RTO Insider

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

ISSN 2377-8016 : Volume 2019/Issue 44

November 5, 2019

Exelon Pledges Reforms amid Grand Jury Probe

III. Nukes Decision by Spring

By Rich Heidorn Jr.

Exelon CEO Chris Crane said Thursday the utility is cooperating with a federal investigation into its lobbying of the Illinois legislature and will make changes to ensure the "highest possible" ethical standards in the future.



Exelon CEO Chris Crane | © RTO Insider

The grand jury probe led to the retirement of Exelon Utilities CEO Anne Pramaggiore on Oct. 15, less than a week after the company disclosed it had received a subpoena seeking communications between Exelon and state Sen. Martin Sandoval, a Chicago Democrat



Former Exelon Utilities CEO Anne Pramaggiore | © RTO Insider

whose home and offices were raided by FBI agents in September. Sandoval's daughter was hired by Exelon's Commonwealth Edison during Pramaggiore's tenure.

The subpoena is part of a wide-ranging payfor-play investigation, according to the Chicago

Tribune. The Illinois Senate said it had been subpoenaed for "items related to ComEd, Exelon [and] any issue supported by any of those businesses ... including, but not limited to, rate increases."

The Tribune dates the ComEd lobbying inves-

Continued on page 27

OPSI 2019 ANNUAL MEETING

Enviro Officials Talk Carbon, Consequences at OPSI



The Organization of PJM States Inc. (OPSI) convened for the first day of its annual meeting at the Marriott Waterfront Hotel in Baltimore on Oct. 28. (p.16). | © RTO Insider

California Could Restructure PG&E, Governor Says

Calls PG&E, Creditors and Fire Victims to Capitol to Broker Deal

By Hudson Sangree

SACRAMENTO, Calif. — Gov. Gavin Newsom said Friday he has summoned Pacific Gas and Electric and its creditors, including wildfire victims, to the State Capitol this week to try to broker a deal to pull the utility out of bankruptcy more quickly.

Newsom said the negotiations will include a professional mediator appointed last week by the judge overseeing PG&E's Chapter 11 reorganization in U.S. Bankruptcy Court in San Francisco. The utility filed for bankruptcy early this year after being blamed for last year's Camp Fire, the deadliest and most costly wild-fire in California history, as well as a series of catastrophic fires in California's wine country in 2017.

PG&E needs to exit bankruptcy by June 30, 2020, if it wants to participate in a \$21 billion wildfire insurance fund established by AB 1054, a bill Newsom pushed through this summer. (See *Calif. Lawmakers Rush to Pass Utility*

Continued on page 7

PG&E Could Still Reject PPAs, Analysts Say (p.6)

PG&E Bankruptcy Judge Appoints Mediator (p.8)

Also in this issue:



At International Tx Summit, Interstate Challenges the Focus



Minnesota Utilities Reunite for CapX2050 Study (p.12)



Renewable, Utility Members Tangle over SPP Seat

(p.21)

ERO Insider



ERO Insider's website is now live! Here are just a few of the stories we published this week:

Overheard at GridSecCon 2019

Colleagues Pay Tribute to Mike Assante

Robb Sees Calmer 2020 After 'Turbulent' Year

Check it out at www.ero-insider.com

RTO Insider

CAISO ERCOT ISO-NE MISO NYISO PJM SPP

Editorial

Editor-in-Chief / Co-Publisher Rich Heidorn Jr. 202-577-9221

Deputy Editor / Senior Correspondent Robert Mullin 503-715-6901

Art Director

Mitchell Parizer 718-613-9388

Associate Editor / D.C. Correspondent Michael Brooks 301-922-7687

Associate Editor

Shawn McFarland 570-856-6738

CAISO/West Correspondent Hudson Sangree 916-747-3595

ISO-NE/NYISO Correspondent Michael Kuser 802-681-5581

MISO Correspondent Amanda Durish Cook 810-288-1847

PJM Correspondent Christen Smith 717-439-1939

SPP/ERCOT Correspondent Tom Kleckner 501-590-4077

Subscriptions

Chief Operating Officer / Co-Publisher Merry Eisner 240-401-7399

Sales Director

Marge Gold 240-750-9423

Account Manager

Margo Thomas 480-694-9341

RTO Insider LLC

10837 Deborah Drive Potomac, MD 20854 (301) 299-0375

2019 Annual Subscription Rates:

Plan	Price
Newsletter PDF Only	\$1,450
Newsletter PDF Plus Web	\$2,000

See additional details and our Subscriber Agreement at rtoinsider.com.

In this week's issue

AWEA Celebrates 100 GW of US Wind Energy
FERC/Federal
At International Tx Summit, Interstate Challenges the Focus
CAISO/West
California Could Restructure PG&E, Governor Says1PG&E Could Still Reject PPAs, Analysts Say.6PG&E Bankruptcy Judge Names Mediator8Western EIM Benefits Top \$800 Million9
ISO-NE
NEPOOL Participants Committee Briefs
MISO
Minnesota Utilities Reunite for CapX2050 Study
NYISO
NYISO Management Committee Briefs
PJM Enviro Officials Talk Carbon, Consequences at OPSI
SPP
Renewable, Utility Members Tangle over SPP Seat
Company News
Exelon Pledges Reforms amid Grand Jury Probe.1Avangrid Earnings Revive on Wind, New Assets.28DTE Posts Lower Q3 Earnings, Touts Decarbonization.29Entergy Beats Q3 Earnings Expectations.30NiSource Earnings Feel Aftershocks of Gas Explosions.30
Briefs
Company Briefs.31Federal Briefs.31State Briefs.32



AWEA Celebrates 100 GW of US Wind Energy

By Tom Kleckner

The American Wind Energy Association last week announced a major milestone for U.S. wind energy, saying there are now more than 100 GW of wind farms operating in the country.

That is enough energy to power 32 million American homes. AWEA CEO Tom Kiernan said during a media briefing Oct. 31.

Put another way, he said, it's enough energy to power California and New Jersey for a year.



Tom Kiernan, AWEA © RTO Insider

"It's an extraordinary milestone," Kiernan said. "It's an extraordinary journey the industry has gone through, and it sets the stage for the journey ahead of us."

According to AWEA's third-quarter report, the U.S. now has 100,125 MW of wind capacity, with more than 57,700 wind turbines in operation across 41 states and two U.S. territories. Developers installed eight new wind projects, with a capacity of 1,927 MW, during the quarter. They have brought 3,667 MW online so far this year, a 123% increase over the first three guarters of 2018.

Texas leads the way with 2,129 MW of capacity in 2019, followed by Iowa (536 MW) and Kansas (475 MW).

Kiernan noted the industry's exponential growth. He said it took 28 years to build the first 25 GW of wind energy but only 11 years to get the next 75 GW into the ground.

AWEA said 22.6 GW of wind projects are under construction and an additional 23.8 GW are in advanced development. The 46.4-GW total is almost half the wind energy operating

The development pipeline includes 5,792 MW of offshore wind, which Kiernan said is "similarly taking off [like traditional wind farms], and arguably at a faster clip and exponential growth."

New York has selected 1,696 MW from two

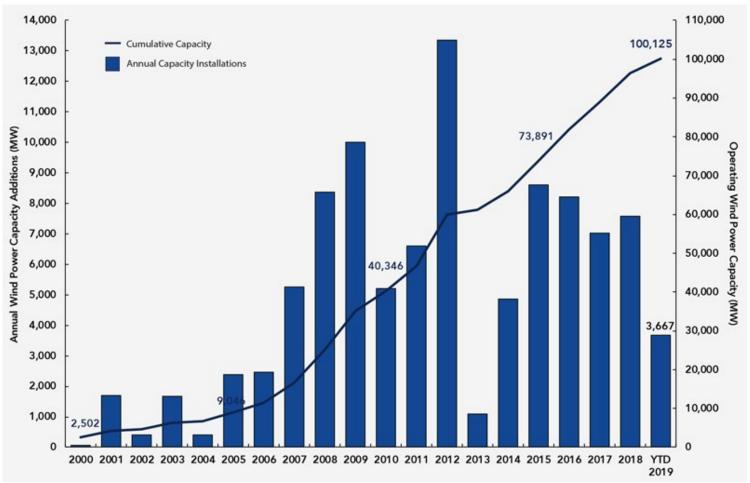
projects to help meet its goal of 9,000 MW of offshore wind by 2035. Virginia Gov. Ralph Northam issued an executive order for the state to develop 2,500 MW of offshore wind by 2026.

Keirnan said he believes the industry has a "good shot" at a tax credit for wind energy and tax extenders for onshore wind.

"Things are moving forward," he said. "We do anticipate significant further discussion [on legislation] this fall, but again, significant uncertainty. How we get from here to the end of the year is a significant to-be-determined."

Research firm IHS Markit recently released a report that indicates the sector's capital spending will increase from \$12 billion last year to \$14 billion in 2020 and 2021, but taper off as tax credits expire. Wind operators can take advantage of federal tax credits if they begin construction before year-end.

Texas remains the wind energy leader, with 27,036 MW, followed by the "wind alley" states of Iowa (8,965 MW), Oklahoma (8,072 MW) and Kansas (6,128 MW). California rounds out the top five with 5,842 MW. ■



U.S. annual and cumulative wind power capacity growth | AWEA

FERC/Federal News



At International Tx Summit, Interstate Challenges the Focus

By Michael Brooks

WASHINGTON — The International Summit on the Electric Transmission Grid was billed by trade group WIRES as an opportunity "to discuss and support the robust interregional and cross-border grid of the future."

But though it was hosted at the Canadian Embassy and featured several Canadian speakers, the discussion mostly centered on the first part: interregional transmission lines — and, more specifically, those that cross state borders rather than international ones.

After all, as more than a few speakers noted, building interstate transmission lines in the U.S. is hard enough without the additional burden of getting a presidential permit to cross national boundaries.

The drive to build both interstate and international long-distance, high-voltage transmission is the same: moving vast amounts of renewable resources to serve growing state demand, itself driven by state and company emissions goals.

In the U.S., California and the Desert Southwest have abundant solar, and the Midwest and Texas are replete with wind, while Canada has more hydropower than it needs to serve its load, located mostly along the U.S. border.

It's so abundant that the word "hydro" is often used as shorthand for "electricity," even if it's "not necessarily generated by hydro assets," said former U.S. Ambassador to Canada Gordon Giffin, now a partner with Dentons. "In Ontario, there's probably 50% nuclear power generation, and it's all called 'hydro.'"

But Canada does not face all the same challenges as the U.S. when it comes to building long-distance, high-voltage transmission lines.

One reason comes down to simple geography. Canadian provinces are much larger than America's states: Though the two countries are about the same size, Canada only has 13 provinces. Lines need to run vast distances from the water in the north to the load centers in the south, but most of the northern land is "open and expansive and owned by the Crown," said Mike Martelli, president of renewable generation for Ontario Power Generation (OPG), referring to the government.

There's also no federal entity similar to the Department of Energy or FERC that oversees interprovincial transmission. Provinces



WIRES held the International Transmission Summit on the Electric Transmission Grid at the Canadian Embassy on Oct. 24. \mid © RTO Insider

need only work with each other to site lines, and many provinces own their own utilities, "Crown corporations" such as OPG, BC Hydro, SaskPower, Manitoba Hydro and Hydro-Québec.

"All the provinces have 100% jurisdiction ... so it's a much easier discussion, and it's a discussion where we can talk more about ... the economic benefits, the jobs, the benefits to First Nations and our communities, and all that information is used in making that informed decision at a provincial level," Martelli said.

Still, interprovincial transmission is uncommon, Martelli said. "All the provinces put up barriers. They like to develop a homegrown solution. And that's where I think we have to change our thinking, and the true solution is going to be a more integrated approach."

The final major difference between the U.S. and Canada: politics.

The summit was held Oct. 24, just a few days after Canada's federal elections. "When the people were interviewed on the street about what's their No. 1 issue, it's climate change," Martelli said. "It wasn't their taxes. We're tremendously taxed. ... We have high, very high taxes. It wasn't taxes; it wasn't health care; it

was climate change."

In May 2009, Ontario passed the Green Energy Act, which created feed-in tariffs for renewable resources. As a result, Martelli said, the province retired all 7 GW of its coal plants and now has 6 GW of wind and 3 GW of solar. "Prices went up about 40%, and people were terribly upset," he said. "But Ontarians seem to be warming up to the idea" because of their prioritization of emission reductions.

Canada's generation is "just over 80% emissionsfree, and we're working to make it even cleaner by phasing out coal-fired generation across the country by 2030 and developing small-modular nuclear reactors to transition remote and northern communities off diesel," Martin Loken, minister of political affairs at the embassy, said in opening the conference.

South of the Border

"For the United States, the integration with Canada, and the opportunities for getting additional carbon-free electricity is absolutely essential" to reaching the targets under the 2015 Paris Agreement on climate change, said Ernest Moniz, former secretary of energy under President Barack Obama. "We have to get the infrastructure to support it."

FERC/Federal News



He talked about "an absolutely beautiful case" under Section 1222 of the Energy Policy Act of 2005, Clean Line Energy Partners' Plains & Eastern Clean Line. "It was a beautiful example to implement, and the only problem was called 'Arkansas."



Ernest Moniz, Energy Future Initiative | © RTO

Michael Skelly, co-founder and former president of Clean Line, was there to talk about the lessons learned of his company's failure. Some of them he only learned "after reading the book" on the subject, he said, referring to The Wall Street Journal reporter Russell Gold's "Superpower." (See Book on Tx Developer Transmits Climate Hope.)

One lesson he focused on was the mistake of putting transmission before generation. "We may have been too early. If you look at how transmission is built around the world, [people] often enough build the generation first," said Skelly, now a senior adviser with Lazard. "The good news in the United States is we're doing exactly that. ... We have a huge renewable expansion taking place, particularly in the center of the country....

"We sort of thought that would happen" when Clean Line was proposing its projects, "but sometimes people need to see it actually happening before they realize, 'Wow we have to do something about this problem,' as opposed to a projected problem."

Skelly clarified that he was not saying this "bass-ackwards" way of designing the grid was good. "It's only a good thing to the extent that

we go, 'Oh wow, we have to go build this transmission because we just spent all this money on generation."

Discussion on Skelly's panel — which included Martelli, the American Wind Energy Association's Amy Farrell and the Solar Energy Industries Association's Katherine Gensler — turned to criticism of RTOs and their transmission planning processes. Farrell and Gensler agreed that the RTOs underestimate the amount of renewables expected to come online when they plan their grids.

"Planning transmission to meet policy goals; planning for interregional transmission: These are the right goals, and nobody has cracked that nut yet on how to do it," said Gensler, SEIA's vice president of regulatory affairs. "Outside of California, no future scenario, not a single one, has 20% solar in it. Some of them don't even have 20% renewables in them. ... We have to plan for a rapidly decarbonizing future, and that is hard for people.

"A lot of the planners want to be very conservative," Gensler continued. She pointed to wind consistently outperforming what RTOs expected within their 10-year scenarios.

Farrell, AWEA's senior vice president for government and public affairs, noted that FERC is reviewing its transmission incentives policy, but "there hasn't been a desire to really [review] Order 1000," the goal of which was partly to encourage transmission planning between RTOs. "You have to look beyond just incentives and existing transmission improvements, and start looking toward fixing this planning process, because ... it's not about enabling renewable deployment as it is ... leaving money on the table. Part of FERC's mandate

is to help drive toward a lowest-cost solution, and we don't have a process for that right now."

"The turf wars and feuds between RTOs are legendary; MISO and SPP, these people, for reasons that are often lost to the mists of time, they don't really like each other that much, and they don't work well together," Skelly said. "So the notion that FERC's going to pass something that says, 'Hey, you guys, coordinate and work together' ... come on. It has not happened, and it's not going to happen."

