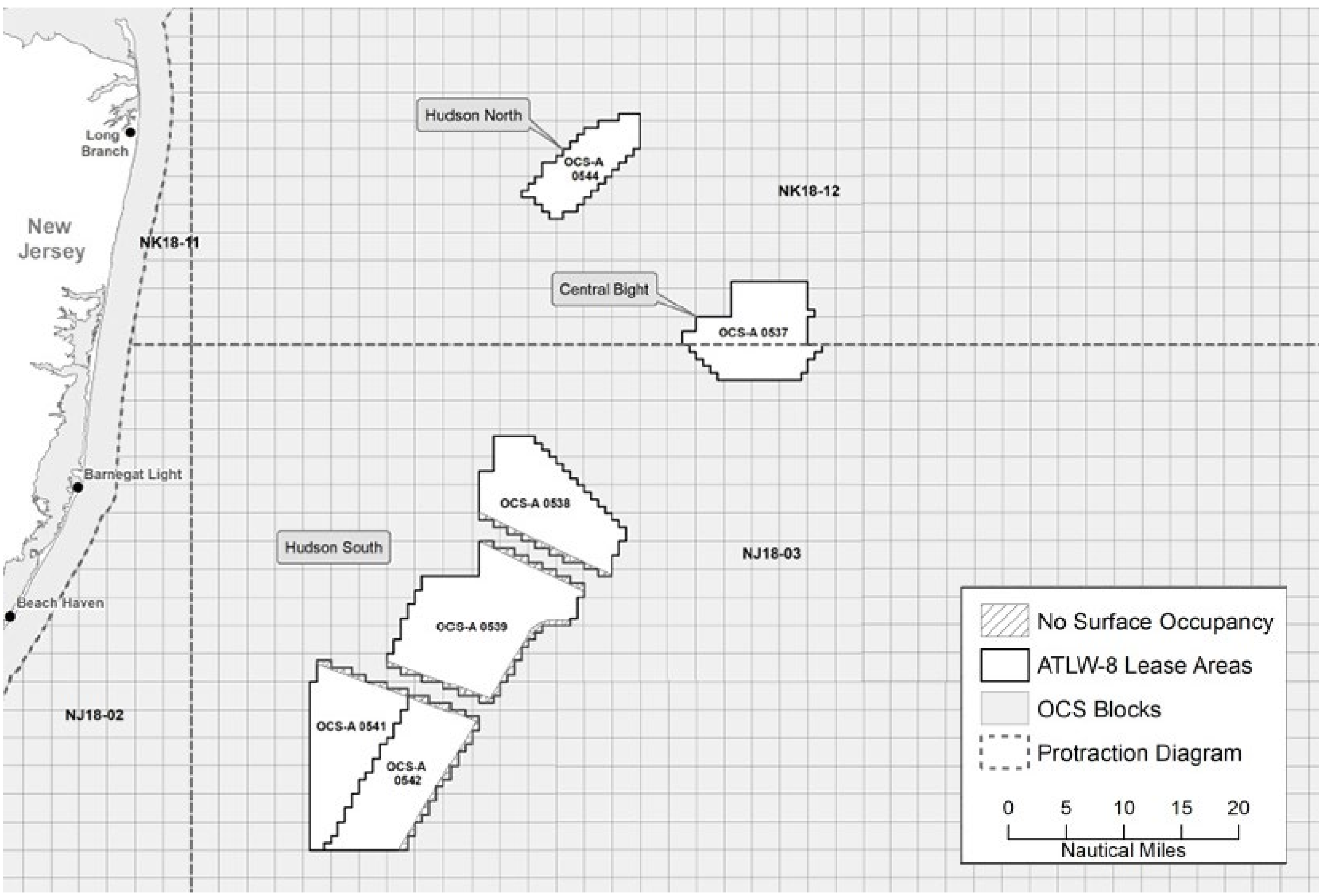
In its call, NYSERDA cited the CLCPA and its final supplemental generic environmental impact statement (*SGEIS*) issued in September 2020, which concluded that, since the lease areas comprise only 3% of the Bight, effects on fishing and marine life would be minimal.

The solicitation includes the first phase of $500 million planned to be invested in ports, manufacturing and supply chain infrastructure; it introduces a first-of-its-kind "meshed ready" offshore transmission configuration, as *required* by the Public Service Commission in January. (See *NYPSC Mandates Meshed Offshore Tx Grids*.)

Officials will award evaluation points for proposals that repurpose downstate fossil-based generation infrastructure or use energy storage to enhance future system reliability.

In accord with the New York Buy American Act, the solicitation sets a minimum U.S. iron and steel purchase requirement for all projects awarded and requires developers to provide opportunities for U.S.-based steel suppliers to participate in the growing OSW industry.

NYSERDA will hold a *webinar* on Aug. 23 to address eligibility criteria, submission requirements, the proposal evaluation process, contract commitments, and the post-award process and agreement. ■



BOEM is continuing a planned approach to transmission and is evaluating options including the use of cable corridors, regional transmission systems, meshed systems, and other mechanisms. | *BOEM*

Stakeholders Urge NYPSC to Reject Utilities' Cybersecurity Proposal

Energy Service Companies Favor a Risk-based Approach

By Michael Kuser

The National Institute of Standards and Technology (NIST) offers strategies to help protect sensitive information stored in computers that supports high-value assets. | *Shutterstock*

Energy service companies and a data policy coalition urged New York regulators last week to reject or amend a petition from the state's investor-owned utilities to strengthen cybersecurity requirements regarding customer data (*20-M-0082*; *18-M-0376*).

The joint utilities on May 4 *petitioned* the New York Public Service Commission to approve six updated and three new requirements in the current self-attestation (SA) of the commission-approved Data Security Agreement (DSA) and a process for regular SA review and potential updates.

The utilities should use a risk-based approach to evaluate cybersecurity concerns, distinguishing between the risk to utility IT systems and the risk of improper access to customer data, whereby they could classify the sensitivity of such data and align appropriate levels of protection, NRG Energy *said*.

"Instead, the JU Petition opts to overly burden energy service entities [ESEs] and customers by requiring cyber security and encryption methods normally reserved for highly sensitive data at the highest levels of government," NRG said.

Because the New York State Energy Research and Development Authority (NYSERDA) is working to implement the Integrated Energy Data Resource (IEDR) platform and the commission is considering the utilities' Data Access Implementation Plan (DAIP), which includes a Data Ready Certification process, the utilities requested that the PSC "move expeditiously" to address the petition no later than Sept. 15, the date of the commission's regular monthly session.

The utilities' petition is "misguided and administratively inefficient" and should rather address "the root of the matter," which is utility liability for a data breach caused by a customer-authorized third party, *said* Mission:data, a Seattle-based policy advocacy coalition.

Until the commission conclusively removes such liability from the joint utilities, a policy choice that has been made by numerous other states, the PSC will face unending requests from the utilities to increase cybersecurity requirements, even if such requirements are unreasonable, costly, impractical or ineffective, Mission:data said.

"Ultimately ... the petition is 'security theater' — the performance of precautionary gestures that lack underlying substance," Mission:data said.

In its July 26 *comments*, D.C.-based software company Arcadia Power concurred with Mission:data and requested that the commission conclusively remove liability from the utilities for customer-permissioned third-party data breaches. It also urged the PSC to establish a right to due process for ESEs with respect to cybersecurity standards while also requiring ESE representation on a proposed governance committee.

In addition to the general request to adopt a risk-based approach to cybersecurity that includes the SA, Arcadia recommended the commission remove or modify the current SA requirement that all confidential customer utility information be stored in the U.S. or Canada only (Cybersecurity Protection 10).

"Such a blanket restriction is not informed by risk level and is also premised on a flawed understanding of zero trust architecture. There are better ways to address national security concerns related to data processing than implementing such an overly broad geographic restriction," Arcadia said.

To the extent there is any actual, incremental risk associated with processing data outside of the U.S. and Canada, Arcadia suggested there are numerous mitigation measures under a risk-based framework that would offset such a perceived risk.

"At a minimum, ESEs should be allowed a waiver from these unduly burdensome geographic restrictions upon implementing risk-based mitigation measures that more fully address the data processing security risks at the core of that policy's rationale," Arcadia said.

All of the modifications and additions to the SA proposed by the utilities should be reviewed in a stakeholder collaborative prior to the commission rendering a decision, a process that would allow stakeholders to articulate concerns about implementation, *said* New Jersey-based energy services company Family Energy, which offers gas and electric products throughout New York state.

New York Attorney General Letitia James in March *announced* that her office was requiring Family Energy to reimburse customers more than $2.1 million for its "dishonest business practices." ■

NYISO News

NYISO Management Committee Briefs

Grid Performs Well in July Heat Wave

The New York grid performed well in the summer's first heat wave July 20 to 24, Aaron Markham, NYISO vice president of operations, told the Management Committee on Wednesday.

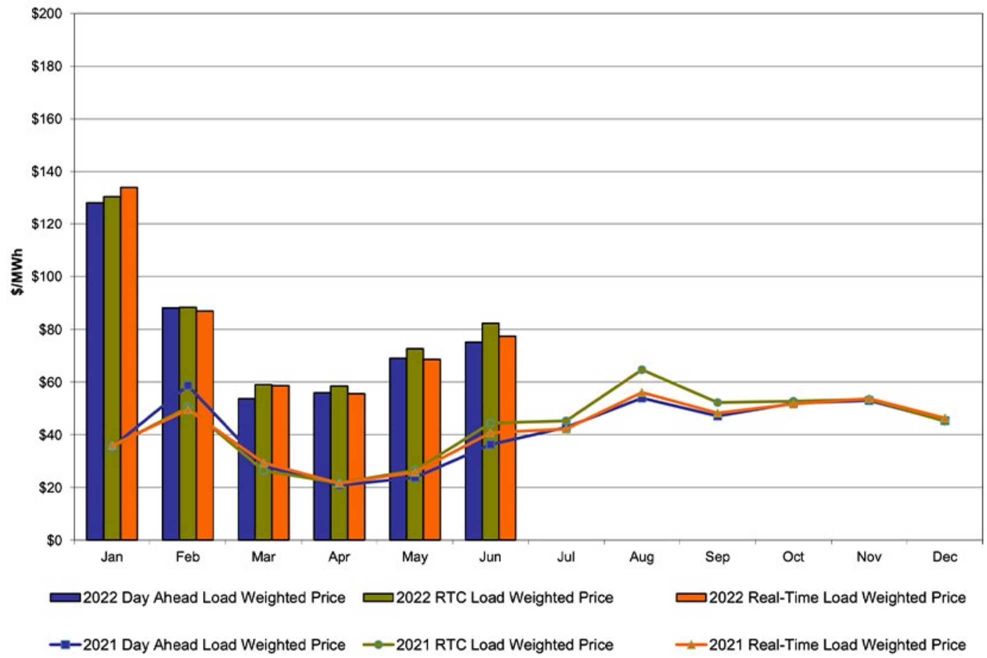
NYISO and transmission owners recalled facilities to service and rescheduled transmission and generation outages to prepare for the hot weather. That week's peak load occurred on July 20, a Wednesday, at 30,505 MW, or just over 97% of the baseline forecast for the summer, Markham said.

