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Chatterjee Eulogizes 'Brother' McIntyre at FERC Meeting

Meeting Room to be Named in McIntyre's Honor

By Michael Brooks

WASHINGTON — FERC devoted most of its monthly open meeting Thursday to honoring recently deceased Commissioner Kevin McIntyre, with Chairman Neil Chatterjee delivering a lengthy, emotional eulogy that drew tears from some staff members in the audience.

Chatterjee went beyond merely praising McIntyre's character and work at the commission. Instead, for about half the commission's 50-minute meeting, he recalled, sometimes with a shaky voice, how he and McIntyre bonded during their time on the commission together, forming a brotherly relationship.

The chairman said that in the weeks since McIntyre's Jan. 2 death, many people have related to him that McIntyre told them that "he loved me like a brother."

"And that's classic Kevin, that he would never have said those words to me directly, because he didn't like to emote like that. He would have said something to the effect of, 'I love you like my much shorter brother. I love you

FERC Chairman Neil Chatterjee speaks to reporters after the open meeting. | © *RTO Insider*

like my dark-haired brother.'

"But I've heard it from enough people that even though I didn't hear it directly, I know he meant it, and I love my brother. And I am going to work with my colleagues to ensure

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Dems Press EPA's Wheeler on Climate at Confirmation Hearing

By Rich Heidorn Jr.

WASHINGTON — Senate Democrats pressed acting EPA Administrator Andrew Wheeler on the agency's efforts to reverse Obama administration policies on vehicle and power plant emissions Wednesday, complaining he failed to demonstrate a sense of urgency to address climate change.

Acting EPA Administrator Andrew Wheeler | © *RTO Insider*

Wheeler was nominated by President Trump on Jan. 9 to replace Scott Pruitt, who resigned as administrator in July.

In a two-and-a-half-hour confirmation hearing before the Environment and Public Works Committee, Wheeler was repeatedly challenged by Democrats over EPA's dismantling of the Clean Power Plan and its plan to weaken fuel economy standards for vehicles. But with only 47 votes, Democrats and the two independents who caucus with them will be unable to block Wheeler's confirmation.

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PG&E Meltdown Could Cost CAISO Members, Generators

By Hudson Sangree and Robert Mullin

SACRAMENTO, Calif. — CAISO market participants and companies that do business with Pacific Gas and Electric could end up paying a hefty price for the giant utility's financial collapse.

Other CAISO members are worried that PG&E, which plans to file for bankruptcy on Jan. 29, could default on its payments to the ISO and the Western Energy Imbalance Market, leaving other members to foot the bills.

PG&E's troubles also have fueled talk of a wide-ranging ripple effect, particularly regarding the renewable power generators from which the utility has contracted to buy billions of dollars worth of electricity. CAISO has tried to relieve members' concerns about a potential default, saying PG&E has enough collateral to cover its debts and future payments.

"The California ISO has received inquiries relating to the financial status of Pacific Gas and

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FERC & Federal News

Chatterjee Eulogizes 'Brother' McIntyre at FERC Open Meeting

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that we execute on the legacy that he put into motion, not just for him and in his memory, but because he was an earnest public servant that genuinely wanted to do the right thing."

McIntyre, 58, died after an 18-month battle with brain cancer. Sworn in as chair in December 2017, he relinquished the position to Chatterjee on Oct. 24 last year as his health deteriorated. (See *FERC's McIntyre Loses Cancer Battle*.)

Chatterjee, who had previously served as chair for four months before McIntyre's arrival, told of how he had felt overwhelmed by all the issues before the commission and reached out to McIntyre for advice.

According to Chatterjee, McIntyre told him over dinner, "'Neil, I'm just a Jones Day lawyer. You are the chairman of FERC. These are your decisions to make, and it is incumbent upon you to lead. ... Whatever decisions you and your colleagues make, I will work to push them forward. ... Just do what you think is right; put country over party and the public good over politics, and you'll be just fine.'"

About a month after McIntyre joined, FERC unanimously rejected the Department of Energy's Notice of Proposed Rulemaking for the commission to order RTOs and ISOs to compensate the full operating costs of generators with 90 days of on-site fuel (RM18-1).

Collegial, Nonpartisan

Chatterjee, a former energy adviser to Senate Majority Leader Mitch McConnell (R-Ky.), has been candid about how McIntyre helped him grow professionally from being a partisan aide to independent regulator. He has said that he was initially sympathetic to the NOPR because of the aid it would provide to coal country, including his home state of Kentucky. (See *Returning Chair Pledges to Protect FERC's Independence*.) As chair, he pushed for a short-term plan to rescue as many plants as possible while the commission did additional fact-finding.

At another dinner between the two after the commission's Jan. 8, 2018, ruling, McIntyre praised Chatterjee for his leadership during his tenure as chair on the issue.

Chatterjee said he was incredulous. "I said, 'Kevin, that's ridiculous. I'm self-aware enough to know that I made a number of mistakes. I threw up all over myself throughout this and botched this at myriad points.' And he said, 'Stop. No, you did not. You were confronted with a difficult situation. The secretary of energy asked us a very complex and important question. You tried to do the right thing.' ...

FERC holds its monthly open meeting in its main meeting room, which Chairman Neil Chatterjee announced would be named in Commissioner Kevin McIntyre's honor. | © *RTO Insider*

"He didn't need to do that," Chatterjee continued. But "that is the mark of a strong leader: someone who recognized that his colleague was feeling down and went and bucked me up and said, 'Hold your head up high, and let's continue to move forward together.'"

The two further bonded attending Georgetown Hoyas and Washington Nationals games, and over promoting awareness of Down syndrome, which McIntyre's youngest child has.

Chatterjee also recalled how McIntyre's wife, Jennifer, called him the day he was promoted back to the chair. According to Chatterjee, she said, "'I know you hate this. I know you didn't want this, and you are wracked with guilt. Stop it. The only thing of happiness that Kevin is taking from this difficult situation is the knowledge that his friend is going to have this opportunity. ... Don't go moping around; don't hang your head; don't feel sorry for yourself and for us. You need to man up and lead.'"

Commissioners Cheryl LaFleur and Richard Glick also praised McIntyre, echoing Chatterjee's remarks about his dedication to nonpartisanship and collegiality.

"Sometimes it seems kind of rote to suggest that we should take heart in an experience such as this and vow to be better people," Glick said. "But I think we would do well to take a page from Kevin's book and focus every day on upholding the commission's collegial, nonpartisan tradition. The coverage in the press sometimes seems to focus on the horse-race aspect of what we do: what commissioners are voting, how we are voting, or whether there's an 'R' or 'D' next to our name. In my opinion, that's not an accurate picture of how the commission functioned under Kevin, or how it functions today."

On the morning after McIntyre's death, "there was a sharp pang of loss and that hollow feeling all around the building and in everyone you talked to," LaFleur said, "because it was the feeling that our best and our brightest had been taken away from us." She said she appreciated McIntyre's legal judgment, commitment to the rule of law and his concern for FERC even while he struggled with his health. She also "loved his vocabulary. He always used his unique words that properly summed up whatever he wanted to say."

Chatterjee concluded his speech by announcing that FERC's main meeting room would be named in McIntyre's honor, with details of the dedication to be announced on a later date. ■

FERC & Federal News

Dems Press EPA's Wheeler on Climate at Confirmation Hearing

Sen. Sheldon Whitehouse (D-R.I.) displays a photo of Wheeler and coal magnate Robert Murray meeting with Energy Secretary Rick Perry, as Sen. Bernie Sanders (I-Vt.) listens. | © *RTO Insider*

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About a quarter of the audience in the small hearing room wore the red T-shirts of the *Moms Clean Air Force* and Wheeler's opening statement was difficult to hear over the shouts of "Shut down Wheeler, not the EPA!" from protesters outside the room. The shouts began after two protesters inside the room were ejected.

Republicans praised Wheeler's nearly two decades of experience at EPA and at the Senate committee, which oversees the agency. Wheeler began his EPA career during the George H.W. Bush administration and later served as staff director and chief counsel to Republicans on the committee.

"I think that's really strong qualifications for this job," Sen. Dan Sullivan (R-Alaska) said. "You come highly, highly qualified."

Republicans also praised EPA's efforts under Wheeler and Pruitt to clean up long neglected toxic waste dumps and to tighten regulations to protect children from lead. Wheeler called himself a "conservationist," saying, "I am an Eagle Scout. I'm an avid camper [and] hiker."

But the nominee found little support among Democrats. Although several praised him for being more responsive to their offices than Pruitt, Sen. Tom Carper (D-Del.) said "his policies are almost as extreme."

Sen. Sheldon Whitehouse (D-R.I.) pressed Wheeler on his work as a lobbyist for coal magnate Robert Murray, suggesting he had been disingenuous when he previously minimized his role in Murray's "action plan" to save coal-fired electric generation. Aides displayed blow-ups of photos of a meeting at which Murray and Wheeler discussed the plan with Energy Secretary Rick Perry. (See *Photos Show Murray's Role in Perry Coal NOPR*.)

In August, Wheeler announced EPA would replace the Obama Clean Power Plan with the Affordable Clean Energy (ACE) Rule, which defines the "best system of emission reductions" as heat-rate efficiency improvements that can be achieved at individual coal plants. The CPP set state emissions limits and encouraged switching to natural gas and renewables. Wheeler cited EPA projections that ACE will reduce U.S. power sector CO_2 emissions up to 34% below 2005 levels, but Democrats said it will allow higher emissions than the CPP. (See *EPA: CPP Replacement Could Boost Coal-Fired Power by 6%*.)

In December, EPA proposed changing its cost-benefit calculations to eliminate the "co-benefits" of reducing pollutants other than those being targeted. Had the proposed methodology been in place in 2011, EPA said, it would have prevented the Mercury and Air Toxics Standards (MATS), which pushed many coal generators into retirement.

Sen. Ben Cardin (D-Md.) said he didn't understand why EPA was seeking to change its cost-benefit methodology, saying "it seems to me the mercury standards have worked."

Wheeler said EPA had to re-evaluate the rules in response to a Supreme Court ruling but said he didn't expect the change to affect mercury emissions.

"Under our preferred option, I do not believe there would be a weakening of the mercury standards at all as far as the equipment that has already been deployed and implemented across the board," Wheeler said. "I get accused of rolling back the Clean Power Plan. I don't think you can roll back a regulation that never took effect. And on MATS, I don't think you can roll back a regulation that's been fully implemented. I honestly don't believe that equipment will be turned off or removed under our proposal."

Carper was skeptical. He said Delaware would be in noncompliance for nitrogen oxide even if it eliminated all pollution from vehicles and businesses because it is downwind from several coal-fired generators in Pennsylvania and West Virginia. "The cruel irony is each of those plants had installed the technology to stop the pollution. … They turned it off. They still have it turned off. And when we [asked] EPA to do something about it, you declined. So, forgive me for being concerned and cautious on this front."

In response to questioning by Sen. Bernie Sanders (I-Vt.), Wheeler agreed that the climate is changing and that humans have an impact on it, saying "I wouldn't use the 'hoax' word" as Trump has used to dismiss climate change.

"Do you agree with the scientific community that climate change is a global crisis that must be addressed aggressively?" Sanders pressed.

"I believe that climate change is a global issue that must be addressed globally," Wheeler responded. "I would not call it the greatest crisis. … I consider it a huge issue that has to be addressed globally."

Wheeler also conceded the forest fires that have charred parts of California had "some relation" to climate change but said "the biggest issue is forest management."

Sen. Jeff Merkley (D-Ore.) rejected Wheeler's contention, saying "the reason these fires are so much longer [is] because the summer season is so much hotter and longer."

"Our entire ecosystem … our fishing, our farming, our forests, are at grave risk." ■

FERC & Federal News

DC Circuit Denies NC Complaint over Yadkin Project

By Michael Brooks


The High Rock dam, one of four that make up the Yadkin Project in North Carolina

The D.C. Circuit Court of Appeals on Friday denied a petition by North Carolina to overturn several FERC decisions that kept the state from acquiring the system of dams on the Yadkin River (*17-1243*).

The state has been seeking the four dams collectively known as Yadkin Hydroelectric Project No. 2197 since 2009, when previous owner Alcoa announced it would close and dismantle the Badin Works aluminum smelting plant. The Yadkin Project had powered the plant, which at its peak employed about 1,000 workers, for almost half a century.

Alcoa started curtailing production and laying off workers in 2002 amid a downturn in the aluminum market. By the time it applied for relicensing in 2006, Alcoa was only using 3 to 5 MW of the 210.5-MW project to power the plant.

In approving Alcoa's application in 2016, FERC denied North Carolina's proposal that the U.S. government acquire the project and transfer it to the state, saying the company had failed to maintain the jobs at Badin Works, which had been cited as a benefit in the project's original 1958 license (*P-2197*).

"The state's proposal — albeit creative — lacked any basis in the law," D.C. Circuit Judge David B. Sentelle wrote in agreement with FERC.

The Federal Power Act allows FERC to recommend that the federal government take over, maintain and operate hydroelectric facilities after a license expires. "North Carolina does not and cannot identify a single case, statute or regulation to provide authority" for the federal government to transfer a seized project to a state government, Sentelle said. The judge noted that the state could have filed its own application for the project with FERC, negotiated a sale or initiated a condemnation proceeding of the project.

"Thriftiness and political pressure do not create a legal basis for federal recapture when its sole purpose is transferring the hydropower project to a state," Sentelle said. "Indeed, none exists."

North Carolina also challenged FERC's *approval* of Cube Yadkin Generation's $243 million purchase of the Yadkin Project in 2017, a challenge the commission also denied. The state alleged that Alcoa misled the state and other potential applicants for the project into thinking the company intended to continue operating Badin Works.

"Alcoa disclosed the curtailment of industrial production at Badin Works every step of the way, from its initial filing of intent to relicense, through its various correspondences with FERC, to the license application itself," Sentelle said. "The loss of jobs from the closure of Badin Works is a dark and menacing cloud that hangs over the state of North Carolina. However, Alcoa did not conceal this impending squall and, thus, FERC did not err by denying North Carolina's request to reopen licensing."

The state attorney general's office could not be reached for comment Monday because of the Martin Luther King Jr. Day holiday.

Though it is no longer the owner of the Yadkin Project, Alcoa still owns the land bordering the river, though it agreed to sell it as part of FERC's approval of its relicense application. Local conservation group Three Rivers Land Trust is raising money to *purchase* an initial 2,310 acres of land by September so it will be granted an additional two years to purchase the remaining 2,390 acres. ■

CAISO/WECC News

CAISO Finalizes 32 RC Agreements in West

By Hudson Sangree

CAISO last week said it had finalized agreements to provide reliability coordinator services, starting later this year, with 32 transmission operators and balancing authorities in the West.

The ISO expects to eventually have a total of 39 RC clients. Those that have finalized agreements include the Bonneville Power Administration, Arizona Public Service and PacifiCorp. (For a complete list, see *CAISO's website*.)

"We are pleased with the progress made this past year to offer reliability coordinator services, and welcome our new participants," CAISO President Steve Berberich said in a *news release*. "After a year of intensive planning and coordination, the ISO will now focus on developing technology and integrating systems to meet our July 1 implementation date."

CAISO said it is moving forward to complete the NERC certification process led by the Western Electricity Coordinating Council.

The ISO won the majority of Western clients for its RC services after Peak Reliability decided last year to wind down its reliability coordinator services by the end of 2019. Peak is currently the RC for nearly all of the Western U.S. and parts of Canada and Mexico. (See *RC Transition, California Wildfires Will Occupy 2019*.)

Peak stunned the electricity sector in July when it announced it would end its RC role and withdraw from its effort to develop a regional electricity market competing with CAISO. (See *Peak Reliability to Wind Down Operations*.) The Vancouver, Wash.-based company said it would shut its doors as early as Dec. 31, 2019, after transitioning its customers to other RCs.

Several months before the announcement, CAISO, a Peak RC customer, said it would "reluctantly" leave Peak, develop its own RC services and offer them to others at reduced costs. CAISO's move was seen as a reaction to Peak entering a partnership with PJM to form a Western RTO to compete with the ISO's expansion.

Transmission towers stand near The Dalles Dam, operated by the Bonneville Power Administration, one of 32 entities with which CAISO has signed agreements to provide reliability coordinator services starting this year. | © RTO Insider

| © RTO Insider

CAISO, SPP and BC Hydro decided to fill the role left behind by Peak. Most of the Western Interconnection signed nonbinding letters of intent to take advantage of CAISO's RC services. (See *CAISO RC Wins Most of the West*.)

In November, FERC approved a set of Tariff revisions covering CAISO's new RC services, clearing the way for about 72% of the region's load to sign on with CAISO, compared with 12% for SPP. BC Hydro is proceeding with plans to provide RC services for its own territory in British Columbia, representing about 7% of load in the region overseen by WECC.

