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Trump Names Energy Lawyer McIntyre as FERC Chair

By Michael Brooks

From left to right: Robert Powelson, Neil Chatterjee, Kevin McIntyre, Cheryl LaFleur and Richard Glick.

The White House on Thursday announced that President Trump intends to nominate lawyer Kevin McIntyre as chairman of FERC.

The coleader of Jones Day's energy practice in D.C., McIntyre has represented energy companies in litigation, compliance and enforcement matters and corporate transactions.

McIntyre, who has been rumored for months as Trump's choice for the chair, would join more than a dozen other Jones Day alumni in the administration, including White House Counsel Don McGahn, a former Jones Day partner. Trump's campaign reportedly has paid the firm $3.3 million in legal fees since 2015.

The White House said Trump will ask the Senate to confirm McIntyre for the remainder of former Chair Norman Bay's term, which ends in 2018, and a full term ending in 2023.

McIntyre is the third Republican to be nominated by Trump for the five-member commission, which could soon be restored to full strength.

Pennsylvania Public Utility Commissioner Robert Powelson and Neil Chatterjee, energy adviser to Senate Majority Leader Mitch McConnell (R-Ky.), both Republicans, have already advanced out of the Senate Energy and Natural Resources Committee and are awaiting confirmation votes by the full Senate. Trump has also said he intends to nominate Richard Glick, general counsel for the Democrats on the committee. (See *Trump*

Continued on page 34

Illinois Zero-Emission Credit Suit Dismissed

By Rich Heidorn Jr.

Clinton Power Station, one of the beneficiaries of Illinois' zero-emission credits

A federal judge on Friday dismissed challenges to Illinois' zero-emission credit program, saying the customers and independent power producers who filed suit lacked standing and failed to exhaust their remedies at FERC.

U.S. District Court for the Northern District of Illinois Judge Manish S. Shah ruled in favor of motions by the state and Exelon to dismiss the case. "The ZEC program falls within Illinois' reserved authority over generation facilities. Illinois has sufficiently separated ZECs from wholesale transactions such that the Federal Power Act does not pre-empt the state program," the judge wrote in a 43-page opinion (17-cv-1163, 17-cv-1164).

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See related story, NY Cites Allco Ruling in Defense of ZECs, p.14

California Lawmakers Extend Cap-and-Trade

By Jason Fordney

California's landmark program to combat climate change has received a new lease on life — 10 years, to be exact.

Both houses of the California State Legislature voted late Monday to extend the state's greenhouse gas (GHG) cap-and-trade program until 2030 (AB-398). The bill now advances to the desk of Gov. Jerry Brown, a key supporter of the legislation.

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See related story, California Zero-Carbon Power Bill Advances, p.5

Also in this issue:

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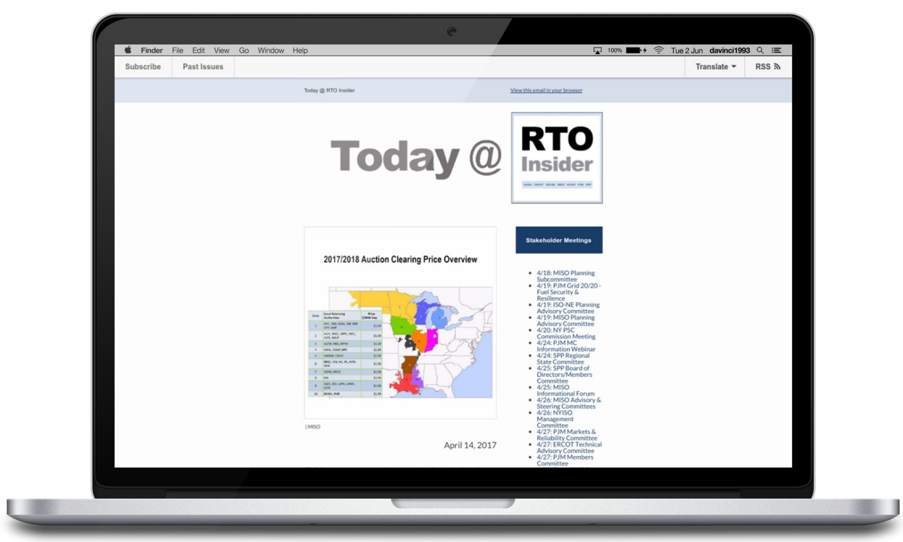

Correction

An article in last week's newsletter incorrectly stated that Dominion's offshore wind project off the coast of Virginia would interconnect near Marine Corps Base Camp Pendleton, which is in California. The project will interconnect near the Virginia National Guard's Camp Pendleton, which is in Virginia Beach.

CAISO NEWS

EIM Leaders Endorse CAISO Gas Constraint Measure

By Jason Fordney

FOLSOM, Calif. — Western Energy Imbalance Market (EIM) leaders last week endorsed a CAISO proposal that would allow the ISO to constrain output from natural gas-fired plants across the EIM in response to potential restrictions on gas deliveries.

The five-member EIM Governing Body voted unanimously to approve applying to the entire EIM footprint the market tools developed by CAISO in the Aliso Canyon Gas-Electric Coordination Phase 3 straw proposal, which will go before the ISO's Board of Governors later this month.

CAISO originally created the mechanism — which gives the grid operator authority to curtail output from plants in gas-constrained areas — to address reliability worries stemming from the outage at the Aliso Canyon gas storage facility. The latest proposal would extend that authority throughout the footprints of both the ISO and the EIM.

Restrictions on gas withdrawals from the 86-Bcf facility near Los Angeles have created supply concerns for power plants, and there are efforts underway to shut the facility down for good as residents still complain of health problems from the massive gas leak discovered there in October 2015. The California Public Utilities Commission is exploring closing the facility completely. (See *Study to Weigh Aliso Canyon Shutdown*.)

If FERC approves the plan sanctioned by the EIM body, the market tool will not expire in November as previously planned. CAISO said the tools will be in effect until it completes development of a set of commitment cost and default energy bid enhancements.

Greg Cook, CAISO's director of market and infrastructure policy, told the body that there are continuing operational risks from the outage at Aliso Canyon. The constraints will address situations in which EIM gas-fired plants have limitations on the amount of gas they can burn in excess of what is scheduled, as well as when generators have limited firm pipeline capacity and additional capacity is not available when gas demand is high.