"In general, generation performed well," Markham said. "From a transmission perspective, the Neptune cable with PJM did return to full capability on Tuesday, [July 19,] so it was able to supply additional megawatts into Zone K [Long Island] from PJM."

The Western New York public policy transmission project was also effective at reducing supply bottlenecking through the period, Markham said.

The ISO did activate emergency demand response and special-case resource (SCR) programs in Zone F [the Capital District] on both Tuesday and Wednesday in response to a forced outage at the 115-KV Greenbush substation in that area, which caused some supply bottling and added to transmission congestion into the region, he said.

"In summary, things went well, and we are watching the weather for next week," Markham said. "It looks like it is warming up again, probably not to the level we experienced last week, but we will continue to monitor that and take actions as needed to be ready for it."



NYISO Monthly Average Internal LBMPs, 2021-2022 | *NYISO*

June LBMPs Rise Slightly; Gas Prices Ease

NYISO locational-based marginal prices averaged $76.72/MWh in June, up from $70.60/MWh the previous month, COO Rick Gonzales said in delivering the monthly operations report.

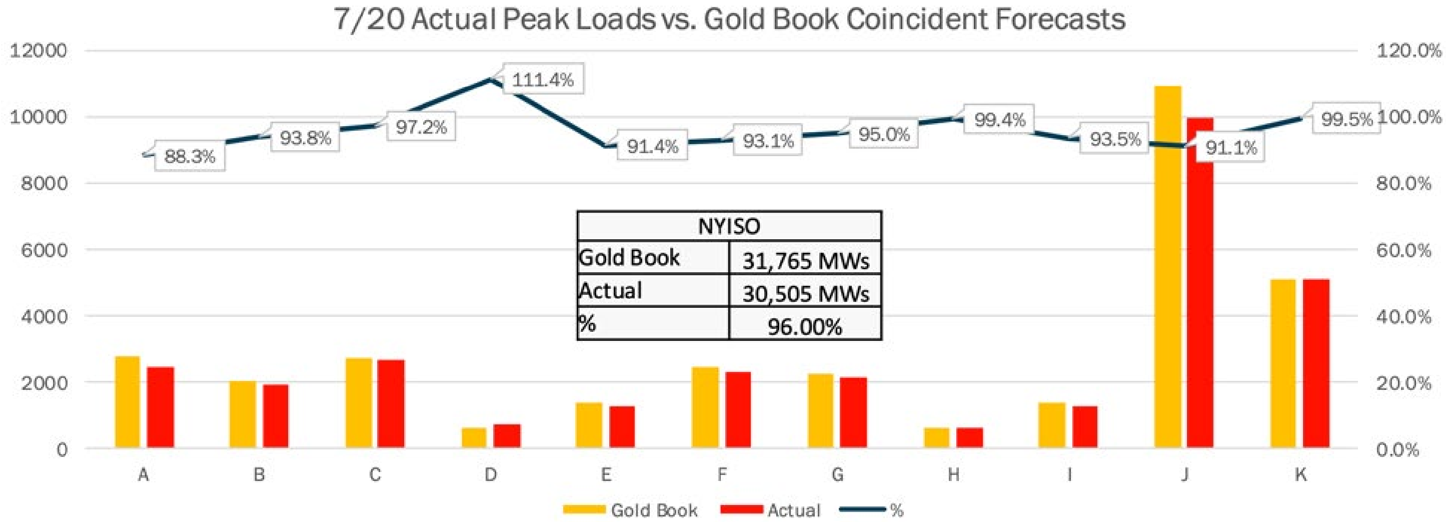
Day-ahead and real-time load-weighted LBMPs came in higher compared to May. Year-to-date monthly energy prices averaged $87.37/MWh, a 115% increase from $40.59/MWh in June last year.

June's average sendout was 422 GWh/day, higher than the 372 GWh/day in May but lower than the 458 GWh/day a year earlier.

Transco Z6 hub natural gas prices averaged $6.91/MMBtu for the month, down from $7.39/MMBtu in May and up 164.5% year-over-year.

Distillate prices were up 115.4% year-over-year but mixed compared to the previous month. Jet Kerosene Gulf Coast averaged $30.68/MMBtu, up from $29.17/MMBtu in

NYISO News



July 20 zonal peak loads in the New York Control Area | *NYISO*

May. Ultra Low Sulfur No. 2 Diesel NY Harbor averaged $31.30/MMBtu, down from $32.97/MMBtu in May.

June uplift decreased to 61 cents/MWh from 5 cents/MWh the previous month, and total uplift costs, including NYISO's cost of operations, came in lower than those in May. The ISO's local reliability share dropped to 46 cents/MWh in June from 60 cents/MWh the previous month, while the statewide share decreased to $1.07/MWh from 65 cents/MWh in May.

No RS1 Cost-of-service Study

The MC voted not to conduct a new Rate Schedule 1 cost-of-service study in 2022-2023. (See "RS1 Cost-of-service Study," *NYISO Management Committee Briefs: June 14, 2022*.)

The last study, which considers the impact of the significant market design changes to be implemented, was done in 2011, and the tariff requires the committee to vote on whether to conduct one each year.

CEO Rich Dewey said NYISO will review the steps required to make a tariff change to remove the topic from requiring an annual vote. The ISO has plenty of work to do with the projects now underway, but next year it will come to the issue prepared with information on how much human resources would be needed to perform the cost-of-service study, he said.

"Then we'll have better data in terms of how that intersects with other efforts within the project schedule, and market participants can be more informed about what that impact might be," Dewey said.

Bad Debt Loss Methodology

The committee approved a recommendation from the Business Issues Committee to adopt a *proposal* from DC Energy to change the "look back" period in the tariff for determining each participant's contribution to recover a bad debt loss, expanding the period from one month to three.

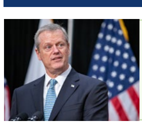
Bruce Bleiweis, director of market affairs for DC Energy, presented the change and said the company believes the goal of the payment default and bad debt loss allocation methodology is to spread the loss fairly based on NYISO stakeholders' overall billing determinants. (See "Bad Debt Loss Methodology," *NYISO Business Issues Committee Briefs: June 22, 2022*.)

One stakeholder asked whether the proposal had any risk of increasing market participants exposure to bad debts.

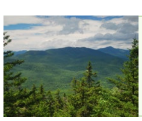
"This proposal does nothing to change the amount of credit or collateral that we have here," said Sheri Prevratil, NYISO manager of corporate credit. "If a market participant defaults, we would always use that credit support first to cover any default before we declared a bad debt loss. ... The ISO has no objection." ■

— Michael Kuser

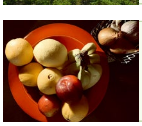
Northeast news from our other channels



Mass. Legislators Send Climate Bill Back to Governor NetZero Insider



Report: Maine Surpassed 10% by 2020 Emission Reduction Target NetZero Insider



RI Experts Seek Policy Shifts for Secure, Low-carbon Food System NetZero Insider

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PJM Challenged on Oversight of 'Immediate Need' Tx Projects

Stakeholders Seek to Pre-empt RTO Filings

By Rich Heidorn Jr.

Consumer advocates, industrial consumers and municipal utilities asked FERC on July 26 to force PJM to require incumbent transmission owners to sign designated entity agreements (DEA) on "immediate need" projects, contending the RTO has violated its Operating Agreement by refusing to do so.

The complaint by American Municipal Power, the D.C. Office of the People's Counsel and the PJM Industrial Customer Coalition came the day before PJM stakeholders were scheduled to vote on whether to open an initiative over the dispute.

The Markets and Reliability Committee was scheduled to have stakeholders vote between an issue charge proposed by consumer advocates and one by TOs after negotiations between the two groups failed to reach an agreement over whether the initiative could consider changes to the rights and responsibilities of PJM and the TOs under the Consolidated Transmission Owners' Agreement. (See *PJM TOs, Consumer Advocates at Odds over DEA Inquiry*.)

The MRC agenda also gave notice that PJM "anticipates" making a Federal Power Act Section 206 filing with FERC asserting that the OA is unjust and unreasonable regarding its implementation of DEAs. "The specific course of action depends in part" on how the MRC resolves the issue charge.

After the filing of the stakeholders' complaint, however, PJM amended the MRC *agenda* to cancel the vote, saying the issue would be discussed tomorrow at the Members Committee meeting.

PJM also amended the MC *agenda* to give the committee "notice of consultation" of a potential filing under FPA Section 205 to revise the *pro forma* DEA in Attachment KK of its tariff.

PJM did not immediately respond to a request for comment on the complaint. In an August 2021 letter responding to questions about the RTO's adherence to the OA, however, PJM CEO Manu Asthana said the RTO had "determined that the Operating Agreement language could be read in a way that is not fully aligned with PJM's practice for the last seven years or, in PJM's view, the rationale behind issuing a DEA in the first instance. That is, the DEA was developed to apply only to projects that are selected through PJM's Order No. 1000-compliant competitive window process and included in the Regional Transmission Expansion Plan (RTEP) for regional cost allocation purposes."

2018 Order

The current dispute dates back to at least 2018, when FERC rejected PJM's request to revise the OA to waive the DEA for RTEP projects that the OA requires PJM to designate to an incumbent (*ER18-1647*). Such projects include TO upgrades; projects that would alter the TO's use of its right of way; and those located solely within a TO's zone that are not cost allocated outside. (See *FERC Rejects PJM Exemption for Incumbent TOs*.)

In rejecting the TOs' rehearing request in 2019, FERC said that breaching a DEA is more expensive for nonincumbent TOs, which are subject to meeting construction milestones that may be delayed for reasons beyond their control, while incumbent TOs only risk breaking the terms of a CTOA by missing scheduled in-service dates.

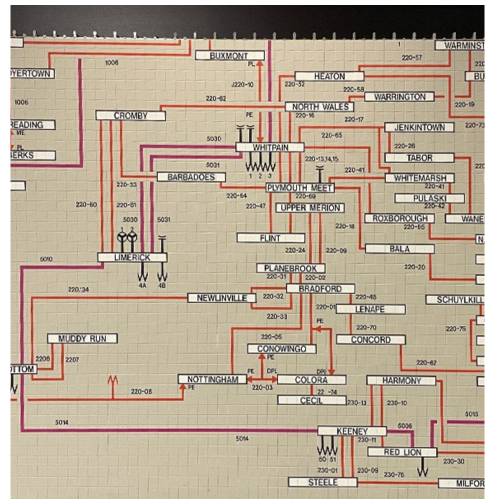
Unlike incumbents, nonincumbents must also "obtain a letter of credit or other financial instrument equal to 3% of the incremental project cost in the event of a breach," meaning this extra cost must factor in project submissions, making the incumbent TO's proposal cheaper by default, FERC said. (See *Rehearing Denied on PJM Designated Entity Agreements*.)

Feb. 2022 Policy Change

In the complaint filed last week — which was not immediately assigned a docket number — the stakeholders alleged that PJM for years had only required execution of a DEA for projects selected through a competitive window under Order 1000 that were regionally planned and subject to regional cost allocation.