The transition of RC services is scheduled to be phased in this year, with CAISO assuming responsibility for California and part of northern Mexico on July 1. BC Hydro will become the RC for most of British Columbia on Sept. 2. CAISO will then take over RC services for many areas outside of California on Nov. 1, while SPP will take responsibility for other regions of the West on Dec. 3. ■

CAISO/WECC News

PG&E Meltdown Could Cost CAISO Members, Generators

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Electric Co. in light of recent media reports," it said in a Jan. 11 market notice. "The ISO wants to assure market participants that PG&E has posted collateral with the ISO to cover its outstanding and upcoming obligations."

But one market participant, a major player in the West, told RTO Insider it could end up paying hundreds of thousands of dollars a month to the ISO if PG&E defaults. The representative spoke only on the condition of the utility's anonymity.

In response to an inquiry from *RTO Insider*, the ISO said it couldn't reveal the amount or type of PG&E's collateral, calling the information confidential. CAISO officials declined an interview request. "We have shared all we can on this subject," an ISO spokeswoman wrote in an email.

PG&E did not respond to a request for comment.

Scott Miller, executive director of the Western Power Trading Forum, says PG&E is unlikely to default on its CAISO obligations. | *WPTF*

Scott Miller, executive director of the Western Power Trading Forum (WPTF), said he thought there was little chance PG&E would default on its CAISO payments.

"When it comes to CAISO charges, you've got to be concerned," Miller said. "But because it's necessary for the grid to operate, and PG&E wants to emerge from bankruptcy as a going concern … I suspect that would be the last thing they wouldn't pay.

"Defaulting on the CAISO charges could cause all sorts of financial shortfalls in CAISO, and that has reliability implications," he added. "I just don't think PG&E would not pay its CAISO charges."

Miller served until 2017 as a senior market adviser in FERC's Office of Energy Policy and Innovation where he worked on RTO credit reforms. He said RTOs and ISOs have assumed roles as financial clearinghouses, for which they're not ideally suited.

It could cast some doubt on whether CAISO can adequately assess PG&E's creditworthiness, he said.

PJM has been scrambling to strengthen its credit policies following the collapse of GreenHat Energy, whose default is expected to cost members more than $100 million. "This is an area that's problematic for RTOs," Miller said. "They're extending credit and taking risk. That's not in their traditional wheelhouse. They're not in as strong a position as a clearinghouse normally is for assessing credit risk."

Ripple Effect

PG&E, California's largest utility, has seen its fortunes fall since the catastrophic wildfires of 2017 and 2018, for which it has received much of the blame. That blame was based on state investigations in some cases, and circumstantial evidence mixed with public distrust in others.

The utility's stock price plummeted from more than $70/share prior to the 2017 fires in Northern California's prized wine country to slightly more than $6/share following November's Camp Fire, the deadliest in state history. The roughly 90% collapse in PG&E's stock price represented a $33 billion loss in market value.

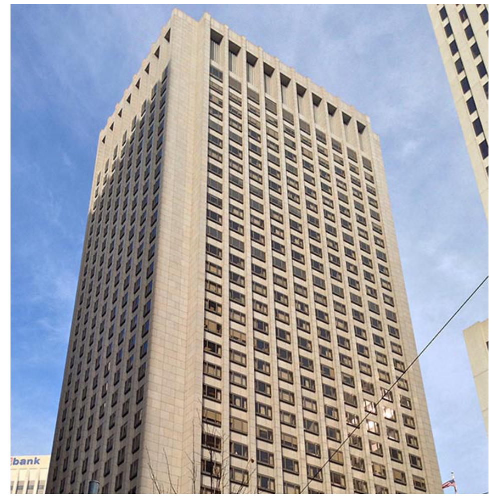
The utility announced Jan. 14 it would file for bankruptcy by the end of the month because it was facing at least $30 billion in wildfire liability. At least 750 lawsuits have been filed against it on behalf of nearly 5,600 plaintiffs, it said. (See ***PG&E Files Bankruptcy, as CEO Steps Down***.)

On Wednesday, S&P Global Ratings further downgraded PG&E's credit rating from CC to D status, the lowest grade used by the major ratings firms. The downgrade was based on PG&E missing a $21.6 million interest payment on $800 million in senior notes.

"We do not expect the company to make this payment during the [30-day] grace period given the company's announcement that it expects to file for bankruptcy protection and commence a reorganization under Chapter 11 of the U.S. Bankruptcy Code," S&P said in a news release.

The fallout from PG&E's bankruptcy announcement is already beginning to hit its renewable suppliers.

"PG&E is the biggest utility in the biggest market in the West. It's not just the RTO activities that people are concerned about," Miller said. "It's the bilateral contracts they've got for resource adequacy — renewable contracts, storage contracts, things like that."



PG&E's financial collapse is being managed from its headquarters at 77 Beale St. in San Francisco.

One generator, the 550-MW Topaz Solar Farm owned by Berkshire Hathaway Energy, recently had its credit rating downgraded to junk status — the same as PG&E's — because it had signed an exclusive 25-year power purchase agreement with the utility, and analysts said it might not get paid. (See ***PG&E's Credit Woes Spread, Worrying CAISO Members***.) Also ***downgraded*** was NextEra Energy's 250-MW Genesis concentrating solar thermal plant, built in 2007. PG&E is its sole purchaser.

PG&E reported to FERC in its ***2017 Form 1*** filing that it had signed about $40 billion in PPAs covering 2019 to 2043, including agreements to buy approximately $34.5 billion in renewable energy such as wind and solar.

In 2017, PG&E generated about 53% of its 61,397 GWh in bundled retail sales according to a security filing, with purchases making up the remainder. PPAs represented $42 billion of the company's $78.8 billion in contractual commitments as of the end of 2017.

Once in bankruptcy, PG&E could attempt to cancel or renegotiate these contracts. Analysts say generators with above-market contracts signed years ago will be most vulnerable to having their prices reduced.

Credit Suisse analysts estimate that PG&E could save $2.2 billion a year by renegotiating its renewable contracts to current market prices, *The New York Times* ***reported***. The analysts said PG&E is paying Consolidated Edison solar plants an average of $197/MWh, almost eight times the $25 to $30/MWh new solar plants are charging.

CAISO/WECC News

Jan Smutny-Jones, CEO of the Independent Energy Producers Association, said in an interview that his organization will push PG&E to honor its commitments to generators.

Jan Smutny-Jones, CEO of the Independent Energy Producers Association, wants PG&E to assure generators that it will honor its power purchase agreements.| *© RTO Insider*

IEP sent a letter to California's political leaders Jan. 15 urging them "to seek immediate assurance from PG&E that its energy-supplier contracts will be affirmed and that generation interconnection deposits supporting new renewable energy projects will be protected and used to develop the transmission upgrades necessary to interconnect those projects."

A major PG&E transmission line crosses Interstate 80 near Sacramento. | *© RTO Insider*

Evaluating Exposure

While CAISO has said little publicly about the potential effects of PG&E's meltdown, conversations are going on behind the scenes as market participants try to sort out their exposure.

The market participant that spoke to *RTO Insider* on background, for example, said it had been struggling to determine how much collateral PG&E had posted with CAISO and whether other participants would be obligated to pay its share and for how long.

Another concern is the tens of millions of dollars in grid management charges (GMCs) that PG&E pays to CAISO each year, for which other members also could find themselves on the hook. In 2017, PG&E paid $51 million to CAISO in GMCs. Those grid fees fund the ISO's fixed revenue requirement and any default must be covered by other participants.

Fallout from a PG&E default could spread to the Western EIM as well. Because the EIM falls under CAISO's Tariff, EIM members have an obligation to cover defaults, similar to other CAISO members, in proportion to their market activity. Their voluntary day-to-day participation in the EIM, however, could allow them to reduce transactions to minimize exposure, and even ultimately withdraw from the market.

CAISO members whose assets are controlled by the ISO have no such recourse. They must cover a defaulter's payments under the ISO's tariff provisions once the defaulter has exhausted their collateral or "financial security."

The ISO's *tariff provisions on creditworthiness* require participants without unsecured credit to post collateral in the form of "an irrevocable and unconditional letter of credit issued by a bank or financial institution," a prepayment to the ISO or a combination of the two. It remains unknown what kind of security PG&E posted.

CAISO requires financial security sufficient to cover a participant's "estimated aggregate liability," which represents all unpaid obligations plus five trading days, providing the ISO a cushion before the participant responds to a call for additional collateral within the required two business days. Posted collateral must be sufficient to cover other liabilities as well, such as a congestion revenue rights portfolio that has gone into the red.

In a situation where a market participant defaults on its payments to the ISO and has no collateral left, section 11:29:17 of the CAISO *Tariff* lays out a process by which the ISO can spread the costs to other members proportionally based on their market activity. Section 29.11 of the Tariff stipulates that those provisions also apply to EIM members.

Another potential consequence of PG&E's bankruptcy: CAISO's own financial position could be adversely affected.

In awarding the ISO an A+ credit rating in 2016, Fitch Ratings said one of the key factors it considered was the "solid credit profiles of California's three largest investor-owned utilities."

That was before S&P and Moody's Investors Service stripped PG&E of its investment-grade credit status, downgrading it to "junk" because of its dire financial outlook from the fires and the fact that California politicians weren't riding to its rescue, as some had expected.

S&P still gave CAISO an A+ credit rating as of Thursday. CAISO's current annual debt service costs of $16.9 million are well below the 2006 peak of $80 million, and the 2009 construction of the ISO's Folsom headquarters accounts for most of its $181 million (as of 2017) in long-term debt.

'Out the Window'

State Assemblyman Chris Holden, chairman of the Utilities and Energy Committee, who co-authored last year's Senate Bill 901 to aid PG&E, said he wasn't inclined to do more right away.

SB 901 contained provisions allowing the state's IOUs to issue long-term bonds, with approval of the California Public Utilities Commission, to cover costs of the 2017 fires. Holden had said he intended to offer legislation to make the bill's provisions applicable to the Camp Fire and other 2018 fires. A PG&E bankruptcy wouldn't be good for the state or its ratepayers, he said.

Holden recently backed away from that effort, telling the San Francisco Chronicle, "Our purpose was to keep PG&E from going into bankruptcy, but that's out the window now. Now the courts are getting out in front." ■

ERCOT News

Texas PUC Responds to Shrinking Reserve Margin

By Tom Kleckner

ERCOT's Dan Woodfin (left) and Warren Lasher address the Texas PUC.

The indefinite mothballing of a 470-MW coal-fired plant has reduced ERCOT's "pretty scary" reserve margin of 8.1% to 7.4%, prodding the Texas Public Utility Commission into ordering several market changes.

The PUC on Thursday directed ERCOT to tweak its operating reserve demand curve (ORDC), which provides a price adder during periods of generation scarcity, and to proceed with implementing real-time co-optimization.

"I was already concerned, and with [this plant] coming out, it's heightened my concerns," said PUC Chair DeAnn Walker, whose "pretty scary" comment has been making the rounds in the trade press. She made the comment following the December release of ERCOT's last capacity, demand and reserves (CDR) report, which revealed the 8.1% reserve margin. (See *ERCOT Predicts Tight Reserve Margin for 2019*.)

Shortly before the open meeting began, ERCOT announced it had completed a reliability analysis and determined that the city of Garland's Gibbons Creek Generating Station was not required to support system reliability. That clears the way for the city to indefinitely suspend the plant's operations, effective June 1.

ERCOT representatives assured the PUC that it can meet demand with the new historically low reserve margin by following its emergency operations procedure. That would entail procuring emergency response service, voltage-reduction measures and releasing reserves.

"There's some talk that 7.4% is not that big of a deal," Walker said. "I believe you can absolutely run this system in a reliable manner, but when you hear 7.4%, does that give you a lot of comfort?"

"At that reserve margin level, it's likely that we will have to take advantage of those additional resources," replied Dan Woodfin, ERCOT's senior director of system operations. "We will likely have to do that on a number of occasions this summer, but there's not an indication at this point in time that we will have to implement rotating outages."

Woodfin did not discount the use of rotating outages in the case of extreme weather, low wind output or forced generation outages.

"Again, I have full confidence in ERCOT managing and running our system, and if we have a large unit trip this summer on the hottest day of the year, I think we can manage this," Walker said. "But I also believe there are things this commission can do."

In a memo *filed* shortly before the PUC's open meeting began, Walker suggested making a 0.25 standard deviation shift in the loss-of-load probability calculation and using a single blended ORDC curve as soon as practicable. She suggested a second shift of 0.25 in the standard deviation next year.

Both Sides

The change would lead to the ORDC's more frequent use, and at higher levels.

Walker said the blended ORDC would also increase the development of demand response, distributed generation and self-generation, and could lead to delays in pending retirements and other units returning to service much more quickly.

Writing that real-time co-optimization would bring economic and operational benefits to the market, Walker also proposed that PUC staff bring back to the commission's Feb. 7 meeting a list of policy issues for stakeholder comment and asked that ERCOT provide a high-level implementation plan and timeline.

Walker said including marginal losses in the security-constrained economic dispatch is not "worth the implementation cost and market disruption."

Commissioners Arthur D'Andrea and Shelly Botkin agreed with Walker's proposals, though Botkin said she was not prepared to take the second step with the ORDC just yet.

ERCOT staff told the commission they could take the ORDC change to the grid operator's Technical Advisory Committee on Jan. 30 and to the Board of Directors on Feb. 12. That would enable ERCOT to implement the revised ORDC by April.

"I think there are a lot of good arguments on both sides," D'Andrea said. "I think all of us agree we're going to stay committed to market principles and let our energy-only market work. I think acting now is prudent."

Critics have said ORDC changes could increase electricity prices by as much as $4 billion annually. (See *ERCOT Faces Tight Summer Margins, Market Changes*.)

Vistra Energy released a *statement* in support of the actions, saying "proper price signals must be sent to incentivize investment in maintaining the existing generation facilities and developing new, more efficient technology" as the Texas market evolves from older, less-efficient technology.

In performing its transmission reliability assessment of Gibbons Creek, ERCOT said "the tools under its emergency procedures are adequate in maintaining grid reliability."

Garland Power & Light in December submitted a notification of suspension of operations for the 35-year-old unit, which is operated by the Texas Municipal Power Agency. It had been operating seasonally since 2017 and returned to mothballed status in October. ■

ERCOT News

Texas PUC Briefs

Commission Welcomes Legislative Input on Energy Storage

Texas regulators last week agreed to let state lawmakers help them determine who will own energy storage devices in the ERCOT market.

PUC Chair DeAnn Walker

DeAnn Walker, chair of the Texas Public Utility Commission, said during the commission's Jan. 17 open meeting that she prefers to hear from legislators before developing rules, reiterating a position expressed in a recent *report* to the 86th Texas Legislature. (See "PUC Asks Legislators for Clarity on Battery Storage Ownership," *ERCOT Briefs: Week of Jan. 7, 2019*.)

"If they don't, we can circle back in June … because we or the legislature need to address this," Walker said. "I'd like to give them the opportunity, because we asked them to weigh in."

The PUC has already opened a rulemaking on energy storage ownership (Project *48023*) after last year rejecting AEP Texas' request to connect two West Texas battery storage facilities to the ERCOT grid. Transmission and distribution providers have squared off against generators over the devices' ownership.

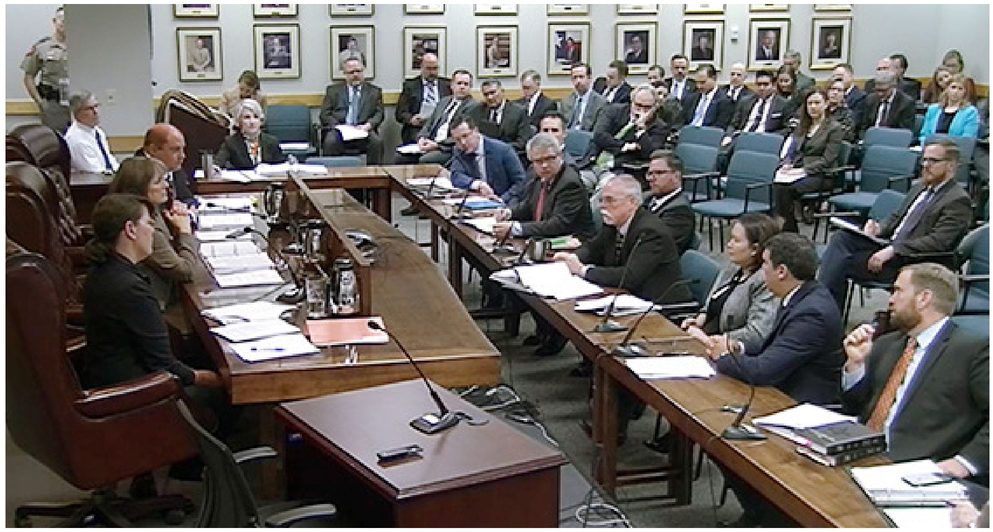
Walker said in the meantime she wants to start a discussion on electric vehicles and asked staff to open a project on the subject. She has suggested the PUC work with the Texas Commission on Environmental Quality in planning how the distribution system will support the charging stations' infrastructure.