Governing Body Chair Douglas Howe questioned whether the program could create opportunities for market abuse and whether CAISO's Department of Market Monitoring supported the measure. The department recently commented that the ISO had not fully justified the plan. (See *Qualified Support for CAISO Gas Constraint Plan*.)


Howe

"How convinced can we be that we won't be opening up the door to market abuse in the EIM portion" outside CAISO? Howe asked.

There will be a well-vetted market process to make sure there is a legitimate physical constraint and opportunities are not created for market abuse or other unintended consequences, CAISO Vice President of Market and Infrastructure Development Keith Casey told Howe. The tools would only be used to manage physical supply problems on the system, not for economic purposes.

CAISO said it plans to follow a recommendation from the Monitor that it automate the process by which transmission paths are deemed uncompetitive, which triggers the mitigation measures.

The board also unanimously approved a proposal to include additional gas price indices to be used as a price threshold in the net benefits test, and changes to the board's charter regarding its interaction with the Regional Issues Forum.

California Lawmakers Extend Cap-and-Trade

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"Tonight, California stood tall and, once again, boldly confronted the existential threat of our time," Brown said in a statement. "Republicans and Democrats set aside their differences, came together and took courageous action. That's what good government looks like."

The outcome is a major victory in Brown's efforts to ensure that California remains at the forefront of global environmental policy despite President Trump's moves to roll back the previous administration's measures to reduce carbon emissions.

Even better for Brown: Both the Senate and Assembly passed the legislation with more than two-thirds of members voting in favor. That margin should protect the bill from challengers who have argued that cap-and-trade constitutes a tax that requires supermajority approval under state law.

The state's Supreme Court recently declined to review a court challenge by business groups. (See *California High Court Upholds Cap-and-Trade*.)

The cap-and-trade extension passed the state Senate 28-12, a single vote above the threshold needed to obtain a supermajority. Just one Republican — Sen. Tom Berryhill of Modesto — crossed the aisle to join Democrats who voted unanimously in favor of the measure. Assemblymembers voted 55-21 in favor, with seven Republicans and all but six Democrats — three no votes, two abstentions and one absence — in support.

The bill also mandates that large industrial facilities such as oil refineries upgrade emissions equipment by December 2023, and it increases penalties for pollution. It also requires emission reductions from mobile and stationary sources.

"Californians overwhelmingly support our efforts to tackle climate change; they know it's an urgent threat and they want us to continue to lead. That's exactly what we're doing by extending cap-and-trade," Senate President pro Tempore Kevin de Leòn said.

The cap-and-trade program will help the state meet its goal of reducing GHG emissions to 40% below 1990 levels by 2030, Brown's office said last week in drumming up support for the bill.

The measure "extends the program by 10 years in the most cost-effective way possible," according to Brown. It will ensure that carbon pollution decreases as the emissions cap declines and use of out-of-state carbon offsets is reduced; free carbon allowances will be reduced by more than 40% by 2030,

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CAISO NEWS

EIM Members Seek More Details on GHG Accounting Plan

By Jason Fordney

Western Energy Imbalance Market (EIM) participants are generally supportive of CAISO's plan to account for greenhouse gas emissions of external resources but requested more information on market tools the grid operator plans to implement.

The EIM received about a dozen comments before the July 6 deadline in response to CAISO's revised draft final proposal for the GHG accounting system.

CAISO is working with the California Air Resources Board (CARB) to address concerns that the EIM market design is not capturing the climate effects from imports serving ISO load. EIM energy transfers that serve ISO load are subject to CARB regulations, and the air quality agency relies on the ISO's market data to identify participating resources' emissions.

CARB's concern, according to CAISO, is that "the market optimization's least cost dispatch can deem or attribute low emitting resources to the ISO, but not account for the resulting 'secondary' dispatch or backfill of other, possibly higher emitting resources to serve external demand."

Item	Date
EIM Governing Body Briefing	July 13, 2017
Board of Governors Briefing	July 26-27, 2017
Report on GHG Attribution Accuracy	Q4 2017
EIM Governing Body Decision	Q1 2018
Board of Governors Decision	Q1 2018
Implementation	Fall 2018

EIM greenhouse gas enhancement stakeholder process and timeline | *CAISO*

After consulting with market participants, CAISO proposed a "two-pass" market tool to determine which generation resources support EIM transfers serving ISO load. The first pass would determine the optimal schedule across the EIM footprint while not allowing net transfers into the ISO. The second pass would allow transfers into the ISO, limiting each EIM resource's GHG bid quantity to the difference between the resource's upper economic limit and the optimal schedule determined in the first pass, according to the ISO.

CAISO is initially planning to implement the two-pass solution only in the real-time market but said it could extend the approach to the day-ahead market.

A group of market participants — including Seattle City Light, Portland General Electric, Idaho Power, Arizona Public Service and PacifiCorp — requested more information on the impacts of the proposal.

The companies said they "believe it is critical to the success of the ISO's proposal, and the EIM in general, that prices for electricity to serve load outside of California are not inappropriately impacted by this proposed change to the market optimization."

The group added that it "is not able to assess, however, whether this principle will likely be met based on the current information provided." The ISO did not provide much detail on price impacts inside or outside California from the two-pass approach, they said.

In separate comments, Seattle City Light said the two-pass proposal "will result in a more accurate accounting of GHG emissions attributable to California, while also preserving the resource-specific cost and GHG attribution components within the [market] optimization."

The American Wind Energy Association's California Caucus supported the two-pass solution, as did the "Six Cities" (Anaheim, Azusa, Banning, Colton, Pasadena and Riverside) in a joint filing. "The cities look forward to the outcome of the ISO's simulations of the two-pass optimization methodology and may identify and comment on implementation concerns based on the simulation results," they said.

EIM participant PacifiCorp, a non-California entity, was more cautious, saying it "needs additional information and analysis, and greater assurances from the ISO that least-cost dispatch will be preserved and that PacifiCorp's customers outside of California will not be negatively impacted in an unwarranted way by this change driven by California's environmental policies."

The multistate utility said it is concerned that aspects of the proposal will disrupt the market. "Given the complexity of introducing a two-pass optimization, PacifiCorp is concerned that there will be additional unforeseen and unintended consequences associated with this approach," it said.

CAISO said it will issue a report in the fourth quarter of this year based on simulations analyzing how effective the proposal would be in minimizing secondary dispatch.

The EIM Governing Body is due to make a decision in the first quarter of 2018. The CAISO Board of Governors is due to review it in the first quarter of 2018, with implementation expected around fall of next year.