In February 2022, the stakeholders said, PJM began requiring DEAs for TO-designated projects selected through the proposal window that were not regionally allocated. "However, PJM persists in only partially complying with Operating Agreement section 1.5.8 because PJM is not requiring execution of a designated entity agreement for all regionally planned projects, including immediate-need reliability projects and those resulting from needs that are not posted in a competitive window," the complaint says.

The complaint asks FERC to order PJM to execute DEAs for about 494 regionally planned projects that have been approved by the RTO's Board of Managers and are still under construction. PJM has executed only five DEAs, two with incumbent TOs and three with nonincumbents, the stakeholders said.



Old circuit diagram on display at PJM Conference & Training Center | © *RTO Insider LLC*

The complainants said the DEA, which includes requirements that designated entities adhere to scheduling milestones, is "particularly relevant" for time-sensitive immediate-need reliability projects. It cited a 2021 PJM informational filing that reported about 50 immediate-need projects' anticipated in-service dates would be after their need-by date.

"If there were designated entity agreements in place for these projects, then PJM would be required to re-evaluate the projects to determine whether a different project is needed," the complaint said.

The complainants said the DEA can also provide cost transparency. "For example, at an April 2021 PJM Transmission Expansion Advisory Committee meeting, Alleghany Power Systems revised the cost estimate for an immediate-need reliability project assigned to it from $41.4 million to $143.4 million, an increase of $102 million, or 246%. Contrary to the express provisions of the currently effective Operating Agreement, there is no designated entity agreement in place for this project," it said. "If there was, PJM likely would have [re-evaluated] the project earlier and revised the project at that time and perhaps identified a less costly solution that would not have increased the price tag by $102 million." ■

PJM News

Change to PJM Market Seller Offer Cap Falls Short

PJM Board Could Act Unilaterally

By Rich Heidorn Jr.

Susan Bruce, PJM Industrial Customer Coalition | *© RTO Insider LLC*

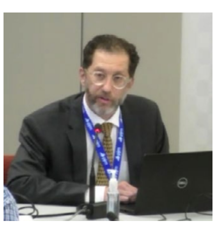
PJM's proposal to change its market seller offer cap (MSOC) fell short of the two-thirds endorsement threshold Wednesday as load sector stakeholders expressed concern over its impact on capacity prices.

The proposal, which would ensure sellers are always able to represent the cost of their Capacity Performance (CP) risk when offering into the capacity auction, won only 60.4% support in a sector-weighted vote of the Markets and Reliability Committee following more than an hour of debate.

The rule change would set the MSOC at the greater of the CP quantifiable risk (CPQR) or net avoidable-cost rate (ACR) inclusive of CPQR.

PJM, which sponsored the proposal in response to requests from generators, said it would address circumstances in which a unit with a positive CPQR value has that cost offset by an otherwise negative net ACR, which could result in a $0 offer cap.

PJM had hoped to win stakeholder and FERC approval for the change effective with the 2024/25 capacity auction in December. After the vote, Adam Keech, PJM vice president of market services, said staff hadn't had "real material discussions" on whether to recommend the Board of Managers file the proposal without stakeholder approval.



Steve Lieberman, American Municipal Power | *PJM*

American Municipal Power's Steve Lieberman said he was "extremely disappointed" with the way the issue was "shepherded" through the Resource Adequacy Senior Task Force, rejecting PJM's characterization of it as a "narrow" change. (See "Stakeholders Wary of 'Narrow' Change to Market Seller Offer Cap," *PJM Markets and Reliability Committee Briefs: June 29, 2022*.)

Lieberman said the proposal would be "a major change" to the Reliability Pricing Model and was proposed in response to the low prices in the last Base Residual Auction in June, when capacity prices dropped by one-third to almost one-half. (See *PJM Capacity Prices Crater*.)

He said AMP is willing to consider changes to the MSOC as part of a "holistic" review of capacity market rules.

PJM's Pat Bruno said CPQR is defined in the tariff as part of ACR and must be "quantifiable and reasonably supported."

"It's still supposed to reflect the market sellers' evaluation of the risk," he said.

Independent Market Monitor Joe Bowring said it is impossible to evaluate the impact of the CPQR change without understanding how PJM would interpret "reasonable support."

"This is a very significant change to the concept of what the MSOC is," he said. Removing a part of the ACR "simply is not logical and doesn't make sense.

"There's no issue that requires a short-term solution. We think this is a bad idea. It's not narrow. It should be part of a broader package."

Jeff Whitehead, GT Power Group | *© RTO Insider LLC*

Jeff Whitehead of GT Power Group said stakeholder concerns that the rule change would set a minimum capacity "floor" price would be addressed by PJM and IMM reviews of the generator filings.

"I don't believe it does [create a floor. But] as long as it's supported … it's not inappropriate that a new floor would be created," said Whitehead, who said he asked PJM to pursue

PJM News

the change.

"Unfortunately, a holistic approach went out the window with the MOPR," he added, referring to FERC's order effectively eliminating the minimum offer price rule for subsidized generation.

"This is a fair and simple reform, despite what the opponents are going to claim," said Jason Barker, of Constellation. "People have said this is a response to the last auction. It's not. This is a longstanding issue."

Susan Bruce, representing the PJM Industrial Customer Coalition, said allowing market sellers to reflect their risks in their offers "is a concept that's hard to say no to."

But she said her group would oppose the change without more certainty over the CPQR definition. " We don't know the size of the breadbox," she said.

Carl Johnson, representing the PJM Public Power Coalition, said he could not recommend his members support the measure.

Greg Poulos, executive director of the Consumer Advocates of PJM States, said most of his members would not support the change because of the "piecemeal" nature of the proposal.

Erik Heinle, however, said the D.C.'s Office of the People's Counsel would support the change, saying Whitehead and others had identified a "legitimate issue with the current construct."

He noted that wind generators cleared 434 MW less in the last auction than the previous one, a drop of 25%. "We certainly recognize the impact of this rule change on intermittent resources that often have very low ACRs and very high CPQRs. That was a major part of our thinking on this issue," he said.

Although he said more discussion is needed on the "parameters" of CPQR, he said his office is confident that the change wouldn't undermine PJM and the IMM's ability to prevent exercises of market power.

MSOC Pre-Auction Activity	Current Deadline	Adjusted Deadline*
Seller deadline to submit unit-specific MSOC request	8/9	-
IMM deadline for MSOC determination	9/8	10/7
Seller deadline for IMM agreement & final req. MSOC	9/18	10/12
PJM deadline for MSOC determination	10/3	10/18
2024/2025 BRA opens	12/7	-

* Adjusted deadlines would be contingent upon FERC approval of the filed change and assume Order by Oct. 1

PJM hoped to win stakeholder and FERC approval of the revised market seller offer cap (MSOC) in time for its next Base Residual Auction in December. | *PJM*

Bowring wasn't so confident.

"There's no good information on how high [the CPQR] could be or the impact on the clearing price without knowing PJM's rules," Bowring said. Expecting the IMM to prevent market power "cannot happen if the rules are bad." ■

Unit	Default ACR	E&AS Offset	Default Net ACR	Unit-Specific ACR (excl. CPQR)	Unit-Specific CPQR	Unit-Specific Net ACR	Current MSOC	Proposed MSOC
1	$80	$150	-$70	-	$20	-	$0	$20
2	$80	$70	$10	-	$20	-	$10	$20
3	$100	$120	-$20	$130	$20	$30	$30	$30
4	$100	$120	-$20	$110	$20	$10	$10	$20

Example Descriptions:

1) Unit 1 has a negative default Net ACR of -$70. Seller submits and is approved for a unit-specific CPQR value of $20, which exceeds the default Net ACR and sets the proposed MSOC at $20.
2) Unit 2 has a positive default Net ACR of $10. Seller submits and is approved for a unit-specific CPQR value of $20, which exceeds the default Net ACR and sets the proposed MSOC at $20.
3) Unit 3 has a negative default Net ACR. Sellers submits and is approved for a full unit-specific ACR value of $150 ($130 ACR excl. CPQR + $20 CPQR). The unit-specific Net ACR of $30 exceeds the standalone CPQR value and the proposed MSOC is set at $30, equivalent to the status quo.
4) Unit 4 has a negative default Net ACR. Seller submits a full unit-specific ACR value of $150, but is only approved for $130 ($110 ACR excl. CPQR + $20 CPQR). In this case, the standalone CPQR value exceeds the unit-specific Net ACR of $10 and sets the proposed MSOC at $20.

Examples of market seller offer caps (MSOC) under current rules and under PJM's proposal | *PJM*

Mid-Atlantic news from our other channels

NJ to Expand Wind Port with Land Purchase

NetZero Insider

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

PJM News

FirstEnergy Spending $1.5B on Transmission Projects this Year

Part of a $7B Spend Between 2018 and 2023, Boosting Return on Investments

By John Funk

The return on investments over the last five years to upgrade its transmission system helped FirstEnergy's second-quarter earnings, the company reported Wednesday.

FirstEnergy currently is overseeing more than 1,000 transmission upgrades, at a budgeted cost of $1.5 billion and part of a $7 billion plan that began in 2018.

"Our transmission business continues to be one of the focal points of our strategy," CEO Steven Strah said during a teleconference with analysts. "Our Energizing the Future program has a relentless focus on reliability improvements for our customers.

"We began the investment program in the ATSI region in 2014. And since that time, we have seen a 53% reduction in the interruptions to customers caused by transmission outages, a 49% decrease in transmission line outages and an 88% improvement of our protection systems. We're striving to build on this success within ATSI and across our territory as we continue to expand this investment program.

"So far this year, we've completed important work across our footprint to reconfigure several substations, rebuild transmission lines, replace transformers and enhance network, cyber and physical security. These projects improve operational flexibility, upgrade the condition of equipment and enhance system performance," Strah said.

A formula developed by FERC typically sets the rate of return on such necessary transmission projects around 9%, compensating a utility for the risk involved.

The company reported second-quarter net income of $187 million ($0.33/share) on revenue of $2.8 billion. That compares to net income of $58 million ($0.11/share) on revenue of $2.6 billion in the second quarter of 2021.

Although residential sales decreased 1.6% compared to the second quarter of last year, reflecting milder weather this past spring, commercial and industrial sales increased 1.9% and 2.4%, respectively, CFO Jon Taylor said. And for the first time, industrial sales were higher than pre-pandemic levels, he said, "reflecting strong recovery and growth in many sectors, including steel, fabricated metals, automotive and food manufacturing."

The one concern in the otherwise upbeat earnings report is that expenses related to the performance of FirstEnergy's pension plan in what the company calls a "bear market," along with rising interest rates, could make the plan more expensive to fund, reducing net earnings. ■

Billions of dollars spent on transmission system upgrades since 2018 have increased the reliability of FirstEnergy's wires as well as the company's rate of return, as noted in second quarter earnings reported Wednesday. The company currently has more than 1,000 transmission projects underway and remains on track to invest $1.5 billion in the transmission system this year alone. | *FirstEnergy*

PJM News

PJM MRC/MC Briefs

Markets and Reliability Committee

2022 Quadrennial Review

The PJM Markets and Reliability Committee last week received a *briefing* on four alternative sets of capacity auction parameters as part of its 2022 Quadrennial Review.

