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 36 September 10, 2019

PG&E Offers $16.9B for Wildfire Claims in Chap. 11 Filing

By Tom Kleckner

PG&E Corp. on Monday filed a *reorganization plan* in U.S. Bankruptcy Court that includes $16.9 billion to pay for wildfire claims, the first step in what is expected to be a protracted battle between wildfire victims and other creditors over the utility's future.

PG&E headquarters on Beale Street in San Francisco | *© RTO Insider*

The San Francisco-based company *said* the Chapter 11 reorganization plan is designed to enable its debtors to "fairly and expeditiously" treat wildfire claims made before the filing "in full compliance" with recently passed legislation (*AB 1054*). The law creates a $21 billion insurance-like fund to pay for wildfire damages and is bankrolled by California's three big investor-owned utilities and ratepayers. (See *Calif. Wildfire Relief Bill Signed After Quick Passage*.)

The plan would create two trust funds, one capped at $8.4 billion to wildfire victims who were unable to cover all their losses and a second capped at $8.5 billion to reimburse insurance companies for their payouts.

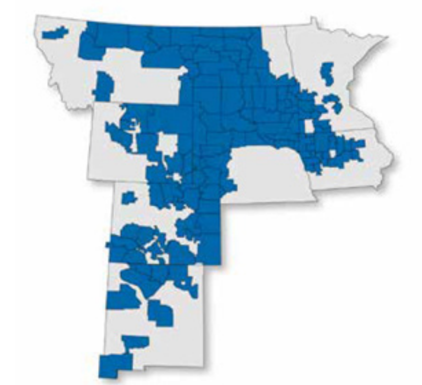
The plan also would cover $1 billion previously announced to fully settle the wildfire claims of public entities.

Continued on page 9

WAPA, Basin, Tri-State Sign up with SPP EIS

By Rich Heidorn Jr. and Tom Kleckner

The Western Area Power Administration, Basin Electric Power Cooperative, and Tri-State Generation and Transmission Association announced Monday they will join SPP's Western Energy Imbalance Service (WEIS) market, giving the new market a foothold in more than a dozen states. SPP plans to launch the WEIS in February 2021.



Basin Electric Power Cooperative has grown to one of the largest generation and transmission cooperatives in the U.S., serving 141 rural electric systems and 3 million customers in nine states. | *Basin Electric Power Cooperative*

As the market administrator, SPP will centrally dispatch energy from the participants every five minutes using the most cost-effective generation to reduce wholesale electricity costs for participants. The market will provide price transparency and allow parties to trade bilaterally and hedge against transmission congestion.

SPP is accepting commitments from additional customers to be included in the market's initial go-live through Oct. 25.

The footprints of the three members include portions of Arizona, Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, New

Continued on page 27

Also in this issue:

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

FERC/Federal News

Book on Tx Developer Transmits Climate Hope, Author Says

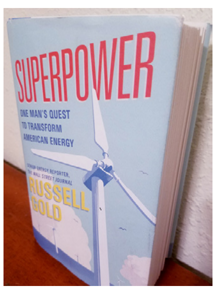
By Tom Kleckner

Russell Gold (right) listens to Michael Skelly during a book tour stop at Rice University. | © *RTO Insider*

HOUSTON — When Russell Gold, a senior energy reporter with *The Wall Street Journal*, decided to write a book on climate change, he naturally chose to focus on the long-haul transmission system.

Say again?

"When I think about climate change — and this is not specifically about climate change — there's balance between hope and despair going on throughout our entire culture," Gold said. "What's happening in the Amazon needs to be balanced by hope. Everything that's going wrong, all these animals disappearing … I wanted to do something on the hope side, on the people trying to arrest climate change and slow it down."



Russell Gold's "Superpower" | © *RTO Insider*

Gold was speaking recently before a standing-room-only audience at Rice University's Baker Institute for Public Policy. It was another stop on his book tour for "*Superpower: One Man's Quest to Transform American Energy*."

"This is an energy story and an entrepreneurial story," he said. "I wanted to find someone, a group of people out there, and tell their story, give people some hope that there are options out there. If you don't have hope, despair wins."

Gold's book tells the story of Michael Skelly, the title's "one man" who built the second-largest wind power company in the U.S. — Horizon Wind Energy — and then founded Clean Line Energy Partners. Skelly's plan at Clean Line was to build HVDC lines hundreds of miles long to transport wind energy from the Great Plains to Eastern and Western population centers.

Unable to clear endless regulatory hurdles and landowner opposition, he eventually sold off Clean Line's projects and is now a senior adviser with the Lazard investment management firm. (See *Out of the Game, Skelly Still High on Wind Energy*.)

Gold, who has covered energy for the *Journal* since 2002, said he was struck by seeing Skelly's projects run into the same long environmental reviews and bureaucratic delays as natural gas pipelines.

"It would be helpful to get a yes or no [answer] in five years," he said, to some snickers in the audience.

"I didn't think that would be a laugh line," Gold said, pausing. "You have your investors saying, 'This is a fun ride, but we'd like to have something happen.'"

First Mouse … or Donkey

While Skelly may not have been ultimately successful, both he and Gold believe his efforts will help those developers who follow. As Gold writes in his book, "The second mouse gets the cheese … what is usually left unsaid is that the first mouse gets the trap."

"There's a really important message here," Gold said. "If we can find a way to build out the grid to where we can move bulk power around to take advantage of this amazing wind and solar resource we have, Americans can have cleaner and affordable energy.

"I wouldn't have thought that five or 10 years ago. I think that's a really powerful message," he said. "We don't have one energy policy, one energy grid. We have 50 energy policies and 50 energy grids. It's difficult to negotiate your way through that."

Skelly, who has apparently never met a person he doesn't enjoy talking with — he was a relentless door-to-door campaigner during a failed congressional bid in 2008 — easily emerges as the star of "Superpower."

"I think there's a different word for it, and it's called a 'donkey,'" Skelly said. "When you work in the transmission business, you feel like a donkey."

"He's a fun, entertaining storyteller," Gold said. "When you're writing about transmission, you need someone who can make the stories

FERC/Federal News

interesting.

"Skelly's career starts when wind power is emerging from the bad California days. By tracing his career, I was able to write about the wind industry," he said. "It's gone from a niche market in the last 20 years, from people who wanted to change the world to a fully functioning industry. I wanted to tell the story, one that you can read and follow along with."

Skelly gave Gold "unfettered access" to the company and its deliberations as it worked to build as many as five long-haul lines. "People in the company thought this was the stupidest idea they had ever heard," Skelly said.

The Talking Industry

The Plains & Eastern Clean Line was central to Clean Line's plans. The 700-mile line from the Oklahoma Panhandle's wind farms to Memphis, Tenn., was to carry 4 GW of renewable energy for purchase by the Tennessee Valley Authority, proving the viability of Clean Line's other projects.

Gold remembers sitting in meetings in Clean Line's fishbowl conference rooms and watching the staff walk by.

"You could tell who didn't like the project by their scowls," he told Skelly during the Rice event. "Trying to build a big transmission line is incredibly difficult. It takes a lot of focus. One of my concerns was having this writer in and out of the office would distract you."

Gold and Skelly operated under what came to be known as the principle of Heisenberg's Cat, a conflation of *Heisenberg's uncertainty principle* and *Schrödinger's cat*.

"Heisenberg's Cat came to be shorthand for the fact that mere measurement of an atom changes it," he said. "Digging too deep into TVA and how TVA was handling the Plains & Eastern proposal would affect the outcome."

As a result, Gold was allowed to sit in on Clean Line's side of the discussions, as long as he held off requests for interview and making details public until negotiations ran their course.

Gold layers story upon story in the book, providing side trips into the long effort to develop renewable energy. He writes about the conception of electricity in Thomas Edison's Pearl Street Station, Samuel Insull and his nephew's attempts to build electric monopolies, and a group of students who took on Consolidated Edison in 1970s New York by building a wind turbine atop an East Village tenement.

Industry insiders are likely to come across personally familiar names in "Superpower," a result of the more than 150 interviews Gold conducted during his intensive research.

Skelly helped Gold pitch the book during the Rice event, saying while he had "no economics in this, we need people to buy this book."

"I started Clean Line because we realized one of the biggest challenges we faced was getting energy from where the resources are really good to where the power is needed," he said.

Referencing California's overabundance of afternoon solar energy, Skelly said, "I'm sure [solar] power is free right now in California. We're using a lot of power in Texas, so we could use some of it.

"Everyone realizes an interconnected system is an optimal way to build a grid," he said. "It's not entirely clear which is bigger: The industry of building a national grid, or the industry of talking about building a national grid? We depend more on a state-by-state approach."

Reflecting on his experience, Gold said that it will take more than an "entrepreneurial outsider" for the nation to realize the impacts of renewable energy. As he said, "It's always windy or sunny somewhere" in the U.S.

Russell Gold reacts to a comment during a book signing. | © *RTO Insider*

"If there's a way to get the different RTOs to cooperate with each other, that would be very helpful," he said. "The history of the United States grid has gotten bigger and bigger, with more and more networking. Think of an integrated, continent-wide network. There's a lot of benefits to that."

And a huge bite of cheese, for the mice that come later. ■

FERC/Federal News

DC Circuit Remands Pipeline Order on Export Issue

By Rich Heidorn Jr.

FERC failed to adequately explain how it relied on natural gas exports in approving the Nexus Gas Transmission pipeline in Ohio and Michigan, the D.C. Circuit Court of Appeals ruled Friday (*18-1248*).

The court said it agreed with the city of Oberlin, Ohio, and the Coalition to Reroute Nexus, a landowners' organization, that the "commission failed to adequately justify its determination that it is lawful to credit Nexus' contracts with foreign shippers serving foreign customers as evidence of market demand for the interstate pipeline."

The court, however, declined to vacate FERC's approval of the 256-mile pipeline, saying, "We find it plausible that the commission will be able to supply the explanations required, and vacatur of the commission's orders would be quite disruptive, as the Nexus pipeline is currently operational."

At issue is the commission's August 2017 *order* granting Nexus a certificate of public convenience and necessity under Section 7 of the Natural Gas Act and its July 2018 *order* rejecting rehearing (CP16-102, et. al.).

The 36-inch *pipeline* runs from receipt points in eastern Ohio to pipeline connections in southeastern Michigan, allowing delivery to customers in northern Ohio, southeastern Michigan and the Dawn Hub in Ontario. Nexus Gas Transmission is a 50/50 partnership between DTE Energy and Enbridge.

FERC found that Nexus' precedent agreements were "the best evidence" that the pipeline would serve unmet market demand. Although the precedent agreements represented only 59% of Nexus' capacity, the commission concluded that existing pipelines could not absorb that amount of gas.

The petitioners claimed Nexus' precedent agreements should be ignored because half of them are with affiliates. The court backed the commission's explanation that it fully credited Nexus' agreements with affiliates because it found no evidence of self-dealing.

But the court agreed with the petitioners' claim that the precedent agreements are not strong evidence of market demand because two of the agreements, totaling of 260,000 dth/day, are intended for export to Canada. If the commission excluded the exports, Nexus would have precedent agreements for only 625,000 dth/day, about 42% of its 1.5 million dth/day capacity.

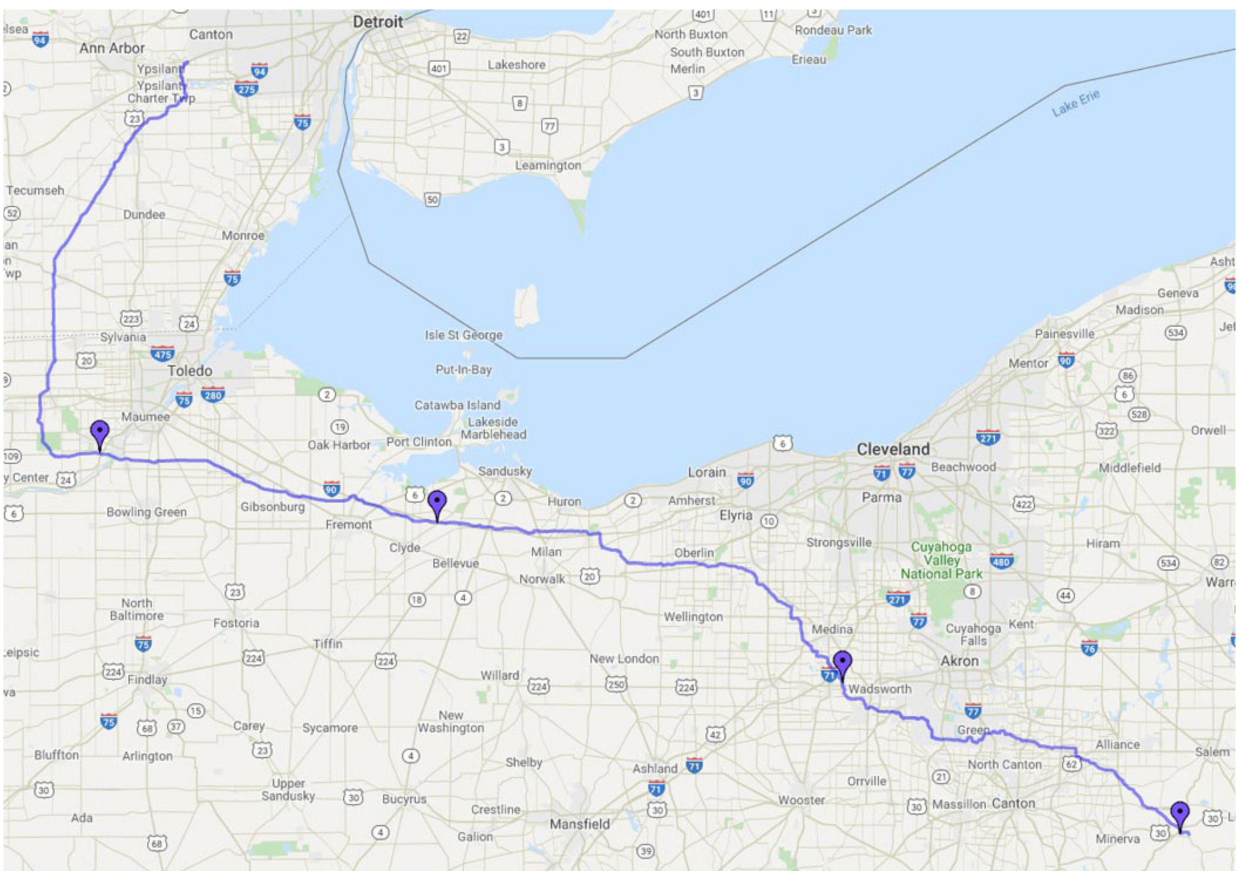
"The commission never explained why it is lawful to credit demand for export capacity in issuing a Section 7 certificate to an interstate pipeline," the court said.

"Section 7 states that the commission may issue a certificate of public convenience and necessity for 'the transportation in interstate commerce,' and we have explicitly refused to interpret 'interstate commerce' within the context of the act so as to include foreign commerce.

"Accordingly, we remand to the commission for further explanation of why — under the act, the Takings Clause [of the Fifth Amendment], and the precedent of this court and the Supreme Court — it is lawful to credit precedent agreements with foreign shippers serving foreign customers toward a finding that an interstate pipeline is required by the public convenience and necessity under Section 7 of the act."

The court rejected challenges to FERC's approval of Nexus' proposed 14% return on equity and its finding that the pipeline does not "represent a significant safety risk to the public."