California Lawmakers Extend Cap-and-Trade

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he said.

Lawmakers on Monday also passed AB-617, a bill that provides for neighborhood air monitoring — an attempt to placate environmental justice groups that have been skeptical of cap-and-trade because it doesn't directly address local pollution in low-income areas.

"The passage of AB-398 and AB-617 builds upon the momentum set forth by last year's landmark climate change polices; establishing a comprehensive, statewide program that will allow us to achieve our ambitious climate goals, while ensuring the market stability necessary to retain industry jobs and address vital public health and air quality issues," said Assemblymember Eduardo Garcia, a sponsor of both bills.

The legislative package was "the product of weeks of discussions between the administration and legislative leaders with Republican and Democratic legislators, environmental justice advocates, environmental groups, utilities, industry and labor representatives, economists, agricultural and business organizations, faith leaders and local government officials," Brown's office said.

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California Zero-Carbon Power Bill Advances

By Jason Fordney

SACRAMENTO, Calif. — A California State Senate bill that would require utilities to obtain 100% of their electricity from zero-carbon sources by the end of 2045 advanced through a key committee in the legislature's lower house on Wednesday.

The Assembly Utilities and Energy Committee voted 10-4 along party lines to pass SB-100, which the Senate passed on a 25-13 vote in May.

The bill retains qualifying resources such as wind, solar, geothermal and others currently under the state's renewable portfolio standard for the first 60% of the requirement, a threshold power sellers must meet by 2030. It does not specify what resources will qualify for the additional 40% target after 2030, except that they be zero carbon. This would keep hydroelectric plants larger than 30 MW in the mix.

Natural gas-fired generation currently accounts for about 36% of California's electricity mix, followed by renewables (25%), large hydro (10%) and nuclear (9%), according to state data. Imports of coal-fired power still make up about 4% of sales.

While many building trade, renewable energy and public interest groups spoke in favor of the bill at a July 12 hearing at the state capitol, utility representatives complained that their companies will be responsible for dealing with the challenges of implementation.

Retail Sellers & POUs	% RPS Procurement in 2015 (Current RPS Obligation: 25% by 2016)	% RPS Procurement Forecasted to 2020 (Current RPS Obligation: 33% by 2020)
Pacific Gas & Electric	29.5%	43.0%
Southern California Edison	24.3%	41.4%
San Diego Gas & Electric	35.2%	45.2%
Marin Clean Energy	51.1%	15.0%
Sonoma Clean Power	40.5%	52.5%
LA Dept. of Water & Power	22.2%	35.0%
Sacramento Municipal Utility District	21.8%	39.0%
Imperial Irrigation District	21.7%	35.0%

Retail sellers and publicly owned utilities' reported progress in meeting California RPS. These data have not yet been verified by state regulatory agencies. | *California State Assembly staff*

"None of those stakeholders have all that much skin in the game to how this all actually works," Southern California Edison lobbyist Ryan Pierini said, adding that utilities are held responsible if blackouts occur. The utility doesn't oppose the goal but has concerns about the methods of getting there, he said.

A Sacramento Municipal Utilities District representative said the utility does not have a position on the bill, but that transmission constraints will make it difficult to attain. The utility hopes to be granted some "flexibility" in reaching the goal because there are worries over grid reliability and costs.

During the hearing, committee Chairman Chris Holden (D) and Vice Chair Jim Patterson (R) debated the number of jobs and companies leaving California, which Patterson said is losing economic development because of energy costs.

Patterson said that the legislature had not considered the impact on ratepayers struggling with high electricity bills and facing utility cut-offs.

"We are … going full-blown into an area in which we have no definitive information about the costs," Patterson said.

Holden told Patterson that "we have different perspectives on this issue."

The bill also requires the California Energy Commission and California Air Resources Board to incorporate the policy into all relevant policies and programs. If passed, the law will oblige those agencies and CAISO to provide legislators with an implementation report every two years beginning Feb. 1, 2019.

California Lawmakers Extend Cap-and-Trade

Continued from page 4

Under the cap-and-trade program, large GHG emitters must purchase emissions credits at the California Air Resource Board's quarterly auctions to cover emissions not accounted for with free credits. Extending the program will keep auction proceeds flowing to environmental initiatives around the state, the governor's office said.

"To date, these investments have preserved and restored tens of thousands of acres of open space, helped plant thousands of new trees, funded 30,000 energy-efficiency improvements in homes, expanded affordable housing, boosted public transit and helped over 100,000 Californians purchase zero-emission vehicles," the office said.

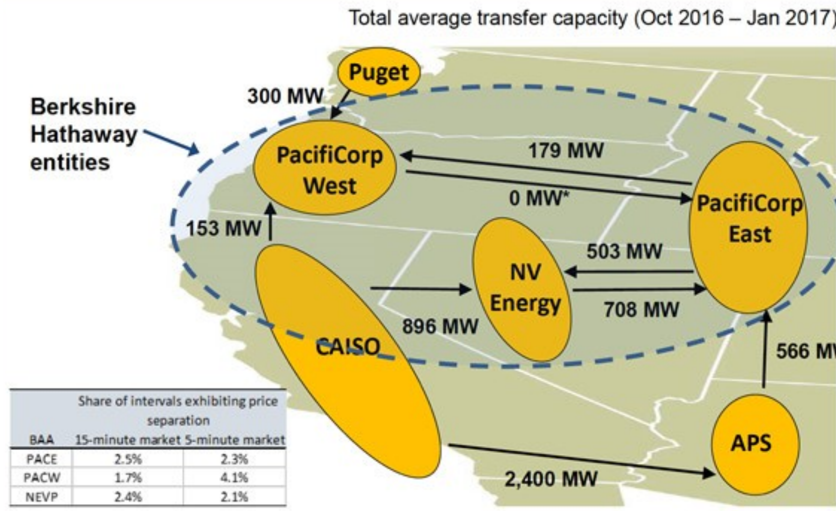
Brown said he will continue to pursue climate change policies despite Trump's pledge to withdraw from the Paris Agreement on climate change, which the president says is unfair to the U.S. Brown recently announced that California will host global leaders in September 2018 for a Global Climate Action Summit to support the agreement.

Brown last week also announced the "America's Pledge" program with businessman and former New York City Mayor Michael Bloomberg. The governor's office described the program as "a new initiative to compile and quantify the actions of states, cities and businesses in the United States to drive down their greenhouse gas emissions consistent with the goals of the Paris Agreement." The initiative will produce a report on aggregate climate change commitments by states, cities, business and educational institutions, and a "roadmap for future climate change ambition."