Members will be asked to select one of the packages from PJM, the Independent Market Monitor, Calpine and Cogentrix at the MRC's Aug. 24 meeting, which will be followed by a vote at a special Members Committee meeting. The votes are advisory, however; the Board of Managers will make the decision on what parameters to propose to FERC.

The parameters — which include the shape of the variable resource requirement curve, the cost of new entry for each locational deliverability area, and the methodology for determining the net energy and ancillary services (E&AS) revenue offset — would be effective with the July 2023 capacity auction for delivery year 2026/27.

Cogentrix's proposal was the overwhelming favorite in a *vote* of the Market Implementation Committee on July 19-22, winning 73% support, with 62% saying they preferred it over the status quo. The PJM and Calpine packages tied at 28% each, while the Monitor's proposal garnered only 15% support. (Members were permitted to vote for more than one option.)

The Cogentrix proposal, which was presented by GT Power Group's Jeff Whitehead, adopts the status quo:

- reference technology (combustion turbine);
- variable operations and maintenance (VOM) parameter (major maintenance and operating cost included);
- simulation method for calculating net energy revenues (peak hour dispatch); and
- net E&AS (historical-looking inputs).

Cogentrix's proposal also adopts PJM's fuel assumption (firm transportation) and for the three points on the VRR curve but with the use of a CT rather than the RTO's combined cycle reference technology.

The Cogentrix curve would result in a price of about $600/MW-day for an unforced capacity (UCAP) reserve margin of about 7.5%, up from about $500/MW-day with the current curve, according to PJM. The curve is almost identical to the RTO's proposed curve above a 10% UCAP reserve margin.

Whitehead said Cogentrix chose a CT as the reference technology because it is less dependent on E&AS revenue than combined cycle plants. "We've seen how much E&AS revenues can change … in a relatively short period of time," he said, a danger when parameters are being set four years in advance of delivery. LMPs, which hovered around $20/MWh "around the clock" during the coronavirus pandemic, averaged about $67/MWh in June, he noted.

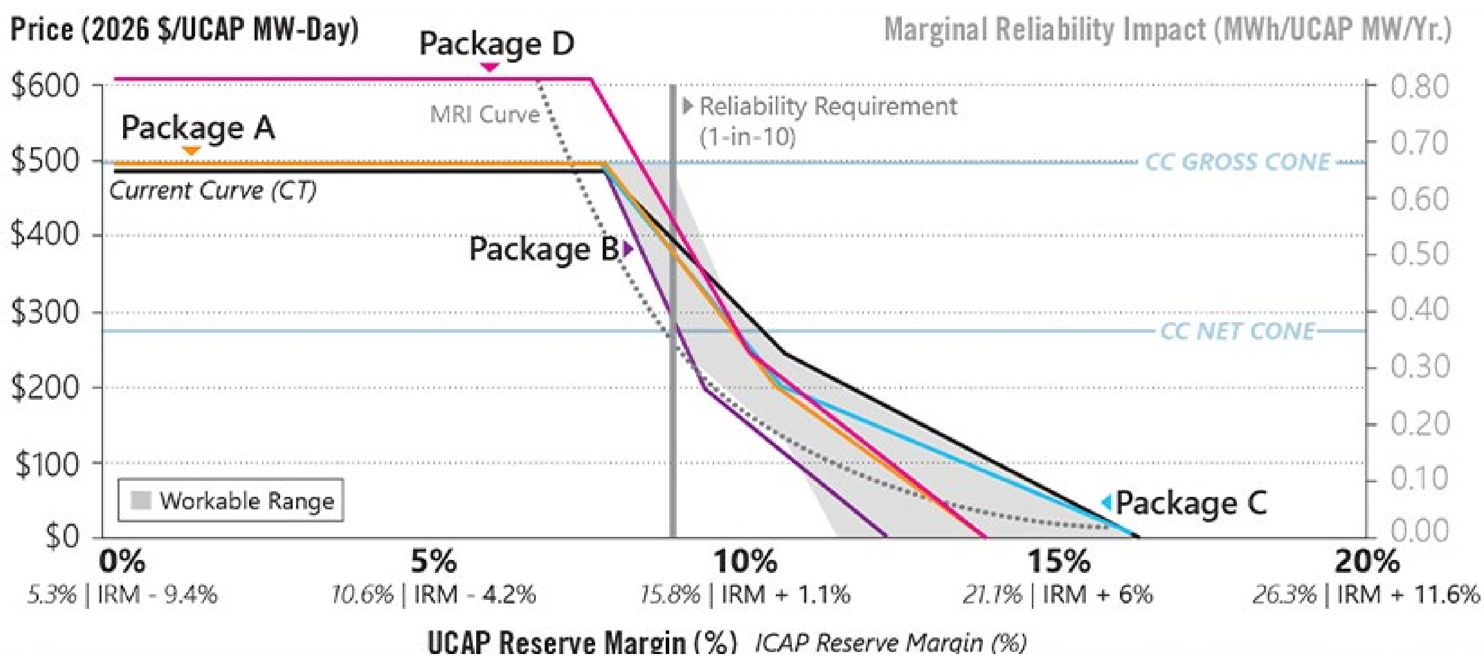
He said CTs are also the most likely generation to be built in a "capacity crunch."

He acknowledged energy storage may be a more appropriate reference technology in the future, noting they are "extremely dependent" on capacity revenue, with regulation their only other revenue source.

David "Scarp" Scarpignato, Calpine | *PJM*

David "Scarp" Scarpignato of Calpine said his company's proposal was based on PJM's and the recommendations of the RTO's consultant, The Brattle Group. However, Calpine favored a historic E&AS offset rather than the forward-looking approach proposed by PJM and the Monitor.

"It's a bad time with all the volatility in the gas markets to be switching to the forward" approach, Scarp said.



Proposed VRR curves from PJM (Package A), the Independent Market Monitor (B), Calpine (C) and Cogentrix (D) | *PJM*

PJM News

Calpine chose PJM's proposal for the first two points on the VRR curve and the status quo for the third point.

"The bottom part of the curve makes a lot of sense," Scarp said. "MISO has a vertical curve. And we saw how that worked out in the last auction." (See *MISO Capacity Auction Values South Capacity at a Penny*.)

Monitor Joe Bowring made a case for his proposal to use only operating costs in the VOM calculation. "Ideally the VOM would all be in avoidable costs, but we recognize it's not currently" he said. As a result, the IMM proposed including major maintenance in energy offers. "If they are in the energy offers, they should not be in avoidable costs," Bowring said.

Manual Revisions OK'd

The MRC endorsed:

- *changes* to Manual 01: Control Center and Data Exchange Requirements, Manual 18: PJM Capacity Market and Manual 28: Operating Agreement Accounting to conform with new testing requirements for demand response and price-responsive demand. The changes, which were approved by FERC in June 2020, will become effective with delivery year 2023/24 (*ER20-1590*).
- *updates* to Manual 14D: Generator Operational Requirements to support the process timing changes for generation deactivations. (See "'Quick Fix' Changes OK'd for Manual 14D," *PJM Operating Committee Briefs: July 14, 2022*.)
- *revisions* to Manual 28: Operating Agreement Accounting to support the start-up cost offer development proposal the MRC approved in May, which allows costs associated with a resource's initial ramping megawatts and soak costs to be included in its start cost. The MC later endorsed related *changes* to Manual 15: Cost Development Guidelines, tariff definitions, Attachment K, Operating Agreement definitions, and Schedules 1 and 2. (See "Start-up Cost Offer Development Proposal Endorsed," *PJM MRC Briefs: May 25, 2022*.)

Members Committee

Application of Designated Entity Agreement

PJM's notice that it planned to make a Federal Power Act Section 206 filing asserting that the OA's provisions on designated entity agreements (DEAs) are unjust and unreasonable prompted the cancellation of scheduled MRC and MC votes on competing issue charges on the matter.

One issue charge was proposed by consumer advocates for Delaware and New Jersey, and a second was by East Kentucky Power Cooperative on behalf of transmission owners. The latter would make out of scope any consideration of changes to the rights and responsibilities of PJM and the TOs under the Consolidated Transmission Owners' Agreement.

The sponsors withdrew their proposals after PJM gave notice of its planned FERC filing on the MRC and MC agendas. PJM also gave the MC "notice of consultation" of a potential filing under FPA Section 205 to revise the pro forma DEA in Attachment KK of its tariff.

Greg Poulos, CAPS | *PJM*

"It didn't make sense to have both a FERC proceeding and a stakeholder proceeding going on at the same time," explained Greg Poulos, executive director of the Consumer Advocates of the PJM States (CAPS).

On July 26, a group of load-side stakeholders beat PJM to FERC, filing a complaint asking the commission to force the RTO to require incumbent TOs to sign DEAs on "immediate need" projects. The complainants contended the RTO has violated the OA by refusing to do so. (See related story, *PJM Challenged on Oversight of 'Immediate Need' Tx Projects*.)

PJM attorney Pauline Foley said the RTO received the stakeholders' complaint late last Tuesday afternoon. "PJM is reviewing the complaint and assessing its path forward," Foley told the MRC on Wednesday.

'Seeding' the Matrix

Members endorsed a proposal to allow PJM and stakeholders to add options to a Consensus Based Issue Resolution (CBIR) matrix before posting the matrix for discussion.

The change will allow PJM and stakeholders to offer options after completing the identification of design components (Step 1) and before posting to facilitate creation of the options matrix (Step 2) prior to solution package development (Step 3).

PJM's Dave Anders said the proposal by John Horstmann of Dayton Power & Light and Adrien Ford of Old Dominion Electric Cooperative to *modify* Manual 34: PJM Stakeholder Process would address the "writer's block" that sometimes occurs at the beginning of the matrix development.

Bowring said his prior concern that the proposal would give PJM an advantage were addressed by assurances that any options proposed by the RTO could be ignored. (See "Members Debate Change to CBIR Matrix Procedure," *PJM Stakeholders Pump the Brakes on 'Clean Energy Expertise' for Board*.)

Steve Lieberman of American Municipal Power said he thought the change was unnecessary because the individuals sponsoring a problem statement and issue charge should be prepared to initiate discussion of options. But he said he was "not willing to fall on my sword" by opposing it.

The measure passed by acclimation with one objection and two abstentions.

PJM Annual Meeting

PJM will hold its first off-site *Annual Meeting* since the pandemic on Oct. 24-26 at the Hyatt Regency Chesapeake Bay in Cambridge, Md. Registration will be conducted online between Aug. 1 and Oct. 19. No walk-up registrations will be permitted. The fee for guests will be $400.

'Clean Energy Expertise' Requirement

The Illinois Citizens Utility Board *presented* three proposed revisions to the OA to add a requirement that one member of the PJM board have "clean energy resource expertise."

Albert Pollard, who heads CUB's *CLEAR-RTO* project, said one of the proposed revisions — requiring "expertise and experience in the development, integration, operation or management of clean energy resources" — was nearly identical to language the RTO is using in its current search for a replacement for Manager Sarah Rogers, who attended her final MC meeting Wednesday.

Pollard said the change is needed because the transition to carbon-free generation is a "top priority" for the RTO.