"There's going to have to be a charging station in Marfa, Texas," Walker said, referring to the artistic community of about 2,000 people in the West Texas desert. "No one's going to be able to get from El Paso to [Austin] without one."

Walker hopes to have recommendations ready for the next legislative session in 2021.

Prelim Order Sets Issues in Oncor-Sharyland-Sempra Deal

The PUC issued a *preliminary order* identifying issues to be addressed in proposed transactions involving Sempra Energy, its Oncor subsidiary, Sharyland Utilities and Sharyland Distribution & Transmission Services — but not before first chiding the parties for clouding the issue of who will own what and where (Docket *48929*).



Texas PUC's Jan. 17 open meeting

The companies in October announced deals worth $1.37 billion, with Sempra buying a 50% stake in Sharyland D&T and Oncor acquiring transmission owner InfraREIT. (See *Sempra, Oncor Deals Target Texas Transmission*.)

"It would be helpful if you could file a table" listing the assets, Walker said. "Not a chart, because your charts make no sense."

Sharyland attorney Lino Mendiola explains the Oncor-Sharyland-Sempra transactions.

"We could have done a better job in our application setting forth exactly what we're asking for," said an apologetic Lino Mendiola, legal counsel for the Sharyland companies. "It's a complicated transaction. We recognize that."

Of specific concern to Walker is who will own the transmission assets necessary to integrate Lubbock Power & Light into ERCOT. The PUC last year approved Lubbock's transfer of 70% of its load from SPP into ERCOT. Coincidentally, it came during the same meeting that Sempra's acquisition of Oncor was approved. (See *Texas PUC OKs Sempra-Oncor Deal, LP&L Transfer*.)

The transactions would result in Sharyland T&D becoming an indirect, wholly owned subsidiary of Oncor, owning transmission and distribution lines in Central, North and West Texas. Sharyland Utilities would remain in South Texas, with Sempra owning an indirect 50% interest.

Mendiola said the geographic split between Oncor and Sharyland complicates the situation, but that the parties had worked out an 86-14 split of assets. Most of the transmission infrastructure would reside in the north with Oncor.

"Our group wants to ensure there are not things in the transmission rates that shouldn't be in the transmission rates," said legal counsel Phillip Oldham, representing Texas Industrial Energy Consumers, the lead intervenor in the proceeding.

A hearing on the merits is scheduled for April 10-12.

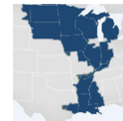
ERCOT Governance Changes Approved

The PUC approved by consent amendments to ERCOT's Articles of Incorporation and bylaws (Docket No. *48677*). The changes were approved by more than the necessary two-thirds of the grid operator's corporate membership in September.

The commission also removed from future agendas a proceeding involving AEP Texas and Rio Grande Electric Cooperative (Docket *47186*). The two have settled their dispute over which utility will serve certain customers in a Uvalde subdivision. (See "Rio Grande Electric, AEP Texas Reach Agreement," *PUCT Urges 2nd Look at Freeport Project Costs*.) ■

— Tom Kleckner

MISO News



MISO Moves to Examine Long-term Supply Measures

By Amanda Durish Cook

CARMEL, Ind. — With spring maintenance season approaching, MISO is opening the floor to encourage stakeholders to offer ideas to address the growing divide between resource availability and need.

MISO is commencing work on longer-term solutions in its multiphase resource availability and need project, focusing on possible revisions to its loss-of-load expectation study and load-modifying resource (LMR) accreditation. It is also exploring further changes to outage scheduling, new seasonal capacity modeling and a possible development of a seasonal capacity auction. Discussions on more major changes will continue through 2019.

During a Jan. 17 Market Subcommittee meeting, Chair Megan Wisersky said the discussions are now "de rigueur" at the large public MISO stakeholder meetings.

MISO has already filed short-term Tariff changes with FERC aimed at immediate relief in time for spring and to buy time for in-depth solutions. The two filings would require LMRs to produce seasonal availability documentation and subject demand response to annual capability testing. (See *MISO to Address Growing Supply Shortage in New Year*.)

The RTO will this month also file a proposal requiring resources to provide 120 days' notice for planned outages, with only one "limited adjustment" to the outage schedule allowed up to 60 days before it begins. Those outages would not be permitted during predefined periods with expected low margins.

MISO had planned by April 1 to implement a firm policy of considering outages scheduled during low-margin periods as forced, impacting a resource's accreditation. However, the RTO is now pledging to grant an exemption to outages and derates starting between April 15 and July 29 if resource owners provide two weeks' notice and "adequate margin is projected when requests are scheduled." The revision comes after several stakeholders this month called for less stringent rules. (See *Stakeholders Press MISO for Flexibility in Outage Proposal*.)

MISO market design adviser Dustin Grethen said the Market Subcommittee should now shift focus to what's needed to meaningfully improve price signals to spur more available and flexible supply. MISO may make at least two more FERC filings, one late this year focused on resource adequacy — if needed — and one in the first half of 2020 focused on new market mechanisms.

Dustin Grethen | © *RTO Insider*

"The start of the 2016 planning year, we saw energy offers significantly drop. We used to see about 8 GW more in energy offers," Grethen said, adding that since that time, MISO has used less traditional sources such as wind power and reserves to cover its load and supply requirements.

Grethen said the drop coincided with EPA's rollout of the Mercury and Air Toxics Standards, which forced many coal-fired generators into retirement.

Some stakeholders debated whether MISO should extend its official calendar summer season, pointing out that the latest maximum generation event took place in mid-September, on a blisteringly hot day but still outside of what the RTO considers summer. Outside of MISO's peak summer season, LMRs are not required to respond to emergencies.

MISO staff said the event technically occurred in what the RTO considers fall, despite the heat.

"Timing is everything," Customized Energy Solutions' David Sapper commented wryly.

Sapper urged MISO to incentivize more supply by staying away from solutions that include generator penalties. "I think you've heard from stakeholders that we want more carrots than sticks," he said.

CES' Ted Kuhn asked why MISO's LOLE study doesn't predict likely emergency frequency when the study projects other system conditions. He said the LOLE study could be redesigned to show when and where MISO will likely face tight operating conditions.

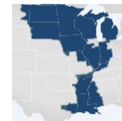
"When is the number of emergencies more than what we really plan on?" he asked.

Sapper asked if MISO might revive discarded market ideas, such as financially binding multi-day commitments.

"I think a lot of that's to be determined," Grethen said. He added that any solution that MISO recommends will be supported by studies and simulations.

Grethen said he would return in February for a more in-depth discussion on long-term supply fixes and a formal request for solution submissions. ■

MISO News



Early MISO PRA Data Show Little Change

CARMEL, Ind. — MISO last week posted draft 2019/20 Planning Resource Auction data that are virtually unchanged from last year's early predictions.

The RTO released the data as it prepares for its usual spring resource adequacy activities, including organizing its annual resource adequacy survey.

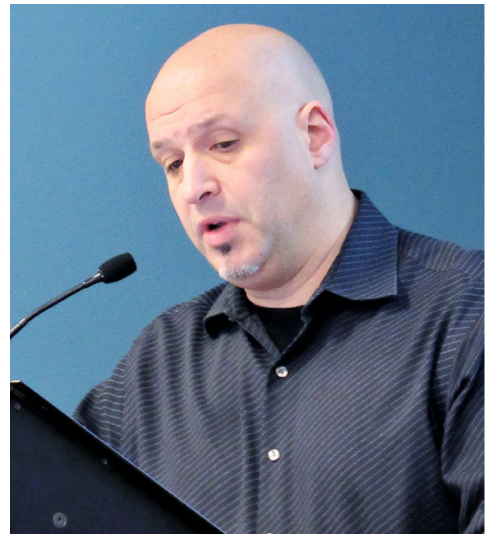
MISO is currently *forecasting* a 121.6-GW systemwide coincident peak and 125.3-GW total zonal coincident peak for the planning period. It also estimates an approximate 134.4-GW planning reserve margin requirement and a combined 152.6 GW in local resource requirements. The estimates are subject to change, but they don't materially stray from last year's preliminary data reflecting low demand but declining margins. (See *MISO RASC Briefs: Little Change to Capacity Forecasts*.)

Speaking at a Jan. 16 Resource Adequacy Subcommittee meeting, Tim Bachus, MISO capacity market administration analyst, said he doesn't expect much change to the data through March, when auction numbers will be finalized.

This year's auction conduct threshold, calculated as 10% of cost of new entry, ranges from \$22 to \$25/MW-day depending on zone, Independent Market Monitor staffer Michael Chiasson said.

Late last year, MISO *said* it would require a 16.8% planning reserve margin requirement for June 2019 to May 2020. At the time, it said it had nearly 154 GW of installed capacity on hand to meet the requirement.

Meanwhile, the RTO will send voluntary surveys to market participants by late March as part of its annual resource adequacy survey with the Organization of MISO States. Completed surveys are due back April 15. Results of OMS-MISO surveys are typically released in June.

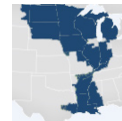


Tim Bachus | © *RTO Insider*

"The last decade has seen a lot of changes in our fleet mix ... and this survey is an important tool to continue dialogue on the change," MISO resource adequacy team member Stuart Hansen said of the survey. ■

— Amanda Durish Cook

MISO News



New MISO Platform Headed to the Cloud

By Amanda Durish Cook

January Market Subcommittee meeting | © *RTO Insider*

CARMEL, Ind. — Staff engaged in MISO's ongoing market system replacement will this year focus on moving the platform to the cloud and creating a single means of submitting modeling data, stakeholders learned last week.

Curtis Reister | © *RTO Insider*

MISO plans to move its system from a server-based platform to the cloud some time in 2020, IT Senior Director Curtis Reister said during a Jan. 17 Market Subcommittee meeting. The RTO will phase in use of the new system gradually from 2020 to 2024.

"We're going to do what's called a private cloud," Reister said.

He explained that while the cloud platform will function like a public network to staff, equipment to support it will be built solely for MISO and be kept on RTO premises, keeping systems more secure.

The new platform will be designed to accommodate market changes more quickly, Reister said. "With a big monolithic system like today, it is difficult to find the impacts of even a modest change."

By 2021, the cloud-based platform will also include a "model manager," a single integrated system for model data submission and validation. MISO currently relies on several different means to collect and process grid information for modeling.

"The model data comes in through a lot of different sources. We're looking at a much more seamless way to gather and verify that information," Reister said.

Also by 2021, MISO will launch a new user interface for members to submit market transactions such as bids and offers.

MISO plans to update the current interface early this year to address browser incompatibility, behind the originally scheduled release in late 2018. Members have reported having to rely on old versions of web browsers to use the current interface.

Stakeholders asked for an update on current vendor General Electric's overall performance on the early stages of the multilevel project.

"We're currently on schedule with our deliveries with GE," Reister said in response to stakeholder inquiries about the company's performance. GE has steadily shown it has the resources and ability to meet the RTO's demands, he added.

MISO continues to "monitor" news around GE and the company's performance, Reister said. Last week, at least one financial analyst *predicted* that GE's financial performance will begin to rebound.

The RTO has said it will not announce a recommended final platform vendor until the fourth quarter, when it finishes evaluating alternatives. (See "Market Platform Replacement Enters Year 3," *MISO Board of Directors Briefs: Dec. 6, 2018*.)

MISO has committed to another stakeholder update of its platform replacement in April.

At Least 1 Market Project Delay

While MISO expects to continue carrying out improvements to its current platform, at least one market upgrade will be placed on hold until the new system is operational.

Implementation of more sophisticated modeling software that can accommodate different combinations of combined cycle units and their dependencies will be postponed until mid-2023, MISO said. The RTO originally planned to have the improvement in place by 2020 but last year announced a delay until 2022. (See *MISO Delays Combined Cycle Model Update*.)

MISO Executive Director of Market Operations Shawn McFarlane said there are "technical issues in installing it on the legacy system," explaining that day-ahead market clearing could experience delays if the project were implemented in the current system.

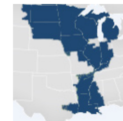
Director of Market System Enhancement Dhiman Chatterjee said market systems would experience a "significant amount of uncertainty" if the RTO implemented combined cycle modeling on the existing platform.

However, MISO's proposed, short-term reserve product, which will furnish capacity within 30 minutes, will still move ahead as planned, supported by the current market platform. The RTO hopes to roll out the new type of reserve in mid-2021.

MISO last week published a *conceptual design* of short-term operating reserves in which online and offline resources can either register as a supplier or provide availability through hourly offers in the day-ahead and real-time markets. Resources would clear according to opportunity costs, offer prices and a demand curve when insufficient amounts of the reserves exist. Clearing resources will be paid their respective zonal market clearing prices. The early design doesn't account for participation by storage resources, but the RTO said later versions will include storage participation "where appropriate."

MISO said 30-minute operational needs are "not efficiently modeled" in the current market, and that a new reserve product would help better manage its Midwest-South contractual limit on SPP's transmission, manage constrained load pockets and meet systemwide energy needs even during times of load and supply volatility. The new reserve type would be especially helpful in MISO South, where operators rely on less transparent out-of-market commitments to address the Midwest-South transfer constraint and load pocket needs. ■

MISO News



FERC Expands Hearing on Entergy Grand Gulf Rates

By Rich Heidorn Jr.

Grand Gulf Nuclear Station | Entergy

FERC on Thursday ordered hearing and settlement procedures on a complaint by the Louisiana Public Service Commission alleging that its ratepayers are being overcharged by an Entergy subsidiary that sells power from the Grand Gulf nuclear plant (*EL18-204*).

The ruling effectively reinstates a portion of a complaint FERC had earlier dismissed for lack of evidence over System Energy Resources Inc. (SERI), an Entergy subsidiary that sells Grand Gulf's output to four Entergy operating companies: Entergy Arkansas, Entergy Louisiana, Entergy New Orleans and Entergy Mississippi.

In August, FERC set for hearing and settlement the PSC's complaint that SERI's return on equity of 10.94% was based on outdated data that did not reflect current capital markets (*EL18-142*). (See *FERC Sets La. Entergy Complaint for Settlement*.)

But the commission rejected the PSC's complaint over SERI's capital structure, saying the regulators had not demonstrated that it was unjust and unreasonable.

The PSC had contended that SERI's equity ratio of 64.9% was "unusually rich" and that it was cross-subsidizing more highly leveraged activities while transferring most of its risk to the four operating companies.

FERC said the PSC had not presented any evidence that SERI does not meet the requirements of the federal commission's three-part test for determining whether to use an operating company's actual capital structure: whether the operating company issues its own debt without guarantees, has its own bond rating and has a capital structure within the range of structures approved by the commission.

The PSC responded to the Aug. 24 order a month later with a new complaint that offered evidence that SERI did not meet the three-part test.

It provided records that it said showed SERI's debt is guaranteed by its parent and the operating companies. It also contended that SERI is a shell company with no employees and that each of its corporate officers is an executive officer of Entergy. It said SERI's equity ratio should be reduced to 35.8%, or at least no higher than 49%, the equity ratio of SERI combined with the operating companies.

FERC rejected Entergy's contention that it had already decided the merits of the capital structure allegations.

"The language in the Aug. 24 order indicated that the allegations in the complaint in docket No. EL18-142-000 concerning capital structure did not establish a prima facie case to justify setting that issue for hearing. Thus, there was no hearing litigating SERI's capital structure … and the Aug. 24 order cannot be considered an 'on the merits' judgment on SERI's capital structure," the commission said.

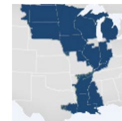
FERC said it will let the chief administrative law judge decide whether to consolidate this proceeding with docket EL18-142.

Rehearing Denied

Separately, FERC on Thursday also rejected the PSC's request for rehearing of its May 17 order regarding Entergy's "bandwidth" calculation for a seven-month period in 2005 (*EL01-88-020*). (See *FERC Affirms Rulings in Entergy Bandwidth Dispute*.)

The calculations were used to equalize production costs among Entergy's operating companies. ■

MISO News



Closed Michigan Dam Loses Rehearing Bid

By Amanda Durish Cook

Edenville Dam spillway

FERC last week refused to budge on its decision to revoke the license of a small hydropower plant in Michigan over the owner's longstanding noncompliance with safety measures.