In a later panel, MISO President and COO Clair Moeller disputed that, saying, "I'd submit we don't actually have a planning problem. We have an objective problem. The reason we don't get the answers that everybody agrees with is that people's objectives are different.

"Lanny and I had a fistfight in the bathroom because RTOs don't get along well," he joked, referring to Lanny Nickell, SPP senior vice president of engineering, who was in the audience. "Well, that's simply not true. The simple fact is the objectives are different. ... Until we can get the objectives so they line up [around a policy consensus, the planners are going to be frustrated because we can't tell them what we like." He noted that the last of MISO's multi-value projects, approved by the RTO in 2011, "won't go into service until probably 2022. That's not a planners' problem. That's a regulatory problem."

Skelly also described the confusion that state regulators have to endure when being pitched multiple interstate lines. "We need policy mechanisms so that the RTO shows up and FERC shows up. Somebody needs to show up from some sanctioned body to say, 'Yes, this makes sense."

But FERC commissioners "hate telling state regulators what to do," Gensler said. "That is a fate worse than death for most FERC commissioners."

As a potential solution, Skelly pointed to Sen. Martin Heinrich's (D-N.M.) announcement that he would introduce bills to create an investment tax credit for "regionally significant" transmission projects and to direct FERC "to improve its interregional transmission planning process." Heinrich, however, has been introducing similar *legislation* since 2015 to no success.

"I thought, up until a few minutes ago, that our process was very political," Martelli said. "But listening to this, I'll take our process any day."

"You guys were smart enough to organize your provinces in a north-south fashion," Skelly quipped.



Left to right: Panel moderator Rod Kuckro, E&E News; Mike Martelli, Ontario Power Generation; Katherine Gensler, SEIA; Amy Farrell, AWEA; and Michael Skelly, Lazard | © RTO Insider



PG&E Could Still Reject PPAs, Analysts Say

Wildfires Mean 'Risks are Being Recalibrated'

By Hudson Sangree

SACRAMENTO, Calif. – A panel of analysts at a renewable energy conference warned that Pacific Gas and Electric could still reject its renewable energy power purchase agreements in bankruptcy despite assurances that it will honor those contracts.

"They may be rejected. They may not. It's very difficult for us to tell," Terry Pratt, energy and industrials director with Fitch Ratings, told the audience at Infocast's CA Renewable Procurement Summit 2.0 last week.

PG&E's equipment has come under suspicion for starting the Kincade Fire on Oct. 23, and the utility intentionally blacked out more than 2 million residents multiple times in recent weeks as part of its public safety power shutoff (PSPS) program. The company's stock sank briefly to a record low of less than \$4/share Oct. 28. (See PG&E Stock Plummets amid Wildfires.)

Those factors only add uncertainty to what PG&E might do during its Chapter 11 reorganization in the U.S. Bankruptcy Court in San Francisco, analysts said. The company filed for bankruptcy protection in January following two years of devastating wildfires.

"Any [renewable energy] project that has a PG&E offtake is not getting paid when PG&E turns the electricity off," Pratt said.

Helen Kou, decentralized energy analyst with Bloomberg NEF, said clients ask the research firm whether PG&E can or should renege on its PPAs, many of which were signed when wind and solar power cost far more than current market prices. Experts interviewed by



Infocast's CA Renewable Energy Procurement Summit 2.0 took place at the new Kimpton Sawyer Hotel in downtown Sacramento, next to the city's new basketball arena. | © RTO Insider

Bloomberg, she said, have differing opinions.

One audience member asked why it would benefit PG&E to reject above-market-rate PPAs, as PG&E passes on the cost of those contracts to ratepayers.

Anne Selting, analytical manager with S&P Global Infrastructure Ratings, said the company will likely have to layer on wildfire costs to its electricity rates post-bankruptcy, and it can only increase its rates so much before the situation becomes unworkable. Trimming its PPA costs would help the utility going forward, she said.

The possibility that PG&E could reject its contracts for renewable energy or stop paying has put projects at risk that primarily serve the utility, Selting said.

Projects are typically heavily leveraged with debt, she explained. Lenders will often provide loans up to a 90% loan-to-project-value ratio with the understanding that dependable payments from utilities such as PG&E will make sure debt gets serviced, she said.

With PG&E in bankruptcy, and facing new threats to its solvency, there's less assurance that it will honor its contracts, Selting said.

That's why Topaz Solar Farm, one of the nation's largest solar projects, saw its credit rating tumble after PG&E filed for bankruptcy, even though the utility hasn't missed any payments to Topaz, she said. The solar array in San Luis Obispo County is owned by Berkshire Hathaway Energy. PG&E is the sole offtaker of Topaz's solar production.

In comparison to the current wildfire crisis, the Western Energy Crisis of 2000-2001 was relatively straightforward, Selting said. Then, Enron and others took advantage of flaws in California's electricity deregulation scheme, but policymakers soon figured out long-term

In contrast, PG&E's new chairman, Bill Johnson, said at a press conference last month that PSPS could continue for a decade as the utility hardens its grid. That's quite different and far more uncertain, Selting said. (See PG&E Says Blackouts Will Continue.)

"We have very little control over where we're heading," she said. "The ability to respond quickly and fix the problem doesn't exist.

"We really are at a moment, where I think, at least for California, the risks are being recalibrated," Selting said. "And I don't think anyone in this room knows what that means."



In a panel moderated by V. John White of CEERT, far left, financial analysts (left to right) Anne Selting, S&P Global; Helen Kou, Bloomberg NEF; and Terry Pratt, Fitch Ratings, discussed the impact of PG&E's bankruptcy on renewable energy contracts.. | © RTO Insider



California Could Restructure PG&E, Governor Says

Calls PG&E, Creditors and Fire Victims to Capitol to Broker Deal

Continued from page 1

Wildfire Aid.)

The governor said his backup plan is for the state to reorganize PG&E, possibly with an "ISO-like structure" akin to CAISO, a public-benefit corporation with leaders appointed by the governor and confirmed by the State Senate.

"If the parties fail to reach an agreement quickly to begin this process of transformation, the state will not hesitate to step in and restructure the utility," Newsom said in a *statement*.

Newsom reiterated his threat in an hourlong *press conference*, broadcast on Twitter, at which he studiously avoided using the word "takeover" but often stopped just short of it. He provided no specific timeline for when the parties to the bankruptcy must come to an agreement before the state would intervene with its plan.

The governor appointed a team to deal with the PG&E situation that will be led by his cabinet secretary, Ana Matosantos, whom he called the state's new "energy czar."

He announced his strategy after a week of touring wildfires burning in Northern and Southern California. The active blazes include



California Gov. Gavin Newsom urged the passage of AB 1054 in July and said Friday that PG&E must exit bankrutpcy quickly or the state will restructure the utility. | Cal OES

the Kincade Fire, in Sonoma County, which may have been sparked by a broken PG&E transmission line. (See PG&E Stock Plummets amid Wildfires, Shutoffs.)

The utility blacked out more than 2 million residents twice in the past two weeks to try to prevent wildfires as part of its public safety power shutoff (PSPS) program. In some cases, residents were without power for seven days.

Newsom insisted such widespread, longlasting power shutoffs could not be the state's "new normal." The state will review the PSPS policies established in SB 901, a major wildfire bill that then-Gov. Jerry Brown signed in September 2018.

The California Public Utilities Commission has started a formal inquiry into PG&E's power shutoffs. ■





PG&E Bankruptcy Judge Names Mediator

Utility Asked for Help Negotiating Ch. 11 Plan with Bondholders

By Hudson Sangree

The federal judge overseeing Pacific Gas and Electric's bankruptcy named a mediator last week to help the embattled utility and its bondholders negotiate a reorganization plan.

Lawyers for PG&E Corp. and its utility subsidiary Pacific Gas and Electric have been pleading for a mediator for weeks to help them resolve differences with bondholders trying to take over the company. (See Attorneys Clash over PG&E Reorg, Blackouts Resume.)

Judge Dennis Montali, with the U.S. Bankruptcy Court in San Francisco, finally acquiesced, saying he hoped mediation would work now as it had in the utility's 2003 bankruptcy, when a mediator helped PG&E and the California Public Utilities Commission hammer out a compromise.

"Now, more than 16 years later in the utility's second case (this time with parent company), the need for mediation is far more obvious and the stakes unbelievably higher," Montali wrote in an order. "After presiding over every hearing in these Chapter 11 cases over the past nine months, the court is convinced that mediation should be attempted once again."



Randall J. Newsome | University of Pennsylvania

Montali named retired bankruptcy Judge Randall J. Newsome as the mediator. Newsome. who works now for JAMS, the nation's largest private mediation and arbitration firm, served on federal bankruptcy courts in Ohio and Northern

California before retiring in 2010. He joined JAMS' San Francisco office in 2011, according to a biography posted by the National Conference of Bankruptcy Judges.

Online biographies for Newsome do not list any utility-related experience, but Montali gave him authority to "recommend the appointment of one or more additional mediators who possess needed requisite expertise and experience to join him in his efforts."

PG&E and its bondholders have been fighting for control of the company for months. On Oct. 9, the judge ended the utility's period of exclusivity — the time it had to propound its own reorganization plan without competition



PG&E's bankruptcy has been playing out in the U.S. Bankruptcy Court for the Northern District of California in San Francisco. | © RTO Insider

- and allowed the bondholders to submit their plan for potential confirmation. (See Judge Admits Takeover Plan as PG&E Starts Blackouts.)

PG&E argued Montali's action hadn't helped advance the bankruptcy process and asked again for a mediator.

"As we predicted at the exclusivity hearing, termination of exclusivity has not worked to promote a consensus," PG&E lawyer Stephen Karotkin told Montali during an Oct. 23 hearing. "We say to your honor, now is the time to promptly appoint a mediator. That is the way to move these cases forward."

The competing plans differ in their sources of financing and the amounts they would set aside for victims of wildfires sparked by PG&E's equipment. The bondholders' plan allocates roughly \$5 billion more to fire victims in cash and PG&E stock. The bondholders also claim to have more than \$29 billion cash in hand, versus promises by PG&E's creditors to provide more than \$34 billion for its reorganization efforts.

The bondholders, a group of high-risk hedge funds and institutional investors, want to wipe out the equity of PG&E's current shareholders and give themselves control of the company.

PG&E sought bankruptcy protection in January after a series of devastating blazes threatened the company with insolvency. They included the wine country fires of October 2017 and the Camp Fire in November 2018. the deadliest and most destructive wildfire in California history.

Seeking to avoid additional wildfires, PG&E has turned off power to millions of California residents numerous times in the past few weeks during dry, windy weather conditions.

PG&E's stock sunk to record lows of less than \$4/share Oct. 28 on news its equipment may have started the Kincade Fire, which had burned more than 77,000 acres in Sonoma County as of Friday, according to the California Department of Forestry and Fire Protection.

Montali's appointment of a mediator and other factors caused PG&E's stock price to jump more than 20% during trading Oct. 29 to nearly \$5/share. It was trading about \$70/share prior to the October 2017 fires. ■

Western EIM Benefits Top \$800 Million

Leadership Changes Hands at the RIF

By Hudson Sangree

FOLSOM, Calif. — CAISO's Western Energy Imbalance Market posted more than \$801 million in benefits for its participants after five years of reporting quarterly results, the EIM's Governing Body members heard Wednesday.



CAISO Vice President Mark Rothleder | © RTO Insider

Mark Rothleder, the ISO's vice president for market quality and California regulatory affairs, told the Governing Body's four current members (one seat is vacant) that the EIM racked up \$64 million in benefits in the third quarter of 2019 - its 20th quarterly report.

"It marks a five-year mark in terms of operation of the EIM," Rothleder said.

Arizona Public Service received the bulk of the third-quarter benefits, with more than \$20 million in savings, followed by PacifiCorp and Portland General Electric, which each benefited by about \$9.5 million, according to the ISO.

The benefits were less than the \$100 million posted during the third quarter of 2018 because natural gas price spikes last year created additional benefits for EIM participants, Rothleder said.

The real-time EIM uses security-constrained economic dispatch technology to find and deliver low-cost electricity across eight Western states and facilitates the use of renewable energy that might otherwise be curtailed.

With new members steadily joining, the EIM is on track by 2022 to have members representing more 77% of load in the Western Interconnection, Rothleder said.

Its nascent competitor, SPP's Western Energy Imbalance Service, started up in June and announced its first three members Sept. 9. (See WAPA, Basin, Tri-State Sign up with SPP EIS.)

The EIM's nine current members include Idaho Power, NV Energy, Powerex, Puget Sound Energy and Sacramento Municipal Utility District. Those scheduled to join include Arizona's Salt River Project and Seattle City Light in 2020, the Los Angeles Department of Water and Power and Public Service Company of New Mexico in 2021, and the Bonneville Power Administration in 2022.

"We've got a robust set of implementations coming up," Rothleder told Governing Body members.

Regional Issue Forum Changes

At the EIM meeting Wednesday, Pam Sporborg, with Portland General Electric, made her first presentation, by phone, as the new chair of the EIM's Regional Issues Forum.

Sporborg recently took over from Therese Hampton, executive director of the Pacific Northwest's Public Generating Pool.

"She's leaving quite big shoes to fill," Sporborg said. "I'm looking forward to taking on the chair role and all the work to hold the RIF together."

Jennifer Gardner, a senior attorney with Western Resource Advocates, has assumed the role of the RIF's vice chair.

The RIF's next meeting will be Dec. 3 in Las Vegas, where the EIM Governing Body is set to meet Dec. 4.

There will be updates from new EIM entrants such as Tucson Electric Power, a discussion of resource sufficiency versus resource adequacy, and perhaps a presentation from FERC on price formation, Sporborg said.

"We're putting together quite an exciting agenda for that meeting," she said.



EIM Governing Body members (left to right) Anita Decker, John Prescott, Carl Linvill and Valerie Fong heard a report on the market's benefits. | © RTO Insider

ISO-NE News



NEPOOL Participants Committee Briefs

Supports ICR Values for FCA 14

The New England Power Pool Participants Committee on Friday approved ISO-NE's proposed installed capacity requirement (ICR) *calculations* for Forward Capacity Auction 14 (2023/24) and three annual reconfiguration auctions (ARAs), to be conducted in 2020.

The PC followed the Reliability Committee in reversing its earlier rejection of net ICRs of 32,205 MW for 2020/21 ARA 3, 32,230 MW for 2021/22 ARA 2 and 32,465 MW for 2022/23 ARA 1, with 61.71% in favor. (See NEPOOL Reliability Committee Briefs: Oct. 23, 2019.)

The Generation sector unanimously opposed the ICRs, but they had the support of the other sectors, including Transmission (16.79%), Supplier (3.36%), Alternative Resources (10.38%), Publicly Owned Entity (16.79%) and End User (14.39%).

The committee also narrowly approved, with 60.04% in favor to meet the minimum 60%, a 940-MW value for the Hydro-Québec interconnection capability credit (HQICC) for FCA 14's ARA 3, with the value rising to 958 MW for ARA 2 and 969 MW for ARA 1.

The Generation sector also unanimously opposed the HQICC motion, but the other sectors supported, including Transmission (16.79%), Supplier (1.68%), Alternative Resources (10.38%), Publicly Owned Entity (16.79%) and End User (14.4%).

ISO-NE plans to file the ICR values with FERC on Tuesday.

No Recovering IROL Costs

The PC failed to support the Schedule 17 cost recovery provisions as proposed by ISO-NE to compensate certain generators and transmission facilities for incremental costs related to interconnection reliability operating limits (IROL) and critical infrastructure protection.