ODEC's Ford questioned whether the OA should be revised. Cybersecurity expertise is also important to the board but is not mentioned in the agreement, she said.

"If the [requirements] matrix gets too big, it might result in focusing on some areas of expertise and neglecting of others," she said.

MC Chair Erik Heinle said the issue will likely be on the agenda for the committee's Sept. 21 meeting. ■

— Rich Heidorn Jr.

SPP News

SPP Board, Regulators Side with Staff over Reserve Margin

15% Margin Going into Effect Next Year

By Tom Kleckner

SPP's Board of Directors on July 26 sided with staff in approving an increase of the RTO's planning reserve margin (PRM) to 15%, effective next year.

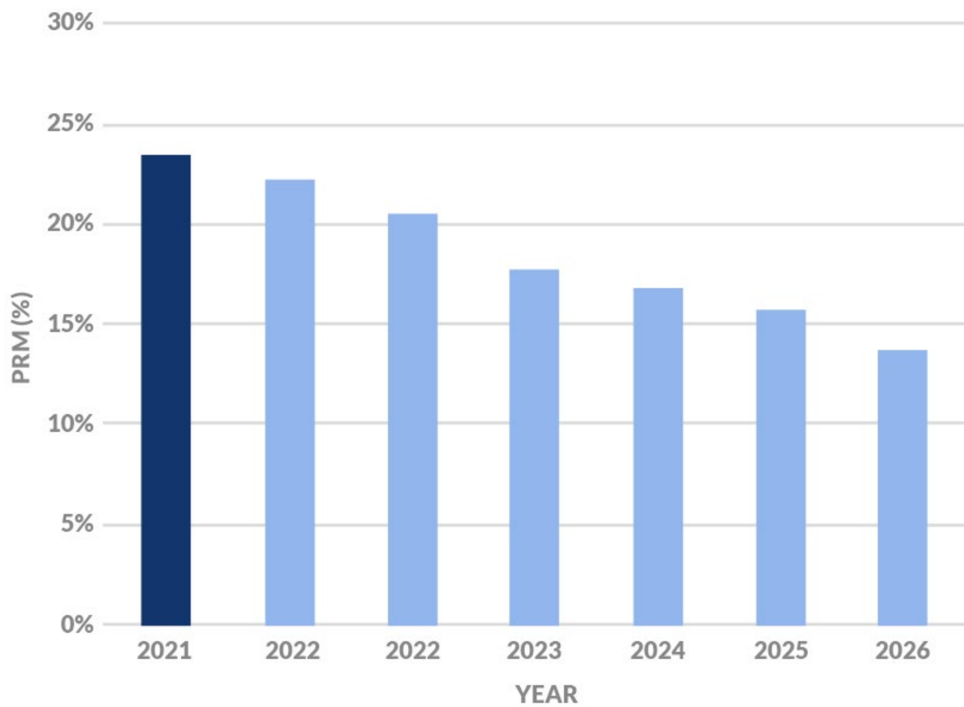
In doing so, the board sidestepped a recommendation from the Markets and Operations Policy Committee to "stair-step" the increase by adding a percentage point to the PRM over three successive years. (See *SPP Board, Regulators to Consider Reserve Margin Increase*.)

SPP's reserve margin requirement, currently 12%, is based on a probabilistic loss-of-load expectation (LOLE) study during summer months that is performed every two years to determine the capacity needed to meet the reliability target of a one-day outage every 10 years (0.1 days/year). LREs unable to meet an obligation that is now increasing three points to 15% can incur financial penalties from the RTO.

Half of the 18-person Members Committee approved the motion, with five (Golden Spread Electric Cooperative, Oklahoma Gas & Electric, Omaha Public Power District, Xcel Energy and Public Service Company of Oklahoma) opposing and four (Empire District Electric, Oklahoma Municipal Power Authority, Tenaska Power Services and Western Area Power Administration) abstaining. The proposal to establish a new PRM will require a revision request filed at FERC.

"In all my years with SPP, I've probably not had more individual contact on an issue than this

Lanny Nickell, SPP COO | *SPP*



SPP's planning reserve margin reserve margin will continue to shrink in future years. | *SPP*

one," said Board Chair Larry Altenbaumer, a director since 2005. "While I'm hopeful to find ways to mitigate any financial costs that people might face, as Winter Storm Uri demonstrated, those costs to meet reliability will pale in comparison with the costs of forced outages and not meeting load.

"There would be no worse scenario than to delay the 15% implementation and then to have an unusual summer event," he said. "I don't want SPP and regulators to be on the other end of calls from governors about why didn't we get this done."

The Supply Adequacy Working Group (SAWG) recommended the stair-step approach, saying it would give SPP time to reduce the generator interconnection queue's backlog, adding certainty to generation forecasts, and allow LREs short of their capacity requirements to cure deficiencies.

SPP COO Lanny Nickell promised members that staff would do everything it could to develop a mitigation plan that works for those LREs short of their requirements.

"That is a critical issue that has to be resolved," he said. "We have to have adequate resources to keep the lights on, but we also have to help our members who are in a position they didn't expect to be in … We've got to move forward and figure out how to implement [the plan] and help members who are in this position through no fault of their own."

Nickell said LREs short of their capacity requirements — a dozen, according to SPP — have several options to meet the 15% capacity obligation:

- purchase existing excess capacity from other entities;
- use interim service in the GI process;
- defer currently planned generation retirements;
- reduce off-system sales; and
- increase demand response and/or interruptible load.

Still, Nickell said staff will also develop a waiver process to be used by members who might still be short of their PRM requirement. They plan to offer that up to MOPC during its October meeting.

The directors also approved a motion to accept SAWG's performance-based accreditation

SPP News

methodologies in its *policy paper*.

The paper outlines accreditation for conventional thermal resources based on their performance over a five-year period, with the worst year tossed out. This is the first time SPP has applied this methodology.

"By having more reliable capacity on the system, that means you need less capacity overall," said Antoine Lucas, SPP's vice president of engineering. "Performance-based accreditation could actually reduce the reserve margin itself, but more importantly, the reserve adequacy requirement."

Several members and SPP's Market Monitoring Unit were among those questioning only using the four best years to arrive at the accreditation. The MMU said the approach should be balanced with an appropriate winter planning reserve margin but said it did not oppose or support the proposal.

The Regional State Committee approved both recommendations unanimously, surprising its chair, North Dakota Public Service Commissioner Randy Christmann.

"I thought it would be very close," he said. "This process has been inspiring. I saw leadership

Antoine Lucas, SPP | *SPP*

in these last two months with RSC members, with CAWG members, with member companies' members, some of whom didn't get their way necessarily on this. But they provided the information we needed to make what we believe is the best possible choice. They really stepped up on behalf of their companies and used the expertise they have in the subject area."

Members generally agreed, as they did during

Randy Christmann, ND PSC | *SPP*

the MOPC's lengthy discussion last month, that the 15% PRM was appropriate, but not without a "glide path" to the target.

"We're asking the utilities to make turns that are very difficult," said Oklahoma Corporation Commissioner Dana Murphy. "It's like turning the *Titanic*. Sometimes it takes a little bit more of lead time."

Both measures will require staff to draft revision requests to be filed at FERC.. ■

SPP Regional State Committee Briefs

Regulators Approve DC Tie Congestion-hedging Solution

SPP's Regional State Committee on July 25 approved its Cost Allocation Work Group's recommendation to approve a congestion-hedging solution for three DC ties that will connect the RTO's Eastern and Western interconnection footprints.

The DC ties are owned by members of SPP's Western Energy Imbalance Service market, providing up to 510 MW of capacity for RTO operations. Other DC ties could be added as the grid operator continues its Western expansion.

The DC Tie Solution Group developed the recommendations earlier this year in a white paper. It said the ties provide a necessary link to "facilitate single market operations" between the two interconnections and to ensure the best use of the facilities and maximum market benefit.

The RSC has agreed that a DC tie cost-allocation methodology should be developed because of their unique operational characteristics and their market functionality. According to the *white paper*, the AC portion of the transmission-service paths that cross a specific DC tie will be awarded auction revenue rights (ARRs) and transmission congestion rights (TCRs) as a single path source to sink and then settled in multiple parts. The rights will be settled in two stages, with the AC portions settling in their respective interconnections. Day-ahead market congestion rent across the DC tie in both stages will be an option style, with the AC portions remaining as obligations.

The solution group recommends a four-year transition period. In the first four years, DC tie congestion settlement is removed from the TCR market. After that, the DC tie settlements process moves to SPP's existing TCR market approach. TCR holders will be compensated for a specific tie's congestion based on the awarded TCR megawatt amount.

Legacy facilities' annual transmission revenue requirement will remain in their respective local transmission zone and will also remain part of the zone's network and point-to-point rates. However, increased use of the DC ties will result in increased maintenance costs, the solution group said, with increased costs being borne fully by the tie owner's zone unless cost recovery mechanisms are put in place.

The white paper creates two new revenue recovery mechanisms, an access charge and an incremental market efficiency use (MEU) charge, to recognize beneficiary-pays principles and recover increased operational costs due to market operations.

CAWG to Continue Safe Harbor Study

The committee directed the CAWG to spend at least another quarter exploring further changes to SPP's three safe harbor criteria and its $180,000/MW limit and bring back the results to its October meeting.

The RSC's review of safe harbor criteria is its first since 2018. A 2020 study was canceled in 2019 following the regulators' decision to conduct in-depth safe harbor reviews every five years. (See "Regulators Cancel 2020 Safe Harbor Review," *SPP Regional State Committee Briefs: July 29 & Aug. 5, 2019*.)

The reviews are intended to determine whether modifications should be made to the thresholds used to determine what project costs should be borne by the load-serving entities making long-term transmission service requests (TSRs).

SPP's aggregate transmission service study process combines into a single study all long-term point-to-point and designated network resource requests received during a specified time period. The RTO splits the costs of transmission projects between the entire SPP footprint and the LSEs purchasing transmission service for designated resources — those used to meet the LSE's capacity margin requirement.

The safe harbor exempts LSEs from upgrade costs when a TSR meets the aggregate studies' waiver criteria, which include:

- wind generation not exceeding 20% of designated resources;
- a minimum five-year term for designated network resources TSRs; and
- designated resources not exceeding 125% of forecasted load.

The CAWG will bring back any modifications to the criteria or the amount. Several states have expressed an interest in further evaluating the 125% load and 20% wind criteria, regulatory staff said.

Travel Costs Increase Budget

The RSC approved a proposed budget for 2023 that reflects rising travel costs, despite a reduction of in-person meetings from four to two.

The total budget of $424,500 includes $270,00 for travel and meetings, an almost 57% increase from last year.

The committee is more than $123,000 under this year's budget. Members have spent more than $37,000 of a budgeted $86,000 on travel and meetings.

Members, who will only meet twice in person this year, discussed the possibility of a third face-to-face meeting next year. Minnesota Public Utilities Commissioner John Tuma, sitting outside in what he described as 76-degree temperatures and mild humidity, suggested the RSC gather in the Minneapolis-St. Paul area for its next July meeting.