The case was decided by Judges Judith W. Rogers, Sri Srinivasan and Robert L. Wilkins, and the opinion filed by Wilkins. ■



| Nexus Gas Transmission

CAISO/West News

EIM Attracts More BANC Members, WAPA Region

By Robert Mullin

The Western Energy Imbalance Market is poised to expand across Northern California after three municipal utilities and the Western Area Power Administration's Sierra Nevada (WAPA SN) division jointly announced they intend to join the growing real-time market.

The Balancing Area of Northern California (BANC) and WAPA said Wednesday they will sign an implementation agreement with CAISO that would allow WAPA SN and BANC members Modesto Irrigation District (MID), Redding Electric Utility and Roseville Electric Utility to begin trading in the EIM in April 2021. The decision does not affect any other WAPA regions.

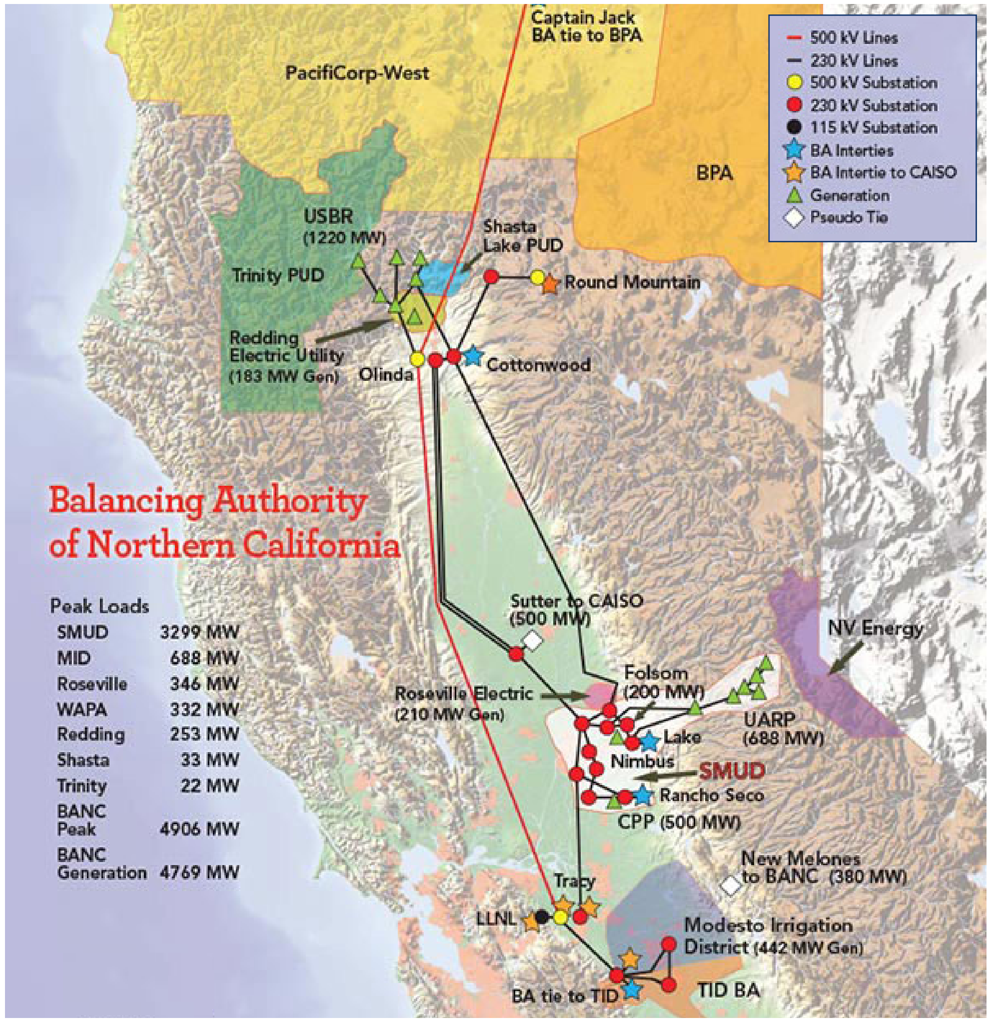
The agreement represents the second phase of BANC's approach to incorporating its members into the EIM. Sacramento Municipal Utility District (SMUD) entered the market in April. (See *SMUD Goes Live in Western EIM*.)

"BANC is excited to expand its participation in Phase 2 after becoming the first publicly owned agency to become an EIM entity," BANC General Manager Jim Shetler said in a statement. "The success of Phase 1 ... and the benefits we've realized encouraged more of our public power members to participate. We expect the transition will be as smooth for Phase 2 as it was for Phase 1."

While SMUD represented the first publicly owned utility to join the EIM, WAPA SN would be the first federal power marketing agency to participate. The Bonneville Power Administration, which operates about 15,000 miles of transmission in the Pacific Northwest, has begun a multiyear effort to examine EIM membership. (See *Customers Probe BPA on EIM Impact*.)

WAPA SN primarily markets wholesale power generated by the U.S. Bureau of Reclamation's Central Valley Project, which includes the Shasta, Folsom, Trinity and New Melones dams. Its customers include towns, rural electric cooperatives, public utility districts, federal and military agencies, and Native American tribes in Northern and Central California and parts of Nevada.

Together with BANC, the agency is part owner of the California-Oregon Transmission Project, a 340-mile, 500-kV line that links BANC's balancing authority area to BPA's territory. The two connect via the Captain Jack substation in Southern Oregon, one of two major transfer points for energy flowing between the Northwest and California.



BANC members Modesto Irrigation District, Redding Electric and Roseville Electric will join the Western EIM in spring 2021, along with WAPA-SN. | *BANC*

"Joining the Western EIM will help SN ensure the reliable delivery of our hydropower while adjusting to a changing energy mix. Given our footprint within the BANC balancing authority area, the Western EIM is the best fit for SN," WAPA SN Regional Manager Sonja Anderson said.

MID provides electricity to more than 122,000 customers and irrigation water to 2,300 agricultural accounts in California's Central Valley. The utility's portfolio consists of about 66 MW of hydroelectric resources and 389 MW of gas-fired generation, including three peaking units.

"Joining the EIM will provide MID continued access to the market's diverse, readily-available power resource mix," MID General Manager Scott Furgerson said. "Access to this low-cost, growing pool of resources will also further ensure and enhance service reliability to our customers."

MID estimates it will incur $3.3 million in start-up costs and about $1 million in annual expenses to participate in the EIM, with recovery anticipated within three years.

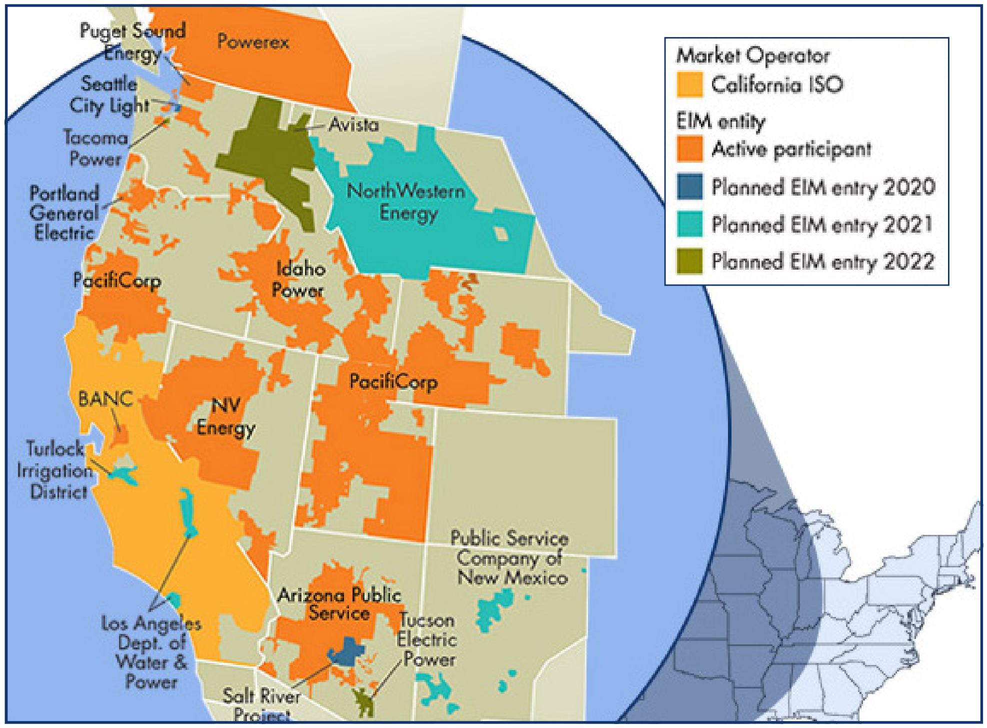
Redding Electric serves more than 42,000 residential and commercial customers within the city of Redding and owns 83 MW of gas-fired generation. With about 53,000 customers, Roseville Electric obtains most of its power from its own gas-fired generation and WAPA.

BANC members Shasta Lake and Trinity Public Utilities District have not committed to the EIM. ■

Colorado Utilities Examine Market Membership

Xcel Could Sell Renewables in Regional Trading Market

By Hudson Sangree



Colorado is a big blank on the Western EIM map. | *CAISO*

One of the biggest blank spots on CAISO's Western Energy Imbalance Market map could be partly filled if four Colorado utilities join the West's expanding real-time trading market.

Or SPP could score a *coup* if those utilities opt to join its nascent Western Energy Imbalance Service market, set to launch in December 2020 to compete with CAISO's effort. (See *SPP's Western EIS Market Poised to Challenge EIM*.)

Xcel Energy, the state's largest load-serving entity, and three partners — Black Hills Energy, Colorado Springs Utilities and Platte River Power Authority — announced Aug. 30 they were evaluating joining one of the markets with the help of a consulting firm. If that eventually happens, they'd be the first entities in Colorado to join an energy imbalance market.

"Working together, we have the potential to drive down fuel costs and provide customers with more energy from wind and solar resources," Alice Jackson, president of Xcel Energy – Colorado, said in a news release. "We're pleased to continue this regional collaboration and urge other power providers to consider joining us."

The four utilities already share resources and balance peak demand through a joint agreement, but they see "value in joining a larger market to expand opportunities to exchange energy with neighboring utilities and be able to reliably integrate more clean energy into their systems," Xcel said.

Motivating Factors

Political and financial factors likely influenced the decision.

Colorado Gov. Jared Polis signed a bill in May that reauthorized the Public Utilities Commission and implemented a host of new environmental requirements for it and utilities. *SB19-236* requires utilities to submit greenhouse gas-reduction plans and instructs the PUC to investigate the potential benefits of joining a regional energy market.

"This exploration is in keeping with the passage of [the bill]," Xcel said.

A prior effort by Colorado utilities to join an RTO went south in April 2018, when Xcel upended a plan for the Mountain West Transmission Group to join SPP. Xcel, the group's largest member, pulled out, saying it wasn't in its best interests. (See *Xcel Leaving Mountain West; SPP Integration at Risk*.)

Xcel has also been engaged in a long-running *turf battle* with the city of Boulder over the city's efforts to acquire the utility's local assets and form a municipal utility intended to supply carbon-free energy by 2030. The city filed condemnation proceedings in June while simultaneously engaging in a separation proceeding with Xcel before the PUC, with both proceedings still playing out.

Boulder's efforts were seen by some as spurring Xcel's pledge in December to become the first major investor-owned utility to supply its customers with 100% carbon-free energy. The company said it would cut carbon emissions by 80% in 2030 and go all-green by 2050.

Polis, in his policy "roadmap" to achieving 100% renewable energy by 2040, has set similar goals for the state.

Reaction and Predictions

Xcel's announcement was met with general praise from supporters of regional markets, including CAISO.

"The Western EIM has proven it can deliver as we enter a new era in the energy industry," the ISO said in a statement sent to *RTO Insider*. "We support the efforts of these four Colorado utilities to join the Western EIM, which includes some of the largest electric utilities in the West. The current Western EIM participants have realized nearly three-quarters of a billion dollars in total benefits while reducing more than 400,000 metric tons of carbon emissions."

CAISO's latest figures show its continually expanding EIM saved its *participants* more than $736 million since it started in November 2014. Its current nine members include Arizona Public Service, PacifiCorp and NV Energy. Nine other entities scheduled to join include Arizona's Salt River Project, in 2020, and the Los Angeles Department of Water and Power, in 2021.

The Bonneville Power Administration is well along the path to joining the EIM, filling in the second big gap in CAISO's EIM map in the Pacific Northwest. (See *Customers Probe BPA on EIM Impact*.)

SPP said it also welcomed the interest.

"SPP has been working with several Colorado

CAISO/West News

and regional utilities interested in participating in a wholesale electricity market," a spokesman said in an email. "Having studied and observed the value of our energy imbalance and day-ahead markets over the last several years, we're confident we can enhance the affordability and reliability of electricity in Colorado and across the West today and in the future. We stand ready to serve potential customers in the West if and when they determine the value of SPP's services is right for them."

Jennifer Gardner, senior attorney with Western Resource Advocates and chair of the committee that nominates leaders for the Western EIM, said Xcel and other Colorado utilities joining a regional market makes sense, especially to facilitate trade of Rocky Mountain wind energy with solar power from California and the Desert Southwest.

"We've seen a lot of market activity taking place in the last two to four years," Gardner said. "These utilities realize there are more benefits to be gained with renewable energy integration … if they expand their footprint."

Transmission connections to SPP or CAISO could be difficult with limited pathways, but a western connection may be more practical, she said.

Leaning Toward CAISO or SPP?

To perform the EIM study, Xcel and its partners selected the Brattle Group, a firm not usually associated with those intending to join that market. That led to some speculation that the Colorado utilities were leaning toward SPP.

An Xcel spokeswoman said in an email that wasn't the case.

"At this time, we are waiting for the results of the study and are not leaning in any particular direction," Michelle Aguayo said.

Gardner said it's true that EIM entities have generally used another firm, E3, but she doubts the choice of Brattle signals a preference for SPP.

"The choice of who's doing a study isn't so important. This is just a personal preference" on the part of utilities, some of whom have used Brattle before, she said.

In energy conferences across the West in recent years, representatives of the intermountain states have expressed concern that California would dominate a regional market controlled by CAISO. They've been hesitant to go along with the ISO's desire to form a Western RTO but have joined the EIM because its board is made up of members from other states and because participation is wholly voluntary.

Moreover, California's huge population and demand for electricity is enticing.

Will financial calculations win out, or is a loathing of California and greater affinity for SPP more likely to control?

Carl Zichella, Western transmission director for the Natural Resources Defense Council and a strong supporter of regional markets, suggested that it could go either way but that CAISO might be the better choice because of its established track record and better connections.

"The power and efficiencies of wholesale energy markets are becoming increasingly clear to all load-serving entities in the West," Zichella said in an email. "The CAISO's Western EIM has surpassed $720 million in benefits for market participants and is continuing to grow. SPP's Energy Imbalance Service has worked well for its members in the Eastern Interconnect.

"Colorado utilities must now decide whether their best deal is obtained by looking east — across the Eastern Interconnect's limited DC ties — or West, toward the Western EIM." ■

CAISO/West News

PG&E Offers $16.9B for Wildfire Claims in Chap. 11 Filing

Continued from page 1

CEO Bill Johnson said in a ***statement*** that the plan "will meet our commitment to fairly compensate wildfire victims and we will emerge from Chapter 11 financially sound."