The motion failed to pass, with 63.84% in favor, just short of the necessary two-thirds. The Transmission and End User sectors were unanimous in opposition, while the other sectors supported, including Generation (16.79%), Supplier (15.86%), Alternative Resources (14.4%) and Publicly Owned Entity (16.79%).

These incremental costs cannot now be competitively offered and recovered through the energy and capacity markets.

An IROL is an operating limit that, if exceeded, could lead to a significant adverse reliability impact on the New England system, as well as neighboring systems to the west and north, according to a background memo from ISO-NE analyst Jon Lowell.

The reliability impact could be loss of significant portions of the New England system — and neighboring systems — because of system instability, cascading outages or uncontrolled system separation.

Generators and transmission facilities designated by the RTO as critical to the determination of IROLs must meet higher NERC CIP standards because their loss or misuse could have an adverse impact on the reliable operation of the grid, including instability in the bulk

electric system, the memo said.

Energy Market in October down 61% Y-o-Y

ISO-NE CEO Gordon van Welie did not appear before the committee, though he did attend various meetings earlier in the day between market participants, the RTO's Board of Directors and officials from the six New England states.

COO Vamsi Chadalavada *reported* that prices in the region's energy markets have been hitting historic lows, with the market value for October at \$151 million, down \$60 million from September 2019 and \$238 million from the same month a year ago.

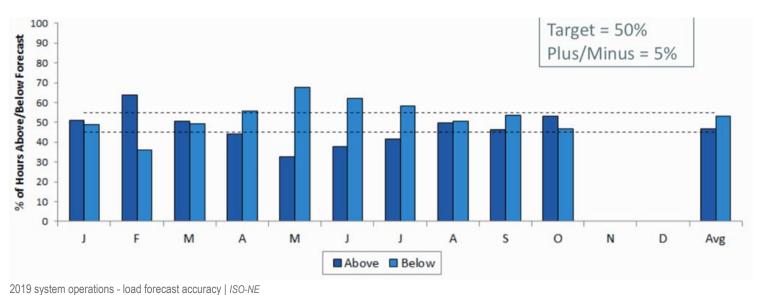
Average natural gas prices and real-time hub LMPs over the period were down 51% and 46%, respectively, from October 2018.

Average day-ahead cleared physical energy during peak hours as a percentage of forecasted load was 98.9% through Oct. 23, down from 99.5% during September.

Financial Assurance Policy Changes

The PC approved changes to the RTO's Financial Assurance Policy (FAP) related to financial assurance requirements for non-commercial resources in the Forward Capacity Market, but it rejected changes to the rate used to calculate the FAP for non-commercial capacity.

According to a memo from NEPOOL counsel Paul Belval, the RTO said the proposed change would remove the profit motivation



ISO-NE News



for resources not expected to deliver because such profits would be offset by a proportionate increase in collateral requirements until the project achieves commercial operation.

The change does not collateralize any capacity supply obligation that originates outside of the FCA, consistent with the existing design.

The committee rejected basing the rate used to calculate non-commercial financial assurance on the net cost of new entry value in place for the given FCA, rather than the current practice of using the FCA clearing price.

The motion failed to pass the two-thirds needed with a 61.47% vote in favor.

ISO-NE this week will inform market participants what it plans to do with the split decision.

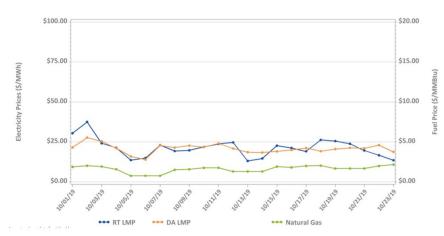
NEPOOL rules prohibit *RTO Insider* from quoting stakeholders' comments during the meeting. However, Brett Kruse, vice president of market design at Calpine, confirmed after the meeting that, for example, in FCA 10, New England saw 900 MW of so-called phantom capacity that bid into the market, cleared and then never showed up in the operating year.

"This region performs exponentially worse than other forward capacity markets for what is supposed to be a physical resource," Kruse said.

Consent Agenda

The committee unanimously approved, with abstentions noted, four items on the consent agenda. The first three were approved by the RC and the last by the Transmission Committee:

 Revisions to Operating Procedure 16J, to modify the timing for initiating the annual certification of transmission equipment



Daily average day-ahead and real-time ISO-NE hub prices and input fuel prices: Oct. 1-23 | ISO-NE

dynamics data;

- Revisions to Operating Procedure 2A, to modify the table of itemized equipment maintenance of communications, computers, metering and building services;
- Revisions to Planning Procedure No. 10, to delete provisions related to interconnection service adjustments that are being incorporated into the Tariff; and
- Tariff revisions (including Section II.48 and Schedules 22, 23 and 25) to clarify interconnection service adjustments.

The committee also approved in a single vote, with one abstention, two other items that did not make it on the consent agenda because of lack of time:

- Revisions to OP-16 Appendix J, to clarify the requirements for the annual certification of transmission equipment dynamics data and incorporate additional clarity; and
- Revisions to OP-2 Appendix A, to add certain

equipment and technology, and delete obsolete language.

Litigation Report

NEPOOL Secretary David Doot, a Day Pitney attorney, highlighted two items from the monthly litigation reports, including a FERC investigation into Order 1000 exemptions for "immediate-need" reliability transmission projects, which will be discussed in detail at the next TC meeting, Dec. 17 (EL19-90).

The second item concerned an appeal pending of the commission's notice of inability to act for lack of a quorum on the RTO's inventoried energy program proposal, which became effective "by operation of law" in September, as did the latest FCA results. (See FCA 13 Results Stand Without FERC Quorum.)

Several New England municipal utilities and Energy New England last week *petitioned* the D.C. Circuit Court of Appeals to rule on the matter (ER19-1428). ■

– Michael Kuser







MISO News



Minnesota Utilities Reunite for CapX2050 Study

By Amanda Durish Cook

The team behind the CapX2020 transmission study is reuniting again for an effort that looks ahead to 2050. But this time around, the Minnesota utilities grouped behind the project will focus on decarbonization goals rather than reliability needs.

Furthermore, the CapX2050 Transmission Vision *study* will look beyond transmission for possible solutions, the companies say.

Spearheaded by Great River Energy and Xcel Energy, the new effort will rely on the combined internal resources of 10 Minnesota utilities, said Great River Energy Director of Transmission Planning Gordon Pietsch, the study's co-lead.

"What we're doing is trying to address impacts on Minnesota and the region going carbonfree," Pietsch said in an interview with RTO Insider.

"Like the Blues Brothers, [we] are on a mission to put the band back together again, and we are working with the original CapX2020 utilities that built over \$2 billion of transmission projects in the Upper Midwest over the last 10 years," Xcel Energy CEO Ben Fowke told analysts during an Oct. 24 third-quarter earnings call. (See Xcel Talks Tx Build After Earnings Come up Short.)

While CapX2020 was driven by local and regional reliability needs and renewable portfolios standards, the new study will focus on generation retirements, renewable additions, inverter-based issues and any foreseen reliability and stability impacts resulting from the growing dominance of renewables. As Fowke noted, CapX2020 *culminated* in an 800-mile, grid expansion in the Upper Midwest, including four 345-kV transmission lines in Minnesota, North Dakota, South Dakota and Wisconsin and a 230-kV transmission line in northern Minnesota.

If the study's objective seems vague, that's the point, Great River Energy executives said. There's not a definitive timeline, any potential project ideas or specific geographic areas of focus. The utilities stress that they're not foreclosing any potential solutions, which aren't limited to transmission projects.

Great River Energy Chief Transmission Officer Priti Patel said that while she couldn't definitively say how long the study might take, now is the time to "begin the discussion around



CapX2020 construction | CapX2020

operating challenges that might arise as we move to a decarbonized future."

Over time, she said, project needs will come into focus.

Pietsch said the study could yield not only transmission projects but needs that other technologies can address.

"We don't know what those technologies will be yet, but the system that we operate today will be much different in a carbon-free future," he said. "Transmission planning is imperative as utilities move to non-dispatchable generation."

Pietsch said the study will "articulate the challenges we've seen on the system today and how they might be different in the future." That work will include a look at grid needs under escalating weather events, he said. The study will also examine power flow, system stability, short-circuit current availability and other operating issues.

No Quick Fixes

The CapX2050 study will study Minnesota, eastern North Dakota, eastern South Dakota, western Wisconsin and the surrounding areas to identify potential constraints. Patel said the utilities will share their findings with regulators, lawmakers and the public. She said the utilities would also put results before MISO planners, if necessary.

"It may not come as a surprise that some of our issues might be indicated in the MISO study work as well," Patel said, referencing the RTO's ongoing renewable integration impact

"We want to say, 'Here's what we've learned about going carbon-free," Pietsch said.

Fowke said the need for new transmission is

Continued on page 13

MISO Proposes 2020 Spending Increase, Static Tariff Rate

MISO will not seek an increase in Tariff rates in 2020 despite proposed spending increases.

The RTO projects it will *spend* about \$368 million in 2020, an 8.3% increase from 2019, with \$337.7 million in operating expenses and \$30.4 million in capital expenses. But it will again seek a 41-cent/MWh Tariff rate from customers, the same as last year and just a penny more than the 2018 rate.

Since Entergy joined the footprint in 2014, MISO electricity use has remained at 740 to 750 TWh annually.

MISO projects its ongoing market platform replacement project will account for \$12.7

million of operating expenses and \$12.3 million of capital expenses in the upcoming year. It also forecasts base operating expenses will be \$264.7 million, up \$9.7 million from last year.

MISO CFO Melissa Brown said a host



MISO CFO Melissa Brown | © RTO Insider

of issues are driving the uptick in spending, including the market platform replacement, facilities upgrades, wage increases and cost increases in computer maintenance and engineering studies.

The Board of Directors' Audit and Finance Committee voted unanimously to approve the budget proposal during a conference call Oct. 29. MISO will seek a final board vote on the budget Dec. 11 during its quarterly Board Week. ■

- Amanda Durish Cook

Minnesota Utilities Reunite for CapX2050 Study

Continued from page 12

illustrated by NextEra Energy's *Crowned Ridge* wind project in northeastern South Dakota having to be *scaled back* by 100 MW because of increased MISO interconnection upgrade

costs. He said Xcel had planned to assume control of 100 MW from Crowned Ridge as a build-to-own transfer project. NextEra's decision to reduce the capacity "highlights the need to expand transmission investment to address congestion and ensure the viability of

future renewable projects," he said.

"The work we did with CapX2020 opened up the door for a lot of renewables, but [the system] is starting ... to get constrained. And I do think long-term, we are going to need more transmission development in the region to make sure we can continue to see renewables come into the MISO market." Fowke said.

Xcel CFO Bob Frenzel cautioned that it's still "early days" for the CapX2050 vision study.

"I don't think this is a very quick process. I think this is going to take at least five years through planning before we start getting into real capital plans and construction time frames," Frenzel said. "So I don't want to suggest that something is going to change in the next year ... in terms of congestion in the MISO region. And we are seeing similar stuff in SPP as well in terms of just congestion and queues being backed up and projects being assessed with significant upgrade costs."

But it's clear to the group that 2050 will be a watershed year for clean energy. Minnesota Gov. Tim Walz has *called* for 100% carbon-free electricity in the state by 2050. Xcel similarly has a plan to go carbon-free by then.

"I would say that we choose 2050 because that's what we've heard," Patel said.

CapX2050's other participating utilities include Central Municipal Power Agency, Dairyland Power Cooperative, Minnesota Power, Missouri River Energy Services, Otter Tail Power, Rochester Public Utilities, Southern Minnesota Municipal Power Agency and WPPI Energy.



CapX2020 transmission | CapX2020

NYISO News



NYISO Management Committee Briefs

New System Software Delayed

NYISO CEO Rich Dewey told the Management Committee that the ISO will delay deployment of a new energy management system (EMS) and business management system (BMS), missing the Oct. 31 deadline rather than risk any reliability problems.

As reported to the committee in September, the last day of October was the latest the ISO could cut over to the new system and still issue a necessary System and Organization Controls report to stakeholders by the Jan. 15, 2020, deadline. (See "Parallel Testing of EMS/BMS," NYISO Management Committee Briefs: Sept. 25, 2019.)

"We encountered a number of problems related to both stability and synchronization of data," Dewey said. "We made the decision not to deploy the new software, but to deploy it as soon as possible in the new year. We're extremely disappointed in missing this deadline but don't doubt we made the right decision in order to have a fully reliable system."

Chief Information Officer Doug Chapman reported at the last MC meeting that March 1, 2020, is the next available deployment date.

Dewey said NYISO will work aggressively to correct the remaining known issues, complete the integrated testing and position the system to deploy as early as possible in 2020. Among other factors in deciding the new target is the need to maintain schedule flexibility to avoid deploying the new system in the middle of a cold snap when the electric system is under stress.

Howard Fromer, director of market policy

for PSEG Power New York, asked how, with a three-year project, it was possible to learn at the "11th hour" that the new system doesn't work.

"We break the system functionality into chunks, and only after it passes those tests do we piece it all together as a complete system with the real telemetry and real-time data inputs," Dewey said. He explained that some of the more recent issues could only be discovered while the more complicated scenarios were performed by the operations team.

The control center has had double shifts for the past few weeks, running both old and new systems side by side, and while the ISO is "satisfied with the standalone applications ... we decided we were better off taking a little extra time with their integration," Dewey said.

Public Policy Tx Cost Caps OK'd

The MC voted to recommend that the Board of Directors approve a plan to allow developers to put voluntary cost caps in their proposals for projects falling under the ISO's public policy transmission planning process.

NYISO Senior Manager for Transmission Planning Yachi Lin *presented* the proposal as approved by the Business Issues Committee earlier in October with 98.91% in favor. It passed the MC with 100% in favor with abstentions. (See *NYISO Business Issues Committee Briefs: Oct. 16, 2019.*)

Contingent on the board approving the measure at its November meeting, the ISO is prepared to make a Federal Power Act Section 205 filing with FERC in December

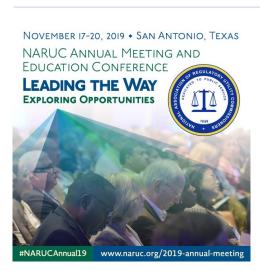
for revisions to sections 6.10, 31.1, 31.4, and 31.7 of the Tariff. The changes would provide developers of projects selected to meet public policy needs the opportunity to make binding commitments to limit the amount of the capital costs of their projects. The commitments would be enforced through the tariffs and development agreements that NYISO enters into with each developer. Certain categories of unpredictable capital costs, such as unforeseeable environmental contamination, would be excluded from the cost cap, or cost recovery would be allowed if an excusing condition occurs, such as delays caused by interconnecting transmission owners.

"The principle we are establishing in the Tariff is if there are actions truly beyond the control of the developer, they should be excused from the cap," Assistant General Counsel Carl Patka said.

Asked about a hypothetical case where the developer's partner is responsible for actions or inactions that lead to exemption from the cost cap, Patka said, "That would be a fact-specific inquiry that would have to be evaluated on a case-by-case basis."

Couch White attorney Amanda De Vito Trinsey, representing New York City, said that the city still continues to have concerns with the consumer protections but was withdrawing its opposition to the motion and abstaining from the vote, based on NYISO's promise to police developer commitments and its Tariff to ensure that cost containment was being carried out as intended.

As at the BIC, Jane Quin, vice president of energy policy and regulatory affairs for Consoli-









dated Edison, said her company and its Orange and Rockland Utilities subsidiary supported the concept but would also be abstaining because of concerns over changes to the evaluation process, which needs to include provisions for a TO to upgrade its own facilities.