Fiegen to Chair Nomination Committee

Members selected South Dakota Public Utilities Commissioner Kristie Fiegen to chair the RSC's Nomination Committee, where she will be joined by Arkansas Public Service Commissioner Ted Thomas and Missouri Public Service Commissioner Scott Rupp.

They will be responsible for bringing the 2023 proposed leadership slate to the RSC's October meeting. They will also have to select at least one new member for the committee, as Oklahoma Corporation Commissioner Dana Murphy is term-limited after this year. ■

— Tom Kleckner

Dana Murphy, OCC | *SPP*

SPP News

SPP Board of Directors/Members Committee Briefs

Members Approve SPS Tx Project over Staff's Recommendation

SPP's Board of Directors last week approved stakeholders' recommendation to issue a notification to construct for a 345-kV double-circuit transmission project in eastern New Mexico.

The Crossroads-Hobbs-Roadrunner project, proposed by Southwestern Public Service as an alternative to a previously identified project in the 2021 Integrated Transmission Plan, was recommended by two stakeholder groups following its re-evaluation after load-projection errors were discovered in the original solution.

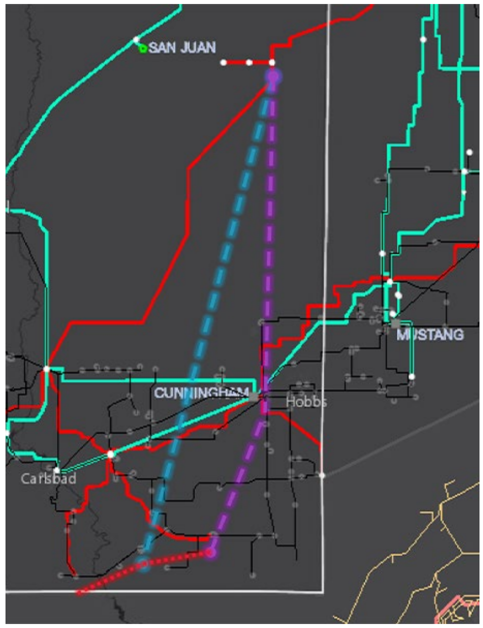
At $395 million, Crossroads-Hobbs-Roadrunner is $15 million cheaper than the original Crossroads-Phantom project and offers SPS operational flexibility. It solves reliability concerns in a load pocket in the state's petroleum-rich Permian Basin region and could lead to additional renewable development there. The line, about 150 miles long, runs from Crossroads to Roadrunner. SPS, the incumbent transmission owner, added a substation in Hobbs that SPP staff said gives more access to operating reserves in the load pocket.

The line also saves about $6 million by eliminating four EHV crossings that the original line, recommended by staff, would cross.

The Markets and Operations Policy Committee found both projects address the area's reliability needs and economic congestion and endorsed both as potential solutions during its meeting earlier in July. But it pointed out that Crossroads-Hobbs-Roadrunner provides better net benefits over its 40-year life of between $2.8 billion to $3 billion, and that could increase to between $3.1 billion and $3.2 billion once the area's residual congestion is mitigated. (See "MOPC Keeps SPS' Tx Alternatives Alive," *SPP Markets and Operations Policy Committee Briefs: July 11-12, 2022*.)

"We see a lot of benefits from routing line through Hobbs," SPS' Jarred Cooley said during the July 26 board meeting. "It's in the high-growth load in New Mexico; generation is located in close proximity; and it gives a path to the southern part of our territory. Lingering congestion issues … [are] something that can be further investigated in future studies. We see Hobbs as more reliable … with the ability to adapt to more load growth."

Staff recommended Crossroads-Phantom



The Crossroads-Phantom (blue) and Crossroads-Hobbs-Roadrunner (purple) 345-kV lines in New Mexico | *SPP*

during the ITP study, saying it solved the majority of load and voltage issues at the Phantom substations. However, it agreed Crossroads-Hobbs-Roadrunner creates more flexibility for other interconnections.

"These projects are very similar. We can't give a real strong preference to either project," said Antoine Lucas, SPP's vice president of engineering. "It depends on what happens next. We know there are potential new loads looking to interconnect to the southern end of the SPS system, but at this stage, those things are speculative. They don't meet the level of certainty in our normal ITP processes."

The Members Committee's advisory vote passed unanimously with five abstentions: American Clean Power, Dogwood Energy, Golden Spread Electric Cooperative, Liberty Utilities and Oklahoma Municipal Power Authority (OMPA).

"I can't help but wonder about the direction we're going," OMPA General Manager Dave Osburn said. "We have a load pocket that needs transmission because of a lack of generation. How long can we build out transmission with other regions paying for it without getting new generation built? It seems like we're fixing a problem we could fix locally."

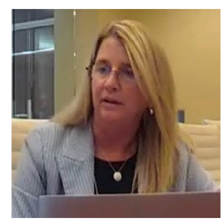
Staff will now assess both upgrades to determine whether either qualifies as a competitive project. If they don't, SPS will be awarded the NTC.

"There's a good chance both could be competitive," SPP General Counsel Paul Suskie said.

NextEra Energy Resources' Matt Pawlowski pointed out that recent competitive projects have shown cost savings of 30 to 50% in the initial phase. Board Chair Larry Altenbaumer agreed, saying that it is an issue that haunts him.

"At the end of the day, the real determinant over which is the better project will be the competitive proposals that come forward with actual costs," Altenbaumer said. "Those differences in [benefit-to-cost] ratios are the noise range. What we've seen historically is that competitive projects seem to bring improvements in actual costs to the table than what are frequently determine in planning estimates."

Summer of '22 'Wild One'



SPP CEO Barbara Sugg delivers her president's report. | *SPP*

Calling this summer a "wild one," CEO Barbara Sugg detailed for the board and stakeholders just how wild it's been during her quarterly CEO's report.

SPP has set six new records for peak demand this month, with the latest — 53.2 GW on July 19 — being a 4.23% increase over the previous mark of 51.04 GW set last year, she said.

Sugg said the RTO has sold more generation over the first six months of the year than ever before. The grid has recorded all-time highs for five of those months. Staff said load assumptions for the rest of year could result in a $6.8 million over-recovery that will be used to reduce next year's recovery.

Sugg said the RTO has issued six resource advisories and one call for conservative operations in its 14-state balancing authority in the Eastern Interconnection. She noted that the grid operator's footprint has spent 21 days under a resource advisory, nine under conservative operations, since May 1.

Make that 22 days under a resource advisory. Following the board meeting, SPP issued its seventh such advisory of the summer for July 27.

"Summer is far from over," Sugg said. "Hot sum-

SPP News

mers are becoming more of a regular thing."

Sugg also welcomed the RTO's three newest members: Oklahoma's People's Electric Cooperative, Colorado's United Power, and the National Resources Defense Council. They raise SPP's membership count to 113.

Search on for 2 Board Directors

The Corporate Governance Committee will bring nominations for two board vacancies to October's meeting. SPP already has one opening for a director's seat with Julian Brix's retirement; a second will open up at year-end when Mark Crisson's term expires and he retires.

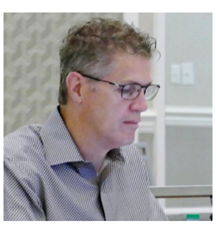
The board will lose longtime members Altenbaumer and Joshua W. Martin III in December 2023, when both will retire. They have 34 years of experience between them, with Martin serving 18 and Altenbaumer 16.

The bylaws limit SPP to nine independent directors, but Sugg said the CGC could bring two recommendations for the vacancies in October because of the expected steep learning curve.

"The search is highly focused on the competencies we'll be losing," she said of Altenbaumer's and Martin's experience.

Western RC Calls 2 EEAs for EPE

SPP had to twice place El Paso Electric (EPE) under energy emergency alert (EEA) status in June when two of the utility's 345-kV transmission lines tripped offline within a week of each other.



Bruce Rew, SPP | © RTO Insider LLC

Senior Vice President of Operations Bruce Rew told the board and stakeholders that EPE was pleased that SPP, the *reliability coordinator* for it and 14 other utilities in the Western Interconnection, was "able to respond and get through it."

"We were able to provide assistance over [a] DC tie," Rew said. "It was only 200 MW, but when you're short or really close, 200 MW is 200 MW."

Early in the morning on June 10, the West Mesa-Arroyo line in Eastern New Mexico tripped, causing a derate on EPE's import capability because of the risk of overloading an underlying 115-kV line. When the utility said it had concerns about meeting its contingency reserve obligation later that afternoon, SPP West RC placed the EPE balancing authority in a Level 1 EEA while working to determine projected system conditions.

At 2:42 p.m. CT, SPP raised the EEA to Level 2 because it and EPE agreed interruptible demand was necessary to compensate for the lack of local generation and its import capability given the load forecast. The EEA was called off when load dropped off that night.

At 6:50 p.m. June 16, the Luna-Diablo line out of El Paso into New Mexico tripped offline, causing a derate for the same reasons as the June 10 event. The RC placed EPE in EEA 1 over concerns it could not cover its most severe single contingency and then an EEA 2 because of the use again of interruptible loads. The event ended at 8:36 p.m. when load dropped and additional generation was supplied over the Artesia DC tie.

SPP's Western Energy Imbalance Service (WEIS) market is also active in the Western Interconnection, balancing generation and load in real time for eight participants. That will grow to 12 when Colorado Springs Utilities joins Aug. 1 and Black Hills Energy, Platte River Power Authority and Xcel Energy-Colorado join next April, Rew said.

"It's encouraging to see the continued growth of SPP's energy services in the west," Rew said in a *press release* issued Monday. "Organized markets save utilities and their customers money, make the delivery of electricity to customers more reliable, and help utilities and states achieve clean energy goals."

"Participation in the [WEIS] is a significant step in our pursuit of clean energy goals and sends a strong signal that we're doing everything possible to secure a reliable electric grid and reduce energy-related costs for our customers," CSU CEO Aram Benyamin said.

The RTO's Integrated Marketplace lost a couple of financial-only participants during the second quarter, leaving 184 in that category, Rew said. SPP's markets have 103 asset-owning participants and 287 overall. They've been drawn by the markets' bountiful wind resources, which have grown from 24 GW of installed capacity two years ago to 31.85 GW in 2022.

Board Approves DC Tie Solution

The board's consent agenda included a congestion-hedging solution for three DC ties that will connect the SPP's Eastern and Western interconnection footprints. The DC ties are owned by members of the WEIS, providing up to 510 MW of capacity for RTO operations.

The measure was previously endorsed by the Regional State Committee on July 25. (See related story, *SPP Regional State Committee Briefs: July 25, 2022*.)