The commission on Jan. 17 denied rehearing on Boyce Hydro possibly restarting operations at the 4.8-MW Edenville Dam, which was ordered closed in October over insufficient spillway capacity. (See *FERC Upholds Michigan Dam Closure over Safety Fears*.)

"In multiple orders, the commission has set forth a history, going back to 2004, of Boyce Hydro's failure to comply with its license for the Edenville project, the commission's regulations and commission orders. Of particular concern has been the project's inability to pass the probable maximum flood due to inadequate spillway capacity," FERC repeated in its latest order on the issue (*P-10808-064*).

Boyce and the Sanford Lake Association sought rehearing of FERC's decision to revoke the license, arguing the commission didn't consider how the revocation could negatively affect a potential transfer of the license. Acquiring a new license, the two said, is an expensive, uncertain and drawn-out process. In addition to the Sanford Lake Association, the Wixom Lake Association and the Saginaw Chippewa Tribe have expressed interest in taking over ownership of the dam.

Boyce said that a new license to replace the 20-year-old license "would require environmental, recreational and other study information required in contemporary licenses." It pointed out that obtaining a new license could be further complicated by the dam's inadequate spillway capacity and the fact that the water quality on the original license had been waived.

But FERC wasn't swayed: "It is not in the public interest for the commission to delay action addressing a licensee's long history of noncompliance with dam safety regulations out of concern that such action may affect the possibility (based mostly on speculation) that some third party might accept transfer of the license and promptly bring the project into compliance."

FERC said the process of acquiring a new hydroelectric license can be expedited with certain procedural requirements waived. The commission also said the lake associations' meetings over the dam are too preliminary in nature to persuade it to change the license revocation into a license suspension, as requested by the Sanford association. The meetings, FERC said, "do not provide any certainty as when the Edenville project's public safety and environmental deficiencies would be remedied."

The commission reiterated that Boyce has been on notice that its noncompliance could lead to license revocation since "at least June 2017" and that the company and interested buyers have had "ample opportunity to investigate the option of license transfer." It added that it received no indication that a third party was ready to assume the project. Further, Boyce never provided the commission with a timetable for increasing spillway capacity when "continuing required work would have been wise," FERC said.

Boyce and the Sanford Lake Association also argued that the license revocation could negatively impact public safety because, absent income from electricity generation, the spillways won't be repaired or upgraded. FERC said dam safety enforcement will fall to the Michigan Department of Environmental Quality, which can instigate civil action.

The commission also rebuffed the argument that its order would disrupt a state-mandated lake level, saying nothing in its license revocation is stopping Boyce or a third party from operating the project as a non-generating facility to maintain water levels.

"For over 14 years, the commission has gone to great lengths to compel compliance with the license requirements, and Boyce Hydro has delayed, disregarded its responsibility and claimed that it was not financially capable of meeting such requirements. Meanwhile, Boyce Hydro continued to benefit from the revenues generated by the project," FERC said. "There is no evidence that allowing Boyce Hydro to maintain its project license will result in a different outcome or that the longstanding compliance issues will be remedied."

Finally, the commission noted that Boyce failed to put money into escrow to fund necessary spillway improvements, as it promised in 2008. The company also never followed up on a promise to provide FERC with a list of its financial assets.

"A licensee's lack of financial capacity does not excuse years of noncompliance with important license conditions," FERC said. ■

MISO News

Cardinal-Hickory Creek Line Wins Incentive Treatment

FERC last week authorized both ITC Midwest and American Transmission Co. to recover all of their "prudently incurred costs" if the Cardinal-Hickory Creek project is abandoned or canceled for reasons beyond their control (*ER19-355*, *ER19-360*). Both companies filed for the rate incentive in November.

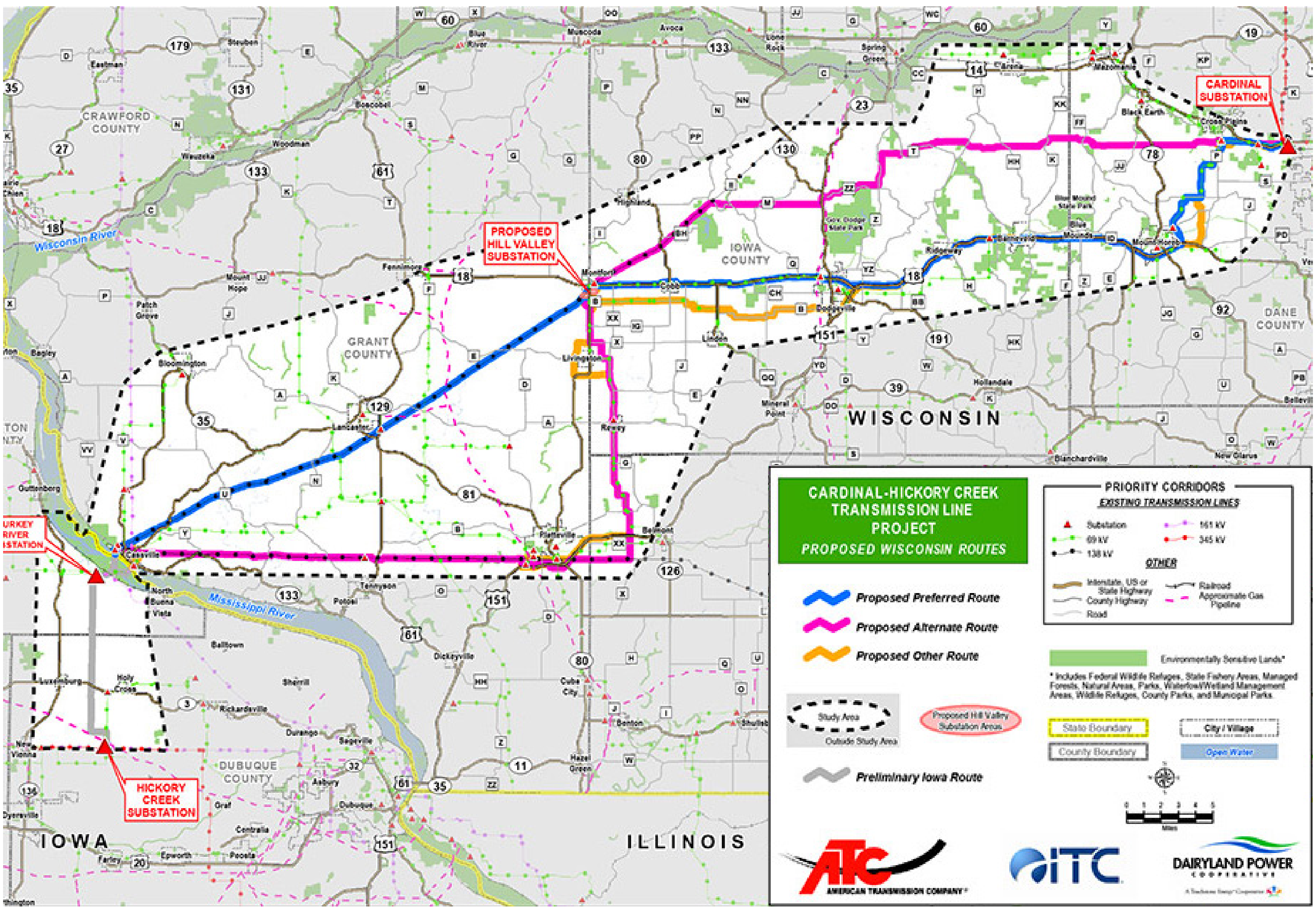
"We agree that the project faces certain regulatory, environmental and siting risks that are beyond the control of management and which could lead to abandonment of the project," FERC said.

The commission said the $500 million project meets the criteria for the abandoned plant incentive because it had been found to enhance reliability and reduce congestion through MISO's annual Transmission Expansion Plan.

One of MISO's 2011 multi-value projects, the 345-kV line will consist of 102 to 120 miles of transmission from southern Wisconsin to eastern Iowa with multiple substation updates. The project is intended to transport wind power and lessen the burden on existing 345-kV and 138-kV lines in the area.

Construction of the line is currently in a holding pattern because of the ongoing partial federal government shutdown. The ***Wisconsin State Journal*** *reported* that six public meetings Jan. 22-29 regarding the line's environmental impact have been canceled. The U.S. Department of Agriculture's Rural Utility Service had been conducting an environmental review of the line before the shutdown. The meetings cannot be rescheduled until the government reopens. ■

— Amanda Durish Cook



Cardinal-Hickory Creek line route | *ATC*

NYISO News

New York Boosts Zero-carbon, Renewable Goals

By Michael Kuser

New York Gov. Andrew Cuomo delivers his annual State of the State address in Albany on Jan. 15. | *NYDPS*

New York Gov. Andrew Cuomo last week vaulted the state ahead in environmental targets by pledging to erase the state's carbon footprint by 2040 and nearly quadrupling its offshore wind energy goal to 9 GW by 2035.

Proclaiming that "the clean energy economy is coming," Cuomo said he wants New York to be ready to fight climate change and create jobs with the "Green New Deal" he promised last month in a preview of his third term as governor. (See *NY Looks to Expand Energy Programs in 2019*.)

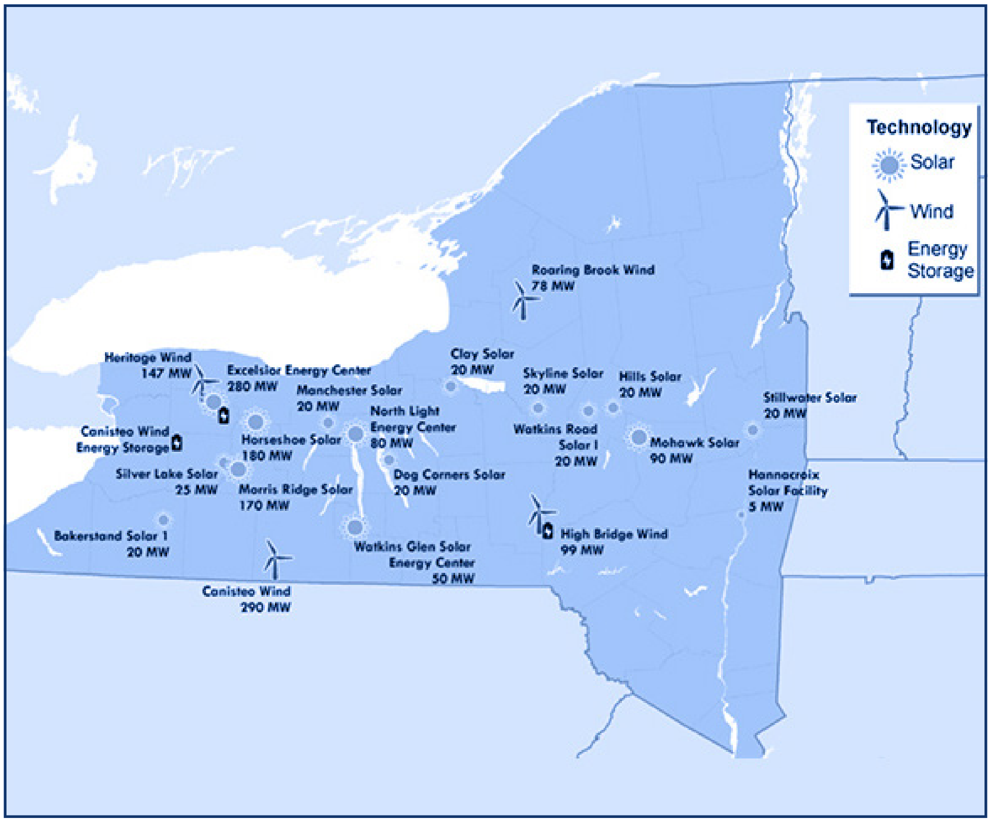
"Let us set the goal, 100% clean power by 2040, highest in the United States of America," Cuomo said in his annual State of the State address in Albany on Jan. 15. "Offshore wind has potential, we know it. The industry is moving that way and we want to locate it in this state. ... Let's invest $1.5 billion — it's a real source for renewable energy — and let's do it this year."

The governor also pledged to invest $200 million in port infrastructure to support the offshore wind industry.

The state set its 100% clean energy goal for five years earlier than the target adopted last year by California. (See *Calif. Gov. Signs Clean Energy Act Before Climate Summit*.) The Cuomo administration released a *book* to accompany the governor's address, in which he said the cornerstone of the new goal is an increase in the state's renewable portfolio standard from 50% to 70% by 2030.

New York's clean energy actions will also include doubling distributed solar generation to 6 GW by 2025 and deploying 3 GW of energy storage by 2030.

A future Climate Action Council will develop a plan to make the state carbon neutral, which may include "working with the U.S. Climate Alliance to create a new multistate emissions-reduction program that covers all sectors of the economy, including transportation and industry, and exploring ways to leverage the successful Regional Greenhouse Gas Initiative to drive transformational investment in the clean energy economy and support a just transition," the administration's book says.



Major solar and wind projects in New York | *NYSERDA*

Upstate and Plaudits

Cuomo also announced $1.5 billion in competitive awards to support 20 large-scale solar, wind and energy storage projects across upstate New York.

The New York State Energy Research and Development Authority estimates the *projects* will drive $4 billion in direct investment in the state's clean energy economy, as well as add more than 1,650 MW of capacity and generate over 3.8 TWh of renewable energy annually.

Environmental advocates applauded the announcements.

"With a mandate to source 70% of the state's energy through renewables by 2030, doubling New York's distributed solar target and quadrupling the current offshore wind targets, the governor has proven that he is a national leader determined to make New York a 21st century, renewable energy, economic powerhouse," said Lisa Dix, senior New York campaign manager for the Sierra Club.

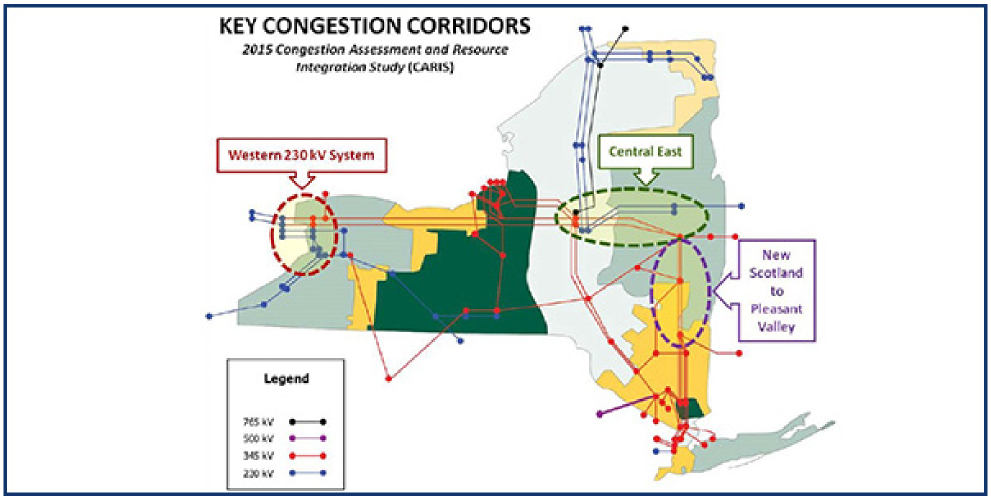
"The plan set forth by Gov. Cuomo is certainly ambitious, often doubling or quadrupling previously set targets, but it is exactly the kind of detailed, innovative and comprehensive commitment necessary to rapidly facilitate the transition to a clean energy economy," said Peter Rothstein, president of the Northeast Clean Energy Council, adding that he hoped the development would inspire other states to create similar plans.

Cuomo a year ago released the comprehensive *New York State Offshore Wind Master Plan*, which called for development of 2.4 GW of offshore wind by 2030, and in July 2018 the New York Public Service Commission authorized state agencies to procure 800 MW by this year. (See *NYPSC: Offshore Wind 'Ready for Prime Time'*.) In consultation with the New York Power Authority and the Long Island Power Authority, NYSERDA in November issued a request for proposals (*ORECRFP18-1*).

NYSERDA expects to announce the first offshore wind contract award in the second quarter of 2019 and, if needed, issue a second solicitation this year to meet the 800-MW goal of the first tranche. ■

NYISO News

NYISO Business Issues Committee Briefs



| NYISO

Committee Approves Repricing Fixed Price TCC Credit Requirement

NYISO's Business Issues Committee on Wednesday approved using the market clearing price to value and calculate the credit requirement for fixed-price transmission congestion contracts (TCCs).

Sheri Prevratil, NYISO corporate credit manager, *told* the BIC that the ISO will use $0 as the payment obligation portion of the requirement if the price calculated for the TCC is less than $0, but it will otherwise continue to use the greater of the payment obligation or the credit holding requirement until receiving payment for the contract.