Yes to Enhanced Credit Requirements

The MC also voted to recommend that the board approve changes to enhance credit reporting requirements and remedies.

Sheri Prevratil, manager of corporate credit, *presented* the proposal, including Tariff revisions that would require FERC approval, as she did earlier in the month when the BIC approved the changes.

NYISO proposed the changes after certain market participants last year defaulted on their payment or credit obligations. Some of those parties filed for Chapter 11 bankruptcy, while others were expelled from the ISO.

If the board approves the changes at its November meeting, NYISO will file Tariff revisions with FERC in November, Prevratil said.

The proposed Tariff changes add appropriate experience and resources to satisfy obligations to the ISO as minimum participation criteria. They also clarify that investigations that could have a material impact on the customer's financial condition need to be reported to NY-ISO, if legally permitted, and add an obligation for a customer to take reasonable measures to

obtain permission to disclose information on nonpublic investigations when possible.

A new provision allows NYISO to reject a new applicant determined to be an unreasonable credit risk based on a credit questionnaire and other review.

Survey Says: ISO Customers Happy

An annual customer satisfaction *survey* conducted by the Siena College Research Institute (SCRI) shows the ISO's performance continuously increasing over the past four years.

SCRI Director Don Levy said a combined customer satisfaction and performance assessment score of 85.5% was the highest in four years, and that an executive approval score of 76% was better than it sounds, in that all respondents grade the ISO at better than "very good" in customer service.

Opportunities for improvement include conducting comprehensive long-term planning for the electric power system, advancing technological infrastructure and providing factual information to policymakers, stakeholders and investors.

2020 NYISO Budget

The MC approved a flat budget of \$168 million for next year, which the board will consider at its Nov. 19 meeting.

Budget and Priorities Working Group Chair

Alan Ackerman, of Customized Energy Solutions, presented the final *budget* proposal to the committee.

The working group made slight changes since he provided an overview last month, reflecting the delay in deploying the new EMS/BMS system, but the bottom line remains unchanged at \$168 million allocated across a forecast of 154.3 million MWh.

The budget calls for a Rate Schedule 1 charge of \$1.089/MWh. Comparatively, this year's budget was \$168.2 million allocated across 157.1 million MWh for a Rate Schedule 1 charge of \$1.071/MWh.

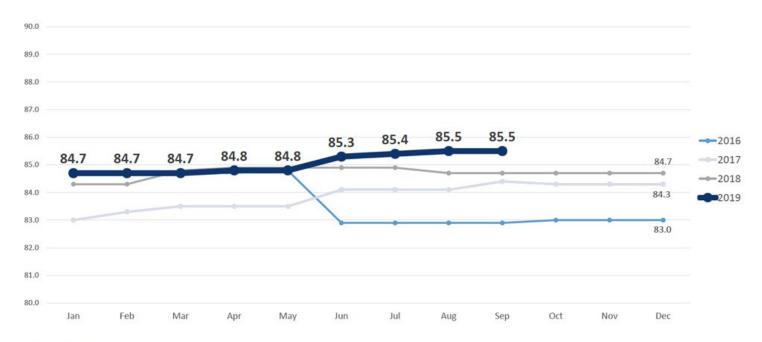
Couch White attorney Michael Mager, who represents Multiple Intervenors, a coalition of large industrial, commercial and institutional energy customers, commended the ISO for working hard to deliver a conservative budget with no increase.

Breidenbaugh Elected New Vice Chair

Stakeholders elected Aaron Breidenbaugh of Luthin Associates as vice chair of the committee for 2020.

Breidenbaugh, whose firm also represents an unincorporated group of nonprofit institutional customers known as Consumer Power Advocates, has been serving as BIC chair this year.

– Michael Kuser



An annual customer satisfaction survey conducted by the Siena College Research Institute shows the ISO's performance continuously increasing over the previous four years. | NYISO/SCRI

2.10

Enviro Officials Talk Carbon, Consequences at OPSI

By Christen Smith

BALTIMORE — State environmental officials worry about PJM's involvement in carbon pricing for very different reasons, depending on where their states sit along geographical — and economic — lines.

For agencies in PJM's eastern territory, "how" matters much less than "why" states might implement carbon policies. But to the west — where fossil fuels dominate — the inverse appears to be true.

During a panel discussion Oct. 28 on state carbon policies at the Organization of PJM States Inc.'s (OPSI) annual meeting, environmental officials from some PJM states expressed doubts about the viability of a federal carbon tax and said cap-and-trade programs, like the Regional Greenhouse Gas Initiative, would more effectively achieve emissions targets popping up across the RTO's footprint.



Chris Bast, Virginia DEQ | © RTO Insider

"We are still talking carbon tax versus a cap-and-trade, [and] I think the important thing is we price carbon effectively and keep a few principles in mind," said Chris Bast, deputy director of the Virginia Department of Environmental Quality.

"A tax gives price certainty, and cap-and-trade gives a reductions certainty."

Bast joined officials from Kentucky, Maryland and Pennsylvania on the panel. He said states should consider science-based policies that don't harm marginalized communities, and that PJM itself should investigate how the broader energy transition from fossil fuels to renewable resources could unfold regionwide.



Kentucky Secretary of Environment and Energy Charles Snavely | © RTO Insider

But Kentucky Secretary of Environment and Energy Charles Snavely objected to involving PJM in any carbon pricing scheme because his state's economy depends on cheap and reliable coal generation, which attracts industry and keeps electricity bills low for its poorest residents. That makes

early retirement of fossil fuel plants politically



The Organization of PJM States Inc. (OPSI) convened for the first day of its annual meeting at the Marriott Waterfront Hotel in Baltimore on Oct. 28. | © RTO Insider

and economically untenable.

"Kentucky does not have the intention to continue to be a coal-fired state, but we will not shut something down prematurely and put that cost on our citizens," he said.

The Carbon Divide

PJM began studying carbon pricing impacts on the wholesale market last year and recently assembled a stakeholder task force to prepare for incoming state policies as more governors across the region adopt aggressive clean energy targets.

Panelists agreed that PJM faces a challenge not experienced in other RTOs and ISOs considering carbon pricing: a patchwork of states with competing political and economic interests that fear the financial and environmental impacts of each other's policies.

That's where consensus ended.

States on the RTO's western border, like Kentucky and West Virginia, worry PJM will implement carbon pricing in a way that disadvantages their coal-heavy generation and leaves their poorest customers footing the bill for clean energy programs in the east.

"It is our opinion that PJM is enabling the policies of certain states at the expense of others," Snavely said. "We will reconsider our participation in PJM just out of necessity. It appears to me that a lot of this is a competitive move by some of our members to further their economic interests, and Kentucky will further our own interests too."

States pursuing clean energy goals, however, said an ill-designed PJM carbon price mechanism could inadvertently punish them as well, by building carbon costs into the offers of their cleaner plants. That could lead to the dispatch

of cheaper — and more polluting — fossil fuel-generated power, one facet of a phenomenon called "carbon leakage."

"Markets work best when prices tell the truth about costs," Bast said. "I pay to throw away my trash, yet we are allowing unlimited carbon dumping into the atmosphere for free. In order to tell the truth about what that costs us, we have to account for all of the costs of that."

Ben Grumbles, secretary of the Maryland Department of Environment, said RGGI auctions have driven more than \$650 million worth of investments in his state alone since it joined in 2007. He suggested that a similar regionwide attempt to price carbon and reduce emissions could



Maryland Environment Secretary Ben Grumbles | © RTO Insider

work for PJM, but it's up to the legislatures and state regulators to decide.

"Our message continues to be to other states — learn more about regional cap-and-invest plans like RGGI," he said. "It will continue to grow in size and importance. As PJM looks at carbon pricing, from our perspective, it's very important to come up with a goal that actually reduces greenhouse gas emissions and addresses leakage."

Only two PJM states, Maryland and Delaware, participate in RGGI. The group says it has reduced its nine members' power sector CO₂ pollution by 45% over the last 14 years and provided \$2.31 billion in lifetime energy bill savings. Participating states, either through regulation or legislation, cap power plant emissions and auction off credits to generators on a quarterly basis; generators purchase the al-

lowances as proof of compliance. The proceeds return to participating states for reinvestment.

New Jersey will officially enter the program in January, and Pennsylvania Gov. Tom Wolf instructed the state Department of Environmental Protection to begin the process for joining last month — a surprising move given the state's wealth of shale gas and booming energy exports that bridge the east-west divide. (See Pennsylvania Governor Signs RGGI Executive Order.)

RGGI's proven track record and existing framework appealed to Pennsylvania Environmental Protection Secretary Patrick McDonnell. He told the OPSI crowd that although the Keystone State remains the No. 2 producer of natural gas, the industry itself contributes to carbon



Pa. Secretary of Environmental Protection Patrick McDonnell I © RTO Insider

pollution and presents a real challenge for achieving the governor's clean energy targets. (See Pennsylvania Joins US Climate Alliance.)

"In our state, we've seen about a 12% reduction in greenhouse gas emissions, but we will see that ramp back up because it's predominantly been driven by the retirement of coal," he said. "RGGI is about giving us a pathway toward that cleaner energy future. Something has to be there to take up the load, and right now that is natural gas. What we don't want to see is reversals."

A Short Bridge

The importance of Pennsylvania's gas supply in propelling RGGI's success wasn't lost on any of the panelists — despite a changing and more hostile regulatory environment for new gas

"The honest assessment of being on the path of greenhouse gas reductions is the transition from coal to natural gas, Grumbles said. "There is a role for natural gas. It is a bridge fuel, and the goal is to make sure [the bridge is] not unacceptably long or leaky."

"I'd say don't bite the hand that feeds you." Snavely said. "What conversation would we be having today if it weren't for West Virginia and Pennsylvania and Marcellus Shale? We wouldn't have the technology without natural gas. When renewable technology is at a point when we don't need to be backed up by natural gas, that's fine; take natural gas out of the equation."

The tension between the promise of renewable resources and the affordability of natural gas appears prominently in Virginia, Bast said, where changing attitudes have jeopardized some high-profile construction projects. (See Stalled Pipeline Overshadows Dominion's OSW Project.)

"I don't think it's a secret that there are currently \$12 billion in pipelines planned in Virginia to bring some of that natural gas our way," he said. "But they are struggling to be finished."

Dominion Energy's Atlantic Coast Pipeline. which will run underground for 600 miles from West Virginia to North Carolina, remains tied up in federal court after developers lost a permit to cross 600 feet below a section of the Appalachian Trail last year. The Supreme Court will soon decide whether to hear the case, and construction on the project could resume before the end of 2019.

Likewise, two natural gas plants — including one of the largest in the country — have not yet broken ground, and doubt remains if developers ever will, Bast said.

"It's not a switch that gets thrown tomorrow, and we need to make up the difference right away." McDonnell said. ■

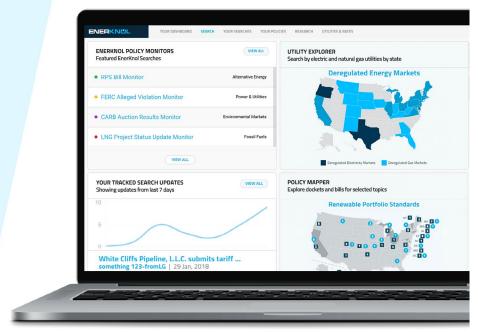
ENERKNOL

Our users don't have FOMO.

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

START DISCOVERING TODAY

BEGIN YOUR FREE 7-DAY TRIAL AT ENERKNOL.COM



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

ENERKNOL.COM



Competitive TOs Push Against PJM Supplementals

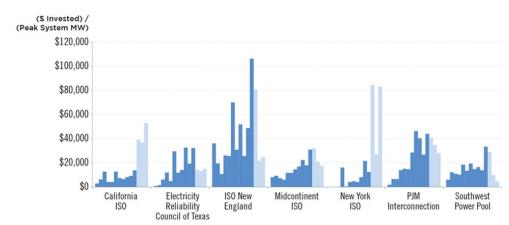
By Christen Smith

BALTIMORE - Competitive transmission developers made a familiar argument at the Organization of PJM States Inc.'s annual meeting last week: Supplemental projects undermine regional planning efforts and PJM should do something about it.

But PJM staff aren't willing to accept the risks that come with managing supplementals and insist that FERC precedent prohibits the RTO from intervening anyway. Incumbent transmission owners agree, insisting that decisions about when to replace aging infrastructure come with many specific caveats that a regional planning organization doesn't necessarily understand.

It's a viewpoint FERC endorsed in two CAISO orders in September 2018 (EL17-45 and ER18-370), Ken Seiler, PJM's vice president of planning, said while participating on an OPSI panel with the D.C. Office of the People's Counsel, LS Power, American Municipal Power and FirstEnergy.

In the former proceeding, the commission rejected a complaint from local and state regulators that said Pacific Gas and Electric violated Order 890 because the majority of its transmission planning occurs behind closed doors. FERC said asset management projects that only produce "incidental" increases in transmission capacity aren't beholden to the



PJM-TO baseline and supplemental projects by proposal year, 2005-2019 | AMP

transparency provisions of the order. (See 'Asset Management' not Subject to Order 890, FERC Rules.)

The commission reiterated this opinion in the latter proceeding that turned down the California Public Utilities Commission's request for a show-cause order finding that Order 890 governs transmission owners' planning for self-approved projects.

"A lot of this issue around end-of-life projects has been formed by us based on these orders," Seiler said. "The orders specifically state that end-of-life criteria is not within the RTO's purview and it's not their expertise. The ISO shall do the planning, and the TO shall do replacement."

LS Power and AMP interpreted FERC's comments in the California dockets differently, however.

"In FERC's California order, the commission said supplemental projects in PJM are a matter of PJM choice," said Sharon Segner, vice president of LS Power. "Not a FERC mandate."

"I don't think you guys are reading that right," Ed Tatum, AMP's vice president of transmission, told PJM staff. "I think the commission took great pains to differentiate between what's going on in California and what's going on in PJM. We've really got to get it straight as to what we are talking about here, as far as PJM being able to set its own destiny."

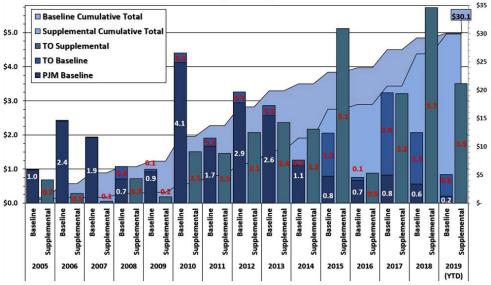
The commission only briefly addressed the PJM matter in the 2018 CAISO orders, calling its February 2018 ruling on PJM supplementals (EL16-71, ER17-179) "inapposite" to the issue at hand in California.

"The question of whether asset management projects and activities that do not increase the capacity of the grid must go through an Order No. 890-compliant transmission planning process was not at issue in the Feb. 15 PJM order." FFRC wrote in both CAISO orders, "Instead, the Feb. 15 PJM order examined the PJM transmission owners' implementation of the process for planning supplemental projects, a process that is set forth in the PJM Operating Agreement and Tariff."

No Authority, Expertise

PJM estimates members spent \$6 billion on supplemental projects in 2018 — triple the amount invested in baseline upgrades that

PJM-TO Baseline & Supplemental Projects By Proposal Year 2005-2019 YTD (10-25-2019) {\$-Billions}



ISO/RTO load-weighted transmission investments. Light blue represents future estimated investments. | PJM

Continued on page 20

PJM MRC Briefs

Stakeholders, Staff Honor Denise Foster



Members Committee Chair Chuck Dugan presented Denise Foster with a gift from stakeholders on her last day at PJM. | © RTO Insider

VALLEY FORGE, Pa. - PJM staff and stakeholders kicked off Thursday's Markets and Reliability Committee meeting with an homage to Denise Foster, the RTO's vice president of state and member services, on her last day with the organization.