CAISO NEWS

CAISO Monitor Says EIM Bid Limits No Longer Needed

By Jason Fordney



	Share of intervals exhibiting price separation	
BAA	15-minute market	5-minute market
PACE	2.5%	2.3%
PACW	1.7%	4.1%
NEVP	2.4%	2.1%

CAISO Department of Market Monitoring

FOLSOM, Calif. — Energy transfer capacity in the Western Energy Imbalance Market (EIM) footprint is now sufficient to justify removing bid limits that are in effect for members PacifiCorp, NV Energy and Arizona Public Service, CAISO's internal Market Monitor said last week.

Analysis by the Department of Market Monitoring found that EIM areas are structurally competitive during almost all intervals, Director of Market Monitoring Eric Hildebrandt said July 13 in a briefing to the EIM Governing Body at CAISO headquarters.

The power sellers are now limited to submitting EIM energy bids at or below cost-based default energy bids at all hours. They must get permission for the change from FERC, which requires companies joining the EIM to file for authority to charge market-based rates. PacifiCorp and NVE are both subsidiaries of Warren Buffett's Berkshire Hathaway Energy.

"We are prepared to submit comments in support of the filing" to lift the restrictions, Hildebrandt said, noting that the Berkshire companies are potentially pivotal in a very small portion of intervals. Automated bid mitigation procedures effectively mitigate market power when imbalance demand is greater than transfer capacity, he said.

Under-mitigation in the 15-minute market, when congestion occurred but bid limits were not triggered as they should have, fell to 1.5% of intervals in the first half of 2017, compared with 17% a year earlier, he said. CAISO's rules effectively limit the companies' market power when EIM areas are not competitive.

The companies have been trying to get the mitigation measures lifted. They had argued that the measures imposed by FERC are out of proportion to the market power risks from imbalance energy, because of the small amount of load served by imbalance. They also said they have no incentive to exercise market power because they are large consumers of imbalance energy and would lose money if prices are too high.

But FERC cited market power concerns in May 2016 when it denied a request by NVE and PacifiCorp to rehear a previous decision that prohibited the two companies' generating units from offering energy into the EIM at prices above default energy bids. (See *Berkshire Denied Rehearing on EIM Market Power*.)

An economist with the Market Monitor said late last year that increased transfer capacity in the EIM is limiting congestion and reducing participants' ability to use market power in their balancing authority areas. (See *Increased Transfer Capacity Reducing EIM Congestion*.)

FERC late last year also denied a request by NVE, PacifiCorp and 19 other Berkshire affiliates to rehear a decision prohibiting the companies from offering power at market-based rates in four neighboring balancing areas in the West, including the PacifiCorp East (PACE), PacifiCorp West (PACW), Idaho Power and NorthWestern Energy areas. The commission rebuffed the companies' contention that an earlier ruling had denied them due process because it failed to notify them of "newly announced standards" for determining market power. (See *FERC Upholds Berkshire Market-Based Rate Ruling*.)

The EIM already includes the PACE and PACW areas, while Idaho Power is slated to join the market in April 2018.

MISO NEWS

4 LMRs Face Penalties for Performance in MISO Max Gen Emergency

By Amanda Durish Cook

Most load-modifying resources called up for the first time in a decade during MISO's April 4 maximum generation event failed to respond properly to scheduling instructions, officials said last week.

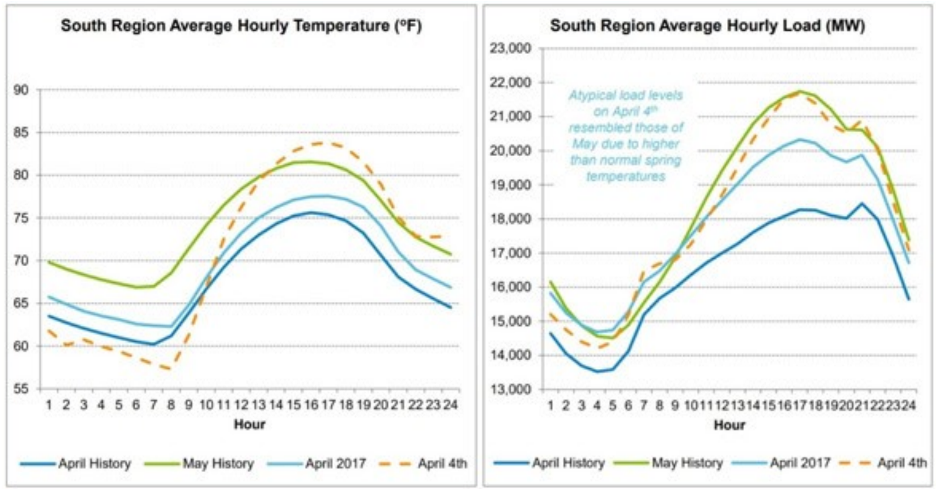
MISO Manager of Resource Adequacy John Harmon said 19 LMRs — demand resources and behind-the-meter generation that provide capacity — responded to meet a maximum scheduling instruction of 715 MW during the emergency in MISO South. Four LMRs failed respond at all and will face penalties under Module E of the RTO's Tariff.

Harmon said the underperformance by some LMRs was offset by the larger-than-expected load reductions by others. The RTO was short about 25 MW of scheduling instructions in the last hour of the emergency declaration.

He stressed the importance of LMR owners providing accurate load curtailment capability to MISO every day. "It's important that LMRs update their availability daily in the MISO communication system. Our operators rely on these each day and … are banking on the numbers when the need could arise to shed firm load," Harmon said at a July 13 Market Subcommittee meeting.

LMRs are only required to be available for emergencies during the summer peak season and do not have to be available during non-summer months. However, the plants must notify MISO when they are unavailable through the RTO's communication system.

In May, MISO promised to conduct a performance evaluation of the LMRs during the event. (See "Several Factors in Spring MISO South Maximum Generation Event," MISO Market Subcommittee Briefs.)



April 4 maximum generation event conditions | *MISO*

MISO has calculated a total penalty of about $2,000 for the four LMRs that failed to respond. The revenue from the penalties will be allocated to all market participants with load in the Entergy Arkansas local balancing authority, and on a market load ratio share basis to the Entergy New Orleans, Louisiana, Texas and Mississippi LBAs.

The RTO will assess and begin to distribute penalties this week. The generators could avoid punishment if they can identify *force majeure* reasons that prevented them from responding.