The ISO's overall TCC credit policy values such contracts for collateral purposes based on the most recent auction price, but the price paid for a fixed-price TCC does not determine the potential credit risk of that contract, she said.

The credit requirement is currently calculated based on the price paid for the TCC, not the market clearing price, and remains the same throughout the duration of the TCC.

If the change is approved by the Management Committee this month and the Board of Directors in March, the ISO will file with FERC in April for deployment in June 2019.

LBMPs Drop 7% in December, 30% Y-o-Y

NYISO locational-based marginal prices averaged $40.31/MWh in December, down by about 7% from November and slightly more than 30% from the same month a year ago, Robb Pike, director of market design and product management, said in the monthly operations *report*. Day-ahead and real-time load-weighted LBMPs came in lower compared to November.

Year-to-date monthly energy prices averaged $44.92/MWh in December, a 23% increase from a year ago. December's average sendout was 425 GWh/day, compared with 411 GWh/day in November and 444 GWh/day a year earlier.

Transco Z6 hub natural gas prices averaged $4.10/MMBtu for the month, compared with $4.23/MMBtu in November and down 3.2% from a year ago.

Distillate prices dropped compared to the previous month and were down 7.3% year-over-year. Jet Kerosene Gulf Coast averaged $12.54/MMBtu, down from $14.50/MMBtu in November. Ultra Low Sulfur No. 2 Diesel NY Harbor was down to $12.84/MMBtu, from $14.72/MMBtu the previous month.

December uplift decreased to -29 cents/MWh from -27 cents/MWh in November, while total uplift costs, excluding the ISO's cost of operations, came in higher than November.

The ISO's 23 cents/MWh local reliability share in December dropped slightly from 25 cents the previous month, while the statewide share stayed the same at -52 cents.

The Thunderstorm Alert cost in New York City was $0/MWh, the same as in November.

Pike announced no updates to the monthly Broader Regional Markets *report*. ■

— Michael Kuser

NYISO News

Imports/Exports Top Talk at NYISO Carbon Pricing Kickoff

By Michael Kuser

RENSSELAER, N.Y. — The NYISO working group charged with shepherding carbon pricing into New York's wholesale electricity market kicked off its efforts Jan. 15 by taking up the issue of how import and export transactions would be handled under the pricing scheme.

A task force created in October 2017 by NYISO and the New York State Public Service Commission worked for more than a year developing a proposal to price carbon into wholesale markets. Last month, it turned the *proposal* and final details over to the ISO's stakeholder process. (See *IPPTF Hands off Carbon Pricing Proposal to NYISO*.)

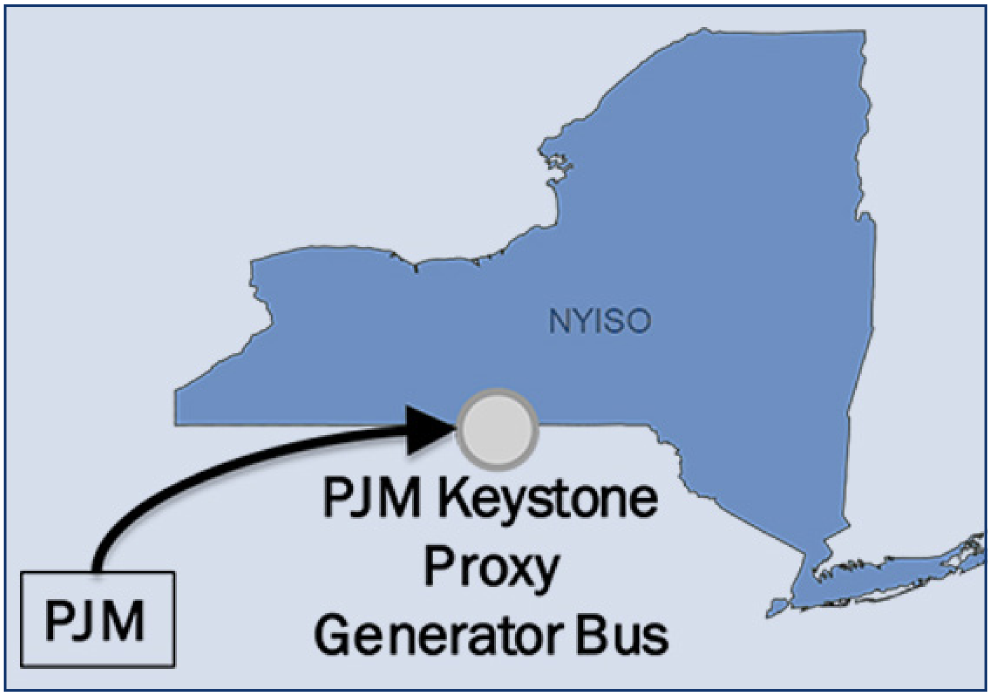
Ethan D. Avallone, NYISO senior energy market design specialist, *showed* the Market Issues Working Group (MIWG) several hypothetical transactions, pointing out that his examples "had to be extreme to show the effects of under- or overestimating the real-time carbon charge."

A carbon charge or credit would apply only to transactions that actually flow in real time, and to external transactions such that they compete with internal resources and each other as if the ISO was not applying a carbon charge to internal suppliers — that is, on a status quo basis, Avallone said. (See *NYISO Plan Revises Treatment of Carbon-Free Resources*.)

To calculate locational-based marginal prices, the examples in the presentation focused on prices at one NYISO proxy generator bus located outside the New York Control Area to represent a typical bus in an adjacent control area. There may be more than one proxy generator bus at a particular interface with a neighboring control area to enable the ISO to distinguish the bidding, treatment and pricing of products and services at the interface.

Imports into the NYISO market are paid the proxy generator bus price for the applicable external control area. For example, an import with costs of $40/MWh in the PJM market could sell at the $50 PJM Keystone Proxy Generator Bus price in the NYISO market for a potential net revenue of $10/MWh.

Several stakeholders at the meeting said they wanted better real-time data from the ISO, possibly using a unit-specific, rather than aggregated, approach.



A market participant intending to import into the New York Control Area (NYCA) will sell power at the proxy generator bus for the applicable control area in the NYISO market. | *NYISO*

"The reason we landed on this more aggregated approach is because we wouldn't be able to tell whether a unit-specific one is representative," Avallone said, adding that the fundamental question about what approach to take had been fully aired in the stakeholder process last year.

Seth Kaplan of EDP Renewables, the largest wind generator in the state, said his company had no position on the matter but suggested the ISO ask for market proposals for a unit-specific approach from those who were advocating one.

Howard Fromer, director of market policy for PSEG Power New York, offered that the ISO could provide day-ahead carbon data to help traders to better ascertain the right carbon adder in order to plan their bids.

"We would settle on the real-time LBMP," Avallone said in explaining the ISO's choice not to provide day-ahead data. "We have discussed recalculating LBMPs for a historical time period as if there were a carbon component [c] included [in order] to get an approximation of LBMPc in real time."

Michael DeSocio, the ISO's senior manager for market design, said energy traders were already "using some model, some heat rate model. Now you just have to add in a carbon adder, so it's not much different from what you do today."

Fromer said it would take some time to digest the detailed examples, and that his company wants to see carbon pricing move ahead, but it's "likely to have some impact on scheduling" as traders are "being forced into guesstimating on the day-ahead LBMPc."

Scott Leuthauser, manager of regulatory affairs and business development for H.Q. Energy Services (U.S.), read a prepared statement saying his company opposes applying the carbon charge, as proposed, to external transactions because it creates additional risks for them. External resources have no control over NYISO carbon emissions and no way of physically hedging against the risk, he said.

"As we have said before, it is better for traders to assess and bear the risk," Avallone said.

The MIWG is next scheduled to meet today to review Tariff sections impacted by a carbon adder.

New Zone J Operating Reserves

NYISO is speeding up the stakeholder process in order to implement by June a Zone J (New

Continued on page X

NYISO News

NYPSC Clarifies Value Stack Capacity Limits

Ruling Lands JFK Solar Project Partly Outside VDER

By Michael Kuser

The PSC held its regular monthly session in Albany on Jan. 17.

The New York Public Service Commission on Thursday ruled that John F. Kennedy International Airport could have a solar project up to 5 MW compensated under the value stack program for distributed energy resources (VDER) while having other solar projects dedicated to serving on-site load (Case *18-E-0766*).

The New York Power Authority and the Port Authority of New York and New Jersey filed a *petition* last month for clarification on the issue of net metering and VDER eligibility for its community distributed generation solar project after Consolidated Edison said its tariff did not allow such compensation where more than 5 MW was located on one site.

Con Ed's Jan. 4 *response* said that while the commission had expanded the capacity limit for eligible projects from 2 MW to 5 MW, it "has not acted, however, to remove the longstanding requirement that all eligible on-site generation be counted toward the size limitation for NEM [net energy metering], and therefore value stack, eligibility." (See *NYPSC Expands VDER Project Size to 5 MW*.)

The commission's original VDER order of March 2017 directed that compensation for eligible DER transition from NEM to the value stack, a methodology that bases compensation on the benefits provided by the resources (Case *15-E-0751*).

The commission's Jan. 17 declaratory *ruling* said "the rated capacity of projects used solely for serving on-site load and not seeking compensation under the value stack or net metering should not be counted towards the rated capacity limit."

In response to Con Ed's concern that the ruling could result in utility-scale generators splitting off 5 MW of a larger project to receive value stack compensation, the commission noted "that such a situation would represent a significantly different fact pattern than the one presented. ... This declaratory ruling is intended to address only situations where the non-value-stack generation is used solely for serving on-site load."

Wholesale Concerns

"I find this ruling to be clear and helpful and a narrow clarification of the intent and of the intended application of our language," PSC Chairman John B. Rhodes said.

John B. Rhodes

"This is a simple but important interpretation of our 5-MW cap in the value stack compensation process," Commissioner Gregg Sayre said. "I never intended through my vote on the value stack to exclude a small project from value stack compensation just because a large customer has a bunch of other generation in the same area that won't ever hit the network."

James Alesi

Diane Burman

Commissioner James Alesi also supported the measure, but Commissioner Diane Burman voted no, saying "one concern is whether this intrudes on the wholesale market that would be going through the ISO process rather than here."

Ted Kelly, assistant counsel for the Department of Public Service, testified that "the reason that a project like this one or like another project that could be built under this declaratory ruling would not be an inappropriate avoidance of the wholesale market is because the primary project is intended for self supply, and customers always have the option of building generation for self supply, even beyond the 5-MW cap, without having to interconnect or be involved with the wholesale market. They can still be direct customers of a distribution utility while having that large generator for self supply."

Ted Kelly

Asked by Burman what would happen if NYPA and the Port Authority did something that would make it a wholesale market issue, Kelly said they would have to file an interconnection request with Con Ed.

"To the extent that NYPA has had an ongoing focus on increasing its jurisdictional reach, how do you see this item applying to that issue?" Burman said.

"This item is really within NYPA's core existing jurisdiction in that it's supporting one of its own customers, as Port Authority is a partial NYPA customer, including partially for its JFK load, supporting one of its own customers building on-site energy management tools, including renewables, energy efficiency and so on," Kelly said.

NYISO News

Commission Grants NYSERDA Access to Customer Utility Data

In a second ruling, the PSC granted the New York State Energy Research and Development Authority access to the data of customers not participating in NYSERDA programs to help the agency analyze the impact of its clean energy efforts (Case *14-M-0094*).

The commission's *order* directs NYSERDA and the state's utilities to develop a memorandum of understanding governing the data exchanges. It also directs the agency to detail its need for customer data; to justify why other data cannot serve that need; to limit sharing of the information; and to ensure that it is not used for financial gain by any third party.

"It's foundationally important that we ensure that the programs we approve do in fact work. Specifically, this means being able to tell if we're making a difference, and that requires data," Rhodes said. "This report assures that data in a way that's careful and appropriate, which is necessary given that we're talking about data and therefore about privacy and security."

"If you can't measure something, you can't improve it successfully," Sayre agreed.

Burman dissented without prejudice for NYSERDA to refile.

The order gives wide latitude to the agency without direct commission oversight "and that concerns me," Burman said. "And it's also being done without — in this case — without any external consumer advocates or other stakeholders having weighed in except for CPA [Consumer Power Advocates]," a *group* that represents hospitals, universities, medical schools and cultural institutions in New York.

"Frankly I think it is incumbent on anyone who's submitting a petition that directly touches upon consumers ... to make sure that there is direct outreach to consumer advocates or others who may be affected," Burman said. "I would have liked to see in the petition the actual studies expected to be done. That would give us and other stakeholders more information on exactly what is planned. It's a three-year plan and ... we'd like to know what to expect."

The commission also denied a request by New York City for unrestricted access to customer usage and other utility data.

"This sort of broad, nonspecific request is inconsistent with commission precedent," the order said.

The commission noted that its December 2018 order adopting accelerated energy-tefficiency targets opened a "comprehensive proceeding to assess the strategic use of customer energy usage data," and invited the city and other interested governmental entities to participate in that proceeding (Case *18-M-0084*). (See *NYPSC Expands Storage, Energy Efficiency Programs*.)

The named utilities in Thursday's order are Con Ed; Orange and Rockland Utilities; Central Hudson Gas & Electric; National Grid gas distributors National Fuel Gas Distribution, Brooklyn Union Gas and KeySpan Gas East; Niagara Mohawk Power; New York State Electric and Gas; and Rochester Gas & Electric.

The commission also granted NYSERDA's requests for relief from certain reporting requirements related to System Benefits Charge III and IV programs (Cases *05-M-0090*; *10-M-0457*). The *SBC* provides funding for NYSERDA programs targeting energy efficiency, research and development, and the low-income sector. ■

Imports/Exports Top Talk at NYISO Carbon Pricing Kickoff

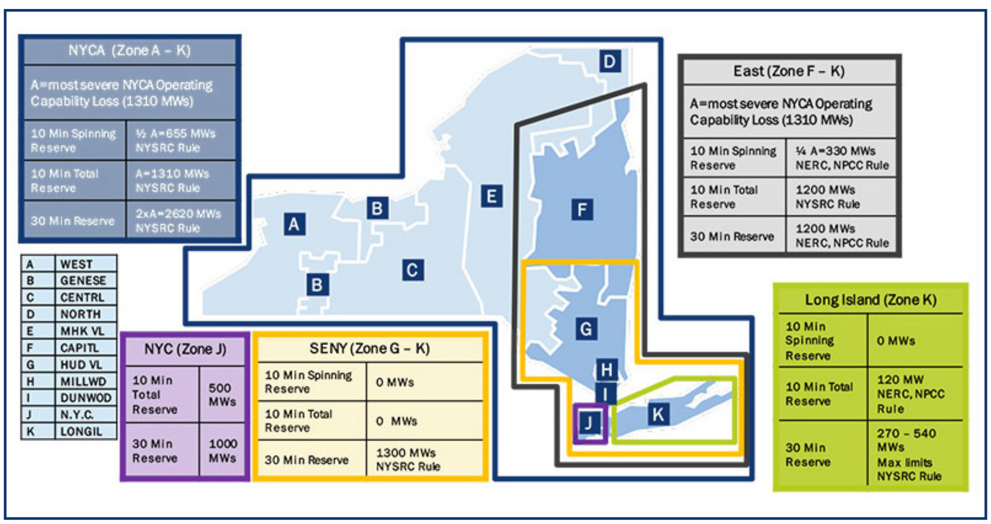
Continued on page X

York City) reserve requirement and procure 500 MW of 10-minute reserves and 1,000 MW of 30-minute reserves, the MIWG learned last week.

Ashley Ferrer, NYISO energy market design specialist, *told* the working group that creating a Zone J reserve region and associated reserve requirements can provide more efficient scheduling and procurement of resources, as well as location-specific market price signals.

The ISO is considering the appropriate operating reserve demand curve for the zone's reserves and will present its proposed pricing as part of further discussions regarding the proposal, Ferrer said.

Establishing a separate Zone J operating reserves requirement was originally recommended in the 2017 State of the Market *report* and later in the 2018 Management *Response* to an assessment by Analysis Group of wholesale market options regarding performance assurance.



NYCA operating reserves with Zone J | *NYISO*

The ISO will present market design and associated Tariff revisions to stakeholders this month and next, with the Business Issues and Management committees slated to vote on the proposal in March. Assuming stakeholder approval, the ISO would submit the proposal to the Board of Directors in April and file Tariff revisions with FERC seeking approval to implement in June. ■

PJM News

More Info Needed on Tx Line Options, Md. PSC Says

By Rich Heidorn Jr.

The Maryland Public Service Commission extended the schedule for its review of Transource Energy's controversial Independence Energy Connection for 30 days to allow parties to provide additional evidence on proposed alternatives.