"Denise has always been committed to the success of PJM." said Stu Bresler, senior vice president of market services. "She was very adept and very skilled at building, maintaining and, if I may, fostering relationships."

Foster resigned in September, much to the disappointment of stakeholders – particularly state consumer advocates — who described her as engaging, personable and sharp. Bresler echoed those warm sentiments in his sendoff, saying that Foster served as a mentor to other staff and provided great "insights on the substance of what we do at PJM."

"She made tough decisions when she needed to and followed through on those decisions when she needed to and really earned the respect of staff here at PJM," he said.

New Load Management Test Rules Endorsed

The MRC endorsed new load management and price-responsive demand testing rules for Capacity Performance resources after PJM said old measures failed to mimic real-life emergency procedures. (See PJM Stakeholders Support More Realistic DR Testing and "Stakeholders Urge Consensus on Load Management Testing Requirements," PJM MRC/MC Briefs: Sept. 30, 2019.)

The new rules, effective with the 2023/24 delivery year, would give PJM authority over scheduling tests — instead of the resource itself — and provide advanced notification so participants can prepare. The changes would implement a three-step system that gives resources first notice of an upcoming test one week prior to the two-week testing window, with additional alerts by 10 a.m. the day before and the day of the scheduled test. There will be one test per year when there is no event, with half of resources tested in winter and the other half in summer.

The current rules, developed when demand response availability was limited to just six hours a day over the summer, require one test during the summer. They give resources a twoday warning — down to the exact hour — and provide unlimited retesting.

Enel X North America, sponsor of an alternative package that provided a week-ahead notification of a one-week testing window, withdrew its proposal Thursday and encouraged members to support PJM's plan instead.

"Both sides gave some blood here," Enel's Brian Kauffman said. "There's some philosophical questions that won't be answered here and will ultimately end up before FERC."

Stakeholders Mull Tx Asset Management **Discussion**

Stakeholders will once again consider assembling to discuss how incumbent transmission owners make asset management decisions and whether those projects should stay outside of the regional planning process.

Ed Tatum, vice president of transmission for American Municipal Power, proposed a *problem* statement and issue charge that would create a special session of the MRC to discuss what criteria TOs should observe before determining their infrastructure has reached the end of its life and whether those determinants could be — or even should be —standardized across. all zones.

"It's important for the stakeholders to weigh in as to how they think this process should work," Tatum said. "There's going to be some disagreement, and we need to get some clarity from Washington, D.C., as we go to Federal Energy Regulatory Commission."

Currently, PJM considers projects related to local asset management as supplemental to the Regional Transmission Expansion Plan and only studies their impacts on the grid's reliability — not whether the proposals are necessary or the most cost-effective solution. AMP and others have argued that local replacement decisions have regional implications and, therefore, PJM should take over planning in order to assure new projects will not just solve reliability concerns, but also support the "grid

of the future."

"We have talked around this issue so much in recent years, perhaps there's a degree in fatigue in thinking about it," said Susan Bruce of the PJM Industrial Customer Coalition. "The first time we went through this, we didn't have as much clarity as to how PJM was viewing these issues. I think we have a better appreciation for PJM's asset management concerns in this space."

Both staff and PJM's Board of Managers maintain that FERC precedent leaves asset management up to the discretion of TOs, where the local planning expertise lies. Incumbent TOs agree.



Pulin Shah, Exelon I © RTO Insider

"By having PJM responsible for end of life, you are putting more liability on PJM and its membership," said Pulin Shah, director of transmission strategy and contracts for Exelon. "Even if an artificial end-of-life criteria is established.

the transmission owners will still need to move forward with their own end-of-life decisions. Having PJM develop or create some may result in significant increase in supplemental spend if PJM now has to take on this responsibility."



Tonja Wicks, Duquesne Light Co. | © RTO Insider

Tonja Wicks, manager of federal regulatory and regional affairs for Duquesne Light Co., said the term "end of useful life" is what both the industry and FERC have defined and accepted. She then reiterated that the

commission concluded that planning for these particular assets is "beyond the scope of PJM's authority" and questioned whether the newly created term "end of life" was an oversight or if AMP concedes that the FERC term and definition "are what we are working from."

"There is no industry accepted definition of 'end of life,' so we are trying to understand how to work out this issue based on a term that has not been defined," she said. "We are trying to get an understanding of what we are talking about because there is no such term."

Tatum said he hopes "TOs will indeed come to the table and come up with some creative



solutions that hopefully we can find a consensus around." While PJM didn't move off of its long-held position on its authority over supplementals, staff said the conversation was still worth having.

"We will not be put into a position to do condition decisions or asset management-type decisions," said Ken Seiler, PJM's vice president of planning. "It's not our authority to do that, but there is solution space here."

The MRC will vote on the initiative at its Dec. 5 meeting. Notably, the Planning Committee turned down the problem statement at its September meeting. (See "PC Says 'No' to Endof-life Transparency Discussion," PJM PC/TEAC Briefs: Sept. 12, 2019.)

FTR Market Rule Changes

PJM presented the first round of recommended rule changes for its financial transmission rights market in the wake of the GreenHat Energy default.

Brian Chmielewski, manager of market simulation, said the recommendations will improve PJM's credit risk policies after the Financial Risk Mitigation Senior Task Force delegated a more holistic FTR market review and possible design changes to a separate MIC task force.

First, PJM suggests hosting five long-term FTR auctions a year, instead of just three, in order to increase oversight and visibility into portfolio conditions so that more collateral can be collected if necessary.

"One of the things we saw with GreenHat, between December and June there was a massive devaluation in that portfolio, so this would have an auction right in March to catch that sooner," Chmielewski said.

A second recommendation would alter the structure of Balancing of Planning Period FTR auctions so that participants can buy and sell in any month of the year, rather than being limited to a specific quarter.

The FRMSTF voted 75% in favor of the changes. MRC endorsement is scheduled for Dec. 5, with implementation effective in 2020/21.

Endorsements

- Manual 14D: Generator Operational Requirements, a periodic cover-to-cover review and language changes that comply with FERC Order 841 for energy storage participation.
- Manual 36: System Restoration and Manual 40: Training and Certification Requirements regarding Order 841.
- 2019 Reserve Requirement Study results. including updated values for the installed reserve margin and forecast pool requirement, which reset key parameters for the RTO's upcoming capacity auctions. (See "2019 Installed Reserve Margin Study Results," PJM PC/TEAC Briefs: Oct. 17, 2019.) Also approved by the Members Committee.

Christen Smith

Competitive TOs Push Against PJM Supplementals

Continued from page 18

same year. Tatum said members have spent \$29.9 billion on supplemental projects over the last 14 years, more than half of which TOs proposed after 2013. Baseline spending, meanwhile, will reach \$30.1 billion by the end of the year, he said.

"Locally cost-allocated projects don't go out for competition," Segner said. "If you can do everything through local planning, then all of a sudden there's not regional needs. There's no coincidence that this world started aggressively in 2013 when FERC Order 1000 went into effect."

"It's very clear in our mind that TOs have the obligation to maintain their system, but as we go through and decide what is asset management ... if you're replacing it, that's something called planning, and we think there is a bright line there," Tatum said.

Under current rules, incumbent TOs submit supplemental projects for inclusion in PJM's Regional Transmission Expansion Plan. The RTO studies the proposals for impacts on the grid's reliability but doesn't make determinations about whether the projects are necessary or the most cost-effective solution. Further, these projects often encompass asset replacement and upgrades that incumbent TOs say they are best prepared to handle. Seiler agreed, noting that PJM isn't in the

business of "condition assessment" and isn't involved in the day-to-day management of TOs' infrastructure.

"When we talk supplemental projects, we are talking aged infrastructure ... that's predominantly the type of projects we are focused on," said Robert Mattiuz, vice president of transmission for FirstEnergy. "We do not want to be in a position where we run our transmission system to failure, so we are proactively addressing this issue."

There's no uniform set of standards for determining when an asset has reached the end of its life, Seiler later told RTO Insider, meaning that PJM must rely on local TOs to provide that knowledge. While he couldn't verify AMP's data about the growth in supplemental spending, he said PJM's last wave of transmission buildout occurred more than three decades ago and suggested that the increase in spending over the last few years could be expected based on the age of the current system alone - though age isn't the only factor TOs consider when replacing infrastructure, he clarified.

He also noted that PJM's spending looks much less dramatic in comparison with other RTOs and ISOs when investments are load-weighted.

"I'd say PJM spending looks to be about average or even below-average in those terms," he said.

Seiler's comments reflect sentiments shared

by Dean Oskvig, chair of the PJM Board of Managers' Reliability Committee, on Oct. 4 that the managers' review of supplemental projects concluded that the RTO's role "can be expanded in some areas but also remains appropriately constrained in others."

"PJM does not have the authority or expertise to assume responsibility for asset management decisions or to determine when a facility is at the end of its useful life or otherwise needs to be replaced," he said. "Those decisions are the sole responsibility of the transmission owner. PJM has the authority, expertise and the obligation to develop the RTEP. In some circumstances, PJM may be in the best position to determine the more cost-effective regional solution to replace a retired facility. PJM welcomes input from stakeholders to determine under what circumstances PJM might assert that authority."

Erik Heinle, of the D.C. OPC, said PJM's ability to foster competition and innovation should naturally extend to supplemental project planning.

"We don't want to just replace 50-year-old substations with the newer version," he said. "One of the great successes of PJM is competition in the marketplace. ... Why can't we have that in the transmission space too? We need to make sure we are replacing these aging facilities ... not with what we need now, but with what we need in the future."



Renewable, Utility Members Tangle over SPP Seat

By Tom Kleckner

LITTLE ROCK, Ark. — A battle over a seat on SPP's Members Committee last week exposed a divide between the RTO's traditional utilities and the renewable energy companies fueling the growth of generation.



Rob Janssen. Dogwood Energy | © RTO Insider

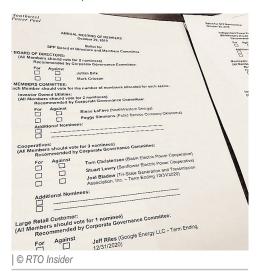
Dogwood Energy's Rob Janssen retained the independent power producer/marketer's seat on the committee, one he's held for 12 years, following a nomination from the floor and a membership vote during SPP's Oct. 29 annual meeting of members and the

Board of Directors. The result overturned the Corporate Governance Committee's recommendation that Enel Green Power North America's Betsy Beck fill the seat.

David Mindham, EDP Renewables' regulatory market affairs manager, told RTO Insider that several members of the IPP sector "find it troubling" that they don't get to choose their representatives and said the wind industry is "underrepresented" on SPP committees.

"Members who may have different agendas select who represents our industry," Mindham said.

Candidates are nominated for SPP committees by their organizations or through third parties. The CGC then considers their nominations and makes its recommendations to the broader membership.



The 21-member committee discusses issues with the board and casts nonbinding votes meant to inform the independent directors.

Janssen said in an email Thursday that he looks forward continuing work with renewable generation and storage segment representatives of the IPP sector "to broaden opportunities for increased representation on SPP working groups and board-level committees."

"I believe that more diversity in representation in SPP's stakeholder process leads to better outcomes for all SPP members," Janssen said.

SPP did not divulge the final vote total, a practice it maintains for all board votes. After announcing the result, Chair Larry Altenbaumer turned to Beck and said, "I hope you will continue to be engaged with us and involved."

Golden Spread Electric Cooperative's Mike Wise, a member of the CGC, told members that the committee "really struggled" in choosing a candidate for the IPP seat's three-year term.

"The recommendation out of the committee took us a long time," he said. "We want people to know that the Corporate Governance Committee really did struggle and spend time on all the issues brought up today about these two individuals."

Nebraska Public Power District's Tom Kent nominated Janssen from the floor, citing his "long track record of reasonable and fair representation of both the IPP/marketers sector and the SPP membership as a whole."

Kent and Janssen served as chair and vice chair, respectively, on the Holistic Integrated Tariff Team, which recently wrapped up a year of work. (See SPP Board Approves HITT's Recommendations.)

"I've gotten to know Rob very well over the last year and a half, watching him work on the HITT team with all the HITT members, asking indepth, challenging questions to help move the organization forward," Kent said. "For a person with the type of expertise that Rob has ... having that expertise on the Members Committee is very important to me."

Janssen is president of Dogwood Energy, which owns a 650-MW combined cycle generating facility near Kansas City, Mo. He's also is a senior vice president with Kelson Energy, an asset management company that has owned or operated more than 7,700 MW of generation businesses at more than a dozen sites in



Betsy Beck, Enel, explains her qualifications to the membership. I @ RTO Insider

North America.

The Kansas Municipal Energy Agency, which had six votes through its affiliate members, seconded Janssen's nomination. Calpine and Kansas Electric Power also filed letters of support.

No letters of support for Beck, Enel's director of organized markets, were included in the board's background materials. Mindham said the letter he filed backing Beck's nomination missed the submission deadline.

Walmart, Google Energy and Evergy's Denise Buffington spoke in support of Beck. Kent and the Oklahoma Municipal Power Authority's David Osburn offered statements backing Janssen.

"I think wind needs to be part of the strategic vision and part of the company moving forward," Buffington said. "Allocating costs in the [generator interconnection] queue, stopping load from paying for all of these wind assets ... that's why I think wind needs to be a part of this group."

'A Lot of Expertise'

Beck has more than 10 years of experience in the electric sector and has spent time as an energy adviser with the U.S. Senate, at FERC and with the American Wind Energy Association. While with the Senate Energy and Natural Resources Committee, she advised members and drafted legislation with a focus on energy trading derivatives regulation, the Public Utility Regulatory Policies Act and public power.

"The IPP sector is made up of diverse stakeholders with interests in project operations,



development and power marketing. It is vital that the IPP sector's representation on the Members Committee accurately reflects those broad interests," Mindham said in his letter.

He pointed out that renewable energy companies have one seat among the three "highlevel" committees that report to the board the MC, CGC and Strategic Planning Committee — while Dogwood Energy sits on all three.

"It is essential that these committees represent all stakeholder interests and that no single company is over-represented. This diversity maintains the integrity of the stakeholder process," Mindham said. "The failure to select Betsy for the Members Committee is disappointing. She would have brought needed diversity and a wealth of industry knowledge to the SPP governance process."

Beck declined to comment following the vote but advocated for herself before the members, as did Janssen. Saying she sees FERC as taking a stronger role in directing SPP's policies, Beck said her diverse background would be helpful to the members.

"Honestly, I think our industry is a little behind the ball in engaging with SPP," she told members. Noting Enel's 4 GW of wind resources in SPP's footprint, which delivered about 5% of the RTO's energy last year, Beck said, "I bring lot of expertise with me as far as interconnection and trading issues. I think our company really represents the diversity of interests in our sector."

"Over the years, I've developed a significant knowledge of SPP, the way the organization operates and where it's going in the future," Janssen said. "I've always tried to look out for all the interests of the members in our discussion, knowing we'll get a better product and a better result for the power pool if we come together."

Osburn, while supporting Janssen, suggested adding seats to the Members Committee in recognition of wind energy's contributions to SPP and the growing importance of solar and energy storage. Wind (47.5 GW), solar (29.4 GW) and battery (6.8 GW) account for all but 331 MW of resources in SPP's generation

"You're going to have a new group of participants with solar coming on board," Osburn

A FERC-mandated two-thirds reduction of SPP's exit fee to \$100,000 will certainly make membership more acceptable to smaller renewable energy companies. (See FERC Tells SPP to End Exit Fee for Non-TOs.) SPP has requested a rehearing of the decision, but it still made a compliance filing in August. (See "Directors Lower Exit Fee to \$100K," SPP Board of Directors/ MC Briefs: July 30, 2019.)