Harmon said MISO will review its approach to training and operations drills to improve LMR performance. It also will review its current process and Tariff to make sure LMRs are "incentivized to update availability each operating day," he said.

"We saw a lower rate of LMRs being able to meet the load reduction that they said they could meet. That suggests to us that market participants can tighten up the precision of the information that they provide to MISO on a daily basis," Harmon said.

Executive Director of Market Design Jeff Bladen said there might be a disconnect between what market participants can provide in load curtailment and MISO's scheduling instructions.

"The issue is when someone tells us that they can drop from 100 MW to 10 MW, and they're operating at 70 MW and drop to 10 MW, that's not a 90-MW drop; that's a 60-MW drop. Whether there's a penalty or not, we want to operate reliably. It's not a question of right or wrong; it's a question of can we operate reliably," Bladen said.

The April 4 event was driven by unseasonably high temperatures and an unusually high amount of transmission and generation outages in MISO South. It prompted the Independent Market Monitor to call for greater MISO authority in approving maintenance outages. (See *MISO South Outages Worry RTO, Monitor*.)

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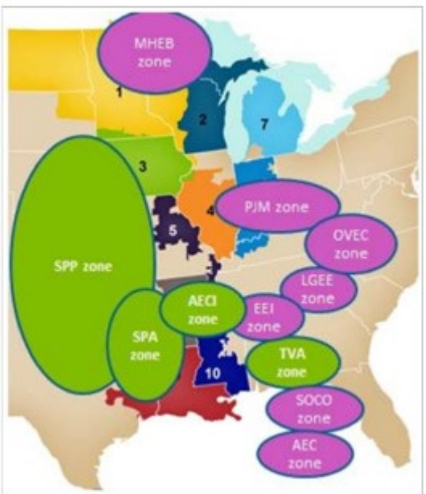
MISO NEWS

MISO Stakeholders: Court Rebuff May Reduce Chances for External Zones

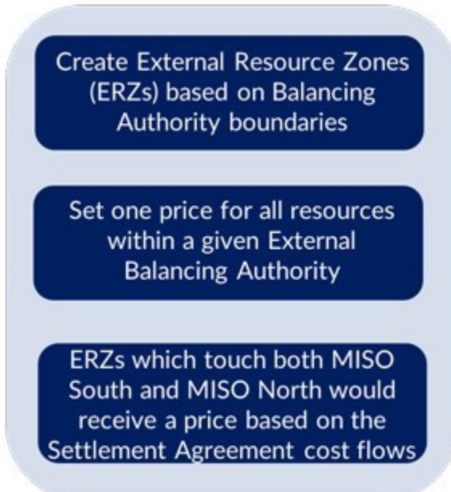
By Amanda Durish Cook

MISO last week presented stakeholders with a proposal to tighten rules on capacity imports amid uncertainty over whether a recent appellate court ruling will impact FERC's ability to approve the changes.

In early July, the D.C. Circuit Court of Appeals eliminated portions of PJM's minimum offer price rule that have been in place since 2013, ruling that FERC overstepped its authority when it suggested changes to a PJM proposal that resulted from a compromise among stakeholders. The court said although FERC can make minor changes to Tariff filings, it cannot substitute its own plan and must approve or reject an RTO proposal as is. (See *PJM MOPR Order Reversed; FERC Overstepped, Court Says*.)



Balancing authority proposal | *MISO*



MISO's proposal — which would integrate external resources zones into the Planning Resource Auction using a single clearing price for each external balancing authority — has been met with a mixed stakeholder response. As a result, some stakeholders think the RTO should hit pause on a proposed September FERC filing and continue working for a proposal that has broad support.

FERC's Power Diminished?

MISO Assistant General Counsel Michael Kessler said that the appellate ruling means FERC's power may be diminished when it regains its quorum. (See related story, *Trump Names Energy Lawyer McIntyre as FERC Chair*, p.1.)

"It's sort of a new package of standards. As it stands now, it's a definite limitation on the commission's authority to accept changes on a Section 205 filing," Kessler said during a July 12 Resource Adequacy Subcommittee meeting.

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MISO Ponders Reserve Scheduling Fix

By Amanda Durish Cook

MISO is considering the possibility of factoring transmission constraints into its reserve requirement modeling to help prevent occurrences of scarcity pricing.

Staff are evaluating changing the algorithm underpinning the minimum zonal reserve requirement to reflect energy flow constraints. Under current practice, MISO calculates reserve requirements for a single operating day three days in advance using an offline study to produce results to be posted in time for the day-ahead market.

But actual operating conditions can change from original study assumptions, said MISO Senior Manager of Transmission Security Planning Mike Mattox, adding that the three-day modeling timeline has been in place for about 10 years.

Dhiman Chatterjee, director of market evaluation and design, said a reserve model that does not capture constraints in the interim can unnecessarily create scarcity pricing for reserves.

MISO staff began taking notice of the issue after events occurring April 1, when an offline study predicted an 84-MW minimum contingency reserve requirement for Zone 6, which encompasses Indiana and a slice of Kentucky. In reality, more reserves were needed to compensate for generation and transmission outages in southeast Louisiana, including the shutdown of the Waterford 3 nuclear unit. As a result, Zone 6 experienced an outflow of energy to the south, triggering operating reserve scarcity conditions for 152 five-minute intervals during the day, with spinning and supplemental reserves clearing at about $200/MWh during 131 intervals and $1,100/MWh during 21 intervals.

"We're really focusing on the event in April. We saw some relatively high prices for the reserves. … In this case, we saw it was bit counterintuitive so we dug into that," said Chatterjee during a July 13 Market Subcommittee meeting.

MISO Principal Advisor of Market Development and Analysis Yonghong Chen said the constraints can be accounted for in the day-ahead modeling process to address reserve deliverability. Chen said that had the modeling more explicitly accounted for constraints, there would have been more inexpensive prices and a reduction in post-reserve deployment congestion.

"There is really no need to go into scarcity pricing," Chen said.

Chatterjee said MISO is in the early stages of analyzing an additional modeling step that it could implement by the end of this year or early next year. He said staff would return to the subcommittee next month to update stakeholders on the feasibility of the change.

MISO NEWS

MISO Stakeholders: Court Rebuff May Reduce Chances for External Zones

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Kessler said there is some ambiguity in the ruling on the distinction between significant changes that FERC is prohibited from suggesting and minor changes the commission can order.