By passing the consent agenda, the board also approved:

- bylaw revisions that clarify RSC membership is only available to regulatory agencies in states within SPP's footprint that receive RTO services;
- filling vacancies on the Strategic Planning Committee (Matt Caves, Western Farmers Electric Cooperative) and Human Resources Committee (Matt Dills, ITC Great Plains);
- creating a third withdrawal deposit category to allow certain non-load-serving entities to terminate their membership without providing a withdrawal deposit;
- forming the 18-person industry expert pool that will evaluate competitive transmission proposals in 2022;
- sponsored upgrades studies for NextEra of terminal equipment on two 161-kV lines near Warrensburg, Mo.; Invenergy's proposal to build a 345-kV line between two substations in West Texas and its upgrade of two 345/230-kV transformers in South Dakota to a 581-MVA rating; and Oklahoma Gas & Electric's reconductoring of a 69-kV transmission line to increase their normal and emergency ratings of the lines while replacing aging assets;
- a revision request (*RR452*) adding a standardized process for evaluating projects proposed by transmission owners for reasons other than meeting SPP regional criteria or a limited subset of local planning criteria evaluated in the planning process;
- the *2023 operating plan* that describes SPP's high-level objectives and initiatives for next year (strategic opportunities, implementing FERC orders 881 and 2222, addressing two major FERC proposals related to transmission-planning processes, and responding to the 2021 winter weather event) and serves as the foundation for the annual budget process; and
- removing the suspension earlier this year of an NTC, originally awarded in 2018 to Nebraska Public Power District, for a 115-kV project valued at $53.8 million. ■

— Tom Kleckner

Company News

Load Growth Boosts AEP Earnings

By Tom Kleckner

Boosted by load growth that has returned to pre-pandemic levels, American Electric Power executives told financial analysts Wednesday that the company is building on the momentum it experienced last year.

Nick Akins | © *RTO Insider LLC*

Leave it to AEP CEO Nick Akins, a drummer and huge rock fan in his spare time, to explain the company's good place in a different way.

"What's going on today at AEP is a perfect blend of the execution of Bachman-Turner Overdrive's '*Takin' Care Of Business*' with the edge of Prince's '*Let's Go Crazy*.' In a good sense, of course," he said during the company's second-quarter earnings call.

CFO Julie Sloat said AEP's normalized sales through June were 2% above pre-pandemic levels. Residential sales were up 1.2% during the quarter and up 1% year-to-date, compared to 2021. That helped drive a 14-cent increase in the earnings per share for the company's vertically integrated utilities.

"Last year's strong growth numbers were expected considering it was a recovery year from the pandemic shutdowns," Sloat said. "This year's growth is perhaps even more impressive considering the growth as compared to a strong recovery year."

Akins agreed with an analyst who remarked that the Columbus, Ohio-based company's load growth provides a "very strong tailwind" for this year.

"It's always good to be ahead a little bit any time you go in the latter part of the year because summer is always good," Akins said. "Our load guy is pretty optimistic. And if you knew our load guy, you know it takes a long way for him to get there. But we feel really good about the position that we have."

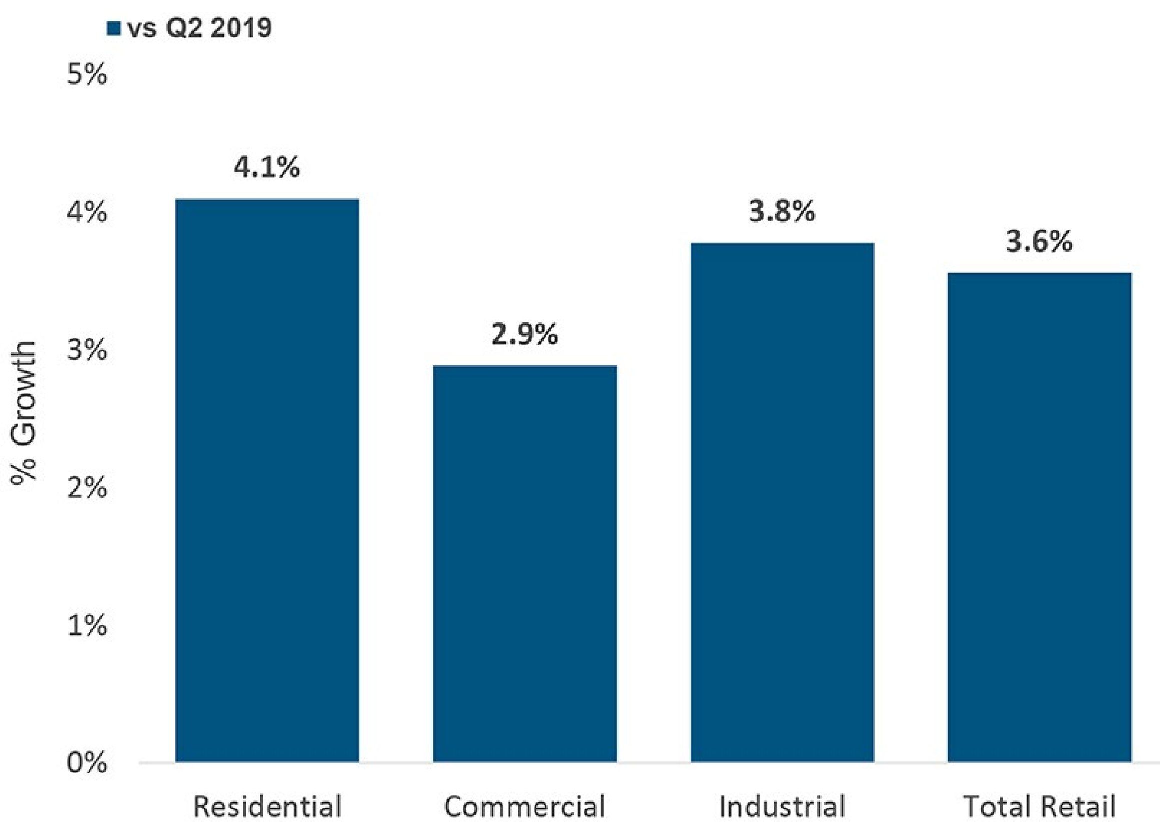
AEP *reported* quarterly earnings of $525 million ($1.02/share), down slightly from earnings of $578 million ($1.16/share) a year ago during the same quarter.

Operating earnings, which exclude special items, came in at $618 million ($1.20/share). That beat Zacks Investment Research analysts' average estimate of $1.18/share. AEP reaffirmed its 2022 operating earnings guidance range of $4.87 to $5.07/share and 6 to 7% long-term growth rate.

The excluded items included charges related to the expected sale of AEP's Kentucky operations and an equity investment's write-off in the Flat Ridge II joint venture wind facility in Kansas. The company is currently discussing the possible sale of its 235-MW ownership.

Kentucky regulators in May signed off on the $2.8 billion transaction with Liberty Utilities, but the deal still awaits approval from FERC and West Virginia regulators. Akins said both states have approved the operating agreement for the 1.55-GW Mitchell Power Plant in West Virginia but with different formats and some divergent post-2028 plant provisions. (See *PSC OKs Sale of AEP's Kentucky Operations to Liberty Utilities*.)

After opening at $94.83 on Wednesday, a $1.59 drop from the previous close, AEP's share price gained $1.46 and finished the day at $96.29. It was trading at $94.99 following the market's close. ■



AEP's load exceeds pre-pandemic levels and is in expansion mode. | *AEP*

Company News

Xcel Sees Benefits in $3.2B Transmission Opportunities

By Tom Kleckner

Xcel Energy executives Thursday praised both the MISO long-range transmission plan (LRTP) and late-breaking agreement in D.C. over the $670 billion Inflation Reduction Act, telling financial analysts both will help the company add 10 GW of renewable energy in its resource plans.

CEO Bob Frenzel said the company is "excited about our transmission expansion opportunity" and expects a $1.2 billion investment for six projects in the LRTP's $10 billion first tranche of projects. Several projects in Xcel's Wisconsin footprint have been identified as upgrades, which will keep them in the company's hands. (See *FERC Allows MISO to Exclude Tx Projects from Competition*.)

Combined with Xcel's *Colorado Power Pathway* — a $1.7 billion to $2 billion, 560- to 650-mile project with regulatory approval — and the transmission needs in its Minnesota resource plan, the company now has about $3.5 billion in large-scale transmission projects.

Frenzel said that will help Xcel add to the renewables it needs for its Minnesota and Colorado resource plans and reach its target of 80% carbon reductions by 2030.

The Minneapolis-based company also reacted positively to the *deal* reached Wednesday between Senate Majority Leader Chuck Schumer (D-N.Y.) and Sen. Joe Manchin (D-W. Va.) on a climate package that could be up for a reconciliation vote. (See *Schumer, Manchin Reach Climate Deal*.)

"It appears to include nearly all the broader clean energy tax credits, including new and extended tax credits for wind, solar, hydrogen storage and nuclear," Frenzel said. "The energy provisions included in the act would provide substantial customer benefits and help enable our clean energy transition while keeping our customer bills affordable. There's still a lot of twists and turns that can happen in Washington, but we're optimistic that the bill could become law."

Xcel reported second-quarter earnings of $328 million ($0.60/share), slightly above last year's second-quarter earnings of $311 million ($0.58/share). Operating earnings came in at 60 cents/share, in line with the Zacks Consensus Estimate.

The company's share price closed at $72.21 Thursday, up 2.8% from the previous close. ■

Xcel Energy lineman at a transmission tower | *Xcel Energy*

Company Briefs

DCP Midstream Fined for Clean Air Act Violations

Denver-based natural gas company DCP Midstream last week agreed to pay a $3.25 million fine to settle thousands of Clean Air Act violations recorded across Colorado's Front Range by the EPA and the state Department of Public Health and Environment.

DCP operates natural gas processing plants in nine Colorado counties where air quality has fallen so far below the EPA's ground-level ozone standards that the area has been designated as a serious nonattainment zone where volatile organic compounds (VOC) react with oxygen molecules and sunlight to create harmful ground-level ozone.

The complaint cited VOC leaks that went unaddressed within required time periods between October 2013 and June 2021. DCP also failed to keep records of compliance and did not monitor pumps, valves and connectors to detect leaks as required.

More: *Courthouse News Service*

Amazon Begins Deliveries with Rivian EVs

Amazon officially began making deliveries with its new all-electric Rivian Electric Delivery Vehicles (EDV) on July 21 in cities nationwide, including Baltimore, Chicago, Nashville, Phoenix, San Diego and St. Louis.

The EDV's range depends on many factors, including outside temperature, added weight in the vehicle, and wind resistance, but it has an estimated range of 150 miles.

The companies plan to bring thousands of EDVs to more than 100 cities by the end of the year and 100,000 vehicles by 2030.

More: *GreenBiz*

Rivian Lays Off More Than 800 Workers

Rivian laid off more than 800 workers last week in a move aimed at helping speed the electric truck maker toward profitability.

Company founder and CEO R.J. Scaringe said the streamlining will help ramp up vehicle production and accelerate development of newer models. He also said the layoffs are necessary for Rivian to achieve its goals of "sustainable growth as we ramp towards profitability."

Rivian reported a net loss of $1.6 billion during its first quarter of 2022, compared to a loss of $414 million during the same period last year. The company posted $95 million in revenue during the first quarter, compared to reporting no revenue a year prior.

More: *CBS News*

Volkswagen Begins US EV Assembly in Tennessee

Volkswagen last week began production of its first electric vehicle assembled in the U.S. at its Chattanooga plant.

The automaker said it plans to ramp up production of its ID.4 electric compact SUV to 7,000 cars per month in the fourth quarter, with a goal of increasing that rate next year. The company delivered more than 190,000 of the vehicles last year.