Members also approved the following nominations for three-year terms to the Members Committee: Basin Electric Power Cooperative's Tom Christensen and Sunflower Electric Power's Stuart Lowry to the cooperative segment; NorthWestern Energy's Bleau LaFave and Public Service Company of Oklahoma's Peggy Simmons to the investor-owned utility segment; City Utilities of Springfield's (Mo.) Chris Jones to the municipal segment; and ITC Great Plains' Brett Leopold to the independent transmission company segment.

Tri-State Generation & Transmission Association's Joel Bladow (cooperative) and Google Energy's Jeff Riles (large retail customer segment) were elected to fill vacancies that expire in December 2020. ■



1

SPP Regional State Committee Briefs

Regulators Approve 2019 ITP, Eliminating Z2 Credits

LITTLE ROCK, Ark. — SPP's Regional State Committee last week unanimously endorsed the elimination of revenue credits for sponsored transmission upgrades and the 2019 10-year transmission planning assessment.

Regulators asked to hear from renewable energy stakeholders, who participated in the Markets and Operations Policy Committee discussion of the Tariff revision earlier in October. The MOPC unanimously approved the *change*, which replaces Attachment Z2 credits for sponsored upgrades with incremental long-term congestion rights (ILTCRs), effective February 2020. (See "Stakeholders Endorse Eliminating Z2 Revenue Credits," *SPP MOPC Briefs: Oct. 15-16*, 2019.)

EDP Renewables' David Mindham repeated the industry's position that the revision doesn't

comply with FERC's policies on interconnections (Order 2003) and long-term firm transmission rights (Order 681).

"We don't oppose removing Z2 credits," he said. "We don't feel there's enough value in ILTCRs to be complying with FERC Order 2003."

"I do agree there are some things that need to be fixed," South Dakota Public Utilities Commissioner Kristie Fiegen said. "But I believe MOPC's action is appropriate. I believe Z2 credits need to eliminated sooner rather than later."

SPP General Counsel Paul Suskie argued that Z2 credits are not required by FERC policy and are instead a "self-imposed requirement" implemented through the stakeholder process.

"If an entity thought our ILTCRs do not comply with FERC, we would not appeal to FERC," he said

The RSC also signed off on SPP's Integrated Transmission Planning 10-year assessment, a portfolio of 44 transmission projects with a total engineering and construction cost of \$336 million. The 2019 ITP, the first after stakeholders revised the planning process, includes 166 miles of new extra-high-voltage transmission and 28 miles of rebuilt high-voltage infrastructure

"We hope to solve both reliability and economic needs in a way that optimizes performance," Senior Vice President of Engineering Lanny Nickell said. He said the portfolio is expected to lower congestion costs by more than 63 cents/MWh, a 21% reduction.

Nickell said he expects two of 345-kV projects, a 60-mile line in Oklahoma and a 105-mile line in Kansas, to become competitively bid. The projects have engineering and construction costs of \$85.9 million and \$162.6 million, respectively.

Louisiana's Campbell: SPP Spending 'Extravagant'

In a rare appearance before the RSC, Louisiana Public Service Commissioner Foster Campbell laid into SPP for what he termed "extravagant" spending on corporate facilities and executive

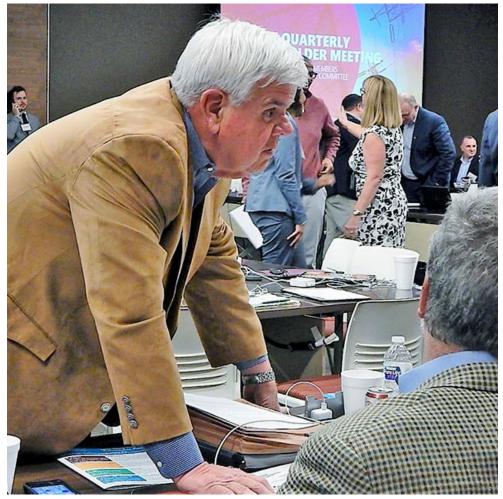
Campbell, a self-described politician whose colorful career includes 26 years in the Louisiana State Senate and multiple failed bids for Congress and the governor's office, was elected to the PSC in 2002. He normally gives his RSC proxy to PSC legal staffer Dana Shelton. That Campbell is up for election in 2020 led many onlookers to call his comments "political."

"I'm not trying to be blunt, but telling it like it is," he said. "The first time I came here, I never saw a building like that. I've been to a lot of places: capitols, the White House, fancy hotels ... this building costs \$67 million. That goes to my customers. I represent my customers, all in North Louisiana, and we have a lot of poor people."



CEO Nick Brown listens to Campbell | © RTO Insider

SPP CEO Nick Brown listened stoically as Campbell criticized him for a salary he said was \$950,000. According to the RTO's 2016 IRS Form 990, the last available through nonprofit tracker GuideStar, Brown's total compen-



Louisiana PSC Commissioner Foster Campbell confers with staff following his comments. | © RTO Insider

sation was \$1.2 million. By comparison, MISO's 2017 990 lists CEO John Bear's total compensation at \$2.8 million.

"I know the good you're doing. I hope you realize there are lots of poor folks out there, and I represent a lot of them," Campbell said. "I would not want my people I represent to know we spend money like this. It's too much."

SPP Chairman Larry Altenbaumer cut Campbell off, saying Brown's salary was commensurate with others in the industry and extolling the work of the Value and Affordability Task Force he chaired. (See SPP Value Group Finds No 'Silver Bullets'.)

"I spent an entire year, with stakeholder involvement, looking at value and affordability of the organization with respect to our costs and the value delivered," Altenbaumer said. "I feel very good about the comments we received."

"I'm sure our architects would be amused that you think that this building is lavishly furnished," Brown said, describing the building's use of reclaimed materials and poured concrete for the floors. "Our Finance Committee, that consists predominantly of member companies, oversaw every specific of this building. This building is significantly cheaper than the leased space we were in over multiple locations in the area. To say we're lavish with our money is simply not true."

SPP clarified that Campbell's \$67 million figure applies to the value of its infrastructure assets. which includes the \$52 million in construction costs for the Corporate Center's four-story office building, modern operations data center and parking deck, and the backup ops center in nearby Maumelle. The operations center costs include required measures such as storm hardening, backup generation and fuel sources to ensure continued operations, the RTO said.



Incoming RSC President Dennis Grennan, of Nebraska, and Iowa's Geri Huber | © RTO Insider

The RSC took a break after the exchange between Campbell, Brown and Altenbaumer. When the meeting resumed, Shelton was sitting in Campbell's seat.

The Louisiana PSC is expected to vote on new RTO assignments in January.

Nebraska's Grennan Elected as RSC **President**

Regulators approved the slate of officers for the committee's leadership in 2020, with the Nebraska Power Review Board's Dennis Grennan succeeding Arkansas Public Service Commissioner Kim O'Guinn as president.

South Dakota's Fiegen will replace Grennan as vice president, while North Dakota Public Service Commissioner Randy Christmann will replace Fiegen as the RSC's secretary.

"We have a lot on our plate for the next few months," Grennan said. "We'll be working on all of those items."

O'Guinn in October was appointed to the National Association of Regulatory Utility Commissioners' board of directors.

Arkansas' Thomas to Lead OMS Half of **Seams Group**

Arkansas PSC Chairman Ted Thomas will replace Missouri Public Service Commissioner Daniel Hall as the Organization of MISO States lead on the RSC-OMS committee working to resolve seams issues between the two grid operators. (See OMS Panel Debates Merits of MISO-SPP Seams Projects.)

Missouri PSC economist Adam McKinnie told the RSC that Hall is leaving the commission when his term expires this month.

The committee will meet in an open session on Nov. 17 during NARUC's annual meeting and education conference in San Antonio. Registration will be available through the OMS website.

Tom Kleckner









SPP Board of Directors/MC Briefs

Directors Approve 9.1% Administrative Fee Increase for 2020

LITTLE ROCK, Ark. — After a one-year drop, SPP's administrative fee will resume its upward climb in 2020 with the Board of Directors' approval last week.

The directors signed off on a 9.1% increase in the fee to a record high of 43 cents/MWh. The fee dropped to 39.4 cents last year following an \$8 million overcollection in 2018. It is projected to reach 46.6 cents in 2022.

The Finance Committee based its recommendation to the board on a net revenue requirement (NRR) of \$172.3 million next year, compared with \$157.5 million the year before. The NRR is composed of operating expenses (excluding depreciation and FERC assessment), principal payments on loans for capital expenditures and a capital reserve fund.

The board also approved the committee's recommended budget, which includes a 6.5% increase in operating expenses to \$209.1 million and a slight uptick in capital expenditures of \$15.7 million.



Director Bruce Scherr explains the recommended budget. | © RTO Insider

Oklahoma Gas & Electric, Public Service Company of Oklahoma and Southwestern Public Service were among those that raised concerns over the increases. Director Bruce Scherr, who chairs the Finance Committee. told members that they were looking at a "cash-flow" budget, not

a "profit" budget.

"Your comments are not new to us," he said. "We're going to keep a close eye on cash-flow improvement. What you should be concerned about is if we didn't care about that, and we let [the increase] go to be institutionalized without further evaluation."

SPS opposed the motion to increase the budget, while OG&E and Liberty Utilities abstained. All three companies abstained from the Members Committee vote to approve the administrative fee.

SPS' David Hudson reacted negatively to the increases, pointing out that his company is "fighting hard" to keep its operating and maintenance expenses flat.



(From left) CEO Nick Brown, board Chair Larry Altenbaumer and members honor Director Emeritus Harry Skilton with a standing ovation. | © RTO Insider

"We see this year after year," he said. "This goes into retail rates. A 10% increase is too high."

"We're concerned with the revenue requirement and the increase in costs we continue to see," OG&E's Greg McAuley said. "We understand the nature of most of it, but in the world we operate [in] today, we continue to keep our operating costs flat. We look for the organization to meet us, because that's what the customers demand of us."

Board Chair Larry Altenbaumer took slight umbrage at the comments, reminding members of what they get for the costs.

"The organization has done a phenomenal job of living within its budget," he said. "I'm not trying to minimize any of the comments, but the thing that continues to gnaw at me a little bit is the other side of the equation ... the pushback is always on costs. There's never any recognition of what members get for that cost.

"I continue to believe this organization is providing significant benefits that outweigh the costs you are paying. That doesn't reduce our efforts to keep the pencils as sharp as we can, but constantly hearing one side of the argument is unfair to this organization," he said.

The budget does not include costs for SPP's reliability coordination functions in the Western Interconnection, which Scherr said have been budgeted separately and will be financed through debt and paid back over time.

SPP expects its employee headcount to

increase to more than 650 by 2021 because of RC West needs and additional engineers added to handle the generation interconnection studies' workload.

2019 ITP Portfolio: 44 Projects, \$336M

The directors signed off on the 2019 Integrated Transmission Planning (ITP) 10-year assessment that SPP said will reduce congestion costs by 21% on average and lead to projected future net savings of up to 23 cents on average monthly residential bills in the footprint.

The portfolio's 44 projects have an estimated engineering and construction cost of \$336 million and include 166 miles of 345-kV transmission. Lanny Nickell, SPP's senior vice president of engineering, said the assessment projected considerable wind and solar growth, conventional generation retirements and the effect of new technologies.

Members resumed a discussion begun at the Markets and Operations Policy Committee in mid-October over the futures used in the 2021 10-year assessment. A carbon-reduction future envisioning as much as 55 GW of wind and solar energy in 2031 was eliminated. (See SPP Debate: How Green is Our Future?)

NextEra Energy Resources' Holly Carias pointed out that stakeholders "already know we're going to exceed" the assessment's base case future, which projects 2 GW of additional wind energy by 2029 beyond the 22 GW already on hand. Nickell said that it's "more likely" that 8 GW of wind capacity will be

1

added over the next 10 years.

"Having realistic futures is extremely important. What we're seeing out of the 2021 futures is a lot more realistic than we've seen previously, so I think we're on the right track," Carias said. "We need to look differently at how we're looking at benefits. Currently, we're looking at benefits to load. Maybe it's time to look at benefits to generation. Maybe [generation] should pay for more of the costs."

"We did assess benefits to generators not committed to load. It's a fairly large number," Nickell said. "What we haven't done yet is figure out a way, or opportunity, for other parties with generators not committed to load to participate in the funding. We don't have the Tariff mechanism."

"We have questions, or concerns, with the way the new ITP process favors [the emerging technologies] future with more wind, which drives more transmission ... and drives further costs," McAuley said. "We're waiting to see a confirmation that the benefits that come out of these studies will continue to increase at the same rates we're being told they will. We're really unsure at this point, after a year of this, about the benefits and cost allocation."

Sunflower Electric Power opposed the recommendation during the Members Committee vote. OG&E, Oklahoma Municipal Power Authority, Golden Spread Electric Cooperative and Tri-County Electric Cooperative abstained.

Board Sends Fast-start Tariff Change to FERC

The board approved a Tariff revision that complies with FERC's directive to allow fast-start resources to set clearing prices, while also supporting the Market Monitoring Unit's opposing filing with the commission.

MMU Executive Director Keith Collins told board members that the Monitor has identified two major market-design flaws in the revision request (MWG RR375): It applies the mitigation process in the price calculation and not the dispatch instruction's calculation, allowing market participants to potentially manipulate the market; and it allows market participants to change start-up offers and no-load offers after the fast-start resources' commitment has occurred.

Collins said that because the offers can set price for other resources, the MMU believes "this sends an inappropriate price signal and allows market participants to manipulate the market." The Monitor has proposed applying

the mitigation process in calculating both the dispatch instruction and price, and that the start-up and no-load offers evaluated at the time of commitment be used in the fast-start resource's modified energy offer. (See "Members Endorse Quick-Start Revision," SPP MOPC Briefs: Oct. 15-16, 2019.)

SPP staff said RR375's scope was limited to meet only FERC's requirement. The Members Committee voted unanimously in favor of the motion.

Golden Spread opposed the revision at the MOPC and said it would likely file comments at FERC.

"This is an incremental step," the co-op's Mike Wise said, noting it has engaged the Brattle Group for support. "We don't believe SPP has complied with FERC's desire on this."

"I'm concerned some of what has to be done has to be resolved by FERC," Altenbaumer said. "We can appropriately get the issue to FERC and have them resolve it in a constructive manner."

The commission in June found the grid operator's quick-start pricing practices to be unjust and unreasonable because they don't allow prices to reflect the marginal cost of serving load and directed the RTO to make six Tariff changes in response. (See FERC Orders Fast-start Rules for SPP.)

FERC's order wrapped up an investigation of several RTOs begun in December 2017 under the Federal Power Act. (See FERC Drops Fast-Start NOPR; Orders PJM, SPP, NYISO Changes.)

Last Meeting for Eckelberger, Skilton, Bernard



Former Chairman Jim Eckelberger listens to words of praise for his service. | © RTO Insider "fresh thinking and planned transition," SPP CEO Nick Brown announced to stakeholders that the board meeting was the last for Directors Emeritus Jim Eckelberger and Harry Skilton, and Director Phyllis Bernard.

Expressing a need for

The three have served together since 2003 and have a combined 55 years of experience as directors. Eckelberger served as the board's chairman for 14 years before stepping aside last year. (See Eckelberger, Skilton Step Down from SPP Board.)