The PSC rejected a motion by the Power Plant Research Program (PPRP) of the Maryland Department of Natural Resources to dismiss Transource's application for a certificate of public convenience and necessity (CPCN) or suspend the schedule.

But the commission's Jan. 15 ruling set a new deadline of Feb. 25 for the PPRP, PSC staff, the Office of People's Counsel (OPC) and local residents opposing the line to file direct testimony (Case #*9471*).

PSC staff and OPC supported PPRP's argument that the commission should reject the project because Transource failed to examine alternative solutions as required by state law. Staff recommended the commission grant the motion, suspend the procedural schedule and direct Transource to supplement its application.

The $372 million project would add two 230-kV double-circuit lines, totaling about 42 miles across the Maryland-Pennsylvania border.

The PPRP said Transource had failed to meet requirements to examine alternatives if an existing transmission line "is convenient to the service area; or the use of the transmission line will best promote economic and efficient service to the public."

The agency said the need for the eastern segment of the project could be met by the existing Furnace Run-Conastone and Furnace Run-Graceton 230-kV double-circuit transmission tower lines, each of which has only one 230-kV circuit and could carry a second. (See *Cancel Transource Line, Md. Panel Says*.)

Transource responded it was not required to study PPRP's proposed alternative and said it met the requirements of state law by analyzing "over 30 study segments."

"Disputes over whether the commission should consider an alternative are properly the subject of competing testimony at the evidentiary hearing," Transource said.

The commission said it was modifying the procedural schedule to allow the parties to conduct additional analysis or discovery regarding the use of PPRP's alternative.

"In response to PPRP's motion, Transource acknowledges that as the CPCN applicant — the party with the burden of proof — it should be prepared to present evidence at the hearing to address any suggestions by other parties that the proposed project should be denied because there exists a clearly superior alternative," the commission said. "This criteria includes the existing transmission line evaluation requirements set forth in [section 7-209 of the Public Utilities Article, Maryland Annotated Code]."

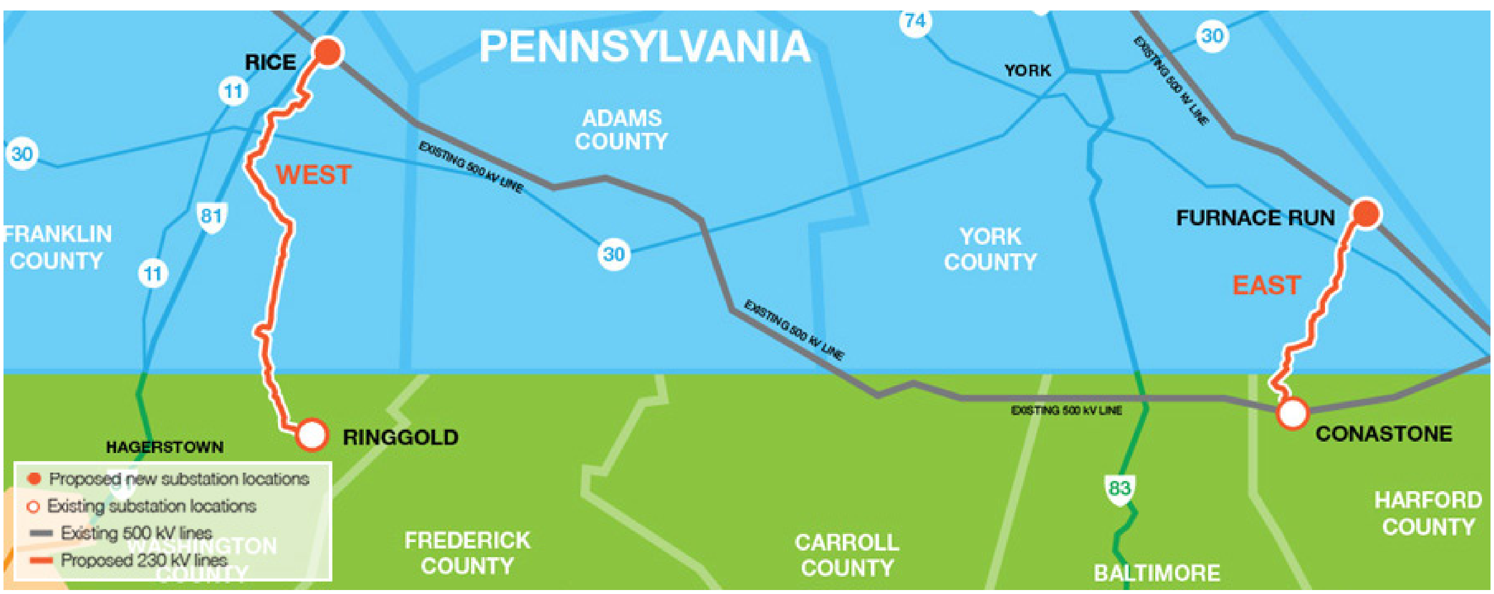
Rebuttal testimony will be due by March 18, with surrebuttal testimony and any PPRP response to public comments due April 1. The commission said it will allow live rejoinder testimony if needed during the evidentiary hearings.

Mary Urban, community affairs representative for Transource, issued a statement reiterating it has met all filing requirements under Maryland law.

"Transource has presented a substantial amount of information regarding alternatives," Urban added. "As the case proceeds, the company will respond as is appropriate under commission rules."

PJM said in November the project would reduce load costs by $707.3 million in net present value over 15 years, producing a benefit-cost ratio of 1.4. PJM declined to comment last week.

Assistant Attorney General Sondra Simpson McLemore, who filed the motion to dismiss for PPRP, did not immediately respond to a request for comment. ■



Once referred to as the AP South Congestion Improvement Project, Transource's Independence Energy Connection project would consist of two lines. The western portion would run from the Ringgold substation in Maryland to the Rice substation in Pennsylvania. The eastern line would run from the Conastone station in Maryland to the Furnace Run station in Pennsylvania.| *Transource*

PJM News

PJM MRC/MC Preview

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

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

Markets and Reliability Committee

1. PJM Manuals (9:15-9:35)

Members will be asked to endorse the following manual changes:

A. *Manual 38: Operations Planning*: Periodic review and update to procedures.

B. *Manual 40: Training and Certification Requirements*: Cover-to-cover periodic review.

C. *Manual 14B: Regional Transmission Planning Process*: Minor changes to ensure consistent terminology; revision to Section 1A on critical energy infrastructure information (CEII); Attachment C revisions concerning changes to load deliverability procedures; and updated generator and long-term deliverability procedures.

D. *Manual 14G: Generation Interconnection Requests Planning Process*: Cover-to-cover review.

2. Transmission Replacement Process (9:35-10:30)

Transmission owners will compete with load interests and merchant transmission operators for stakeholder endorsement of proposed manual revisions to address end-of-life facilities in the PJM planning process.

American Municipal Power's *proposed* changes to Manual 14B: Regional Transmission Planning Process, which were seconded by Old Dominion Electric Cooperative at the July 27, 2018, MRC meeting, will be considered the main motion. PJM's proposed *revisions*, which were moved by FirstEnergy and seconded by Public Service Electric and Gas at the Dec. 20, 2018, MRC meeting, will be the first alternate motion. (See *AMP Offers 'Best We Can Do' on PJM Tx Planning* and "Transmission Replacement," *PJM MRC Briefs: Dec. 20, 2018*.)

AMP would add language in section 1.5.4 to require sufficient information for stakeholders to replicate TOs' results on the need for proposed supplemental projects. It also would strike the word "useful" in references to "end of useful life."

PJM *said* its proposal provides additional transparency to the Regional Transmission Expansion Plan process and incorporates most of the AMP/ODEC-proposed changes along with input from TOs.

LS Power has proposed a *friendly amendment* to either proposal that would limit the ability of supplemental projects — which are developed by TOs based on their own criteria — to supplant competitively bid projects accepted by PJM to address regional reliability violations or other criteria.

The main motion will be voted first. If it fails, the alternate motion will be brought to a vote.

3. Energy Price Formation (10:30-11:30)

Members will be asked to endorse one of four *packages* of energy market rule changes from the Energy Price Formation Senior Task Force (EPFSTF). The Board of Managers told members last month that it will make a unilateral filing with FERC if members do not reach consensus on a package by Jan. 31.

The rule changes will affect shortage pricing; reserve products; synchronized reserves; secondary reserves; and the alignment of the day-ahead and real-time reserve markets.

PJM's *proposal* would replace the current stepped operating reserve demand curve (ORDC) with a sloped curve; the first horizontal segment would represent the minimum reserve requirement, with the downward sloping curve based on the probability of reserves falling below the minimum reserve requirement (PBMRR) in real time based on uncertainties.

The D.C. Office of the People's Counsel *proposed* a similar ORDC, except that the downward sloping curve would take into account the regulation requirement.

The Independent Market Monitor's *proposal* would leave the ORDC unchanged and reduce the current two-step penalty factor ($850 and $300) with a single penalty factor equaling the safety net energy offer cap of $1,000/MWh. If PJM approves a cost-based offer above that price, the penalty factor could increase in $250/MWh increments to a maximum of $2,000/MWh.

The PJM proposal would increase the price for the initial horizontal segment of the curve to $2,000/MWh and replace the second step of the curve with a downward sloping segment valued at $2,000 times the PBMRR.

Calpine *supports* the PJM proposal on reserve market changes except that it would add a transitional mechanism to the energy and ancillary services revenue offset to reflect expected changes in revenues in the determination of the net cost of new entry. (See *Monitor Sees Problems with PJM Reserve Pricing Plan*.)

Votes at the *EPFSTF* meeting Wednesday will determine the breadth of support for the proposals and how they will be considered at the MRC.

4. Incremental Capacity Transfer Rights Clarifications (11:30-11:45)

Members will be asked to endorse *revisions* to section 234.2 of the Tariff to require new service customers to request incremental capacity transfer rights (ICTRs) calculations during the facilities study phase. Customers can include up to three locational deliverability areas in the request.

Section 234.2 requires PJM to determine in the system impact study the increase in capacity emergency transfer limit resulting from an interconnection, merchant transmission facility or customer-funded upgrade.

The change is in response to a FERC order that found PJM had not been following section 234 for assigning ICTRs. PJM had clarified the procedure in Manual 14E, but FERC said it must also be added to the Tariff (*EL18-183*).

The MRC and MC will also be asked to endorse the changes on their first read so they can be filed with FERC by Jan. 31.

Members Committee

Consent Agenda (1:20-1:25)

Members will be asked to approve a revised *definition* of "on-site generators" in the market participation rules in the Tariff and Operating Agreement. The changes will affect distributed energy resources located behind a customer's meter participating as demand response to reduce load and as generation to inject power.

1. FTR Mark-to-Auction Credit Requirements (1:25-1:40)

The committee will be asked to approve a new

PJM News

mark-to-auction component for financial transmission rights credit requirements, a change prompted by the GreenHat Energy default.

Although a decline in market value can indicate increasing FTR risk, current rules do not provide for a collateral call when an FTR portfolio's value is deteriorating.

Proposal G-1 would consider the difference between the FTR purchase price and most recent market price. It was endorsed by the MRC by acclamation, with one objection, in December. (See "FTR Collateral," *PJM Market Implementation Committee Briefs: Dec. 12, 2018*.)

2. Energy Price Formation (1:40-2:40)

The committee will be asked to approve revisions to the energy and ancillary market rules to improve price formation. (See MRC item 3 above.)

3. Incremental Capacity Transfer Rights Clarifications (2:40-3:00)

Members will be asked to endorse revisions to section 234.2 of the Tariff to require new service customers to request ICTR calculations during the facilities study phase. (See MRC item 4 above.)

4. Opportunity Cost Calculator (3:00-3:30)

The committee will be asked to endorse *revisions* to Manual 15: Cost Development Guidelines governing generators' use of the Monitor's calculator as an alternative method of calculating energy market opportunity costs.

Members also will be asked to approve related revisions to Schedule 2 of the OA. (See "Opportunity Cost Calculator Vote Deferred," *PJM MRC/MC Briefs: Oct. 25, 2018*.) ■

— Rich Heidorn Jr.

SPP

Carias, Buffington Smoothly Assume MOPC Leadership

By Tom Kleckner

NEW ORLEANS — For a historic moment for SPP, the ascension of two women to the RTO's Markets and Operations Policy Committee leadership last week was fairly low-key.

NextEra Energy Resources' Holly Carias began her term as MOPC chair Jan. 15 by simply saying, "Thank you for letting me be the MOPC chair."

Then it was down to business for NextEra's director of regulatory affairs. She ran the meeting efficiently, wasting no time in moving from agenda item to agenda item. She conducted the votes quickly and brought the committee back on time from breaks.

"I'm glad to see you in a leadership position," Jim Eckelberger, SPP's chairman emeritus, told Carias during the lunch break.

Board Chair Larry Altenbaumer offered his own unsolicited comments during the opening introductions. "I think it's a good leadership team," he said.

Serving as the committee's vice chair is Denise Buffington, director of federal regulatory affairs for Kansas City Power & Light. She and Carias are only the second and third women to take a leadership position at the committee.

Asked if two women leading a male-dominated group — as is typical in the electric industry — is a good sign for women, Buffington replied unequivocally, "Yes!"

"Obviously, I'm excited for the opportunity to take a leadership role at the board level," she said.

| © RTO Insider

NextEra's Holly Carias (center) opens the January MOPC meeting as SPP's Lanny Nickell and KCP&L's Denise Buffington listen. | © *RTO Insider*

Diversity and Balance

Whereas SPP made a concerted effort to increase the diversity of its Board of Directors by adding two women as members last year, Vice President of Engineering Lanny Nickell said that was not the case with the MOPC appointments.

"I don't think the Corporate Governance Committee recommended Holly and Denise to serve as MOPC chair and vice chair, and the board approved that recommendation, to increase diversity," said Nickell, himself a new addition to the committee as staff secretary. "The recommendation was made because these were the two best candidates for the positions."

Both positions opened up late last year when Chair Paul Malone cycled off and Vice Chair Jason Atwood left Northeast Texas Electric Cooperative. Having already sent out one solicitation for vice chair, SPP sent out a second for chair or vice chair.

If anything, the board and CGC followed an unwritten rule in ensuring the MOPC chairs represented either a transmission user (Carias) or transmission owner (Buffington). As an added measure, Carias is also the first independent power producer representative to chair the committee since Dogwood Energy's Rob Janssen.

"Certainly, diversity of thought and skill sets and experience is important," Nickell said. "If you look at the history of chairs and vice chairs of MOPC, you'll note there has been an attempt to have a balance of perspectives."

Nickell said Carias is a collaborator who tries to find creative solutions "that tend to serve the interests of a broad group of parties."

"She seems to have SPP's regional interests in mind when she participates in our stakeholder discussions," he said.

And Buffington?

"She's very passionate," said Nickell. "She's very good at asking the right question to get [to] the root cause of an issue. She makes us think about what we can do and what we can do better. I think they will work together to be effective leaders for the MOPC."

Nickell has his own large shoes to fill, those of COO Carl Monroe, who served as the committee's staff secretary for 18 years. Claiming he won't be as smart as Monroe, the self-deprecatory Nickell did admit, "I've got good people around me, so we'll be fine."

'All About Process'

Carias became a committee member just last year, though she had previously attended meetings in her role as director of wind development for NextEra. She has been with NextEra for more than 11 years, following her discharge as a captain from the Air Force.

Buffington has been a steady presence on the committee for several years and recently chaired the Z2 Task Force. She joined KCP&L in 2010 after 13 years with the law firm Skadden Arps Slate Meagher & Flom, and she

SPP

holds a law degree from American University's College of Law and an MBA from the University of Missouri-Kansas City.

Buffington said she will focus on ensuring stakeholders receive meeting materials on time, a common complaint in annual stakeholder surveys.

"I'm a lawyer. I'm all about process," she said. "If you're trying to elevate the conversation at MOPC, people have to get the materials on time. I don't like getting materials the day of the meeting and the continual updates to the meeting materials."

That will be the least of the changes for the committee in 2019. Under Altenbaumer's leadership, the board has delegated additional authority to the committee, relinquishing its approval of changes to SPP's Tariff or criteria. Unless there's a dispute requiring an appeal to the board, the MOPC will now have final authority for those changes.

"That's a huge change," Carias told stakeholders. "These are exciting times in SPP."