Volkswagen said customers can expect the EVs to be delivered as early as October.

More: *The Associated Press*

Uber Expanding EVs to 7 More Cities

Uber last week said its newest electric option, the "Comfort Electric," will expand to seven additional cities: Austin, Baltimore, Denver, Las Vegas, Philadelphia, Portland and Seattle.

The option originally debuted in May in San Francisco, San Diego and Los Angeles.

Riders can request a premium EV such as a Tesla, Polestar or Ford Mustang Mach-E.

More: *Axios*

Federal Briefs

EPA to Tackle Coal Industry Carbon with Rules on Other Pollutants

EPA Administrator Michael Regan last week said the agency plans to use new limits on traditional pollutants such as ozone and coal ash to help encourage the retirement of the nation's remaining coal-fired power plants.

Regan said the EPA is also working on several other rules targeting power plants, including requirements for the disposal of toxic coal ash and enhancements to the National Ambient Air Quality Standards for ozone.

The approach reflects how the Biden administration intends to forge ahead with goals to decarbonize the power sector despite the recent ruling from the Supreme Court. The power industry is the source of 25% of the nation's greenhouse gases.

More: *Reuters*

Biden Nominates Former Chair Ritch to Return to TVA Board

President Joe Biden last week nominated former Tennessee Valley Authority Chairman Joe Ritch to serve as a director once again. Ritch was first appointed to the board in 2012 by then-President Barack Obama and was elected to serve as chairman in 2014.

Ritch was renominated for another term by Obama in 2016, however the Senate did not confirm him and two other appointees before President Donald Trump took office in 2017.

Ritch must be confirmed by the Senate.

More: *Chattanooga Times Free Press*

NRC to Issue Final Design Certification for NuScale Nuclear Module

The Nuclear Regulatory Commission last week indicated it will certify NuScale's 50-MW small modular reactor design.

The NRC has directed staff to issue a final rule that certifies the standard design, which NuScale applied for in December 2016. The certification will be effective 30 days after the commission publishes that rule in the

Federal Register.

When published, the reactor will become just the seventh reactor design certification the NRC has issued for use in the U.S.

More: *POWER Magazine*

DOE to Loan GM Battery Joint Venture $2.5B

The Energy Department last week announced it intends to loan a joint venture of General Motors and LG Energy Solution $2.5 billion to help finance construction of new lithium-ion battery cell manufacturing facilities.

The loan to Ultium Cells for facilities in Ohio, Tennessee and Michigan is expected to close in the coming months.

GM and LG are investing more than $7 billion in the venture to build the three plants. Production in Ohio is expected to begin in August, while production is set to begin in Tennessee and Michigan in 2023 and 2024, respectively.

More: *Reuters*

Solar Jobs Census: US Adds 21,500 Jobs in 2021

Solar energy jobs were up in 47 states and increased 9% nationwide from 2020 to 2021 to a total of 255,037 workers, according to the "National Solar Jobs Census" released by the Interstate Renewable Energy Council.

Overall, the industry added 21,563 jobs in 2021, with more than 66% of these new jobs (14,350) coming at installation and project development firms.

At the state level, California leads in the total number of solar jobs with 75,712 jobs as of 2021, followed by Florida (11,761), Massachusetts (10,548), New York (10,524) and Texas (10,346).

More: *Solar Power World*

DOE Selects Sodium-cooled Design for Test Reactor in Idaho

The Energy Department last week issued a record of decision to build the Versatile Test Reactor (VTR), a sodium-cooled fast test reactor, at the Idaho National Laboratory. The VTR could help develop fuels for advanced nuclear reactors.

The DOE said it plans to use the GE Hitachi Nuclear Energy Power Reactor Innovative Small Module as the basis for the VTR's design. The department has requested $45 million in the fiscal 2023 budget for the VTR, which would likely use uranium, plutonium and zirconium as fuel.

If Congress approves funding, it would be the first fast spectrum test reactor to operate in the U.S. in nearly 30 years.

More: *DOE*, *Reuters*

Enviro Groups Urge DOT to Reinstate Emission Regulation Rule

More than 175 environmental organizations last week sent a letter to Transportation Secretary Pete Buttigieg urging him to adopt a federal rule that requires state and city transportation departments to measure and set standards for greenhouse gas emissions.

"The transportation sector is the largest contributor to greenhouse gas emissions in the United States," the letter reads in part. "The addition of the greenhouse gas measure to the Department's existing performance measurement framework will shine needed light on the climate impacts of these investments and lead to more informed decision-making."

Last month, Buttigieg proposed the reinstatement of the emission draft rule to require city and state departments that use national highway systems to set carbon emission reduction targets.

More: *The Hill*

State Briefs

COLORADO

Groups Sue Over Coal Mines

Five organizations, including the WildEarth Guardians and the Sierra Club, filed a lawsuit last week against state environmental agencies alleging they failed to ensure the West Elk coal mine complied with clean air laws.

The complaint contends that state officials failed to approve or deny an air pollution permit required by the U.S. government within the 18 months allotted by state law. The permit, granted by state agencies, would allow greater oversight of the mine's compliance with clean air laws and regulations, ensuring that the company was sufficiently restricting methane emissions. If the state denied the permit application, the mine would be forced to halt operations.

The West Elk Mine produced more than 4 million tons of coal in 2019.

More: *The Colorado Sun*

Tri-State Reaches Settlement to Retire Rifle Station

Tri-State Generation and Transmission Association filed a multiple-party settlement on July 22 with the Public Utilities Commission that, if approved, would result in retirement of the Rifle Station natural gas plant around Oct. 6.

The 85-MW combined-cycle natural gas plant has run infrequently, as Tri-State has other sufficient and lower-cost resources to serve its power requirements. Significant near-term investments would be required to continue operating the plant.

The unanimous settlement to close the plant was reached with PUC staff, the Office of Utility Consumer Advocate, and Western Resource Advocates.

More: *Tri-State Generation and Transmission Association*

FLORIDA

FPL Firm Took Control of News Site, Let Execs Influence Coverage

Records obtained by the Orlando Sentinel and Floodlight showed that an operative for political consulting firm Matrix signed an option agreement in September 2019 to purchase a controlling stake in The Capitolist and in turn allowed Florida Power & Light to gain control of the website. This allowed the utility to make editorial decisions about its content and allowed executives to influence coverage leading up to the 2020 elections.

The Capitolist purports to be a legitimate news site, saying it seeks to "tell more complete stories" about businesses and policy that might be overlooked by traditional outlets. But leaked records, verified as authentic by Matrix founder, Joe Perkins, show that then-Matrix CEO Jeff Pitts and FPL Vice President for Legislative Affairs Daniel Martell were at times given the opportunity to weigh in on unpublished story drafts.

The records emerged during an ongoing investigation into Matrix's work for FPL. The utility's relationship with the firm has come under scrutiny after Matrix operatives orchestrated a "ghost" candidate scheme to influence three state Senate races in 2020.

Rep. Kathy Castor has since asked the Department of Justice to investigate Florida Power & Light amid the reports.

More: *Orlando Sentinel*, *Miami Herald*

IOWA

Utilities Board Approves Certificates for Solar Projects

The Iowa Utilities Board last week issued an order granting electric generating certificates for two Duane Arnold Solar projects.

The board will issue the certificates for the projects after NextEra Energy has filed, and the board has accepted, a final unappealable decision to be made next month by the Linn County Board of Supervisors. The Linn County board will then vote in August to approve or deny the companies' request for rezoning under the county's utility-scale solar installation ordinance.

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

More: *The Gazette*

LOUISIANA

Entergy New Orleans to Institute Temporary Shutoff Moratorium

Entergy New Orleans last week said it will institute a temporary moratorium on electric shutoffs for delinquent customers struggling to pay summer bills.

The New Orleans City Council's utilities committee had proposed a 90-day reprieve from service cutoffs and had asked Entergy officials to attend a meeting to discuss their plan, but that was before the utility had agreed to the moratorium.

More: *WVUE*

Entergy: Public Should Prepare for Hurricane, 21-day Power Outage

Entergy last week said the public should be prepared to go without power for up to 21 days in the event a Category 4 hurricane as the state prepares to enter the most active weeks of hurricane season.

The restoration timeline — offered during a presentation to the Kenner City Council — tracks with estimates Entergy provided last August when the utility warned that Hurricane Ida had the potential to leave residents in the dark for up to 21 days, if not longer. The proceeding blackout lasted 10 days.

According to company estimates, the public should be prepared to go without power for up to seven days for a Category 1 storm; 10 days for a Category 2 storm; 14 days for a Category 3 storm; 21 days for a Category 4 storm; and more than 21 days for a Category 5 storm.

More: *Nola.com*

MONTANA

Environmental Groups Sue DEQ over Coal Mine Expansion

Environmental groups Montana Environmental Information Center and the Sierra Club last week sued the Department of Environmental Quality over its approval of a proposed coal mine expansion, citing its potential to worsen the effects of climate change in the state.

The groups argue that Westmoreland Rosebud Mining's proposal to expand the Rosebud Mine into the headwaters of Lee Coulee would exacerbate climate change impacts ranging from shrinking snowpacks and increasing wildfire activity to crop losses, forest die-offs and wildfire smoke-induced air quality declines.

Coal from the mine is the primary fuel source for the Colstrip power plant.

More: *Montana Free Press*

Judge Upholds Decision Blocking Butte Solar Project

District Judge Luke Berger last week upheld a zoning board's ruling from July 2021 and blocked a $250 million solar project in Butte.

Lawyers representing the project argued that the board was unduly influenced by strong public opposition and by the project's potential impact to neighbors. Furthermore, they said the board neglected 18 other criteria and failed to provide an adequate explanation for the denial. However, Berger said that even though the board focused on public comment as a key reason for rejecting the permit, it did not mean other factors were not considered.

"The Board heard significant comment and received detailed reports pertaining to the entirety of the criterion they were to consider," the ruling said. "Failing to address them specifically does not convince the Court they did not consider the information."

More: *Montana Standard*

NORTH CAROLINA

Cooper Appoints Ledford as Clean Energy Director

Gov. Roy Cooper last week appointed Peter Ledford as the state's new clean energy director.

Ledford, who is currently a lawyer and policy director at the Sustainable Energy Association, will help oversee efforts to meet the goals of Cooper's Executive Order 246, including reaching net-zero carbon emissions and ensuring environmental justice.

Ledford replaces Dionne Delli-Gatti, who recently took a job with the Environmental Defense Fund.

More: *WFAE*

WEST VIRGINIA

State Bars 5 Financial Firms for Fossil Fuel 'Boycotts'

West Virginia last week barred five major financial institutions, including Blackrock and JPMorgan Chase, from new business after determining they were boycotting the fossil fuel industry. Goldman Sachs, Morgan Stanley and Wells Fargo are also barred on similar grounds, Treasurer Riley Moore said.

Moore said the firms were barred after a review of their policies and statements found them to have policies "categorically limiting commercial relations with energy companies engaged in certain coal mining." He is authorized to prohibit firms from new banking business under a law passed earlier this year.

West Virginia is the first state to move to kick out Wall Street firms, although some other states have enacted similar laws.

More: *Reuters*