"This isn't just a PJM, MISO issue; it's an industry issue. Any filing party will have to consider what FERC can and can't do now since the back-and-forth that we've gotten used to [since the 1990s]. That route is not going to be available anymore. The whole industry will be carefully reviewing this to see the implications on filings going forward," Kessler said. He added that all pending appeals of FERC-ordered changes could be up for reinterpretation.

Stakeholders said that with FERC expressly prohibited from ordering changes to RTO proposals, chances of the commission approving the contentious locational proposal may be smaller.

Customized Energy Solutions' David Sapper, representing MISO's Load-Serving Entity Coalition, said the ruling may signal to MISO that it's time to only pursue filings with majority stakeholder support.

Last month, Sapper and the coalition made a motion to delay the locational proposal in favor of a capacity transfer rights proposal that would treat long-term supply arrangements involving external resources the same as internal planning resources. (See *Changing Course, MISO Adopts IMM External Resource Zone Plan*.) Stakeholders later passed the motion in an email vote 34-11 with three abstentions.

MISO Executive Director of Strategy Shawn McFarlane reminded stakeholders that the motion is only treated as advice and is not binding. He said the motion signals to the RTO that more discussion with stakeholders is needed.

"So, we think we need some follow-up conversations," he said. "We'll be reaching out to stakeholders over the next few weeks. … We think some one-on-ones is going to be appropriate."

McFarlane added that MISO will be making sure that the stakeholders that voted in favor of the motion understand the locational proposal; he said it would look for some possible modifications as well.

Asked if FERC would reject the filing without consensus among MISO and its stakeholders, McFarlane said it was too early for speculation and that the RTO still has time to alter its proposal.

Combined Filing Likely

Indianapolis Power and Light's Ted Leffler asked if MISO has considered filing the locational proposal separately from hedging rules so the external location zone filing is not rejected based on its proposed approach on allocating excess auction revenues.

MISO has proposed that auction revenues be first handed to resources with historical commitments, with pre-RTO formation capacity arrangements and pre-locational capacity arrangements given first consideration for funding. External resources with contracts to MISO load affected by the proposal are next in line before the RTO doles out revenues as usual using an existing zonal deliverability benefit assessment.

McFarlane said MISO has considered separate filings but is still leaning toward a combined filing.

Leffler asked how many external capacity resources will become unmarketable because of a low clearing price and the lack of a historic capacity agreement.

"I think it's important that we understand how much is at risk here," Leffler said. "The auction clearing prices are very sensitive to changes in supply and demand."

"We don't feel like we have a choice but to address the potential reliability issue from our current approach here," McFarlane said. He added that MISO is eyeing a "reasonable" approach that can win FERC approval.

Some stakeholders are still asking MISO for more details on how external resources are treated based on geographic distance from the RTO's footprint. They asked that prices be based on a resource's proximity to loads inside MISO instead of a uniform external balancing authority price.

Laura Rauch, MISO manager of resource adequacy coordination, said that except for resources near a border, the RTO sees no difference in deliverability in resources situated "150 miles away from MISO or 300 miles from MISO." Its concern is whether a resource in Chicago or New Jersey can deliver against Lower Michigan's clearing requirement "as well as a Detroit resource," she said.

Former Energy Future Holdings Exec Named MISO North Director

MISO has named a Texas energy executive to head its North Region external affairs division.

A former public policy vice president at Dallas-based Energy Future Holdings, Brian Tulloh is now MISO's "primary liaison with members, stakeholders and policymakers in the north footprint." He will be based in the RTO's Eagan, Minn., office.

Prior to his four years with EFH, Tulloh spent a decade at TXU Energy in executive positions. He was also a senior energy consultant for consulting firm McKinsey and Co. He has a bachelor's degree in chemical engineering from Purdue University and an MBA from Southern Methodist University.


Tulloh

Tulloh said he is excited to join MISO, calling the RTO's collaboration with members and stakeholders "critical."

MISO spokesman Mark Adrian Brown said Tulloh fills a role previously held by Priti Patel, who became Great River Energy's new vice president and chief transmission officer last month.

— Amanda Durish Cook

MISO News

Resource Adequacy Subcommittee Briefs

MISO Proposes BTM Deliverability Process, Stakeholders Unconvinced

MISO has introduced a three-step checklist that owners of behind-the-meter (BTM) generation can use to prove deliverability for the Planning Resource Auction, but some stakeholders are calling foul on the differing auction requirements.

The three-pronged approach will involve different sign-offs from affected load-serving entities, transmission owners and MISO. The LSE will determine whether the BTM customer can participate in the wholesale or retail market, while the TO will ascertain study requirements for access to the transmission system when the BTM generator interconnects to a non-transferred facility. The RTO will determine the resource's deliverability or transmission service procurement in order to use the transmission system.

"This is meant to provide some guidance on the more intricate relationship between LSEs and TOs," MISO Manager of Resource Adequacy John Harmon said during a July 12 Resource Adequacy Subcommittee meeting. "MISO is not looking to gain new authority in this endeavor; we're trying to stay within the bounds of our Tariff."

Since the beginning of the year, MISO staff have been grappling with deliverability rules that would allow BTM generation in excess of a utility's planning reserve margin requirement — but without existing transmission service — to enter the annual capacity auction. The RTO last month proposed requiring that a BTM resource submit to an optional engineering study to identify a deliverable volume of capacity eligible to be bid into a single auction. However, the study would have only temporary value. The resource would then be required to enter the same volume into the interconnection queue study process before offering capacity into any subsequent auctions. (See *MISO Proposes Deliverability Rules for Behind-the-Meter Capacity*.)

Harmon said MISO is proposing to adopt the optional study avenue for two planning years until June 1, 2019. After that, resource owners will have to enter the interconnection queue.

Deliverability amounts discovered in the optional study will have a "limited applicability" and will not be used to determine deliverability in the interconnection queue process, Harmon said.

Indianapolis Power and Light's Lin Franks asked why BTM generation should essentially be treated as "free riders" on the grid, and not supported by utility aggregators.

"I don't know of any place where behind-the-meter generation [is] paid for transmission service. They've paid nothing whatsoever for access to the Bulk Electric System," Franks said. "There are some holes."