"I am confident that we can, and will, provide better service to our customers and communities, and our plan of reorganization is another step in this process," Johnson said. He said the company will remain focused on reducing the risk of wildfires and continue supporting the state's clean-energy goals.

PG&E said the plan will achieve a rate-neutral solution for customers and meet AB 1054's June 30, 2020, timeline to become eligible to participate in an insurance fund for future wildfire claims. The company also said it will honor all pensions and collective bargaining agreements.

Under the plan, PG&E would also assume, or remain responsible, for all power purchase agreements and community choice aggregation servicing agreements. Court documents indicate the utility holds almost 400 PPAs with more than 350 companies, worth about $42 billion.

It remains to be seen whether the wildfire victims will accept PG&E's offer. In addition, a group of hedge funds seeking to recoup billions of dollars from PG&E are attempting a hostile takeover of the company.

Meanwhile the city of San Francisco made an offer Friday to buy the utility's city electric operations for $2.5 billion. (See related story, *PG&E Ends Bond Bid as SF Makes Wires Offer*.)

PG&E said it intends to work with financial institutions over the next several weeks to obtain up to $14 billion in equity financing commitments. Those proceeds will be used to pay wildfire victims and help fund PG&E's contributions to the state wildfire fund.

The company filed for bankruptcy in January after two years of devastating wildfires that are likely to cost the utility billions of dollars in damages. The fires included the November 2018 Camp Fire, the deadliest and most destructive in state history.

PG&E filed its Chapter 11 reorganization plan in the U.S. Bankruptcy Court in San Francisco.| © *RTO Insider*

The U.S. Bankruptcy Court in San Francisco, where PG&E made the filing, *canceled* a hearing scheduled for Tuesday. ■

CAISO/West News

PG&E Ends Bond Bid as SF Makes Wires Offer

By Hudson Sangree

SACRAMENTO, Calif. — San Francisco offered $2.5 billion to buy PG&E Corp.'s grid facilities serving the city Friday as the company announced it was postponing a controversial effort to secure up to $20 billion in bonds to pay its wildfire debts.

The company's announcement came as state lawmakers prepare to end their session this Friday — and as PG&E readied its reorganization plan, filed Monday in U.S. Bankruptcy Court in San Francisco. (See related story, *PG&E Offers $16.9B for Wildfire Claims in Chap. 11 Filing*)

California State Capitol

San Francisco Offer

The company indicated that the city's offer — delivered in a letter from Mayor London Breed and City Attorney Dennis Herrera — was not part of its plans for exiting bankruptcy.

"PG&E has been a part of San Francisco since the company's founding more than a century ago, and while we don't believe municipalization is in the best interests of our customers and stakeholders, we are committed to working with the city and will remain open to communication on this issue," PG&E spokesman Andy Castagnola said in a statement.

Breed and Herrera said in a statement that the city's offer was the result of a "detailed financial analysis conducted by industry experts and encompassing an extensive examination into the company's assets in San Francisco."

"The offer we are putting forth is competitive, fair and equitable," they said. "It will offer financial stability for PG&E while helping the city expand upon our efforts to provide reliable, safe, clean and affordable electricity to the residents and businesses of San Francisco."

The purchase would create California's third-largest municipal utility, after the Los Angeles Department of Water and Power and the Sacramento Municipal Utility District. The city is not seeking to purchase any of PG&E's gas assets.

The deal would have to clear the bankruptcy court and federal and state regulators, where a central issue is likely to be how the loss of San Francisco would impact the rest of PG&E's system.

"What that will mean is that folks who live in suburban and rural parts of California are left behind in PG&E's system, and it's not clear that the system is economically viable," Michael Wara, the director of Stanford University's energy policy program, *told* the *San Francisco Chronicle*. "What is the impact of this on people who don't live in San Francisco?"

IBEW Local 1245 — PG&E's largest union with *12,000* PG&E employees — has opposed talk of municipalization, creating a *website* to make its case against a purchase it says would cost closer to $6 billion. "Should city government focus on fighting homelessness, reducing traffic gridlock and building more affordable housing — or should politicians spend $6 billion buying PG&E and running our local utility?" it asks.

Tom Dalzell, business manager for the local, *told The Wall Street Journal* the city's offer "is off by a factor of four. They don't have the workforce either — the underground workers, the engineers to run the system."

The unions also may have an ally in Gov. Gavin Newsom, the former San Francisco mayor and supervisor, who helped defeat two initiatives to create a city-owned utility.

PG&E: Will Revisit Bond Plan

Steven Maviglio, a spokesman for major PG&E *shareholders* that backed the bond plan, said they would revisit it next year.

"The timing was simply not right to pass this legislation with just days left in the session," Maviglio said in an emailed statement. "During the interim, we will continue to work to resolve the bankruptcy case and help PG&E fulfill its commitments. We will return in January with a renewed effort to getting this beneficial legislation the full and fair consideration it deserves."

PG&E issued a statement Friday saying, "We firmly believe that Wildfire Victim Recovery Bonds are a critical element to the state's path forward when it comes to addressing wildfire risk."

The company filed for bankruptcy in January after two years of devastating wildfires that are likely to cost the utility billions of dollars in damages. The fires included the November 2018 Camp Fire, the deadliest and most destructive in state history.

In recent weeks, PG&E and the hedge funds that control much of its stock have been lobbying lawmakers to draft and pass a measure that would have established a wildfire recovery bond program for the state's investor-owned utilities. The proposal would have let the state borrow money, tax-free and at low interest rates, on behalf of the IOUs. (See *PG&E Seeks $20B Wildfire Bonds Issuance*.)

The expected vehicle for the bond measure was Assembly Bill 235, a wildfire-related measure that stalled in committee earlier this year. The vehicle for the bond measure was Assembly Bill 235, a wildfire-related measure that stalled in committee earlier this year. It was heavily *amended* Friday to include the bond provisions, just as PG&E said it would no longer pursue the effort.

The measure was meant to bolster PG&E's position in bankruptcy and to head off an effort by its unsecured bondholders to take greater control of the company at a substantial discount. Those bondholders had put forward their own reorganization plan that included a $30 billion investment in the company in exchange for guaranteed payment of their notes, which could otherwise be dismissed in bankruptcy, and a big stake in PG&E. (See *PG&E's Bondholders Push $30 Billion Investment Plan*.) They waged a lobbying and advertising battle against the PG&E bond proposal in recent weeks, launching a *website* titled "Stop the PG&E Bailout." ■

ERCOT News

ERCOT Escapes Scarce Conditions as Temps, Load Drop

By Tom Kleckner

A call for conservation, slightly higher-than-expected wind energy and lower-than-expected temperatures helped ERCOT avoid taking emergency actions during scarce conditions last week.

ERCOT asked Texans to reduce their energy usage on Thursday and Friday, projecting peak demand of 72.7 GW and 73.3 GW, respectively. (See *ERCOT Sees Tight Conditions, Calls for Conservation*.)

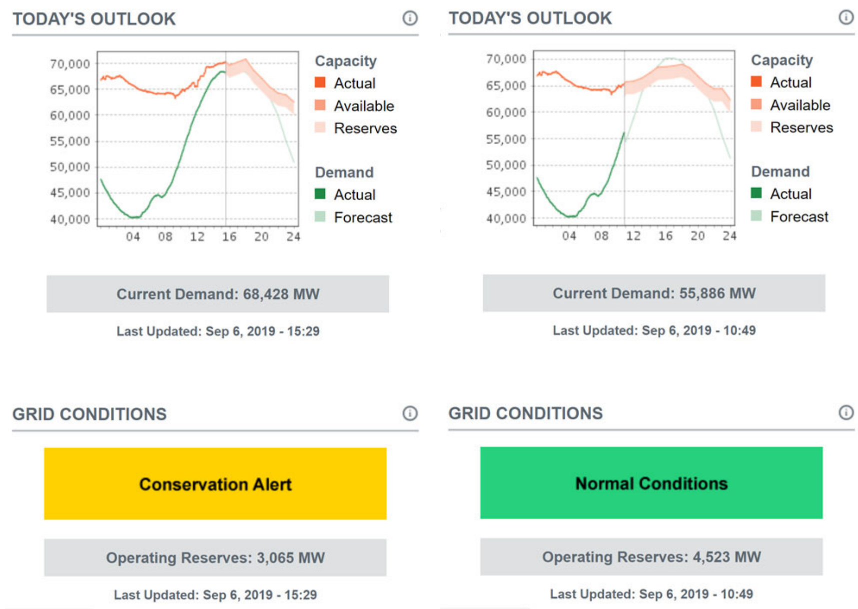
The National Weather Service had expected temperatures to reach triple digits in the state's major metropolitan areas into the weekend. Temperatures ended up being 2 to 4 degrees lower in many of the cities, with rain in some parts of the state helping dampen demand.

ERCOT's system demand peaked at 68 GW and 68.8 GW on those two days. The latter set a new record for September, elbowing aside the 68.5-GW mark established Sept. 3.

"We are thankful to Texans for helping us conserve," spokesperson Leslie Sopko said.

On Thursday, wind production was expected to be less than 1.5 GW during the early afternoon hours before coastal winds picked up. However, wind energy contributed an extra half-gigawatt when physical responsive capability was at its lowest.

"When the wind doesn't blow, it gets interesting," ERCOT COO Cheryl Mele said last week during the Infocast Texas Renewables Summit. "The driver to the day is how much wind do we have. On our peak days, we've definitely had a little less than we did on peak days last year. When [wind] gets down to 2 GW or less, it has an effect on price. We're all sitting around hoping the wind really does show up.



Demand dropped as Sept. 6 conditions eased. | *ERCOT*

"Anytime we're seeing a forecast of less than 2 GW in the afternoon or at peak, it means we're going to have an interesting day."

Prices briefly hit triple digits on Thursday during the interval ending at 5 p.m., after settling at just over $5,000/MWh in the day-ahead market. On Friday, prices were in quadruple figures, topping out at about $1,778/MWh during the 2:35-4:45 p.m. time period. Day-ahead prices for Friday's energy and ancillary services were both about $4,500/MWh for the day.

The Texas grid operator this summer has called two energy emergency alerts, its first in five years. (See "ERCOT CEO Briefs Commission on Summer Performance," *Texas PUC Briefs: Aug. 29, 2019*.)

ERCOT began the summer with an 8.6% reserve margin. It set a new all-time peak of 74.7 GW on Aug. 12, and it has recorded 11 other demand marks above the record set a year ago. Last year, ERCOT broke its previous record 14 times.

Austin, home to ERCOT, exceeded 100 degrees Fahrenheit during 27 of August's 31 days. ■

ERCOT News

Overheard at Infocast's 2019 Texas Renewable Energy Summit

Attendees Give ERCOT's Market Thumbs-up

AUSTIN, Texas — Infocast's Texas Renewable Energy Summit last week brought developers, corporate off-takers, cities, municipalities, co-operatives, the financing community and other key stakeholders to sort out where ERCOT's market is headed, stay abreast of the latest trends shaping the Texas renewables market, and glean the latest insights into the market.

Infocast's Texas Renewables Summit holds court in Austin. | © *RTO Insider*

Meeting in the midst of 100-degree-plus heat along the banks of Lady Bird Lake in downtown Austin with ERCOT facing tight grid conditions, much of the conversation centered on the market's performance this summer.

John Hall, Environmental Defense Fund | © *RTO Insider*

John Hall, Texas-based director of regulatory and legislative affairs for the Environmental Defense Fund, complimented ERCOT's staff on meeting record customer demand despite an 8.6% reserve margin. The grid operator has been forced to call two energy emergency alerts, the first in five years, but avoided taking more extreme measures.

Referring to the "ERCOT movie, which I find the most interesting movie this summer," Hall asked the panel he was moderating for their opinion.

Jacob Steubing, Recurrent Energy | © *RTO Insider*

Jacob Steubing, director of origination and structuring for solar developer Recurrent Energy, agreed with Hall but said, "I'm still holding out for '*Joker*' with Joaquin Phoenix. It's getting good press."

Turning serious, Steubing said, "I'm a solar guy, so going by the book, we think the market design as it stands is ideal. Solar has performed at least as well as expected, and I think the data backs that up. We're continuing to see more sophisticated buyers seeking that solar shape. Your exposure in Texas is when it's hot and sunny, and solar is a pretty good hedge for that."

Karl Dahlstrom, senior vice president of commercial execution for renewable developer Seventus, said ERCOT's market is unique, given its 2% "consistent load growth every year."

"The impressive number of renewable buildup is placing pressure on fossil plants," he said. "We do think the market is working. We're happy to see the $9,000[/MWh scarcity] prices happen. The purpose of the $9,000 price was to encourage new generation. It will be some time over the next two years to see if that's changed investors' expectations."

Resmi Surendran, Shell | © *RTO Insider*

"This summer's been really good. It's helped improve the market confidence in EROCT and [the Public Utility Commission's] management of the market," said Resmi Surendran, senior director of regulatory policy for Shell Energy. "ERCOT is only taking market actions at the last moment. It's a good example to show market impact on prices. That has shown the importance of having the right market design."

Tuan Pham, PowerFin | © *RTO Insider*

"You will get your returns in the energy-only market, but be careful what you wish for, because here we are," PowerFin Partners CEO Tuan Pham said. "This market is designed as a trader's market. Traders love volatility, and they're killing it right now. Grandma's not going to be paying the $9,000 prices, so who pays? The retailers are supposed to, and they will, but prices will eventually get socialized to all the ratepayers. It's going to take some time to work through the system to socialize Grandma's bills, but it's going to happen."

Pham said if ERCOT operated a capacity market or more defined market, no longer would "traders make a whole lot of money and walk off with their bonuses and never invest in the transmission grid."

A capacity market is anathema to many of ERCOT's participants. "As a solar developer, we're against that," Steubing said, echoing similar comments from others on his panel.

Bob Helton, ENGIE | © *RTO Insider*

Bob Helton, ENGIE's senior director of regulatory affairs, recoiled when a fellow panelist mentioned a capacity market.

"There are three words you can't say in Texas: blackouts, capacity market and the wall," he said in jest. "It's involuntary load shed, load obligation and life-form barrier."

On a more serious note, Helton said transmission is the biggest issue in the market, saying renewable energy's "basis risk" — the spread between futures and physical prices — is "horrendous across Texas."

"That will be the main barrier," he said. "It's hard to find projects. We'll have to look at things completely out of the box."

ERCOT News

Panel: Not All Proposed Projects Will be Built

A panel discussing the generation buildout and connecting the resources to the system cast doubt on the more than 100 interconnection requests by renewable developers. ERCOT's August *generator interconnection status report* lists 62.4 GW of planned solar projects and nearly 36 GW of wind projects among the nearly 112 GW of study requests.

"We're just simply not going to build out 40 GW of solar in the state," Pham said. He said it's "apparent" ERCOT's interconnection processes, bogged down with too many specious applications, need to change. "It's also important to think about distinguishing between solar and wind. You have investors still stuck in this paradigm of imposing wind expectations on solar energy. Wind is off peak; solar is on peak."

Tenaska Power's Keith Emery and EDP Renewables' Vanessa Tutos listen to a question. | © *RTO Insider*

Sunil Nair, managing director for Transmission Analytics Consulting, called the amount of solar projects in the queue "ridiculous" and said the "basis differential risk is real, and it's growing."

Sunil Nair, Transmission Analytics Consulting | © *RTO Insider*

"The large amount in the queue … is going to cause issues," he said. "How much is built or where. Unfortunately, I don't think anyone has a crystal ball.