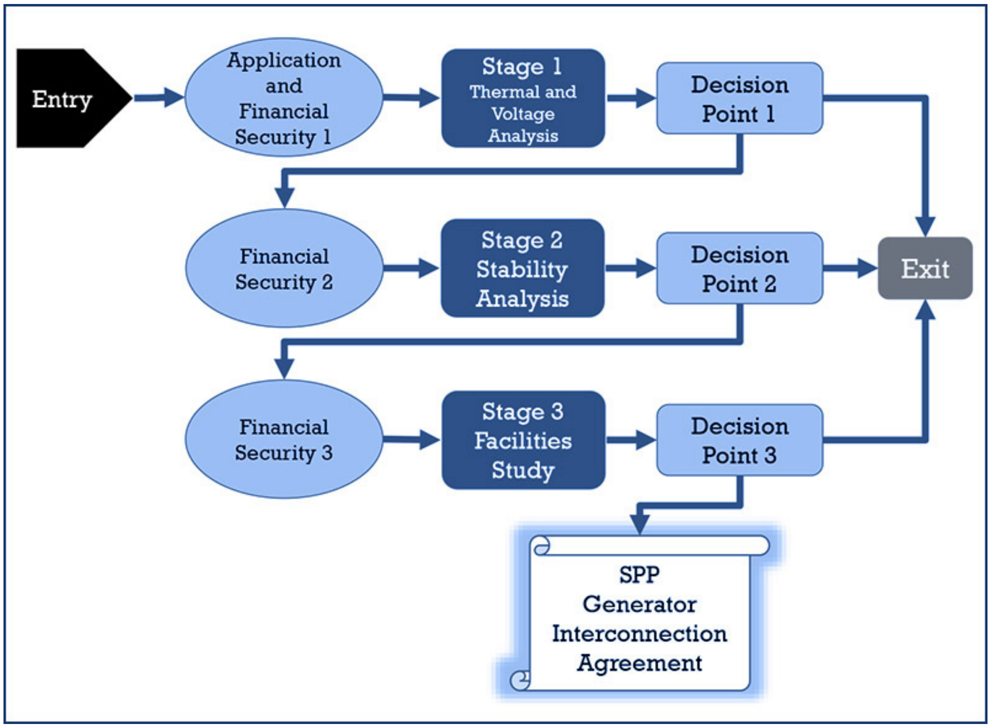
Nickell said he and Carias plan to adhere to Robert's Rules of Order, which was evident during last week's meeting.

"The result of [some] debate won't go to the board anymore," he said. "If that puts more emphasis on MOPC resolving those issues at MOPC, we'll have to get better at following those rules. I think motions need to be clearly understood, and the best way is seeing those in writing on the screen before a vote is taken." ■

NextEra's Holly Carias chats with SPP's Antoine Lucas before the MOPC meeting begins. | © *RTO Insider*

SPP

SPP Markets and Operations Policy Committee Briefs



Proposed GI study process (3-stage) | *SPP*

Stakeholders Approve Streamlined Generator Interconnection Process

NEW ORLEANS — SPP stakeholders last week unanimously approved changes to the RTO's generator interconnection process to simplify what had become a burdensome process involving the submission of repetitive data.

The Market and Operations Policy Committee approved a revision request (*RR335*) that adopts a three-stage study process: thermal and voltage analysis, stability analysis, and facilities study. The RR also changes the amount and timing of security deposits, publishes study models earlier in the process, and allows penalty-free withdrawals when costs increase above certain thresholds.

The task force said the new process will be easier for SPP to administer and for users to understand and navigate, with most upgrades being identified in the first stage. That would allow transmission customers to make an informed decision before committing to a lengthy and costly stability analysis.

The group said reducing the number of withdrawal requests late in the process would reduce restudies and uncertainty. Customers will be able to withdraw after the second of three decision points without incurring financial penalties when assigned upgrade costs increase by at least 35% and $15,000/MW between study stages.

The measure was brought forward by the Regional Tariff Working Group (RTWG), which took up the issue following last year's dissolution of the Generator Interconnection Improvement Task Force (GIITF). The GIITF was created in 2016 to identify improvements in SPP's transmission study process, which had become clogged with more than 62 GW of interconnection requests. (See *SPP Generator Interconnection Group Wraps up Work*.)

20-Year RR Tabled

The committee tabled a second RR (*RR334*) that would add the 20-year Integrated Transmission Planning (ITP) economic-only assessment as an eligible study in determining whether projects are eligible to become competitive upgrades.

SPP has not previously issued notifications to construct (NTCs) based on long-range studies, although it is not precluded. Evergy opposed the RR within the RTWG, saying the 20-year assessment is intended to be indicative and that no NTCs should be issued without additional analysis in the annual ITP study. To do so would mean SPP was issuing an NTC for a project without studying its reliability impact on the system, Evergy said.

The MOPC asked staff to return the RR when its language is clarified to make it clear the 20-year-assessment would not result in NTCs being issued without additional study to evaluate its reliability impact and the year the project is needed.

HITT Educates MOPC on its Progress, Learnings

The Holistic Integrated Tariff Team (HITT) conducted an education session before the MOPC meeting formally began, briefing stakeholders on its work and issuing a last request for additional information. The team has been meeting since April on a plethora of presentations and proposals.

SPP General Counsel Paul Suskie, who serves as the HITT's staff secretary, told the committee that a final report will be issued to the Board of Directors in April. The report will include details on which stakeholder groups will be tasked with working out the specifics in the Tariff language, policies, implementation and timelines.

"It's become obvious to HITT members that technology is rapidly changing and rapidly impacting our industry," Suskie said. "We always talk about turning the aircraft carrier in this industry. Technology is changing how rapidly the aircraft carrier is turning."

NPPD's Tom Kent opens the HITT education session. | © *RTO Insider*

Nebraska Public Power District's Tom Kent, who chairs the HITT, said the group has narrowed its high-level policy recommendations to four subjects:

- Aligning SPP's transmission planning processes and stakeholders' resource adequacy needs with the Integrated Marketplace and Tariff requirements;
- Reviewing of existing transmission cost allocation methodologies;
- Holisticly understanding of the Integrated Marketplace and essential reliability services in the face of the changing generation mix and new technologies; and

SPP

- Facilitating load-growth opportunities in the footprint.

A stakeholder panel on transmission planning and resource adequacy noted "traditional" planning processes have focused on the reliable delivery of firm capacity resources, while energy markets, public policy initiatives and other incentives have led to the increased development of variable energy resources.

Supply Adequacy Working Group Chair Brad Hans of the Municipal Energy Agency of Nebraska said his group is working to ensure SPP maintains the "right type of resources."

"How much variable energy resources do you allow in the footprint?" he asked. "The way we should look at it is, 'How much dispatchable resources do you need to keep at all times from a reliability perspective?'"

Arkansas Public Service Commission staffer Cindy Ireland summarized a review of SPP's cost allocation methodologies by saying, "At the end of the day, load is going to pay." A member of the Cost Allocation Working Group, Ireland said the group is discussing which is the appropriate load to pay.

The market panel said SPP is considering a ramping product, but as staff's Gary Cate said, pointing to MISO's and CAISO's products and ISO-NE's exploration of the same, "We're not breaking new ground with a ramp product."

1A Task Force's Fee Schedules OK'd

The MOPC approved four Schedule 1A rate schedules, an effort to recover SPP's costs from the users of its services.

Members backed a recommendation from the Schedule 1A Task Force, commissioned last July, for:

- Planning, scheduling and dispatch;
- Transmission congestion rights administration;
- Market clearing; and
- Markets facilitation.

Evergy's John Olsen said the group will now draft Tariff language and a white paper, which will be sent through the RTWG. He said the Tariff language would come back to the MOPC in April or July.

Olsen said the group spent much of its time discussing energy billing determinants and debated virtual transactions. He said one concern for the task force is avoiding the creation of discriminatory treatment.

The group has yet to include energy transactions in the rate design.

The measure was opposed by Oklahoma Gas & Electric Services and BP Wind Energy North America. ITC Holdings and Tenaska Power Services abstained.

MWG Withdraws 2 Revision Requests

The MOPC approved the Market Working Group's recommendations to withdraw an RR related to the timing of real-time balancing market submittals. *RR329* would have modified the market user interface (MUI) to allow

January's MOPC meeting | © *RTO Insider*

market participants to "systematically" submit certain offer parameters on a continual basis. As designed, the MUI locks out users less than 30 minutes before each operating hour.

SPP's Market Monitoring Unit said it could not support the RR because it doesn't include language requiring generators' parameters be based on physical limitations. The Monitor said it believes that physical parameters included in a resource offer should be based on "true, accurate and verifiable physical capabilities or limitations of the resource."

The MWG said it was also withdrawing *RR337*, which calls for the MMU to file an annual review of frequently constrained areas (FCAs). FERC's acceptance in December of SPP's revised plan for a timely update of FCAs elim-

Rate Schedule #	Schedule Description	What Costs are Recovered?	Who Pays?	Billing Determinants
1	Planning, Scheduling & Dispatch	FERC Account Categories: -Scheduling & Dispatch -Reliability Planning	Transmission Customers	Prior year 12-month coincident peak (as currently used in Sch 1A)
2	TCR Administration	Costs for administering TCR process	TCR Participants	All TCRs awarded and converted from ARRs
3	Market Clearing	Costs associated with clearing, monitoring, and settling market transactions	Virtual and Real-Time Market Participants	Real time gen, load, imports/exports, and virtual transactions
4	Markets Facilitation	Remaining market costs, not recovered in rate schedule #2 and #3	Real-Time Market Participants	Real time gen, load, & imports/exports

Proposed new rate structure | *SPP*

SPP

inated the requirement for an annual update. (See "FERC Approves SPP's Streamlined FCA Process," *SPP FERC Briefs: FCAs, NPPD Complaint, Refunds*.)

Staff Reports: MISO Event, Western RC Services

Staff told stakeholders that a FERC inquiry into last year's emergency event with MISO is expected to be completed by early in the second quarter.

In January, severe cold weather and generation shortfalls in MISO South led MISO to exceed its regional dispatch limit on transfers between its northern and southern footprints across SPP's system. MISO made emergency energy purchases from Southern Co. before operations returned to normal.

The two RTOs have been working since then to improve coordination across their seam.

Operations Vice President Bruce Rew told stakeholders that SPP's effort to provide reliability coordination services in the Western Interconnection remains on track to be certified in August. He said the RTO has added about half of the necessary staff and expanded some of its models to incorporate Western entities.

SPP has signed RC contracts with about 12% of Western Interconnection load. It is scheduled to go live with its RC services Dec. 3.

Staff reported that the 2019 ITP process is off to a slow start with a couple of slipped milestones but said that won't affect the downstream schedule. The study's economic model and its balancing authority reliability powerflow models are scheduled to be completed in November.

The detailed project proposal window opened Jan. 8 and will close Feb. 6.

At the same time, the 2020 ITP process has just begun. Director of Transmission Planning Antoine Lucas requested stakeholder engagement, saying staff would soon be soliciting information for load and generation profiles.

MOPC Adapts to Leadership, Other Changes

The Jan. 15 MOPC meeting was the first in 18 years without SPP COO Carl Monroe serving as staff secretary. He was replaced by Lanny Nickell, SPP's vice president of engineering.

"I guess we finally got it right enough, so we can let him step aside," cracked board Chair Larry Altenbaumer.

The meeting was also the first that stakeholders could access over the Internet.

Staff and members also recognized outgoing MOPC Chair Paul Malone for his "passionate, devoted and conscientious service." Malone is retiring from NPPD in February.

Among the several changes facing the committee is the newly delegated authority to approve Tariff- or criteria-related changes without sending them on to the board for final approval. Stakeholders can still appeal a MOPC decision to the board but must do so within a week of the decision.

The committee passed two such changes:

- Its unanimous endorsement of the 2019 SPP Transmission Expansion Plan (STEP), which lists all transmission projects needed over a 20-year planning horizon. The plan consists of 568 upgrades totaling $5.2 billion and documents the completion of $779 million worth of upgrades and the issuance of 23 NTCs last year.
- Its approval of East River Electric Power Cooperative's sponsored upgrades of a new 115-kV line and a 115/69-kV transformer near Aberdeen, S.D. The project will be a creditable upgrade eligible for incremental long-term congestion rights or cost recovery through Attachment Z2.

Staff Withdraws 4 Mountain West Tariff Changes

The MOPC's consent agenda included the withdrawal of four RRs related to SPP's proposed integration of the Mountain West Transmission Group: *MWG RR281*, *MWG RR282*, *MWG RR284* and *MWG RR286*.

The RRs were approved by the MWG in April 2018 but were rendered moot by the halt of integration efforts last year.

The 2020 ITP assessment scope's approval was pulled from the consent agenda because of concerns over its age-based retirement of certain generating units. It was approved separately despite opposition from Southwestern Public Service and Xcel Energy Southwest Transmission.

The consent agenda's unanimous approval also resulted in a charter revision for the Model Development Working Group, expanding its voting membership to "up to" 24, and in the Event Analysis Working Group's (EAWG) dissolution. *Created* in 2017 to review major bulk electric system events, the EAWG was never

SPP Southwest Power Pool

Markets and Operations Policy Committee

RESOLUTION

Whereas Paul Malone, Director, Transmission Policy for Nebraska Public Power District (NPPD), has faithfully served and supported the electric utility industry for over forty years and specifically Southwest Power Pool, Inc. (SPP) for nearly a decade;

Whereas Paul has been active on the Markets and Operations Policy Committee since NPPD joined SPP and more recently served as chairman of the committee since January 2017;

Whereas Paul served as the chairman of the Seams Steering Committee (2013-2016) and was *instrumental* in guiding development of policies that govern interactions between SPP and its neighbors;

Whereas Paul actively participated in the Regional Tariff Working Group (2008-2014) and the Competitive Transmission Process Task Force (2015-2019);

Whereas Paul's leadership was always conducted in accordance with SPP's core values of balance, diversity, respect, transparency and integrity; and

Whereas Paul will retire from Nebraska Public Power District employment and resign from his SPP organizational group positions in 2019; then

Be it now therefore resolved that the Markets and Operations Policy Committee recognizes Paul Malone for his passionate, devoted and conscientious service and expresses deepest gratitude for *helping SPP members work together to keep the lights on – today and in the future!*

Resolved this fifteenth day of January, Two thousand and nineteen.

olly Carias
airman, Market Operations and Policy
mmittee

Lanny Nickell
Staff Secretary

MOPC's resolution for Paul Malone | © *RTO Insider*

called into action. Its responsibilities will now be picked up by other working groups.

Approved RRs included:

- *BPWG RR331*: Clarifies and reorganizes interchange tagging business practices for denial of schedules and emergency tags.
- *MWG RR326*: Updates expired language (replacing "bill statements" with "settlement determinant report") and removes a redundant requirement to create documentation for a miscellaneous charge already included in the asset owner determinant report.
- *MWG RR341*: Aligns the Integrated Marketplace protocols and Tariff to comply with FERC Order 745 by modifying how the net benefits test is calculated.
- *MWG RR342*: Modifies attributes, definitions and names of determinants, and restructures a calculation to be consistent with existing calculations. The changes are necessary to implement automated contingency reserve deployment tests.
- *RTWG RR330*: Changes non-firm daily service submissions to no later than 10 a.m. CT and closes the daily non-firm submission window when the non-firm hourly submission window opens, matching the release of unscheduled firm transmission service to the non-firm market.
- *TWG RR237*: Removes duplicative or unnecessary language in the SPP criteria to make it consistent with NERC Standard TPL-001-4's requirements and account for the differences between NERC's requirements and SPP's Tariff. ■

— Tom Kleckner

SPP

SPP Strategic Planning Committee Briefs

SPC, Stakeholders to Address EPA 111b Rulemaking

NEW ORLEANS — SPP staff have been tasked with providing "at least an outline" of comments next week for submittal to EPA in response to its proposed rulemaking under Clean Air Act Section 111b.

OGE Energy's Usha Turner | © RTO Insider

Usha Turner, OGE Energy's director of environmental affairs and federal public policy, appeared before SPP's Strategic Planning Committee last week to make the request, saying that the RTO's role as a reliability manager "carries significance" on this issue.

EPA in December *proposed revisions* to a 2015 Clean Air Act rule stipulating that partial carbon capture and storage (CCS) technology was the best system of emission reduction (BSER) for new coal-fired plants. Turner said the changes would mainly revise CO_2 emissions limits that apply to new coal plants but pointed out that the agency is also accepting comments on the need to revise the rule to allow more flexibility in operating simple cycle combustion turbines (SCCTs).

"It would be important for SPP to engage," Turner told the SPC during its Jan. 16 meeting. "We found in talking with the EPA last year a lack of understanding of how this market works, and why the diversity and flexibility of resources and the diversity in technology is very important in your role of providing affordable and reliable electricity in your service territory."

The comment period is open through Feb. 21. Turner said the deadline could be delayed, however, by the partial government shutdown.

Turner said SCCTs have a rolling 12-month efficiency-based generation output limit, but if a unit exceeds this limit, it must comply with combined cycle units' CO_2 limits.