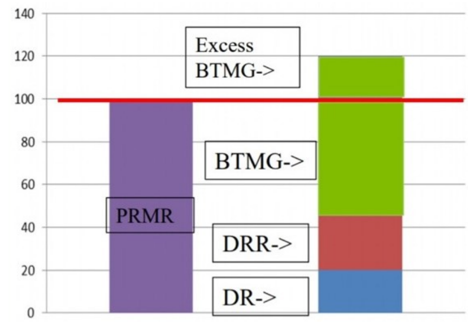
Harmon said BTM will only have access on an as-available basis, and that the proposal is an "interim solution" to ushering BTM generation into a more formal interconnection process.

Dynegy's Mark Volpe asked if MISO was proposing a go-around to the rules that every other capacity resource has to abide by.

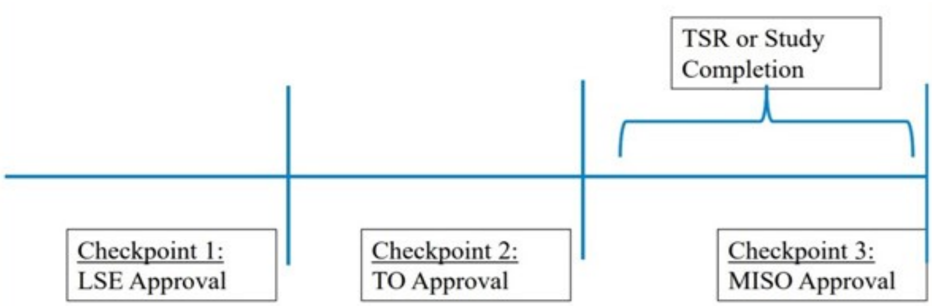
"You've got a gigantic comparability issue here," Volpe said.

Harmon pointed out that before this year, excess BTM generation was delivered undetected. "We think there's good cause for a transition period," Harmon said. He also added that the proposal might not be "100%" yet, but that MISO and stakeholders are striving toward the same goal.

He asked for additional stakeholder feedback on the deliverability proposal by July 26.



MISO



Behind-the-meter deliverability approval process | *MISO*

PRA Qualification Deferral to Become a Reality

MISO will file Tariff changes this fall to give certain capacity resources the option for additional time to qualify for the PRA.

The deferral will also be spelled out in the Business Practices Manuals and will allow certain resources to postpone completion of generator verification tests or installed capacity value calculations until after the auction. Capacity resource owners that intend to defer must inform the RTO before Feb. 15 and complete a generator verification test no later than May 31 in order to participate in the upcoming planning year.

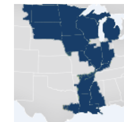
MISO uses the verification test to determine the total capacity that a planning resource can reliably provide based on performance and availability data for summer peak conditions.

The draft BPM language states that the deferral is for untested new planning resources, existing resources "returning to operation from a catastrophic outage or suspension," resources in the midst of increasing capability, suspended resources and resources "awaiting other miscellaneous resource approvals to achieve commercial operation."

Analyst Scott Thompson said deferrals could also be used by intermittent capacity resources that have yet to come online at the time of the auction or generators that are completing environmental upgrades that prevent operation.

— Amanda Durish Cook

MISO NEWS



FERC Staff OK MISO Interconnection Queue Refund Plan

By Amanda Durish Cook

FERC staff have approved a MISO proposal to allow generators to withdraw from the RTO's interconnection queue penalty-free after undergoing a three-stage evaluation process.

The commission's Office of Energy Market Regulation on Wednesday accepted MISO's plan in a three-page order containing little comment (ER17-156-003).

In approving MISO's new interconnection queue rules in January, FERC required the RTO to devise a method to allow refunds of milestone payments if "significant" change affects cumulative network upgrade costs while a project is in the interconnection queue's definitive planning phase (DPP) — the final phase of the queue before generation interconnection agreements are finalized. The commission also told MISO to define the degree of change needed to trigger a penalty-free exit. (See *FERC Accepts MISO's 2nd Try on Queue Reform*.)

Under the new rules, MISO will evaluate cost increases across all three stages of the DPP and assign different thresholds to activate refunds depending on the stage of the project. Refunds will be triggered if:

- From the first stage of the DPP to the second, network upgrade costs increase by at least 25% — and a minimum of $10,000/MW — between the publication of the preliminary and revised system impact studies. For upgrades on transmission systems outside of MISO, a 30% cost increase is required.
- From the second to third stage, upgrade costs increase by at least 35% — and more than $15,000/MW — between the revised SIS to any phase three studies. For outside transmission system upgrades, a 40% increase is needed.
- From the first to the third stage, upgrade costs increase by a cumulative 50% — and at least $20,000/MW — from the preliminary SIS to any phase three studies. Outside transmission system upgrades require a 55% increase.

While acknowledging that the three-step approach was "admittedly more complicated than other solutions," MISO said it believed the proposal "best balances key interests for both interconnection customers and MISO."

The gradually increasing thresholds and floors "encourage projects to withdraw earlier in the queue process at a point where restudy is already incorporated in the process and discourages queue gaming," the RTO said, reducing the need for cascading restudies — a point FERC also asked MISO to address in accepting the new queue rules.

NYISO NEWS

New York PSC Extends Con Ed Demand Program

By Michael Kuser

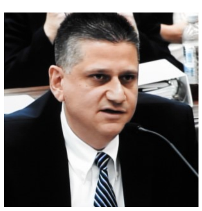
From left to right: Commissioners Diane Burman, Chairman John B. Rhodes, Gregg Sayre and James Alesi. | *© RTO Insider*

ALBANY, N.Y. — The New York Public Service Commission last week approved an indefinite extension for Consolidated Edison's demand management program in New York City's Brooklyn and Queens boroughs, which aims to defer an estimated $1 billion in local infrastructure spending.

The commission's July 13 order retains the original Brooklyn-Queens Demand Management (BQDM) program's $200 million budget but caps expenditures on utility-side non-traditional solutions — such as storage batteries — at $50 million, including what the company has spent to date.

Con Ed has so far spent $46.56 million on the program, according to the most recent BQDM quarterly report.

The program allots Con Ed $200 million to procure market-based, distributed energy resource solutions such as energy efficiency, energy storage, distributed generation and demand response to achieve load reductions on the sub-transmission feeders supplying the company's Brownsville No. 1 and No. 2 substations. The program aims at achieving 41 MW of customer-side DER and load reduction, as well as 11 MW of non-traditional utility-side solutions by summer 2018.



Padula

"In the absence of the BQDM program to meet the anticipated load growth in that area, Con Edison would have to construct a new distribution substation, a new switching station and substation feeders between the two," Marco Padula, deputy director for market structure at the state's Department of Public Service, told the commission. "This major project collectively was projected to cost approximately $1 billion."