Eckelberger, Skilton and Bernard were all honored with resolutions from SPP and standing

ovations from its members. Bernard participated by phone.

The board's membership currently stands at nine active members following the approval of Julian Brix and Mark Crisson to three-year terms that begin in January. Brix has been a director since 2008 and Crisson since 2017.

The Corporate Governance Committee later this year will interview candidates for Bernard's vacancy.

SPP to Pay up to \$8.6M in Pension Benefits

Directors approved the Human Resources Committee's recommendation to offer lumpsum payments to terminated SPP employees vested in the RTO's pension plan but not yet drawing a benefit. The proposal would amount to an \$8.6 million payout if all 164 eligible former staffers draw from it.

Based on annual premium savings of \$100,000, current interest rates and actuarial tables, SPP would break even with just one participant in the buyout, staff said. They said advisers have told the RTO to expect a "take rate" of about 100 eligible participants.

Members and the board also approved the Value and Affordability Task Force's recommendation to accept its report and recommendations and dissolve the group. (See *SPP Value Group Finds No 'Silver Bullets.*)

Consent Agenda Clears Project Resets

The consent agenda was passed without dissent, resulting in the approval of APEX Clean Energy's upgrade to the Neosho-Caney River 345-kV line in Kansas, scheduled to go in service next year, and a pair of baseline resets:

- Evergy's \$54.1 million update for a 345/138kV transformer and 138-kV transmission line project, estimated at \$67.1 million in 2017.
- Evergy's \$34.4 million update for network upgrades on a 138-kV circuit, which was originally projected to cost \$58.3 million.

Two revision requests were on the consent agenda:

- TWG RR363: Defines existing transmission facilities' "material modification" as being "based on engineering judgment" in NERC's facility interconnection studies (FAC-002) compliance.
- TWG RR364: Reduces the planning criteria's language on equipment rating, which is already covered by NERC Reliability Standard FAC-008. ■

- Tom Kleckner

Exelon Pledges Reforms amid Grand Jury Probe

III. Nukes Decision by Spring

Continued from page 1

tigation to at least mid-May, when the FBI searched the homes of former lobbyist Mike McClain, an ally of House Speaker Michael Madigan and former Chicago Alderman Michael R. Zalewski, seeking records about attempts to get ComEd lobbying work for Zalewski.

Public radio station WBEZ reported that federal officials are probing whether ComEd hired "multiple politically connected employees and consultants in exchange for favorable government actions." Many did "little or no work," and some had ties to Madigan, the station report-

In May, the FBI raided the Chicago home of Alderman Marty Quinn's brother, Kevin, a Madigan aide who was fired over sexual harassment allegations. The Tribune has reported that investigators are interested in \$10,000 in payments that five current or former ComEd lobbyists made to Quinn after his firing.

Outside Investigation

Speaking during the company's third-quarter earnings call Thursday, Crane said the company's outside lawyers are conducting "an exhaustive investigation of the facts relevant to the subpoenas" and briefing a special committee of Exelon's board, which is represented by its own outside counsel.

"Exelon's outside lawyers are sharing the results of the investigation with the government in an ongoing basis. Their investigation is enabling us to determine what changes are necessary internally to ensure that going forward, we operate at the highest possible standards not whether actions have been legal or not, but rather which go beyond the ethical reproach," Crane said in a halting prepared statement.

Crane said the company will "immediately take action" to correct any problems it learns of from the attorneys doing the investigation. "Cooperation with the government — full cooperation, very open cooperation — is the imperative here. We're not passing judgment on [whether] anything [is] legal or illegal in some of our past practices with contract lobbyists or consultants."

'Eye on the Ball'

Although he acknowledged the investigation is dominating the news about Exelon and

ComEd, he insisted executives were "keeping our eye on the ball by staying focused on the operational and strategic path that has delivered the [company's] success."

The company reported net income of \$772 million (\$0.79/share) for the quarter, an increase over the \$733 million (\$0.76/share) a year earlier. Non-GAAP operating earnings were also up slightly to \$900 million (\$0.92/ share) versus \$856 million (\$0.88/share) in

But the disclosures appear to have shaken investors. Shares have dropped 8% since July 11, the day before the company disclosed it had received its first subpoena. After falling to a low of \$44.40 on Aug. 1, prices rallied to \$48.45 before sliding again after the company disclosed the second subpoena Oct. 4. Shares closed Thursday at \$45.49, down \$1.17 (-2.5%).

In its first disclosure, Exelon said it was asked to produce "information concerning [Exelon and ComEd's] lobbying activities" in Illinois. The second subpoena sought "records of any communications with certain individuals and entities, including Illinois state Sen. Martin Sandoval," the company disclosed.

In between the two disclosures, Fidel Marquez, senior vice president at ComEd in charge of government affairs, retired Oct. 2.

Nuke Plants at Risk

The investigation comes as Exelon is trying to persuade the Illinois legislature to prop up the finances of its four nuclear plants in the state that are not already receiving zero-emission

Crane said the drafting of the legislation will be dependent on FERC's ruling in response to PJM's proposal to create a resource-specific fixed resource requirement (FRR). PJM's filing was in response to FERC's June 2018 ruling that the RTO's capacity market rules were not just and reasonable because they failed to address growing subsidies that are suppressing prices. (See Glick Recusal May Mean No MOPR Ruling Before December.)

"I can't stress how important this spring legislative session will be for the four sites not coved by ZECs," Crane told analysts Thursday. "The first half of 2020 will be a real critical point in decision-making and potential retirement announcements. ... If for some reason we don't

garner support ... to go forward with the legislation [based on] what we see in the market forwards today, plants will start to shut down. That's the reality.... Without being able to get capacity revenue for those eight reactors, and the market forwards being as low as they are right now, it's uneconomic. And the one thing we're not going to do is sit around and damage the balance sheet."

Former Heir Apparent

Pramaggiore began working for Exelon in 2006, when she joined ComEd as an attorney. She was named CEO of the utility in 2012 and promoted to oversee all of Exelon's six utilities in May 2018, making her a leading candidate to succeed Crane.

She was credited with helping ComEd win several legislative initiatives, including a 2011 law that authorized \$2.6 billion in gridmodernization investments over a decade. The company's delivery rates reportedly jumped 37% from 2013 to 2019 under the law. Exelon and ComEd have one of the biggest lobbying forces in Springfield. Pramaggiore reportedly donated more than \$240,000 to Illinois politicians since 2005.

In addition to retiring from Exelon, Pramaggiore resigned as chair of the Federal Reserve Bank of Chicago. Calvin G. Butler Jr., the CEO of Baltimore Gas and Electric, replaced her as interim CEO of Exelon Utilities.



Interim Exelon Utilities CEO Calvin G. Butler Jr. | © RTO Insider

Avangrid Earnings Revive on Wind, New Assets

By Michael Kuser

Increased wind output helped Avangrid's profits jump 20% in the third quarter as the company continued to see strong growth in its renewables fleet.

The company earned \$150 million (\$0.48/ share) during the quarter, compared with \$125 million (\$0.40/share) in 2018. Net income for the first nine months was flat at \$477 million, compared with \$476 million for the same period last year.

The results "reflect really positive performance in renewables that improved production due to better wind resource and new assets in service during the quarter," CEO James P. Torgerson said in a call with analysts Wednesday.

A subsidiary of Spain-based Iberdrola, Avangrid owns United Illuminating, Connecticut Natural Gas, Central Maine Power, New York State Electric and Gas, and Rochester Gas & Electric, as well as generating assets throughout the U.S.

Renewables Projects

Torgerson noted Avangrid's Renewables division has commissioned 427 MW of onshore wind this year and has about 562 MW under construction. The company's approximately 16.5-GW pipeline of renewable energy projects is about evenly divided among onshore wind. offshore wind and solar.

The company last quarter executed a new power purchase agreement with Oregonbased Portland General Electric for the repowering of the 75-MW Klondike II wind project.

It also inked a \$112 million deal with Axium, expected to close in the fourth quarter, to sell a 50% ownership interest in a wind farm and a solar project in Arizona, both of which have long-term PPAs. Torgerson characterized the deal as a continuing strategy to recycle capital and optimize pipeline projects and assets.

He also said the company expects the Bureau of Ocean Energy Management to issue a supplemental environmental impact statement for the Vineyard Wind offshore project "by late 2019, early 2020." Avangrid is a 50/50 partner in the offshore venture with Copenhagen Infrastructure Partners.

Vineyard Wind submitted separate bids in the



Avangrid expects its 1,200-MW New England Clean Energy Connect transmission project to start construction in the second quarter of 2020 and come online by the end of 2022. I Avangrid

Massachusetts and Connecticut offshore wind solicitations but lost out to Mayflower Wind on Wednesday for Massachusetts' second 800-MW offshore award. Connecticut is expected to announce its contract award this month.

On the transmission front, the company expects its \$950 million, 1,200-MW New England Clean Energy Connect project to start construction in the second quarter of 2020 following receipt of the final permits from Maine and the U.S. Army Corps of Engineers, as well as approval from ISO-NE.

"The project is progressing well," Torgerson said.

Utility Rates

NYSEG and RG&E in May filed one-year rate cases requesting new rates from the New York Public Service Commission.

Both utilities are seeking a 9.5% return on equity and proposing additional capital for

resilience plans, which include a vegetation management and automated metering infrastructure, Torgerson said.

He said the company expects the rate cases to substantially mitigate impacts of outage restoration, staging costs and overtime, particularly for increased vegetation management at NYSEG, which was penalized by the PSC in June for performance issues. (See NYPSC Dings Utilities for 2018 Reliability, Safety.)

CMP has an ongoing rate case with a decision expected early in the first quarter of 2020. The utility has requested an ROE of 10%, above the current 9.45%, Torgerson said. The Maine Public Utilities Commission proposed lowering it to 8.75% because of customer service issues, he said. The company in turn recommended organizational changes and the establishment of a \$6 million customer benefit fund, plus the establishment of an energy assessment pilot with Efficiency Maine.

Call transcript courtesy of *Motley Fool*. ■

DTE Posts Lower Q3 Earnings, Touts Decarbonization

By Amanda Durish Cook

DTE Energy's earnings fell last quarter despite gains for its electric business, the company said during a call with analysts last week highlighting its recent push to reach zero carbon emissions by 2050.

The company reported third-quarter profits of \$319 million (\$1.73/share) compared with \$334 million (\$1.84/share) a year earlier. Operating income fell 9 cents short of Zacks Investment Research's estimates of \$2/share. DTE attributed the decline to expenses related to restoration activities after severe storms.

Despite the performance, DTE increased its 2019 operating earnings guidance range from \$6.02 to \$6.38/share to \$6.06 to \$6.40/share.

CEO Jerry Norcia told analysts Oct. 28 that 2019 "is shaping up to be a strong year as evidenced by our guidance increase."

CFO Peter Oleksiak said DTE's standalone electric earnings were \$307 million for the quarter, \$3 million higher than 2018, "largely due to the impact of new rates implemented in May, offset by rate base growth costs and cooler weather in 2019."

"As a reminder, the third quarter of 2018 was one of the hottest quarters on record in our region," Oleksiak said.

The call also focused on DTE's recent decarbonization goal.

In September, the company announced it was setting a "bold new goal" of net zero carbon emissions in its electric generation fleet by 2050. The utility had previously committed to reducing greenhouse gas emissions from



DTE Pinnebog wind park in the Michigan thumb region | DTE Energy

electric generation by 50% from 2005 levels by 2030, 75% by 2040 and 80% by 2050.

"DTE Electric's medium- and long-term plans aligned with the scientific consensus around the importance of achieving carbon-emission reductions. We are fully committed to dramatically reducing carbon emissions. This is the right thing to do for our customers, our business and the environment. We are doing as much as we can, as fast as we can, to provide our customers and the state of Michigan with clean energy that is affordable and reliable," Norcia said.

DTE says reaching zero emissions will depend on retirement of its coal fleet, "thousands" of additional wind and solar megawatts, natural gas-fired generation, and investments in carbon capture, large-scale storage and modular nuclear facilities.

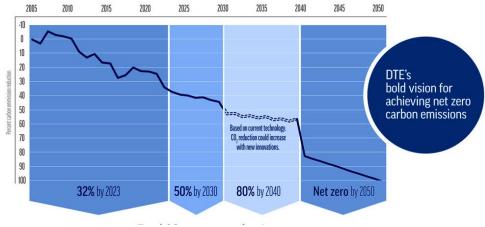
The announcement comes as the Michigan Public Service Commission deliberates on DTE's latest 15-year integrated resource plan, filed in spring. Environmentalists and renewable advocates have derided the plan as relying blindly on coal and natural gas resources and not including enough renewable energy. Multiple intervenors have urged the PSC to reject the plan. (See DTE IRP Draws Fire from Renewable Proponents.)

Norcia said progress continues on the \$1 billion, 1,150-MW gas-fired Blue Water Energy Center to replace about 2,000 MW of retiring coal plants in southwestern Michigan.

"We broke ground last year and received all the necessary permits. The plant is a little over 30% complete with the turbines already on site and an expected in-service date of the spring of 2022," Norcia said.

Norcia also reported progress on MIGreen-Power, the company's voluntary renewable energy program, saying commercial customers including Ford Motor Co., General Motors, the University of Michigan and the **Detroit Zoo** have committed to using a combined 400 MW of renewable power to date. Additionally, nearly 10,000 residential customers have "committed to a portion of their monthly bills [going] to renewable power," he said.

DTE also reported that the Michigan PSC last quarter conditionally approved its *purchase* of three new wind farms with a collective 455 MW in capacity, increasing the company's renewables portfolio by nearly 50%. The wind farms are slated to come online at the end of 2020.



DTE's new carbon reduction goals | DTE Energy

Entergy Beats Q3 Earnings Expectations

Entergy beat Wall Street's expectations Wednesday by reporting third-quarter adjusted earnings of \$506 million (\$2.52/share), up from \$431 million (\$2.35/share) a year earlier on increased rates, higher sales and lower nuclear generation costs.

Zacks Investment Research's survey of financial analysts had projected \$2.31/share.

The New Orleans-based company's GAAP results were \$365 million (\$1.82/share), compared to \$536 million (\$2.92/share) a year ago.

Company executives said during a conference with analysts that the "strong results" led them to raise their 2019 adjusted earnings guidance's midpoint by 5 cents and narrowed the

range to \$5.25 to \$5.45/share.

"The fundamentals supporting our steady, predictable growth are strong and give us confidence in our financial outlooks." CEO Leo Denault said.

Entergy Wholesale Commodities (EWC), the company's merchant generation business, suffered a loss of \$141 million during the quarter after a \$105 million profit the year before. The company said revenues were down following the sale of Massachusetts' Pilgrim Nuclear Power Station to Holtec International in August and tax items recorded a year ago.

Denault said the Pilgrim sale completes an "orderly exit" from EWC's nuclear business. The Indian Point units in New York and the



Entergy linemen | Entergy

Palisades plant in Michigan are scheduled to be shut down in 2021 and 2022, respectively.

Entergy's share price was trading Wednesday at \$121.56 during after hours, up \$2.61 from the morning's open. ■

- Tom Kleckner

NiSource Earnings Feel Aftershocks of Gas Explosions

By Amanda Durish Cook

NiSource lost money last quarter as the company continues to face costs stemming from a string of gas pipeline explosions in three Massachusetts cities last year.

The Indiana-based parent of Northern Indiana Public Service Co. meanwhile continued to replace its coal plants with wind and solar resources.

NiSource reported a net operating loss just short of \$2 million, compared with earnings of \$35 million (\$0.10/share) a year earlier.

Speaking to analysts Wednesday, NiSource CFO Donald Brown attributed the loss to higher financing costs and increased safetyrelated spending in response to last year's string of gas explosions in three Massachusetts communities.