"The rule establishes output-based restrictions for simple cycle units," Turner explained. "If you operate those units above a certain capacity factor, you must meet the emissions standards of a combined cycle unit, which, by design, is unachievable."

January's Strategic Planning Committee meeting in New Orleans | © RTO Insider

"This is a pretty substantial issue," said Golden Spread Electric Cooperative's Mike Wise, noting his company discussed the issue with EPA recently when installing its own CTs. "We're concerned about these rules. The pool's need for these resources shouldn't be unduly constrained."

"Our area is really a good laboratory," SPP Vice President of Engineering Lanny Nickell said. "We should not be constraining these units that absolutely keep the grid's reliability functioning properly."

Nickell said he wasn't sure whether the Feb. 21 deadline would provide SPP enough time to study the rule's impact, but he said common sense told him that "new units, more efficient and economical, are being punished."

"I believe that's where we end up. We'll see more emissions," he said.

Michael Desselle, the RTO's chief compliance and administrative officer, reminded the SPC about the organization's agnostic view of resources.

"If there's any advocacy we should be talking about, it's to leave us the flexibility in the marketplace, and the RTO, for reliability purposes," he said. "You need a diverse portfolio of resources."

Advanced Power Alliance's Steve Gaw | © RTO Insider

Steve Gaw, representing the Advanced Power Alliance (formerly The Wind Coalition), said he was concerned about a lack of analysis about the rule's impact on the market. "I'm not sure SPP should be advocating for individual companies with varied interests," he said.

Altenbaumer Continues to Exert his Influence

Larry Altenbaumer is playing a strong hand in his first year as chairman of SPP's Board of Directors.

In the few months since replacing Jim Eckelberger last year, Altenbaumer has revamped board meetings, shortening the duration and focusing them on strategic discussions with members and the Regional State Committee. (See "Altenbaumer Tweaks New Governance Schedule," *SPP Board of Directors/Member Committee Briefs: Oct. 30, 2018*.)

Pointing to stakeholder satisfaction surveys that indicate shortfalls in strategic planning, Altenbaumer said he wants to make better use of the opportunities for the board and its interaction with the Members Committee and the RSC.

Altenbaumer has also assumed chairmanship of the SPC. Long-time committee chair Wise is now vice chair.

Altenbaumer told the SPC he will also chair a task force on affordability and value, an initiative he has been pushing since last January. He hopes the group's work will be incorporated into SPP's 2020 operations planning and budget cycle.

"We'll make an assessment in October this year about what further steps might need to

SPP

be addressed," Altenbaumer said.

The task force is scheduled to hold its first meeting on Jan. 30, following the board's regular quarterly meeting. Altenbaumer said the meetings will be "quasi closed," with each SPP member entitled to have one representative attend.

Outside groups will be invited to present best practices and their own successful experience within other organizations, Altenbaumer said. He said the group will identify ways to better communicate the task force's efforts and will work to "keep the RSC up to speed."

The task force will report to the board and also includes CEO Nick Brown and Directors Bruce Scherr and Julian Brix; Markets and Operations Policy Committee Chair Holly Carias, with NextEra Energy Resources; Wise; retired Director Harry Skilton; and member representatives Darrin Ives (Evergy), Jerry Peace (OGE Energy) and Jim Jacoby (American Electric Power).

SPC leadership (left to right): SPP's Barbara Sugg, Chair Larry Altenbaumer and Vice Chair Mike Wise | © *RTO Insider*

Staff Continue Work on Validating NITS Data

SPP staff will continue to work with members as it struggles to provide a solid foundation for validating accurate network integration transmission service (NITS) data.

COO Carl Monroe reviewed staff's 2018 efforts in surveying customers' understanding of their responsibility to report NITS load. He said grandfathered agreements and behind-the-meter generation have hindered integrating the reported data.

SPP COO Carl Monroe | © *RTO Insider*

Transmission customers are legally responsible for reporting their load, Monroe said, but this information may also be provided by meter agents. He said a single NITS contract can involve multiple pricing zones, with each zone comprising multiple delivery points, and that a single transmission zone can have multiple settlement locations.

Asked by Altenbaumer how close SPP is to where it should be in reporting the data on a 1-to-10 scale, Monroe said, "Eight or 9. I'm not sure it's a 10, but that's a Carl Monroe sense."

While the work is not yet complete, Monroe said he is ready to facilitate a discussion with interested stakeholders to draft a revision request for mapping NITS data. ■

— Tom Kleckner

Company Briefs

FERC Orders PATH to Redo Rate Filing

FERC on Thursday ordered developers of the canceled Potomac-Appalachian Transmission Highline (PATH) to recalculate their cost of service, saying an earlier filing improperly accounted for general advertising costs and land transactions. The commission found that PATH had only partially complied with its January 2017 ruling (Opinion No. 554) concerning its formula rates and abandonment recovery.

In that ruling, the commission ordered the developers, a joint venture of American Electric Power and FirstEnergy subsidiary Allegheny Power, to refund more than $7 million to ratepayers, mostly for disallowed advertising, lobbying and "advocacy-building" costs. (See "$7M Refund Ordered on Abandoned PATH Tx Project," *FERC Orders Tx Refunds, Investigates Pipeline Rates in PJM*.)

The $2.1 billion PATH project was approved in PJM's 2007 Regional Transmission Expansion Plan. It would have run from AEP's John Amos coal generator in St. Albans, W.Va., to New Market in Frederick County, Md. PJM canceled the project in 2012 after determining it was not needed based on revised load forecasts.

More: *ER09-1256-004, ER12-2708-006*

5 Companies Team up to Purchase Solar Power

Bloomberg, Cox Enterprises, Gap, Salesforce and Workday have formed a group to purchase 42.5 MW from a 100-MW solar facility in North Carolina developed by BayWa r.e.

Coming together as the Corporate Renewable Energy Aggregation Group, it is the first example of companies collaboratively entering into a virtual power purchase agreement, according to Bloomberg.

The five businesses began collaborating in 2017 at an event hosted by the Rocky Mountain Institute's Business Renewables Center. The deal was facilitated through LevelTen Energy and its renewable procurement platform.

More: *Bloomberg*; *Fast Company*

New Company GBatteries Claims Tech Leap in EV Charging

GBatteries, a newly unveiled company led by battery industry veterans, says it has developed an adapter that could make using electric vehicle charging stations as quick as filling a gas tank.

"The AI-powered charging algorithm ... is the first and only demonstrated technology capable of higher than conventional net charge rates with lower heating and degradation of lithium ion batteries," the company said in a release.

GBatteries claims the adapter can allow a standard 60-kWh battery with a 238-mile range to charge halfway within five minutes.

More: *Axios*

Google to Power Data Centers with Solar Plants

Google last week announced it would power two data centers it is building in Alabama and Tennessee with electricity purchased from solar farms.

NextEra Energy will build a 150-MW facility near the Tennessee Valley Authority's abandoned Bellefonte nuclear plant in Hollywood, Ala., making it the largest solar farm in the state upon completion. TVA will purchase the power to deliver to Google's $600 million data center it is building on the site of the agency's former Widows Creek coal plant site.

In Tennessee, Invenergy will build another 150-MW solar farm in Yum Yum that will power Google's data center near Clarksville.

More: *Times Free Press*

Hearing Set on AEP-West ROE

FERC ordered hearing and settlement procedures on East Texas Electric Cooperative's challenge to the return on equity of the AEP-West companies (Public Service Company of Oklahoma, Southwestern Electric Power Co., AEP Oklahoma Transmission and AEP Southwestern Transmission).

The co-op contends AEP's 10.7% ROE, which resulted from a 2009 settlement agreement, is no longer just and reasonable and should be reduced to 8.71%. The complaint covers a 15-month period of Sept. 6, 2018, through Dec. 6, 2019.

The commission said its chief administrative law judge may choose to consolidate this proceeding with docket EL17-76, a dispute over the ROE for June 5, 2017, through Sept. 5, 2018. The commission set that ROE complaint for hearing in November 2017.

More: *ER18-199*

Federal Briefs

Rehearing Rejected on Tri-State SPP Placement

FERC on Thursday denied Nebraska Public Power District's request for rehearing of its May 2018 order approving the placement of certain Tri-State Generation and Transmission Association transmission facilities in SPP transmission pricing zone 17. (See *FERC Rejects NPPD Objection to Tri-State Zonal Placement*.)

The commission said NPPD's request "repeats arguments that it previously presented on issues that were fully explored on the record during the course of the hearing and that both the presiding judge (in the initial decision) and the commission (in Opinion No. 562) squarely addressed."

More: *ER16-204-004*

Duke Energy Progress Cleared in Rate Dispute

FERC rejected a complaint by North Carolina Electric Membership Corp. (NCEMC) alleging it was being overcharged because Duke Energy Progress (DEP) had failed to reflect in its wholesale transmission rates the 2018 federal corporate income tax rate cut and other tax-related measures.

NCEMC said DEP also had failed to account for the return of excess accumulated deferred income taxes (ADIT) and reductions in the North Carolina state corporate income tax rate effective Jan. 1, 2014.

More: *EL18-168*

Wildfire Prevention Stalled by Shutdown

The nearly monthlong government shutdown has delayed contracts for firefighting equipment, halted hiring for seasonal firefighters and stopped planned burns to manage forests in wildfire-prone states such as California and Oregon.

The winter is a crucial time for federal agencies — the Forest Service, National Park Service, Bureau of Land Management, Fish and Wildlife Service, and Bureau of Indian Affairs — to work with private companies and organizations on wildfire prevention and planning. Because of the shutdown, the vast majority of government-funded work isn't being done.

"Some of the time you just can't get back," Nick Goulette, executive director of The Watershed Center, a nonprofit that does community forest and fire management in northwest California, told Bloomberg Environment. "If it's a two-month shutdown, it doesn't mean you've just lost two months of work. Some of that work gets bumped to another fire season, and we're another year behind."

More: *Bloomberg Environment*

BOEM Recalls Furloughed Employees to Work on Drilling Lease

The Bureau of Ocean Energy Management has called furloughed employees back to work during the partial government shutdown on the sale of a lease for oil and gas drilling in the Gulf of Mexico.

The bureau's updated shutdown contingency plan, published Jan. 8, drew complaints from House Democrats, who told acting Interior Secretary David Bernhardt that the move appears to be illegal and demanded an end to the activity.

More: *Politico*; *CNN*

State Briefs

ARIZONA

Report: Pinnacle West Spent $37.9M to Fight Ballot Measure

The latest finance report filed Jan. 15 with the state by Arizona Public Service parent company Pinnacle West Capital shows that the company spent $37.9 million in the effort to defeat Proposition 127.

The ballot measure, rejected by voters in November, would have required utilities in the state to get half their electricity from renewable resources.

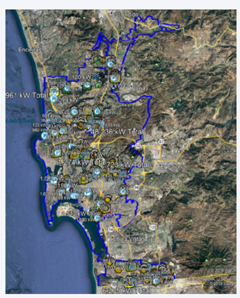
It was supported by billionaire activist Tom Steyer and his environmental group, NextGen America, which spent more than $23 million.

More: *The Arizona Republic*

CALIFORNIA

Survey Says Potential for more Solar in San Diego

A clean energy advocacy group last week released a "solar siting survey" that identified 500 MW of locations with potential for large-scale solar deployments within the city



limits of San Diego and pinpointed more than 120 prospective locations that could be home to projects of a minimum of 1 MW.

The Clean Coalition used Google Earth to survey the city block by block, breaking down the results by ZIP code. The group said more than 75% of the sites were on parking lots and structures.

"Almost everybody thinks about solar in built environments as being on rooftops," said Craig Lewis, the group's executive director. But "three-quarters of all the siting potential in urban and suburban environments is actually on parking lots and parking structures … almost nobody has any sense of that."

More: *The San Diego Union-Tribune*

KANSAS

KCC Briefs Lawmakers on High Utility Rates

Corporation Commission staff last week briefed the Senate Utilities Committee on the commission's 226-page rate study detailing how the state's utility rates went from being among the lowest in the area about 11 years ago to being among the highest now.

According to the report, nearly 35% of Westar Energy's rate increases were tied to environmental retrofit needs for coal-fired plants and slightly more than 25% were related to transmission delivery charges. Kansas City Power & Light attributed nearly 33% of its increases to retrofitting and slightly more than 11% to delivery charges.

The utilities also spent millions of dollars complying with a now-repealed state rule for 20% of energy to come from renewable sources by 2020, staff said.

More: *The Topeka Capital-Journal*; *The Associated Press*

LOUISIANA

PSC Approves Cleco Acquisition of NRG Assets in State

The Public Service Commission last week approved Cleco's $1 billion purchase NRG

South Central Generating's assets in the state.

The deal, announced last February, involves eight plants with a total capacity of 3,555 MW. Most of the plants will be operated by Cleco, except the 1,279-MW, natural gas-fired Cottonwood Generating Station in East Texas, which will be leased back to NRG, who will operate it until May 2025.

The newly acquired assets and employees will operate as Cleco Cajun, which will base its operations in New Roads. FERC approved the deal in December. (See *FERC Clears Cleco to Buy NRG Generation in South*.)

More: *Baton Rouge Business Report*

MAINE

Residents Debate Proposed Longroad Wind Farm

Hancock County residents last week gathered in Aurora to discuss a proposal for a 72.6-MW, 22-turbine wind farm under review by the Department of Environmental Protection.

Most of those who spoke were in favor of Boston-based Longroad Energy Partners' proposed Weaver Wind project, which would be located in Osborn and Eastbrook, with operations based in Aurora.

"Residents are looking for some tax relief," Eastbrook resident Julie Curtis told the panel of three DEP representatives. "We're looking for some businesses to develop. We would see this as a good thing for us. We are for this."

More: *The Ellsworth American*

MARYLAND

PSC Approves Utilities' EV Charging Pilot Program

The Public Service Commission last week approved a modified version of a five-year electric vehicle charging infrastructure pilot program proposed by four of the state's largest electric utilities.

The decision supports the deployment of more than 5,000 total Level 2 and DC fast-charging stations in the service territories of Baltimore Gas and Electric, Delmarva Power and Light, Potomac Edison and Potomac Electric Power Co. The state has a goal of 300,000 zero-emission electric vehicles by 2025.

All four utilities must develop an EV time-of-use rate design as part of their plan to provide rebates to customers for the costs of the chargers.

More: *Maryland Public Service Commission*

MASSACHUSETTS

Falmouth Selectmen Vote to Shut down Wind Turbines

Four of the five members of the Falmouth Board of Selectmen voted to shut down two 1.65-MW wind turbines owned by the town.

Selectman Samuel Patterson abstained, while Selectman Douglas Jones made the motion. "I have no interest in having these turbines run in Falmouth ever again," Jones said.

Wind 1 and Wind 2, which went online in 2010 and 2012, respectively, were the subject of nine lawsuits by abutters during their operation. Neighbors complained about a long list of turbine-related health effects.

More: *Cape Cod Times*

RHODE ISLAND

Vineyard Wind Offers $6.2M to Compensate Fishermen

Vineyard Wind is offering to pay state fishermen $6.2 million in compensation for lost access to fishing grounds as part of a mitigation plan for its proposed offshore wind farm that also includes the creation of a $23 million fund to research new gear and technology to support safe fishing in and around wind turbines.

The offer, however, falls short of fishers' demands. OAn analysis by the Department of Environmental Management estimated the potential drop in revenues they would suffer from losing access to the waters where Vineyard wants to erect 84 turbines to be between $30.5 million and $35.6 million over the 30-year life of the wind farm.

The company disagreed with the DEM's analysis and came out with its own study that estimated the loss to be less than half of what the department estimated. "Vineyard Wind believes this mitigation package provides substantial financial contribution to the impacted fishermen," it said in the offer.

More: *Providence Journal*

SOUTH DAKOTA

Bill to Cut Solar Power Permit Timeline Moves Forward

The Senate Committee on Commerce and Energy last week advanced a bill that would treat solar facilities the same as other resources in the permitting process.

Currently, solar developers are required to submit a notification six months before filing an application. The bill would eliminate that notification period, and the Public Utilities Commission would have a year to consider the application once filed, the same amount of time as any other resource.

The bill was introduced in the Senate at the request of the PUC.

More: *Capital Journal*

WYOMING

Gordon Requests $10M for CCS Coal Plant in Budget

Gov. Mark Gordon last week included $10 million in a supplemental budget request to help pay for the construction of an experimental, 5-MW advanced coal-generating plant capable of capturing at least 75% of its carbon emissions.

The funding for the plant, which would support the University of Wyoming School of Energy Resources, would be used to leverage up to $40 million in grant funding from the U.S. Department of Energy for another project to help supplement the work of the Integrated Test Center, a public-private partnership that studies carbon capture and sequestration.

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