"There are growing levels of basis differential risk and congestion risk," Nair said. "We've heard a lot of talk about scarcity pricing … but people are building out in areas where they are competing with other wind and solar projects for transmission access. But you may not see that $9,000 pricing. If located behind a constraint with wind or solar on the margin, you may be sitting at zero or negative pricing, while everyone else is getting $9,000."

Kip Fox, president of Electric Transmission Texas, a joint venture between subsidiaries of American Electric Power and Berkshire Hathaway Energy, said the end result is a system that does not have enough transmission.

Kip Fox, ETT | © *RTO Insider*

"We've had half a billion in congestion costs so far this year. Half a billion solves a lot of adequacy problems," he said. "When I hear an appeal for conservation from ERCOT, I see a transmission system that is going to be in trouble. We're going into a period where there is more risk due to increased load and congestion."

While energy storage facilities are increasingly being added to the interconnection queue, ERCOT insiders are also seeing growing interest from server farms and Bitcoin mining operations seeking reliable transmission service.

"We've had a lot of requests from Bitcoin server farms," Fox said. "Bitcoin is tired of being in Mongolia or the Siberian peninsula. These facilities take anywhere from 10 to 20 MW of power and would love to be hooked up to a reliable grid."

"You won't see 40 GW of server farms [in West Texas]. You have prairie dogs out there," Pham said, offering a dissenting viewpoint. "People who operate those things would rather live in Austin or Silicon Valley."

Wind Industry Expects Continued Growth

The summit's speakers continue to see strong growth in the Texas wind industry. The rush to begin construction on approved projects before the production tax credit falls off after 2020 is a key driver, but so could be the groundwork laid back in the 1990s by former Texas Gov. George W. Bush, which has led to acceptance of the industry's facilities.

Texas opened its electricity market to competition in 1999, which led to a wave of wind development and the need for additional transmission infrastructure. The Competitive Renewable Energy Zones (CREZ) project was the answer, resulting in the construction of 2,400 miles of high-voltage lines, capable of carrying 18.5 GW of West Texas wind to ERCOT's major load centers.

"You could almost say George W. Bush was the godfather of Texas transmission lines," Pattern Energy Group Vice President George Hardie

Husch Blackwell's Chris Reeder interviews ERCOT COO Cheryl Mele. | © *RTO Insider*

ERCOT News

George Hardie, Pattern Energy | © RTO Insider

said. "The CREZ lines enabled an extraordinary amount of new wind to be developed. Because Texas wind has done extraordinary things for Texas communities, there's been very little blowback of visual aesthetics. You're seeing wind projects going increasingly closer to load centers."

Susan Williams Sloan, AWEA | © RTO Insider

"This has all the fundamentals of being a great place for wind development," said Susan Williams Sloan, vice president of state affairs for the American Wind Energy Association. "There's high load, so there are a lot of customers. There are ample wind resources and market rules that allow the developers or generation owners to connect to the grid and get their power to the market. With a low-cost, competitive market … there's a whole lot of political support for building and hosting wind farms. We're seeing a lot more interest in hosting more [renewable resources] because it's been so good for rural economic development."

But it's not all rainbows and unicorns.

Vanessa Tutos, EDP Renewables' director of government affairs, said there's no political will for a CREZ II, saying "it's so much more expensive to build large-scale transmission to serve that cheap generation than it is to use distributed generation."

"Looking at the economic development that is lost to rural America, renewable energy can be there and help some of the economies," she said. "The only way to do that is enable access to those markets so we can get these projects developed where they're needed."

"You can argue wind has been so successful in Texas, it's creating some adversities that need to be shaken out," Hardie said. "We need more transmission, but how conducive is ERCOT to building a new transmission line just to accommodate a 100-MW wind farm in West Texas when there's already so much wind coming out of there? The CREZ lines have become, in an amazingly short time, all full up. Careful siting and location of wind projects, and where the power is needed, will be the key for the ongoing success of wind."

Sloan said that while the wind industry may soon be the only form of generation not receiving some form of federal tax subsidy, and without a price on carbon, her stakeholders always find a way to beat expectations.

E.ON Climate Renewables Mark Frigo listens to Renewable Energy System's Shalini Ramanathan. | © RTO Insider

"If there's only one technology left competing against other technologies with their incentives and subsidies, and despite the cost of wind coming down 69% over the last nine years, being able to compete against others is going to be tough," she said. "Since I've been in this industry, we've beat expectations every way. A technology-neutral tax incentive is something you will see us advocating for."

Permian Basin Drives ERCOT's Load Growth

Shannon Caraway, Solar Prime | © RTO Insider

Shannon Caraway, vice president of business development for Solar Prime and a 30-year veteran of the ERCOT market, said that while the grid operator's 2% annual load growth may be setting the standard, it's nothing compared to the growth in West Texas' oil-rich Permian Basin.

"The amount of sheer load growth is just staggering. In my entire career, I can't remember an area that has grown that fast and worn out a forecast," he said, noting that peak load in ERCOT's Far West zone has grown 47% since summer 2017 (2,920 MW to 4,280 MW), accounting for about 27% of ERCOT's peak load growth.

The growth is fueled by oil and gas production. The Permian Basin is currently producing more than 4.2 million barrels per day, though the rate of growth has slowed in recent months. If the trend continues, it would only mean the load growth slows somewhat.

"As long as oil prices stay above $50 a barrel, production could reach up to six million barrels a day," said Brian Bartholomew, a U.S. power analyst with BloombergNEF.

The petroleum companies are betting on renewables to help manage their price risk. Exxon Mobil recently procured 250 MW of solar energy in the Permian and 250 MW of wind. Shell is also said to seeking renewable generation. ERCOT's most recent ***adequacy report*** indicated nearly 1,9500 MW of solar energy is already operating in its footprint, with 1,500 MW in West Texas.

"A vast majority of all that West Texas solar sits in the Permian Basin," Caraway said. "When we came out to the Permian area six years ago, most of the solar development was much farther west, west of Fort Stockton. It had great solar irradiance but almost no transmission. Since then, we've seen solar in the Fort Stockton area experience severe congestion." ■

— Tom Kleckner

ERCOT News

ERCOT Foresees Adequate Capacity for Fall, Winter

ERCOT said Monday that it has sufficient installed capacity to meet system demand this fall and winter.

The final fall *seasonal assessment of resource adequacy* (SARA) indicates the Texas grid operator will have nearly 84 GW of capacity to meet a projected peak demand of 61 GW during October and November. The *preliminary SARA* for the winter season (December-February) anticipates a peak demand of 62.3 GW.

The fall SARA — based on normal weather conditions during peak demands from 2003 through 2017 — adds almost 2 GW of planned additional capacity: 296 MW of gas-fired generation, 732 MW of wind and 170 MW of solar resources. It also includes 13,833 MW of forecasted unit outages, based on historical averages for the past three years.

“Our studies show we have sufficient generation for the fall season,” Manager of Resource Adequacy Pete Warnken said in a *statement*.

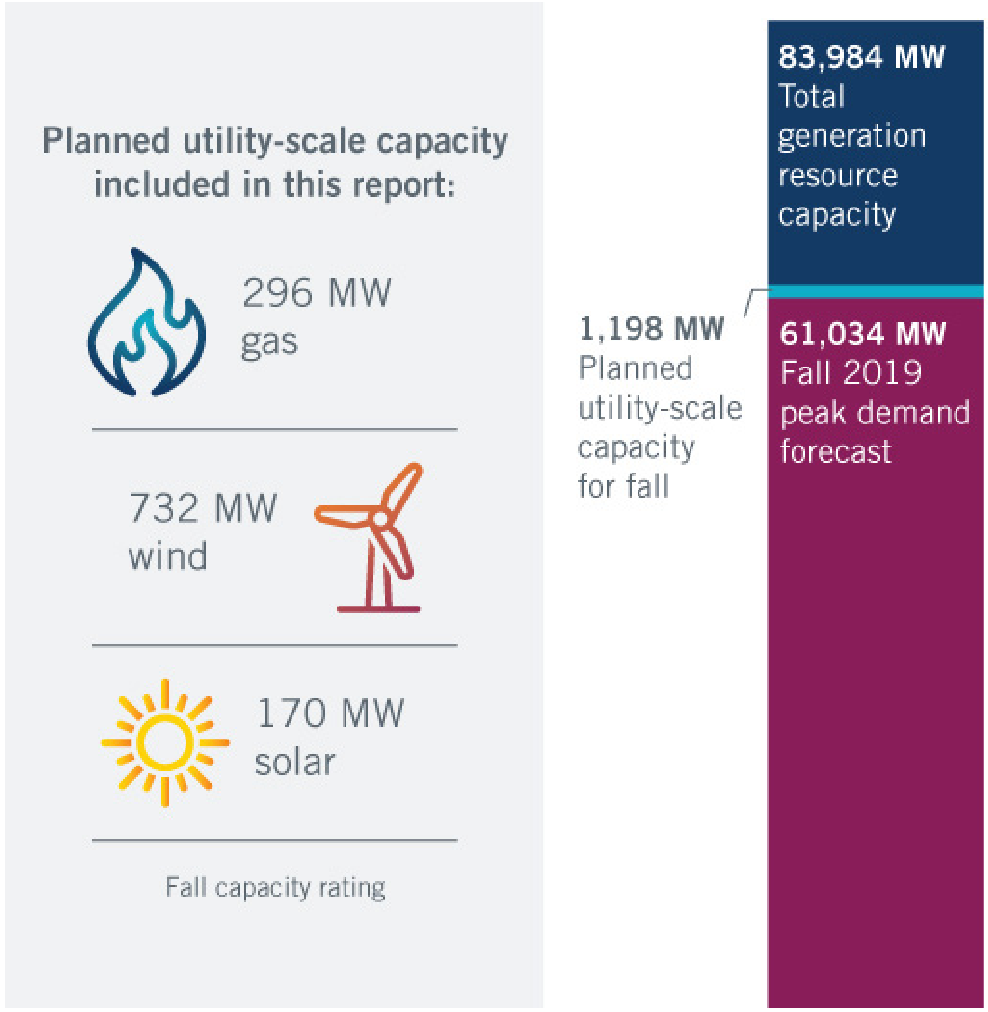
ERCOT's Pete Warnken | © *RTO Insider*

An additional 1,179 MW of planned winter-rated capacity is expected to be added between now and December. The final winter SARA will be released in early November.

ERCOT began the summer with 78.9 GW of available capacity and an 8.6% reserve margin.

The SARA report assesses generation availability and expected peak demand conditions at the time it is prepared. The assessment takes into account expected generation outages for routine maintenance and a range of outage scenarios and weather conditions that could affect seasonal demand. ■

— Tom Kleckner



ERCOT's fall outlook | *ERCOT*

ISO-NE News

ISO-NE IMM Details Market Power Concerns on ESI

Patton Backs ISO-NE Day-ahead, Imbalance Reserves Plan

By Rich Heidorn Jr.

David Patton, Potomac Economics | *© RTO Insider*

External Market Monitor David Patton and Internal Market Monitor David Naughton both endorsed major portions of ISO-NE's Energy Security Improvements (ESI) plan before the New England Power Pool Markets Committee on Sept. 3, with Naughton also spelling out his concerns for policing market power.

ISO-NE's proposal includes day-ahead generation contingency reserve (GCR) and replacement energy reserve (RER) ancillary services.

"We've been recommending the ISO implement day-ahead reserve products for a number of years," said Patton, president of Potomac Economics. "We've seen that they have significant value in other RTOs."

[Editor's Note: In compliance with NEPOOL rules, all quotes in this article were taken from speakers' written materials or approved by them after the meeting.]

Potomac Economics' "2018 Assessment of the ISO New England Electricity Markets" *report* found about 4,000 hours of commitments made through the day-ahead market to meet spinning reserve requirements last year. But those commitments are essentially out-of-market commitments, Patton said, "because while the physical constraints are embedded in the day-ahead market, there's no market product associated with them, so they are not priced."

The result: "understated" day-ahead prices relative to the system's needs and increased net commitment-period compensation (NCPC) uplift payments.

"These [new] products will allow those requirements to be recognized and priced through the market," he said.

Patton said the proposed day-ahead energy option component, while not essential, will provide additional incentive for scheduled resources to be available when called upon.

"It's critical that [the day-ahead products] have a physical obligation to be available and have the ability to supply the product that the ISO is procuring — that they not be purely financial."

Energy Imbalance Reserves

Patton said the proposed energy imbalance reserves are "probably the most innovative component" of the RTO's plan, allowing the day-ahead market to "fully reflect" the system's physical needs. He said it could allow ISO-NE to procure the resources through the market and "allow the day-ahead prices to fully reflect the system's requirement."

Allocating the cost of the forward energy procurement to negative deviations will create an incentive for load to be "more fully scheduled day-ahead" and should reduce the reliance on the reliability unit commitment (RUC) process, he said.

Patton said the current allocation of NCPC to deviations should be eliminated or changed to be based on cost causation. "It is very important in this design to stop [allocating] inefficient costs to virtual load so it will efficiently arbitrage differences between the day-ahead and real-time LMPs," Patton said in his *presentation*.

Day-ahead Replacement Reserves

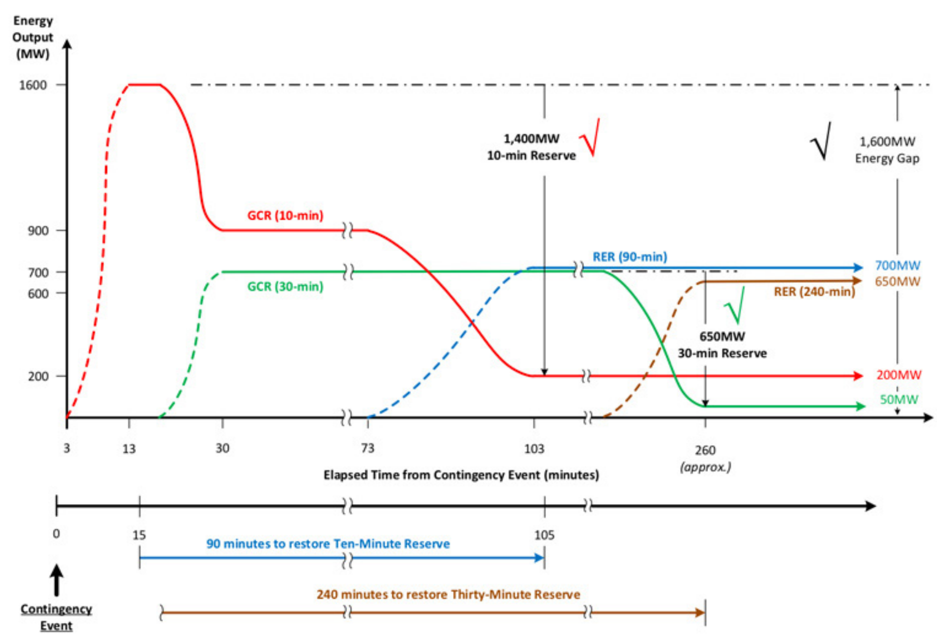
Patton also endorsed procurement of day-ahead replacement reserves, saying it should help ensure reliability in the operating day by incentivizing resources to be physically prepared to operate if needed in real time while reducing the need for out-of-market actions.

He said the requirement should be dynamic to reflect operators' determination of the system's needs. During cold spells, the replacement reserve quantity could be high, while on most days the need would likely be zero. "The Tariff should describe the process for determining the quantity," he said.