NiSource said it has dedicated \$1 billion to stepped-up safety protocols after the explosions, which killed a teenager, injured 21 other people and destroyed multiple buildings in Lawrence, North Andover and Andover, The blasts occurred as the company's Columbia Gas subsidiary was replacing cast iron pipelines with plastic lines.

"We expect to recover a substantial portion of our Greater Lawrence incident costs through the \$800 million of casualty insurance coverage and \$300 million of property insurance in place at the time of the event," Brown said. He

noted the company started submitting claims in December 2018 and has collected casualty insurance recoveries of \$670 million through September — and expects to collect the remaining \$130 million early next year.

In July, NiSource resolved multiple class-action lawsuits brought by business owners and residents for \$143 million. The utility has also settled two other lawsuits brought by the communities and the victim's family.

Columbia Gas last month experienced a second major gas leak in Lawrence as it continued rebuilding pipelines. The Massachusetts Department of Public Utilities has since placed a moratorium on the company's nonemergency work and has opened an investigation into possible safety violations.

NiSource CEO Joe Hamrock said the company is working to win back the public's trust and has added a chief safety officer, instituted a safety management system based on a framework for pipeline operators from the American Petroleum Institute, and installed safety improvements on its low-pressure gas distribution systems.

"Teams have installed more than 1,000 automatic shutoff devices across the NiSource footprint this year, including completing all installation of these devices in Massachusetts and Virginia," Hamrock said.

He said NiSource will continue to factor the financial impacts of the leaks into its 2020

guidance, "but on a fairly moderate basis."

NIPSCO Update

NIPSCO issued three requests for proposals for replacement capacity on Oct. 1, including for 2,300 MW of solar generation and solar paired with storage, and 300 MW of wind generation and wind paired with storage. The utility is also requesting an unspecified amount of thermal or other capacity resources. The RFP window closes Nov. 20.

The RFPs come in response to a forecasted capacity need as the utility gradually phases out its coal fleet by 2023. NIPSCO pledged in its 2018 integrated resource plan to cut 80% of its remaining coal-fired generation by 2023 and all coal by 2028. That translates into retiring its 1,625-MW R.M. Schahfer coal plant in 2023 and the 469-MW Michigan City coal plant in 2028.

NIPSCO last quarter also received approval from the Indiana Utility Regulatory Commission for a certificate of need for the 102-MW Rosewater wind *project* in northwestern Indiana. NiSource and Texas-based EDP Renewables also filed with the IURC to build the 302-MW Indiana Crossroads wind farm, also in northwestern Indiana.

Hamrock also said NIPSCO expects to hike electric rates by about \$11/month for an average residential customer beginning in January 2020, with a rate case order due from the IURC by the end of the year. ■

Company Briefs

PG&E to Credit Customers Affected by Oct. 9 Shutoff Only

Pacific Gas and Electric has agreed to provide rebates to customers affected by the public safety power shutoff on Oct. 9.

The one-time rebate will only apply to roughly 738,000 customers. The shutoff was the first of four that have left millions without power for days at a time. There are no plans for similar rebates for the three shutoffs that have followed since, but the utility is "open to having a policy discussion with state regulators and others."

More: The Mercury News

Biggest Private Coal Miner Goes Bust as Trump Rescue Fails

Robert Murray placed his company, Murray Energy, into Chapter 11 bankruptcy protection last week, as he had hinted was coming



© RTO Insider

in an angry speech at FERC Chair Neil Chatterjee's conference in Kentucky on Oct. 21. (See Energy Worlds Collide at Chatterjee Conference in Ky.)

The company entered protection in the U.S. Bankruptcv Court in Columbus. Ohio. to restructure more than \$2.7 billion of debt. The largest privately owned U.S. coal company reached a restructuring support agreement with lenders who hold more than 60% of a \$1.7 billion loan, the company said. The deal provides a new \$350 million loan to keep operations going during the reorganization.

The company said it has named Robert D. Moore, former COO and Murray's nephew, as president and CEO. Under the restructuring agreement, the lender group will form a new entity (Murray NewCo) that would seek to acquire the company's assets, with

Murray as chairman and Moore as CEO.

More: Bloomberg

Shell, Sumitomo Buy 15% Stake in Minigrid Firm PowerGen

Royal Dutch Shell and Sumitomo have taken a minority stake in African minigrid firm PowerGen.

The pair will have a combined ownership of 15% after leading the most recent funding round alongside six other investors. Shell will get a seat on the board, with Sumitomo taking an observer seat.

PowerGen has connected about 15,000 homes and businesses via its minigrid installations in Kenya, Tanzania, Sierra Leone and Nigeria. It will use the new funds to build out its presence on the ground but not for project finance.

More: Greentech Media

Federal Briefs

Trump Serves Notice to Quit Paris Agreement



© RTO Insider

The Trump administration formally notified the U.N. on Monday that it would withdraw the U.S. from the Paris Agreement on climate change, leaving global climate diplomats to

plot a way forward without the cooperation of the world's largest economy.

The action, which came on the first day possible under the accord's complex rules on withdrawal, begins a yearlong countdown to the U.S. exit on Nov. 4, 2020, the day after Election Day. President Trump first announced his intent to withdraw from the agreement in June 2017. (See Trump Pulling U.S. Out of Paris Climate Accord.)

Secretary of State Mike Pompeo announced the notification on Twitter and issued a statement saying the accord would have imposed intolerable burdens on the American economy. Trump has long held that the accord would cripple growth and intrude on American sovereignty.

More: The New York Times

Feds Favor OK for Cardinal-Hickory Creek to Cross Wildlife Refuge

Federal wildlife authorities are proposing to allow the Cardinal-Hickory Creek highvoltage transmission line to cross one of the largest blocks of floodplain habitat in the continental U.S., while Wisconsin officials have granted the project a permit to temporarily fill some wetlands.

Three utility companies seeking to build the line between Dubuque, Iowa, and Middleton, Wisc., are seeking permission to cross the Upper Mississippi River National Wildlife and Fish Refuge. The utilities propose building 75- to 195-foot towers to carry wires along a 260-foot corridor through the refuge. The line would disturb about 39 acres of the 240,000-acre refuge.

The federal Fish and Wildlife Service issued a preliminary determination of compatibility last month, meaning it intends to allow construction of the line. According to its review, the new line would create a visual impact and would result in habitat fragmentation. but because it is replacing an existing line and would run parallel to an existing gravel road and railroad, there would be a net reduction of fragmentation over the next three to five decades. The agency is accepting public comments through Nov. 26.

More: Wisconsin State Journal

EPA to Roll Back Rules to Control Toxic Ash from Coal Plants



EPA is expected to weaken a 2015 regulation that strengthened inspection and monitoring at coal plants, lowered acceptable levels of toxic effluent

and required plants to install new technology to protect water supplies from contaminated coal ash.

The agency will relax some of the requirements and exempt a number of power plants from any of the requirements, according to the people familiar with the Trump administration's plan.

The Obama-era rule came partially in response to a 2008 disaster in Tennessee when a containment pond ruptured at the Kingston Fossil Plant and more than 1.1 billion gallons of coal ash spilled into nearby rivers.

More: The New York Times

Military Wants More Rules for Turbines near Nuclear Missiles

Department of Defense and Air Force officials outlined concerns in a letter to North



Dakota and four other states with nuclear missile arsenals to consider introducing new rules aimed at preventing conflicts between wind turbines

and helicopters that provide security at

launch facilities.

Last month, DOD asked the North Dakota Public Service Commission to consider new rules, including increasing the distance to more than 2 miles between a turbine and missile launch facility, and wants special lighting added to wind towers that is compatible with night vision goggles worn by helicopter pilots. The military said it's also "an issue of concern" in Montana, Wyoming, Colorado and Nebraska. The commission has yet to act on the requests.

More: The Associated Press

State Briefs REGIONAL

Organization of MISO States Announces 2020 Officers



The Organization of MISO States at its annual meeting last month elected new officers for the remainder of 2019 through Dec. 31, 2020.

Minnesota Public Utilities Commissioner Matt Schuerger, who previously served as the vice president and at-large member of the organization's Executive Committee, was elected president. North Dakota Public Service Commissioner Julie Fedorchak was elected vice president. In this role, she will lead the State Regulatory Authorities sector at the MISO Advisory Committee.

Other officers include Secretary Mike Huebsch, of the Wisconsin Public Service Commission; Treasurer Arthur D'Andrea, of the Texas Public Utility Commission; At-Large Member Sarah Freeman, of the Indiana Utility Regulatory Commission; and Immediate Past President Ted Thomas, chairman of the Arkansas Public Service Commission.

More: OMS

MARYLAND

State, Exelon Reach \$200M Settlement to Clean up the Bay

Gov. Larry Hogan announced last week that the state and Exelon have reached a legal settlement laying aside litigation between the state and the company over management and other issues associated with the Conowingo Dam.

As part of the settlement, Exelon, which operates the dam and generates hydropower, will invest about \$200 million for an array of measures designed to clean up the Susque-



hanna River and the Chesapeake Bay. State officials have long maintained that sediment coming through the dam has polluted the river and bay.

"This settlement is a significant and positive step in the right direction, and with the cooperation of Exelon and upstream states, we can continue making progress in our efforts to preserve and protect this great national treasure," Hogan said in a statement.

More: Maryland Matters

MASSACHUSETTS

Mayflower Wind Wins State's 2nd **Offshore Wind Contract**



Mayflower Wind Energy has won the

state's second offshore wind contract, as electric companies selected the lowest cost of Mayflower's four bids, rather than ones designed to invest in port infrastructure or build a new manufacturing facility. Mayflower beat Bay State Wind and Vineyard Wind, both of which also submitted multiple bids with different selling points.

Mayflower's bid calls for 804 MW of generation capacity. Together with last year's winning bid by Vineyard Wind for 800 MW, the state has fulfilled its procurement obligation under its 2016 energy diversity law.

Eversource Energy, National Grid and Unitil selected the winner in a state-supervised process, which required them to buy longterm contracts for at least 1.600 MW of energy from offshore wind. The companies

have not yet signed contracts.

More: South Coast Today

MICHIGAN

Whitmer Expected to Sign Bills to **Clarify Solar Energy Tax Exemptions**



Gov. **Gretchen Whitmer** supports a package of bills recently approved by the legislature that clarifies tax exemptions for small-scale solar energy projects.

House Bills 4465 and 4069, along with Senate Bill 47, generally would provide tax exemptions for smallscale, behind-the-meter solar projects. The bills apply to solar installations up to 150 kW that are behind the meter and don't include larger-scale projects. HB 4465 and SB 47 apply to commercial and industrial installations, while HB 4069 applies to residential. The House of Representatives had near unanimous support for the bills in June, while the Senate signed off last week.

More: MiBiz

MINNESOTA

Xcel, Minnesota Power Seek Electricity Rate Increases



Xcel Energy and Minnesota Power announced proposals to increase electricity rates by

about 15% over the next three years.

Xcel said its proposed increase will allow the utility to invest in transmission and distribution lines to help strengthen reliability and carry power from new wind farms. Smart meters are also part of the company's plan. Monthly increases for residential customers would be about \$4.80 in 2020, \$1.25 in 2021 and \$3 in 2022.

Minnesota Power said its proposal would allow the utility to continue its plans to improve the grid and supply half of electricity generation from renewable sources by 2021. Residential electricity bills could go up by about \$11.66/month.

More: MPRNews

MONTANA

Deal Reached in Dispute that Shuttered Large US Coal Mine



State officials last week reached a temporary deal that will allow the Spring Creek mine

to reopen amid a legal dispute with its new owners from the Navajo Nation.

The Navajo Transitional Energy Co. shut down the mine after state regulators insisted the company waive its immunity as a tribal entity from future lawsuits, but eventually they reached an agreement for a 75-day, limited waiver of immunity for the company.

The waiver allows the state to enforce environmental laws at the mine and allows the company to be sued over future environmental violations or mine reclamation costs. Negotiations will continue over the state's request for a permanent waiver, but company representatives said they won't agree to a full waiver of their treaty rights.

More: The Associated Press

NEW JERSEY

Murphy Commits State to Climate Change Resilience Plan



Gov. **Phil Murphy** last week signed an executive order that establishes a statewide climate change resilience strategy involving 16 state agencies.

Led by the Department of Environmental Protection, the group will write a report on how best to deal with rising sea levels, warming seas, and stronger and more frequent storms. The report is due to the governor by Sept. 1, 2020. David Rosenblatt, the DEP's assistant commissioner, will serve as the state's chief resilience officer, leading the effort and working with other state agencies.

More: The Associated Press

NORTH CAROLINA

Duke Energy Progress Asks for Rate Increase



Duke Energy Progress has asked state regulators to

approve an average 12.3% rate increase.

The filing with the Utilities Commission asks for an additional \$464 million to pay for retiring coal plants, closing coal ash dumps and improving the electric grid. If approved, Duke said residential rates would rise by an average 14.3%, while the average increase for commercial and industrial customers would be 10.4%

More: WFAE

SOUTH CAROLINA

Dominion Wants Santee Cooper to Chip in for Failed Nuclear Project

Dominion Energy attorneys sent a letter to Santee Cooper, the minority owner of the failed V.C. Summer nuclear project, on Oct. 21 and demanded the state-owned utility cover 45% of Dominion's costs for nine separate legal disputes.

Dominion's lawyers claim Santee Cooper owes the money because of its earlier agreement with SCE&G to build the two reactors. Santee Cooper owned 45% of the project. Part of Dominion's demands include a \$200 million settlement it entered with current and former SCE&G customers earlier this year.

Santee Cooper believes it does not owe Dominion anything and asked a judge to block the company from trying to extract millions of dollars from it and its ratepayers.

More: The Post and Courier

TEXAS

CPS Energy to Double Solar but also Keep Coal

CPS Energy plans to nearly triple the amount of solar power it uses to replace its aging natural gas plants.

The city-owned utility's CEO, Paula Gold-Williams, detailed the planned surge in solar power generation last week at a San Antonio energy forum. She said the agency would solicit bids from solar providers by the end of the year.

CPS currently gets about 10% of its supply of electricity, or 550 MW, from solar. The

new plan would increase solar power to 900 MW. Combined with existing wind power, the new solar could bring the utility's clean-energy generation mix to more than 40%.

But to the dismay of environmentalists, CPS also plans to continue running the Spruce I and II coal plants for possibly several more decades. Gold-Williams said CPS needs the plants to ensure adequate power for customers.

More: San Antonio Express-News

Scout Clean Energy Plugs in 300-MW Wind Farm



Scout Clean Energy, a portfolio company of Quinbrook Infrastructure Partners, announced the

completion of the 300-MW, 120-turbine Ranchero wind park.

The plant was constructed by Renewable Energy Systems at a site in Crockett County. Scout Clean Energy, whose team will handle the day-to-day operations, noted that it received tax equity funds for the project.

More: Renewables Now

WISCONSIN

Alliant to Build 1 GW of Solar Generation



Alliant Energy announced plans to build up to 1 GW of solar power by the end of 2023 as

part of its transition to clean energy sources. That number is nearly 10 times the state's current solar-generation capacity and would more than double the amount expected to come online within the next couple of years.

Alliant, which has pledged to cut 80% of its carbon emissions by 2050, said, "Changing economics, customer sustainability goals and better renewable technology" are driving the commitment to solar energy. However, the company did not specify how or where it would develop the solar energy or whether it plans to buy any of the half-dozen large solar farms being developed.

The announcement marks Alliant's first commitment to large-scale solar. As of 2020, it will have 474 MW of wind power serving its customers in the state.

More: Wisconsin State Journal