Because uncertainties and risks change as operators move from the day-ahead market into the operating day, Patton said, "we do not believe it is desirable to require procurement of the same product in real time." Instead, the RTO should procure in real time the operating reserves that are actually needed during the operating day, he said.

Multiday Market

Patton was more skeptical of the value of a



This graph illustrates ISO-NE's basis for the proposed day-ahead generation contingency reserve (GCR) and replacement energy reserve (RER) ancillary services. The RTO says it will take into account the unloaded supply capability available to recover from a large supply contingency (GCR) in addition to what additional unloaded supply capability is available to fill the energy gap created when the reserve requirement is restored (RER). | *ISO-NE*

ISO-NE News

multiday-ahead market, saying most of its benefits would likely be limited to cold weather events when firm fuel constraints are binding.

Patton said he had concerns about "unintended consequences" and the need for liquidity in such a market to ensure prices reflect the expected real-time prices for each day. Liquidity in the day-ahead market is driven by virtual trading, and ISO-NE has "probably … the least liquid set of virtuals" of any market, partly because of "the mindless allocation of real-time NCPC," he said. Moreover, he said, it would entail running a market 52 weeks a year to realize a week or two of significant benefits.

Patton said the proposed day-ahead product, while extremely helpful, will not address the entire fuel security issue because it will not coordinate limited fuel inventories when the demand for secure fuel spikes.

He said a "more targeted" solution would be to procure a firm energy product that is coordinated over a five- to seven-day time frame only when needed — a few weeks each winter when a cold spell occurs. It would be optimized with commitments and schedules in the day-ahead market.

Seasonal Procurement

Patton reiterated his call for eliminating the forward reserve market, saying it should not be modified to address fuel security.

He said "an efficient forward market" that procured products that settle against the same product in the operating time frame — while not essential — could help facilitate seasonal fuel procurement decisions.

"We do not support proposals to procure products forward (three years ahead or seasonally) that do not exist in the operating time frame," he said.

IMM Memo

Later in the meeting, IMM David Naughton expanded on a *memo* outlining his review of the ESI. Naughton said the ESI proposal correctly seeks to value the "missing product" of energy security and said it could obviate the need for out-of-market interventions such as capacity market retentions and having oil-fired generators on standby during the operating day.

He said it seeks to provide a means for physical supply to recover the fixed costs of a call option for LNG or the delivery of fuel oil. But he said the RTO should spell out clearly in the rules the types of costs intended to be included in the "unrecovered fixed cost" component of the option offer.

He also said the rules should explicitly require resources to physically provide energy to cover their ancillary service obligations.

"We understand the potential efficiency benefits over time of allowing speculative participation. However, we believe that the design is more likely to provide the secure energy when needed if participation is predicated on physical capability to provide secure energy, a clear expectation of meeting dispatch instructions in real time and a financial consequence for non-delivery that will deter speculative participation," Naughton said.

The IMM stressed the importance of the seasonal forward component, saying it may become the primary market for clearing ancillary service obligations. "In practice, many of the actions to secure fuel are taken — and costs incurred — well in advance of the operating day. Relying on spot market revenue from the ESI products alone may entail significant cost-recovery uncertainty for participants who incur costs well in advance of the operating day."

He warned that "any differences between the fixed costs included in the forward market and in the day-ahead ESI market" would undermine price convergence and incentives.

Market Power

Naughton said ESI must be carefully evaluated for market power issues in an analysis that considers "a broad range of future scenarios."

He noted that the proposal is intended to address supply shortages that imply "potentially some degree of market power in the periods when secure energy is most needed. This can be compounded by the significant increase in (explicit) capacity reservation in the [day-ahead market] clearing, as a result of the new ancillary service requirements, and the level of ownership concentration of physical assets available to meet the reservation requirements."

The increase in capacity reservations from the day-ahead market will reduce residual supply and "increase the likelihood that one or more participants will have market power, especially in the ancillary service products with a vertical demand curve," he said.

He said the impact of market power could be magnified if it is exercised with respect to the new ancillary services products or the existing energy product. "To the extent market power can be exercised in one of these products to increase the price, it is likely that the price of the other products (including energy) being co-optimized will also increase."

"We do not support proposals to procure products forward (three years ahead or seasonally) that do not exist in the operating time frame."

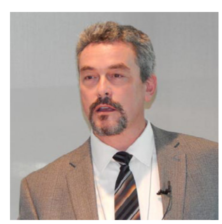
— External Market Monitor David Patton, Potomac Economics

The IMM said it should address market power vulnerabilities through ex ante reviews to mitigate uncompetitive offers as part of the market clearing. "The ex ante approach protects price formation from the exercise of market power and does not introduce uncertainty about final prices via ex post correction, redistribution of rents through resettlement and/or lengthy regulatory enforcement activities," he said. "The ESI market design should not rely on ex post measures, such as claw-back, enforcement action and/or [Federal Power Act Section] 206 filing for unjust and unreasonable rates."

He opposed the proposal that participation in the day-ahead market for ESI products be voluntary, saying it would open the market to physical withholding.

He also called for consideration of a must-offer requirement for capacity resources with the physical ability to provide the ancillary services products. Capacity resources have such a requirement for energy in the day-ahead market and for both energy and reserves in the real-time energy market.

Naughton's memo included concerns that key portions of the ISO-NE proposal would not be completed until after the RTO made its first planned FERC filing to meet an October deadline. Those concerns became moot when the commission last month extended the deadline by six months. (See *FERC Extends ISO-NE Fuel Security Filing Deadline*.)



Andrew Gillespie, ISO-NE | © *RTO Insider*

ISO-NE Principal Analyst Andrew Gillespie delivered a *presentation* and answered questions on the proposal during most of the rest of the daylong meeting, the first of two scheduled last week. ■

ISO-NE News

NEPOOL Adapts Fuel Security Work to FERC Extension

By Michael Kuser

The New England Power Pool Markets Committee met last week to discuss ISO-NE's proposed Energy Security Improvements (ESI), but the sense of urgency to act has lifted after FERC extended an October deadline by six months.

Todd Schatzki of Analysis Group was joined by ISO-NE economist Christopher Geissler to present an analysis of the *impacts* of ESI. Pressed by stakeholders on how the study would move forward with the deadline now pushed out to April, Schatzki said the effort will benefit from the additional time — but that his firm is not expecting any delay in its work.

Geissler said that although the ESI team would no longer be "going at breakneck speed," it was committed to getting out the best design as soon as possible.

The New England States Committee on Electricity (NESCOE) filed the motion for the delay, asserting that the complex market design effort in the region was being unduly rushed. (See *FERC Extends ISO-NE Fuel Security Filing Deadline*.)

Forward Market

Rebecca Hunter, Calpine senior analyst of government and regulatory affairs, *presented* again on the company's proposed Forward Enhanced Reserves Market, expanding on its current position and suggesting modifications to ISO-NE's proposal. She said Calpine will use the extension to spend more time on draft Tariff language.

"In terms of the need to run RAA [resource adequacy analysis], I do see it happening as often as you would award for EIR [energy imbalance reserves]," Hunter said. "If you think about it, with the ISO awarding resources for EIR, the operators are not going to have any information about those resources being awarded, so when they go to decide who they should commit under the RAA process, they're going to be starting down from the bottom of the stack.

"There's a chance that maybe they're picking up that same EIR resource in the RAA process, and I do identify that as getting paid for the same thing, that has been awarded twice, or there's also a chance that they're running a completely separate resource," she added.

Geissler led a discussion of the framework for developing a *forward component* to the ESI design.

"I don't know how we'd get the linkage between the forward sale of fuel and the expected obligation in the [day-ahead] market, or how those settle," Geissler said. "For example, if there is no linkage, there may be concerns about how resources can be compensated for fuel through a couple different mechanisms, but at the same time, without a spot market that looks a lot like this, it's not necessarily clear to me how to link the two in a sensible way."

Stakeholder Amendments

Christina Belew of the Massachusetts attorney general's office presented three *amendments* to the ESI proposal, each to be voted on separately by the MC:

- Restrict use of generation contingency reserves, replacement energy reserves (RER) and EIR to winter months; and require impact analysis and NEPOOL stakeholder process before implementing ESI year-round.
- Limit use of 90-minute and 240-minute RER options year-round.
- Add a sunset provision to ESI to trigger review of program need and efficacy.

Belew said her office was no longer going to proceed with its forward stored energy reserve proposal — a seasonal auction format for stored energy options — because after modifications were made to address stakeholder concerns, it no longer met the attorney general's original objectives of providing the most efficient solution at least cost to consumers, fairness to all resources and responsiveness to future changes in resource mix.

NESCOE Director of Analysis Jeffrey Bentz also presented four possible *amendments*, including restricting EIR and RER to the winter months, but said the group is "considering these as one set of potential amendments, not four separate amendments."

Another amendment would implement a must-offer requirement for resources with capacity supply obligations, while another would increase by 25% the strike price for ISO-NE's proposed hourly energy call options — and create two options.

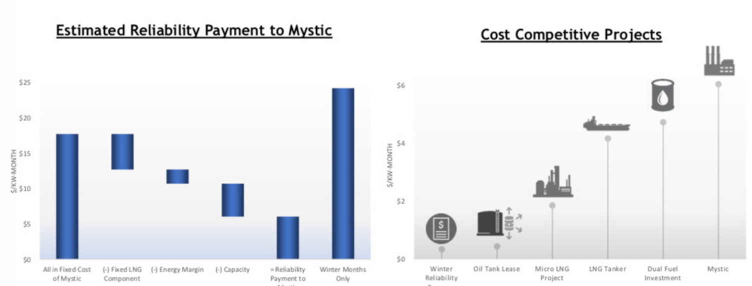
"Even with these amendments, analysis suggests that ESI as amended would be unlikely to fully solve the emerging concerns around market power mitigation but would be a step in the right direction," he said. "We may decide to separate, eliminate or modify these based on today's discussion and those going forward."

David Errichetti of Eversource Energy briefly presented an *amendment* to address the company's concern that the RTO's interim Inventoried Energy Program would overlap with ESI for winter 2024/25.

ISO-NE has promised to develop netting rules to address paying for both programs but has presented nothing yet, so NEPOOL is being asked to approve these rule changes without knowing if the netting rules will avoid paying twice for winter 2024/25 operations reliability, Errichetti said.

Robert Laurita, on behalf of the Connecticut Public Utilities Regulatory Authority and the Department of Energy and Environmental Protection, presented their *amendment* to the Tariff language concerning quarterly certification of the competitiveness of the energy call option offers in the day-ahead market and the related clearing prices.

Pending consideration of an amendment from PSEG Long Island, the RTO on Wednesday postponed a vote on *Tariff changes* to clarify that a resource retained for fuel security will only be retained until the end of the fuel security need and no longer than the two-year period allowed by FERC. The MC will vote on the matter at its Sept. 18 meeting. (See "Time Limit on Fuel-security Resources," *NEPOOL Markets Committee Briefs: July 30, 2019*.) ■



Calpine's Forward Enhanced Reserves Market (FERM) is a market design intended to pay all fuel-secure resources equally. | *Calpine*

ISO-NE News

Overheard at ISO-NE Consumer Liaison Group

ISO-NE Vice President Anne George addresses the RTO's quarterly Consumer Liaison Group meeting on Sept. 4 in Portland, Maine. | *© RTO Insider*

PORTLAND, Maine — ISO-NE on Thursday continued its decade-long tradition of taking its show on the road — this time to Maine — to hear from the region's residents and share with them the latest activities at the RTO.

Last week's Consumer Liaison Group (CLG) meeting drew about 100 participants and featured state energy officials, environmental advocates and the energy analytics manager for a leading university.

Rebecca Tepper, Massachusetts | *© RTO Insider*

CLG Coordinating Committee Chair Rebecca Tepper, chief of the Energy and Telecommunications Division at the Massachusetts attorney general's office, said December's meeting in Boston will mark the 10th anniversary of the group.

Here is some of what we heard.

As Goes Maine

Dan Burgess, Maine | *© RTO Insider*

Dan Burgess, director of Maine Gov. Janet Mills' Energy Office, talked about a number of legislative measures that marked the first half-year of Mills' first term.

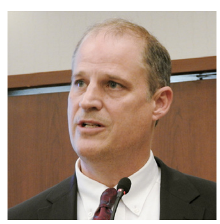
Describing the energy challenges facing the state, Burgess noted that more than 70% of Mainers are dependent on fuel oil to heat their homes and that they drive 1,000 miles more per year than the national average, with transportation accounting for 54% of emissions.

He said a state bill (*LD 1679*) to establish the Maine Climate Council saw "broad bipartisan support" in the legislature and that an act to reform Maine's renewable portfolio standard (*LD 1494*) was a particular success.

"For years, Maine lagged behind the five other [New England] states in RPS targets, flatlining at 10%, but now tops the chart with an RPS goal of 80% by 2035," Burgess said. The ultimate goal is 100% of electricity to be generated from renewable resources by 2050.

Among the other bills in the state mentioned by Burgess:

- *LD 1844* directs the Public Utilities Commission to evaluate the ownership of the state's power delivery systems, with the first report-back due in March 2020.
- *LD 1231* funds energy-efficiency programs through a fee on the sale of unregulated heating fuels.
- *LD 1711* promotes solar energy projects and distributed generation resources.
- *LD 1766* boosts the heat pump market to save residents money and reduce energy consumption.



Michael Stoddard, Efficiency Maine Trust | *© RTO Insider*

Michael Stoddard, executive director of Efficiency Maine Trust, presented an *overview* of his agency's work on energy efficiency, including how the state will spend $8 million from the Volkswagen settlement for both electric vehicle rebates and charging infrastructure.

Energy Security and More

Anne George, ISO-NE | *© RTO Insider*

Anne George, ISO-NE's vice president for external affairs and corporate communications, spoke on several *topics*, including work on the RTO's Energy Security Improvements (ESI) initiative and the RTO's preparations for Forward Capacity Auction 14, scheduled for February 2020.

FERC last month granted a six-month extension for the RTO to file its long-term energy security plan, giving the grid operator until April 15, 2020, to complete additional scenario analysis and fully develop the conceptual framework for market power mitigation, she said. (See *FERC Extends ISO-NE Fuel Security Filing Deadline*.)

She listed off replacement energy reserves, generation contingency reserves and energy imbalance reserves as the three new market options, and she said that stakeholders also are considering a multiday-ahead market and a seasonal forward market.

"We have been focused on these energy options, which are really geared towards preparing the ISO and the region to operate the system ... and move those ahead into the day-ahead energy market," George said.

She also mentioned the RTO's public meeting scheduled for Thursday in Boston to discuss its Regional System Plan (*RSP*), which focuses on moving forward as the electric grid evolves to adapt to a changing resource mix. (See *New England Officials Speak on Grid Transformation*.)

Emissions Reporting

ISO-NE will be asking FERC to approve an operating budget for next year of $174.2 million, about 3% higher than this year, or approximately $1.02/month per consumer in the region, she said.

ISO-NE News

Preparatory work for FCA 14 is on schedule and the RTO anticipates a November filing with FERC of its auction-related determinations and calculations.

Asked about delays in the federal permitting of offshore wind projects, particularly the 1,200-MW Vineyard Wind project off Martha's Vineyard, George said that "a potential delay in any of these resources could affect the energy security of the region. But that's something that we see several years out, and hopefully the studies continue to move forward and those resources start to get developed."

"It's a matter of making sure that our markets are providing the right incentives, these resources are getting developed, and then we're into a system where we don't see this being a reliability risk," George said.

Michael Macrae, energy analytics manager at Harvard University, joined the event via telephone and spoke on improving the RTO's *emissions reporting*, especially marginal emissions rates.

"I work for Harvard University, and many of the various roles that I've played there have done a lot of carbon accounting for how Harvard thinks about its operational strategy for our carbon-neutrality goals," Macrae said. "In doing so, one of the core, fundamental pieces of that is understanding what do the power system emissions look like."

After "diving way deep down in the weeds" of the RTO's data, Macrae said he found two problems, the first of which is that energy imports are excluded from its system greenhouse gas emissions accounting.

"Problem No. 2 is more nuanced, in that ISO-NE overestimates the contribution of marginal units in small, local export-constrained areas," he said.

"For years, Maine lagged behind the five other [New England] states in RPS targets, flatlining at 10%, but now tops the chart with an RPS goal of 80% by 2035."

— Dan Burgess, director of Maine Gov. Janet Mills' Energy Office

Macrae said the RTO could manage the first challenge by incorporating emissions associated with energy imported from New York and Canada. And it could address the second by adopting its Internal Market Monitor's methodology for reporting marginal emissions based on a unit's contribution to system load.

Carbon Pricing

Jordan Stutt, carbon programs director at the Acadia Center, *presented* on the environmental advocacy group's thinking on regional efforts to price carbon, noting that "we are seeing a better effort to not just track, but to account for carbon emissions."

Jordan Stutt, Acadia Center | © *RTO Insider*

Through the Regional Greenhouse Gas Initiative, Stutt said, 16.4% of New England CO_2 emissions are subject to a carbon price.

"When we consider that the RGGI price is $5.77/metric ton, and the social cost of carbon is $50/metric ton, you can see that we only account for 1.9% of the cost of CO_2 emissions in New England," Stutt said.

He highlighted the Transportation and Climate Initiative (*TCI*), a regional collaboration of 12 Northeast and Mid-Atlantic states and D.C. that aims to improve transportation, develop clean energy and reduce carbon emissions from the transportation sector.

"We're hopeful that by the end of the year, there will be a memorandum of understanding, possibly a model rule that tells what that program will look like," Stutt said.

NYISO and PJM are looking to incorporate the full cost of carbon emissions into their wholesale energy markets, he said, with New York's plan expected to be presented to FERC later this year, he said.

"In six New England states, at least one carbon pricing bill was filed in 2019 in each of those states, and those bills have a variety of content, coverage and support," Stutt said.

"Some of those are just study bills at this point, others are full-fledged policies. Some are economy-wide, while others would exempt certain sectors," he said.

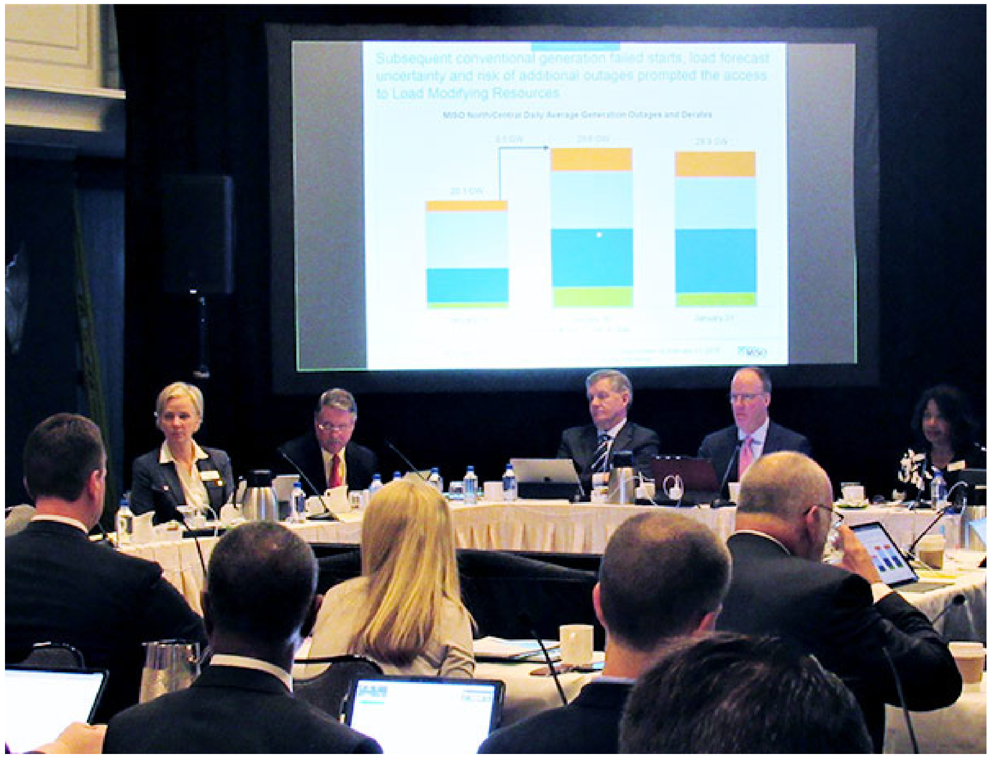
Stutt noted that the Massachusetts bill (*H.1726*) filed by state Rep. Jen Benson exempts the electric sector, while a Rhode Island bill (*S.0417*) nets out the cost of RGGI allowances "similar to the NYISO carbon pricing plan." ■

— Michael Kuser

MISO News

Task Team Zeroes in on MISO Board Recommendations

By Amanda Durish Cook



The MISO Board of Directors in spring | © *RTO Insider*

The task team examining changes to how MISO selects its Board of Directors is closing in on a set of recommendations that could alter eligibility requirements for future members.

Among the possible suggestions? Reserving a board seat for candidates who have experience representing the interests of utility customers.

The Board Qualification Task Team (BQTT) could offer up that and more later this month at MISO Board Week in St. Paul, Minn.

Jennifer Easler, an attorney with the Iowa Office of Consumer Advocate, said the move would ensure customer views are better represented on the board.

"I believe the current structure is more heavily dominated by industry perspectives," Easler said during a BQTT conference call Sept. 3. "I believe the price of particular initiatives is something good to keep in the forefront."

Easler said she envisioned the position being filled by anyone with experience advocating for consumer interests, whether at a public or non-governmental organization. She said it would be helpful for RTOs to be more cost-conscious.

But some members of the task team cautioned a consumer expertise requirement might be too broad and is probably already represented among current board members. Others said they worried further earmarking of board seats for specific backgrounds could lead to a shallower pool of candidates.

MISO's *Transmission Owners' Agreement* dictates that the nine-member board contain six members with experience in corporate leadership at the senior management or board level or in the areas of finance, accounting, engineering or utility laws and regulation. The three remaining seats are divided among those with transmission system operations, transmission planning, and commercial markets and trading experience.

When she served on the Nominating Committee last year, Madison Gas and Electric's Megan Wisersky said she was explicitly told to look for candidates with a regulatory background, even though regulatory experience was not a prerequisite. The committee eventually recommended then-sitting Minnesota Public Utilities Commission Chair Nancy Lange. (See *MISO Elects Lange to Board; Keeps 2 Incumbents*.)

"Where does this come from?" she asked, calling for MISO and its Advisory Committee to be more transparent about which skills and background they're seeing each year in new directors. She asked MISO to share how it decides what qualifications will help better position the RTO to navigate grid change.

MISO earlier this year tasked the BQTT with examining possible Nominating Committee changes, either expanding or eliminating the RTO's yearlong "cooling-off" period imposed on candidates and potentially detailing more qualifications.

Exelon's David Bloom said the team will likely provide a draft of its recommendations at the Sept. 18 Advisory Committee meeting during MISO Board Week. The AC is expected to vote in December on whether to put the recommendations before the board's Corporate Governance and Strategic Planning Committee.

MISO sectors have generally agreed to recommend increasing the number of stakeholder representatives on the Nominating Committee. (See *MISO Sectors OK Expanding Nominating Committee*.) The BQTT appears ready to suggest boosting the number of stakeholder seats from the current two to three or four and rotating the sectors from which members are drawn. Three committee seats are reserved for sitting board members.

The BQTT also looks set to recommend applying MISO's current yearlong cooling-off period before board eligibility to state and federal regulators as well as those coming out of the industry.

"State commissioners and staff are market participants in every sense of the word but the legal definition. Their decisions affect what happens in MISO," Wisersky said.

Three MISO directors' terms will conclude at the end of this year. Additionally, the board is involved in a special process to decide on a candidate to replace former Director Thomas Rainwater. (See "Board Moving on Rainwater Replacement," *MISO Board of Director Briefs: June 20, 2019*.)

BQTT leaders will likely ask MISO to extend the life of the group by at least a month in order to consider feedback from AC members through October. Bloom said while he hoped the team could wrap up next month, he wouldn't rule out an extension through the end of the year. ■

MISO News

MISO Moving to Expand Authority on Market Defaults

By Amanda Durish Cook

MISO's Carmel, Ind., headquarters | © *RTO Insider*

Taking a cue from PJM's financial transmission rights market debacle, MISO will this month draft Tariff changes designed to further protect all of its markets from financial defaults — including a measure that could spell bans for defaulting parties.

MISO is proposing to increase collateral requirements in its FTR markets based on perceived risk and give itself discretion over banning a potential participant from joining or re-entering any of its markets in extreme cases.

The RTO is seeking to implement a 5-cent/MWh minimum collateral requirement for FTRs and a mark-to-auction mechanism that would estimate the market value changes of an FTR portfolio by calculating the difference between purchase prices and the most recent auction prices. (See *MISO Proposes Protections for FTR Market*.)

The plan also aims to prevent known "bad actors" from participating. The provision would extend to those with a material financial default or named in a case "involving malfeasance or manipulative behavior," said Jordan Cole, of MISO's credit and risk management team. The RTO would review public charging documents to decide whether to prevent an entity facing manipulation allegations in other markets from entering its market.

While MISO can already suspend trading privileges for those who default within its own market, it is also considering whether to increase collateral requirements and allow for a five-year ban for any company with default values at more than $1,000 in other markets. MISO would decide to take either action on a case-by-case basis.

"We think this $1,000 is a low enough bar that it isn't prohibitively insurmountable," Cole said during a conference call Wednesday. He and other staff stressed the RTO is open to stakeholder suggestions to refine the proposal.

The RTO is additionally proposing guidelines to allow market participants to re-enter the market without posting additional collateral if they cure a default within a week. Participants taking more than a week to remedy a default would also be permitted to re-enter but could face additional collateral requirements up to either twice the default value or their highest exposure over the last 12 months.

MISO is also proposing that parties submitting its Annual Certification Form must attest to past defaults, even if they occurred under a different company name or an affiliate. The RTO would also ask market participants to disclose any bankruptcies, mergers or acquisitions in the last five years.

"This will help MISO respond accordingly under a case-by-case basis," Cole said.

MISO will also draft language to allow itself to act when any market participants exhibit "financial warning signs." Cole said any course of action upon discovering red flags would be up to management's discretion on a case-by-case basis.

Stakeholders on the call asked that MISO consider additional collateral requirements before it issues suspensions or bans.

When asked by stakeholders about the prospect for appealing suspensions or bans, MISO credit analyst Brian Brown said market participants are free to challenge RTO decisions at the FERC level. "We're obviously not the last voice in this process. We're an intermediate voice charged with protecting the market," he said. "The reality is a financial default is a financial default."

Brown added he doesn't envision MISO ever utilizing market bans, but he noted it has not ruled out the possibility.

Executive Director of Strategy Shawn McFarlane said MISO had set out to re-examine its FTR market even before GreenHat Energy's record default in PJM.

"Sometimes we are guilty of being reactionary. … This time we were looking at tightening this up even before GreenHat became public," he said.

MISO staff have said the RTO will continue to examine its credit practices after the new rules take effect. The RTO plans to file the proposal with FERC by the end of the year.

"I don't think the book will ever be closed on FTR improvements. At any given time, the market can change, and we will certainly re-evaluate and reopen this, if need be," Brown told stakeholders at the Market Subcommittee meeting last month. ■

MISO News

DTE IRP Draws Fire from Renewable Proponents

By Amanda Durish Cook

DTE rendering of Blue Water Energy Center | *DTE Energy*

DTE Energy's latest *integrated resource plan* before the Michigan Public Service Commission is attracting several detractors who say it is short-sighted and relies blindly on fossil fuels.

DTE filed the IRP in spring to cover 2020 through 2035. Last month, several environmental and renewable energy proponents called for the PSC to reject the plan when it rules on it in late January (*U-20471*).

Reaction to the plan is a now familiar salvo in the industry: Environmentalists and renewable advocates maintain the utility is not making enough progressive change and is snubbing alternative energy sources on a grid that they say will soon be brimming with new technology.

Or, as Robert Rafson put it in testimony on behalf of the Great Lakes Renewable Energy Association, DTE relies on "traditional, backward-thinking, business-as-usual practices compared to ideal forward-thinking planning."

Rafson said DTE's plan includes a "minimum level of adoption of new technology."

The company is currently constructing 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. The utility will retire the 277-MW River Rouge plant next year, and the 1,260-MW St. Clair and 485-MW Trenton Channel plants by 2022.

The IRP also proposes multiple gas-fired plants rated at about 400 MW, 693 MW of wind generation, 11 MW of solar with on-site storage and 859 MW in demand response programs by 2024.

"It is disingenuous for DTE to pat themselves on the back for reducing their carbon emissions when most of that reduction is derived from inefficient coal generation to more efficient natural gas and energy efficiency which they don't even pay for," Rafson said.

Union of Concerned Scientists analyst James Gignac — representing UCS, Environmental Law & Policy Center, The Ecology Center and Vote Solar, among others — said the IRP is so "fundamentally flawed" that Michigan regulators should outright reject it and order an amended filing.

"Doing so will ensure that coal plants are not being operated longer than they should and that investments in clean energy options are being pursued sooner and at the lowest cost," he testified. Gignac said DTE simply assumed that its Belle River and Monroe plants would operate until 2030 and 2040, respectively, without considering their operations and maintenance costs or possible hundreds of millions of dollars in environmental mitigation retrofits.

DTE has previously committed to end coal use by 2040 and has a 50% renewable energy goal by 2030.

"In several ways, the IRP modeling was effectively prevented from choosing other more cost-effective resources," Gignac told the PSC. By "hardcoding" the coal plants into its plan, Gignac said DTE assumes that any added capacity provides zero value, even as the costs of wind and solar generation, battery storage and behind-the-meter resources rapidly decline.

"DTE forced its modeling to over-rely on existing, company-owned resources, which produced suboptimal results and portfolios with inflated present value of revenue requirement," Gignac said.

DTE has told the PSC that its plan is the "most reasonable and prudent means" of meeting demand through 2035. The company said it's now focused "on more clean energy and less coal," and has also concluded it won't have a "persistent capacity need" until 2030, when the mixed-fuel 1,395-MW Belle River Power Plant near the Canada border is expected to retire.

But consultant Robert Fagan — speaking on behalf of the Michigan Environmental Council, Natural Resources Defense Council and Sierra Club — said DTE is failing to account for ITC transmission upgrades in place by 2023 that will increase the Lower Peninsula's capacity import limits and expand energy purchase options "from the broader MISO region."

Fagan said MISO Zone 7 capacity import limits are set to increase anywhere from 1,000 to 2,000 MW above the current approximate 3,200-MW limit and called DTE's decision to use the current limit in out-year planning "not credible." The environmental groups urged DTE to pursue bilateral purchase alternatives and an earlier retirement of Belle River. ■

PJM Content with IMM Role after Fuel-cost Policy Ruling

By Christen Smith

Following nearly a year of internal changes, PJM is now backing off previous indications that it would reconsider the nature of its periodically fraught relationship with its Independent Market Monitor.

The issue bubbled back to the surface last month after FERC reaffirmed the Monitor's authority to initiate regulatory proceedings against PJM over fuel-cost policy disputes. (See *Another Win for PJM Monitor on Fuel-cost Policies*.)

In its request to dismiss a separate IMM complaint over fuel-cost policy in January, PJM argued that Order 719 established the Market Monitor as an "element of a jurisdictional RTO/ISO." Thus, if the commission allowed the IMM to file complaints under Federal Power Act Section 206, a new governance structure was needed that provides "complete independence" for the Monitor and no longer mandates reporting to the Board of Managers (*EL19-27*).

Joe Bowring, PJM's Market Monitor | © *RTO Insider*

The commission's August ruling denying PJM a rehearing opened the door for the RTO to take action on the issue. But interim CEO Susan J. Riley has signaled a softening of PJM's position, releasing a joint statement with Monitor Joe Bowring on Thursday that reaffirmed their "relationship of mutual respect."

"We both have a commitment to fair and competitive markets, even though from time to time we have differences of opinion," the statement reads. "PJM values the Market Monitor, and we are both committed to our contractual relationship. The FERC's decision in no way changes that relationship."

Long-simmering Debate Put to Rest — for Good?

Members said PJM's perceived frustration with its Monitor dates back at least a decade, as their disagreements, few as they may be, became more public.

In September 2016, the Monitor complained that PJM's plan for evaluating fuel-cost policies usurped its authority and contradicted the Tariff's specification of their respective roles (*ER16-372*). PJM, in its defense, said the Monitor's complaint crossed the line and muddied their contractual relationship, as overseen by the Board of Managers. In its request for rehearing, the RTO said that Attachment M of the Tariff permits the Monitor to file complaints against market sellers over fuel-cost policy violations, but not against the RTO itself. It also said that its board's oversight of the Monitor's budget creates a conflict of interest.

The tension came to a head when the Monitor filed a separate complaint in December 2018 over PJM's decision not to assess a penalty against a market seller that did not follow its approved fuel-cost policy. The RTO responded the following month by suggesting FERC "revisit" Order 719 and "reform PJM's governance structure so that PJM's Market Monitor is no longer accountable to the PJM board and establish it as truly independent from PJM with clear standing to bring complaints."

FERC has not issued a ruling on the 2018 complaint. But it rejected both the Monitor's and PJM's arguments in the earlier docket. It also found "unconvincing" PJM's conflict-of-interest argument.

"There is no conflict," Monitor Joe Bowring said during an interview with *RTO Insider* on Wednesday. "The board can't tell us what to file. It's not part of their authority over us."

Bowring also noted that the board can't sever ties with his firm, Monitoring Analytics, under the contract terms to which they both recently agreed.

"We can't 'cut off' PJM board oversight of Monitoring Analytics — and nor would we want to, without a different and better governance construct in place," Jeff Shields, PJM spokesperson, said in an email to *RTO Insider* on Thursday. "We believe there are better options, but this is a policy choice bound by legal considerations that FERC and the courts respectively would have to embrace."

Still, PJM gave no indication it would pursue further legal action on the issue. "The board does not have substantive oversight over the positions of the Market Monitoring Unit," Bowring said. "There is nothing in the FERC order that contradicts anything in the Market Monitoring Plan or in the contract between PJM and the Market Monitoring Unit."

States Prioritize Stronger PJM/IMM Bond

Jackie Roberts, director of the West Virginia Public Service Commission's Consumer Advocate Division, said the Monitor plays a crucial role through its independence and "ability to discharge its responsibilities to members."

"If PJM is sincere about changing the culture, they need to see the Market Monitor as part of the solution, not part of the problem," she told *RTO Insider*. "The Monitor needs to be brought into issues early on."

Indeed, change has swept through PJM throughout the last year. Longtime CFO Suzanne Daugherty resigned in April, CEO Andy Ott retired in June and Nigeria Poole Bloczynski came aboard as the organization's first chief risk officer in July. She will lead the credit and market reforms anticipated in the wake of the GreenHat Energy default. (See *Report: 'Naive' PJM Underestimated GreenHat Risks*.)

Other stakeholders echoed Roberts' desire for a stronger partnership between PJM and the Monitor in FERC filings and letters to the head of PJM's search committee for a new CEO.

"Just as PJM recognizes the rights of states to their policies, PJM must recognize the right of the IMM to be an independent body," Kristin Munsch, president of Consumer Advocates of the PJM States, in a July letter to the committee. "Arguments parsing Tariff language distract from the larger questions of how to use competitive markets to provide affordable and reliable electricity service."

"Fact of the matter is that PJM and the Market Monitor agree on far more issues than they disagree upon," Roberts said. "I think we have to focus on that."

Consumer advocates weren't the only stakeholders to intervene in the proceeding. PJM Power Providers sided with the RTO in its dismissal request, saying previous commission guidance supports its interpretation of the Monitor's ability to file complaints.

The Edison Electric Institute took no official position, but it urged FERC to consider a governance structure that excludes the Monitor from playing a primary role in drafting tariff revisions, manuals or other documents, or implementing rule changes "that they ultimately monitor."

"When possible, Market Monitors should attempt to address perceived areas of concern associated with behaviors or practices of market participants through a fact-based transparent resolution process before taking formal steps of referrals to regulatory authorities or otherwise," the EEI wrote. "As part of the process, prior to referrals to regulatory authorities, market participants should have the ability to challenge the Market Monitor's findings pursuant to a dispute resolution process as outlined in the tariff." ■

PJM News

FirstEnergy Challenges Nuke Vote in Ohio Supreme Court

By Christen Smith

FirstEnergy Solutions asked the Ohio Supreme Court on Wednesday to block a vote to repeal $150 million in subsidies for its two nuclear plants.

The company argued the new ratepayer fees — ranging from 80 cents up to $2,400/month — are equal to a tax, making the underlying legislation, House Bill 6, ineligible for the petition that Ohioans Against Corporate Bailouts is currently circulating for a ballot referendum. (See *Ohio Nuke Ballot Petition Approved*.) The *lawsuit* names both the group and Secretary of State Frank LaRose, the state's chief election official, as defendants.

"The charges levied by House Bill 6 are a tax and laws providing for the levy of a tax are exempt from a referendum under the Ohio Constitution," said Tom Becker, an FES spokesperson. "The referendum is inherently misleading and confusing to Ohio voters. Ohioans and the state of Ohio should be spared the costs associated with this futile attempt to place this unconstitutional referendum on the ballot."

FES requested a truncated timeline giving the anti-subsidy group (referred to in the lawsuit as the respondents committee) just five calendar days for a response. Briefs on the merits would be due from FES in another 15 days and from the committee 15 days after that before potential oral arguments.

Meanwhile, Ohioans Against Corporate Bailouts has until Oct. 21 to gather almost 266,000 signatures for the referendum to appear on the November 2020 ballot.

"Time is of the essence in this case because the respondent committee, within the last few days, has started undertaking a misleading and ultimately futile solicitation of voter support and signatures for the committee's illegal referendum effort," FES wrote. "It is inherently misleading and confusing to Ohio voters for the respondent committee and its circulators and other agents to circulate and file a referendum petition that states, implies or otherwise suggests that H.B. 6 is subject to a referendum when that is not true."

Perry Nuclear Power Plant, located about 40 miles northwest of Cleveland

Gov. Mike DeWine signed the Ohio Clean Air Act into law on July 23 after months of debate over whether the Davis-Besse and Perry nuclear plants were worth saving. (See *Ohio Approves Nuke Subsidy*.) FES, currently negotiating a Chapter 11 bankruptcy settlement plan, said both facilities would close without the subsidies — taking 4,300 jobs and most of Ohio's carbon-free emissions with them. The act replaces the state's renewable energy mandates with ratepayer surcharges to support the reactors and two Ohio Valley Electric Corp. (OVEC) coal plants.

Gene Pierce, spokesperson for Ohioans Against Corporate Bailouts, blasted the lawsuit in an emailed statement that called into question FES' legal standing and state lawmakers' own attempts to frame the bill as anything but a tax.

"This frivolous lawsuit is another desperate attempt by FirstEnergy Solutions to protect their ill-gotten billion-dollar bailout," he said. "In addition to having no legal basis, their own proponents in the legislature repeatedly stated that H.B. 6 was not a tax increase in their efforts to secure enough votes for passage of the bill." ■

PJM News

Foster out, Tribulski up in Latest PJM Shakeup

Settlement Reported on GreenHat

By Rich Heidorn Jr.

Susan Riley, a PJM board member since 2005, was named interim CEO during the search for Ott's replacement. | *PJM*

Interim PJM CEO Susan J. Riley on Monday announced a shakeup of the RTO's State and Member Services Division, the latest in a cascade of management changes in the wake of the GreenHat Energy default and continued friction with state officials.

Riley announced that Denise Foster, vice president of the division, will resign effective Oct. 31 and that her unit will be reorganized under Associate General Counsel Jen Tribulski. "With Denise's decision to step down, we have decided to realign the State and Member Services Division to further demonstrate the organization's willingness to listen to key stakeholders and provide a more direct line of communication between the executive team, the states and members," Riley said in a letter to members.

Also Monday, Chief Administrative Law Judge Carmen A. Cintron reported that PJM and intervenors have reached a settlement in principle in the dispute over how to liquidate financial transmission rights left over from the GreenHat default. Cintron ordered a 30-day extension in the settlement deadline to "allow additional time to finalize settlement documents for their filing with the commission" (*ER18-2068*).

PJM declined to provide details, but spokesman Jeff Shields said the RTO is "pleased that the parties have reached a settlement in principle" and will "provide some high-level discussion around it" at the Market Implementation Committee meeting Wednesday.

In June, FERC gave PJM stakeholders 90 days to settle all disputes about GreenHat's liquidation before initiating a paper hearing. PJM has said the cost of the default could rise by $250 million to $300 million if the RTO is forced to unwind settlements of the company's FTR portfolio. (See ***FERC: PJM Settle Disputes Before GreenHat Hearing***.)

The GreenHat default in June 2018 came as PJM was already facing strained relations with some members over state nuclear subsidies, the RTO's push for increased "fuel security" and a FERC order to change its capacity rules. (See ***PJM Stakeholders Reluctantly OK 'Fuel Security' Initiative***.)

Foster will be the third senior executive to leave PJM since the GreenHat default. CFO Suzanne Daugherty retired shortly before the board released a highly critical *report* on the RTO's failings in the GreenHat matter. CEO Andy Ott resigned effective June 30, announcing his departure two months after the report was released. (See ***PJM CEO Andy Ott to Retire***.) Riley, a board member since 2005, was named interim CEO during the search for Ott's replacement.

Under the changes announced Monday, Tribulski will become senior director of member services, with oversight of stakeholder affairs, member relations, and state and member training. Tribulski, who graduated from the Quinnipiac University School of Law in 1993, has more than 20 years of experience in energy law. Her direct reports will be Jim Gluck, director of member relations, and Dave Anders, director of stakeholder affairs.

Former Ohio regulator Asim Haque, who joined PJM in February, will continue as executive director of strategic policy and external affairs.

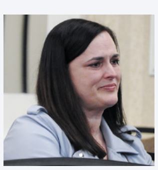
Haque and Tribulski will report to Vince Duane, general counsel and senior vice president of law, compliance and external relations.

Foster will remain as chair of the Markets and Reliability Committee until her departure, Riley said. ■

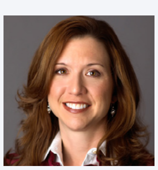
New Reporting Structure for PJM State & Member Services Division

Out

Andy Ott, CEO



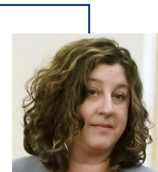
Suzanne Daugherty, CFO



Denise Foster, VP, State & Member Services

Vince Duane, SVP & General Counsel for Compliance & External Relations

Asim Haque, Executive Director – Strategic Policy & External Affairs.



Jen Tribulski, Senior Director – Member Services

Dave Anders, Director – Stakeholder Affairs

Jim Gluck, Director – Member Relations

Denise Foster will be the third senior executive to leave PJM since the GreenHat default, joining CFO Suzanne Daugherty and CEO Andy Ott. | *PJM, PUCO, RTO Insider*

SPP News

WAPA, Basin, Tri-State Sign up with SPP EIS

Continued from page 1

Mexico, North Dakota, South Dakota, Utah and Wyoming. Arizona, Colorado, and Utah are not part of the RTO's 14-state footprint.

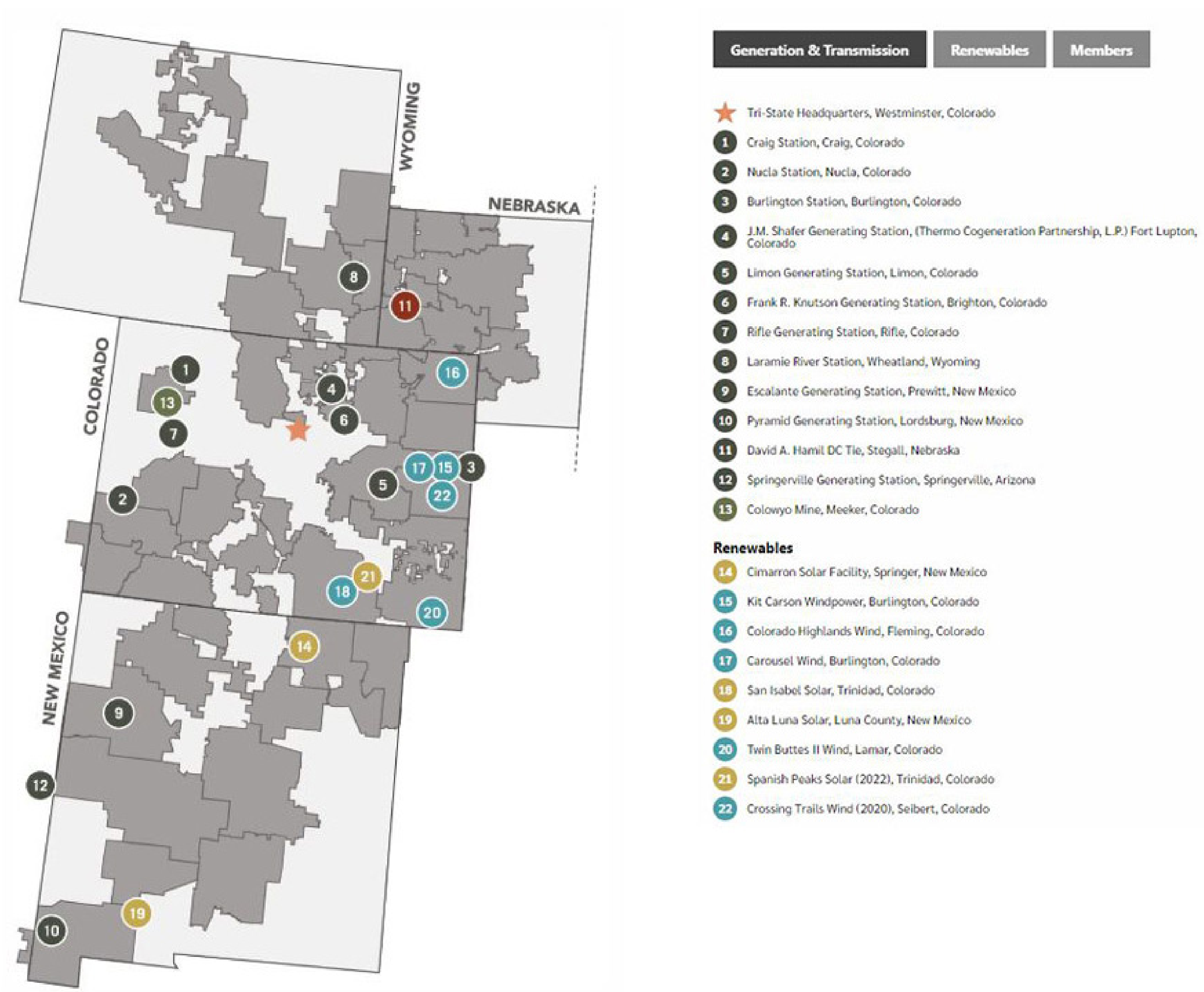
Basin Electric CEO Paul Sukut cited SPP's "proven track record in operating energy imbalance and full day-two markets," its "independent board of directors, a proven stakeholder process and a governance structure that specifically includes commissioners from state regulatory commissions."

Tri-State CEO Duane Highley said the WEIS will provide "a cost-effective solution that quickly increases market efficiencies, reduces expenses for our members and electric consumers, and supports Tri-State's rapid transition to cleaner energy."

Joining from WAPA will be the loads and resources of Pick-Sloan Missouri Basin Program – Eastern Division, the Loveland Area Projects and the Salt Lake City Area Integrated Projects, located in the Upper Great Plains Western Area Balancing Authority (WAUW) and Western Area Colorado Missouri Balancing Authority (WACM).

WAPA Administrator and CEO Mark Gabriel said the agency needed to examine markets because of the increasing pace of change in the electric industry, with new generation options "and pressing needs regarding balancing area operations."

"We are committed to seeking mutually beneficial partnerships consistent with sound business principles," he said.



Tri-State Generation & Transmission Association footprint | *Tri-State Generation & Transmission Association*

SPP News

Pick-Sloan Eastern Division Missouri River Basin | *Basin Electric Power Cooperative*

SPP announced plans for WEIS in June. (See ***SPP's Western EIS Market Poised to Challenge EIM***.)

The RTO said it plans to operate WEIS under a "Western Joint Dispatch Agreement," which it said "guarantees participants a say in the market's ongoing evolution." Utilities do not have to be a member of the RTO to participate.

"We're a stakeholder-driven organization that believes in the power of partnership," SPP CEO Nick Brown said. "We want to do more than just launch a wholesale electricity market in the West. We want to work with utilities to understand the challenges they face and develop smart solutions that benefit the whole region. That's how we operate as an RTO, and it's how we plan to administer this and other contract services in the West."

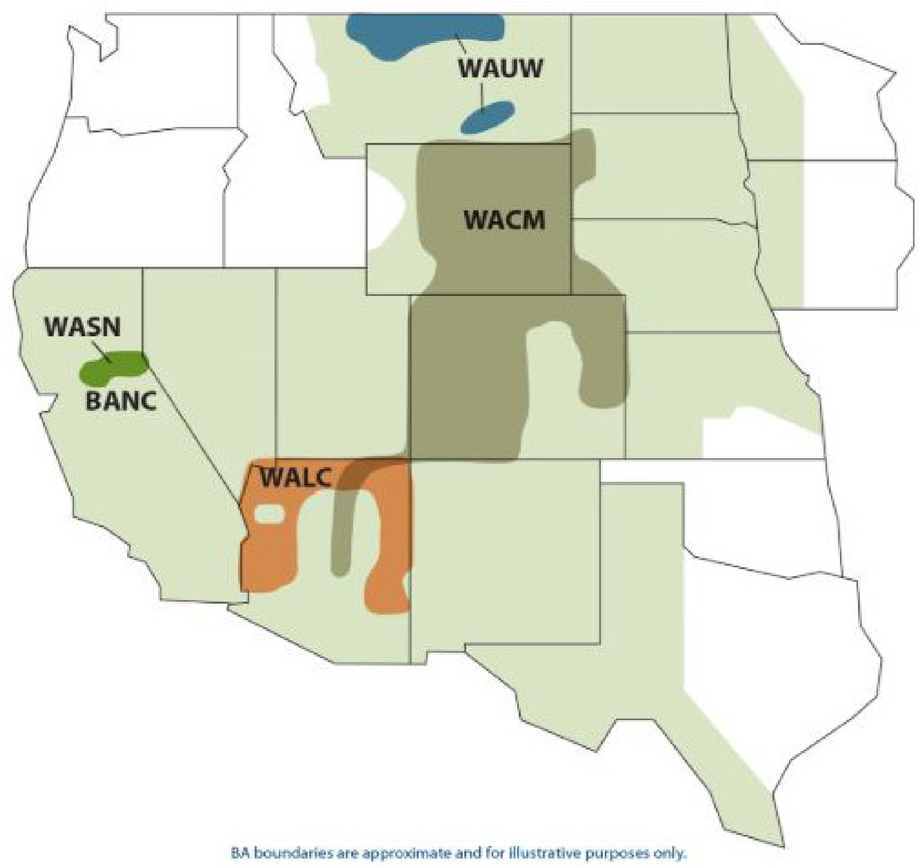
SPP also is scheduled to begin providing reliability coordination services for more than a dozen utilities in the Western Interconnection in December. It also intends to offer planning coordination to help utilities study and plan transmission upgrades.

Last week, Xcel Energy, Colorado's largest load-serving entity, and three partners — Black Hills Energy, Colorado Springs Utilities and Platte River Power Authority — announced they were evaluating both the WEIS and CAISO's Western Energy Imbalance Market. (See related story, ***Colorado Utilities Examine Market Membership***.)

Basin Electric, headquartered in Bismarck, N.D., generates and transmits power to 141 rural electric systems and 3 million customers in nine states: Colorado, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, South Dakota and Wyoming.

Tri-State is a not-for-profit generation and transmission cooperative with 43 distribution cooperatives and public power districts that serve 1.3 million people in Colorado, Nebraska, New Mexico and Wyoming. ■

WAPA Upper Great Plains region | *WAPA*



WAPA balancing authorities | *WAPA*

Company Briefs

Facebook Signs 200-MW Wind PPA in Texas

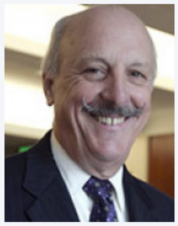
Facebook has signed a power purchase agreement with Apex Clean Energy for 200 MW of the 525-MW Aviator Wind project set to be built in Coke County, Texas.

The project, which is being developed by Apex and owned by funds managed by Ares Management Infrastructure and Power, is expected to begin operations in 2020. It will be the largest single-phase wind project in ERCOT and the largest single-phase, single-site wind project in the U.S.

The PPA supports Facebook's target of reducing its greenhouse gas emissions by 75% and being powered by 100% renewable energy by 2020.

More: *CleanTechnica*

Judge Denies PG&E's Proposal to Give Execs $16M in Bonuses



U.S. Bankruptcy Judge **Dennis Montali** denied PG&E Corp.'s proposal to pay up to $16 million in bonuses to a select group of top executives.

Montali said that, in light of the billions in wildfire claims and other problems the utility is facing, the executives shouldn't need extra incentives to improve the utility's performance on safety and other issues. The bonuses would have covered a dozen executives that make at least $307,000/year. Bill Johnson, the utility's CEO, was not in the group.

"There is simply no justification for diverting additional ... funds to incentivize them to do what they should already be doing," Montali wrote.

More: *The Sacramento Bee*

Tri-State Adds MIECO as New Member

Tri-State Generation and Transmission Association announced the addition of MIECO Inc. as its first non-utility member.

MIECO, a subsidiary of Marubeni Corp., is headquartered in California and supplies natural gas to purchasers throughout the U.S., including Tri-State for its power plants. The admission of MIECO also results in Tri-State becoming subject to rate regulation by FERC.

"Tri-State is rapidly changing to be increasingly clean with more renewable resources," Tri-State CEO Duane Highley said. "Natural gas generation helps us reliably integrate renewables. Adding MIECO to our membership helps ensure that we have enough firm natural gas pipeline transportation capacity and fuel to supply our existing and any new natural-gas fired power plants."

More: *Tri-State*

Federal Briefs

Gas Plants Will Get Crushed by Wind, Solar by 2035, Study Says

According to a report released last week by the Rocky Mountain Institute, by 2035, it will be more expensive to run 90% of gas plants being proposed in the U.S. than it will be to build new wind and solar farms equipped with storage systems.

The authors of the study say they analyzed the costs of construction, fuel and anticipated operations for 68 GW of gas plants proposed across the country. They compared the costs to building a combination of solar farms, wind plants and battery systems that, with conservation efforts, could supply the same amount of electricity and keep the grid stable.

If it happens, it would be a reversal for gas plants, which supplied less than 20% of electricity in the country 20 years ago. Today that share has jumped to 35% as fracking has made natural gas cheap and plentiful.

More: *Bloomberg*

Manchin Declines to Run for W.Va. Governor

Sen. **Joe Manchin** (D-W.Va.) last week announced he would not challenge Republican Gov. Jim Justice next year.

Manchin, the ranking member of the Senate Energy and Natural Resources Committee, said in a statement that he loved his stint as governor from 2004 to 2010, but he decided to stay in the Senate after considering "where he could be the most effective" for the state.

His presence is considered critical for Democrats as the party pushed to take control of the chamber. If Manchin left the Senate, the party would have had a tough time winning his seat.

More: *CNBC*

SEIA Calls on FERC to Enforce PURPA, Increase Competition

The Solar Energy Industries Association late last month filed a proposal with FERC that it said would "address longstanding concerns with monopoly utilities by enhancing competition under the Public Utility Regulatory Policies Act" (*AD16-16*).

The proposal was filed under FERC's docket for reviewing how it enforces PURPA, which began in July 2016 in response to pressure from state regulators and congressional Republicans. (See ***FERC Conference Debates PURPA Costs, Purchase Obligations***.) Along with calling on the commission to strengthen its enforcement of the 1978 law "to prevent discrimination against independent solar facilities," SEIA asked it "to increase transparency in avoided cost calculations and make such information publicly available on a utility's website."

"It's consumers who are harmed by the lack of competition with their local utility," SEIA CEO Abigail Ross Hopper said. "We know utilities are adding more low-cost solar to their portfolios every year, but they aren't always passing savings on to their customers. SEIA's proposal will bring more competition and better prices to utilities around the country."

More: *SEIA*

State Briefs

KANSAS

1st Hearing Scheduled in Pretty Prairie Wind Lawsuit

A judge has scheduled a hearing for Sept. 30 in the lawsuit filed by NextEra Energy and landowners challenging the denial of a conditional-use permit for a proposed wind farm in Reno County.

The hearing is to determine whether 18 landowners who filed protest petitions against the permit for NextEra's Pretty Prairie Wind Energy Center can join the lawsuit as defendants. Meanwhile, attorneys for NextEra filed a motion two weeks ago seeking partial summary judgment on the key issue in the suit. That motion isn't likely to be taken up until October, after the court decides on the intervenor question.

The corporation's main contention in the suit is that a majority of protest petitions filed against the project were not legally sufficient because they were not notarized and contends if a person is gathering signatures, that person must sign the petition in front of a notary. At least 116 of the 233 petitions were submitted by circulators, according to the motion, but none were notarized. The county argues the law cited by NextEra applies to petitions that are circulated to force a ballot question on an issue and doesn't apply to a land-use permit.

More: *The Hutchinson News*

MAINE

PUC Staff, Public Advocate Disagree on Cause of High CMP Bills

A conclusion from analysts with the Public Utilities Commission affirmed an earlier analysis done by Liberty Consulting Group found that exceptionally high bills received by Central Maine Power customers from a winter a few years ago were caused by increased power use during frigid weather, as well as a rate increase.

However, the state's utilities watchdog presented a report to regulators Friday that says CMP's meter and billing systems continue to suffer from multiple defects that are leading to errors on customer bills. Public Advocate Barry Hobbins said he was disappointed that PUC staff didn't wait for the results of a meter-testing study being completed by consultant BerryDunn.

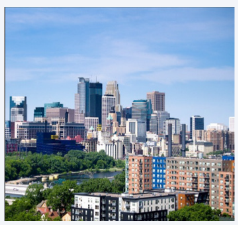
Hobbins said his study shows a continued pattern of billing defects that include errors in dates and power usage.

CMP acknowledged that more than 97,000 customers received bills that were at least 50% higher than a similar period a year earlier but has been steadfast in its position that the "usage is the usage."

More: *Portland Press-Herald*; *Portland Press-Herald*

MINNESOTA

Minneapolis Seeking Ideas to Lower Cost of Meeting Renewable Goals



Concerned it may be paying too much for renewable power through an Xcel Energy program, the city of Minneapolis has invited other companies to submit ideas on powering all city operations with clean electricity.

The request for information asks companies for clean energy at prices below what Minneapolis pays currently to Xcel's Renewable Connect program, and for strategies on meeting several other objectives.

Minneapolis officials wonder why Xcel's premium remains so high at a time when wind and solar prices have plummeted. With two Renewable Connect contracts up for renewal in a few years, Minneapolis could opt for a company that owns and manages solar on government buildings and on land outside the city, energy manager Brian Millberg said.

More: *Energy News Network*

MISSOURI

Ameren Proposes Solar Energy Farms for 3 Rural Cities

Ameren Missouri plans to spend $68 million on solar farms and storage facilities that could provide power to residents in Utica, Green City and Richwoods. The three cities are at the end of 20-mile transmission lines and often experience long power outages.

If approved by the Public Service Commission, the 10-MW facilities would each have a battery that could power connected homes for several hours. Construction is slated to start next year.

The proposed facilities are a part of Ameren's efforts to increase its solar generation by 100 MW by 2027 and cut its greenhouse gas emissions by 80% by 2050.

More: *St. Louis Public Radio*

WASHINGTON

Report: Seattle's EV Efforts Could Threaten Grid

An influx of electric trucks and buses in Seattle could overwhelm the grid if utility officials don't start coordinating with other city agencies, according to a report released Wednesday.

Released by Seattle City Light and the Rocky Mountain Institute, the report is the first municipal utility strategy for advancing electrification in every vehicle class, including passenger cars. While the analysis focused on Seattle, the researchers said the findings highlight a major challenge that could await authorities in other cities and states with emission-cutting commitments.

In Seattle's industrial areas, where charging depots would likely be sited, the grid lacked the capacity to deliver power for delivery trucks and other medium-duty vehicles, the co-authors found.

More: *E&E News*

WYOMING

PacifiCorp Forecast Offers Grim Outlook for State's Coal-fired Plants

Several draft power plans presented by PacifiCorp to stakeholders last week mapped out an ominous prognosis for the state's coal economy.

Some portfolios presented at a meeting estimated cost savings of about $500 million, if certain coal-fired plants retired early. But additional testing is still needed to provide a more definitive portfolio for the state's plant retirements, the company said.

Comprehensive results will not be formally announced by the company until October. Spencer Hall, a spokesman for PacifiCorp, noted that the findings could change depending on how additional tests unfold in the coming weeks.

More: *Casper Star-Tribune*