According to Padula, the program has provided Con Ed the flexibility to plan several infrastructure projects to be in service by summer 2019 and further delay the need for the new substation to 2026.

"Specifically, the additional solutions include the installation of capacitor banks, transformers and a 60-MW load transfer to the Glendale network," Padula said. "With the extension, the company will have the opportunity to procure more DER that will allow it to delay the new substation and defer the need for the Glendale project and also enable possible future deferral for other traditional infrastructure projects."

A New Normal

Rhodes

Newly appointed commission Chair John B. Rhodes lauded the successful concept design and Con Ed's successful performance to date in meeting its implementation checkpoints on time and under budget.

"The BQDM program has also provided for important learning opportunities for other utilities, for stakeholders and for the commission, as non-wire alternatives have become part of New York state utilities' standard business practices," said Rhodes. "What was new has now become a normal."

New York City supported the proposed extension in comments filed in April but wanted Con Ed to provide more detail on the cost-effectiveness of non-wire alternatives compared to traditional infrastructure investments. The city raised the possibility of doubling the utility's incentives for some of the work performed under the program, specifically the Glendale project.

In response, the commission ordered that deferral of the Glendale project must be considered part of the BQDM program — and not as a separate non-wire alternative — that "shall not be eligible for further shareholder incentives beyond what has already been authorized."

The commission also ordered Con Ed to continue filing quarterly reports and semi-annual cost-benefit analyses on the program, as well as an updated implementation and outreach plan reflecting the new realities inherent in the program's extension.

The New York Battery & Energy Storage Technology Consortium also filed comments in support of the program, particularly its aspect of broadening the market for DER.

New York-based consultancy Peak Power, however, opposed it, as well as Con Ed's methodology, load forecasting and auction procurement mechanism. Con Ed replied to all the parties' comments in May and refuted Peak Power's criticisms.

The extension order said the commission "does not agree with Peak Power's characterization of Con Edison's reporting on the BQDM program as being not transparent or that this proceeding lacks a record to support the company's proposal."

Commissioner Diane Burman alluded to criticism of the program but said that "reliability is paramount" and that it's

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NYISO NEWS

New York PSC Extends Con Ed Demand Program

Continued from page 12


Burman

important to extend the program to avoid losing "the value that we see BQDM is providing."

"We are seeing more of these [programs] from other utilities looking for similar non-wires alternatives and we're even starting to see some non-pipes alternatives on the gas side," Commissioner Greg Sayre added. "We make sure that each program that's brought to us provides the benefit to ratepayers, compared to the traditional network investment, so we end up with a benefit to ratepayers, to the company and to the environment."


Sayre

Central Hudson Recovers REV Costs

The PSC also issued an order last week approving Central Hudson Gas & Electric's deferral accounting authority and recovery of incremental costs associated with the state's Reforming the Energy Vision (REV), which requires the state's utilities to generate 50% of their energy from renewable resources by 2030. The commission's order authorizes CHG&E to recover more than $1.8 million for incremental external labor costs associated with developing its distributed system implementation plan and related grid modernization efforts.


Worden

Michael Worden, DPS director of electric, gas and water, testified that the company incurred the costs as a direct result of commission orders for utilities to integrate DER into their systems and to develop interconnection portals to help facilitate DG interconnection.

"The utilities were also directed by the commission to develop hosting capacity analyses that are intended to identify more technically feasible locations on the distribution system where distributed generation projects could interconnect," Worden said.

He pointed out that much, if not all, of the work represented in the order would have taken place through the natural process of grid modernization occurring prior to the REV proceeding.

"All of these efforts can be correlated to the increase in distributed resources that's not only being seen in New York state, but nationally as well," Worden said.

Burman said she understood "the need for Central Hudson to have regulatory certainty and clarity," but she noted "that it is potentially cloudy in what it means, what is deemed reasonable and how they will be able to have cost recovery. ... I don't want this to be seen as there's an unending pot of money for external labor."

NYISO NEWS

New York Cites Allco Ruling in Defense of ZECs

By Michael Kuser

New York state officials filed a brief last week saying a recent appellate court decision upholding two Connecticut renewable energy programs vindicates its zero-emission credits for nuclear plants.

A coalition of generation owners opposing the nuclear subsidies countered that the 2nd U.S. Circuit Court of Appeals' June 28 ruling rejecting Allco Finance's challenge to the Connecticut renewable energy credit (REC) program and renewable portfolio standard did not support the legality of the ZECs (*Allco v. Klee*, 16-2946, 16-2949). (See *Second Circuit Upholds Conn. Renewable Procurement Law*.)

The generation owners sued New York in December 2016, arguing that the ZECs intrude on FERC's jurisdiction over wholesale electric markets (1:16-CV-8164).

On Friday, U.S. District Court Judge Manish S. Shah dismissed a similar challenge to Illinois' ZEC program. (See related story, *Illinois ZEC Challenge Dismissed*, p.1.)

In both the New York and Illinois challenges the generators cited the Supreme Court's 2016 decision in *Hughes v. Talen*, which found Maryland's attempt to subsidize construction of a natural gas-fired generator encroached on FERC's authority under the Federal Power Act. (See *Federal Suit Challenges NY Nuclear Subsidies* and *IPPs File Challenge to Illinois Nuclear Subsidies*.) All the nuclear plants expected to receive the ZECs in the two states are owned by Exelon.

Injunction Sought

In their July 10 brief, attorneys for the New York Public Service Commission said the *Allco* ruling "is the first appellate decision construing *Hughes*, and confirms that the decision is 'limited' and establishes a 'bright line' proscribing only state-sponsored payments for electric sales into wholesale energy auctions."

The PSC said the New York ZECs are "even further removed from *Hughes* than *Allco*."

"New York has neither '"command[ed] generators to sell capacity" into the FERC-approved interstate auction,' nor premised the receipt of ZEC revenues on selling into and clearing the wholesale auction, and the ZEC program 'thus lack[s] the "fatal defect" that triggered *Hughes* pre-emption,'" the PSC said.

Thurgood Marshall U.S. Courthouse in New York City, home of both the 2nd U.S. Circuit Court of Appeals and the U.S. District Court for the Southern District of New York.

"Compared to the *Allco* power purchases, the ZEC program is more clearly on the state side of the jurisdictional line, as it involves the purchase and sale of environmental attributes separate, i.e., 'unbundled,' from any electricity sale. [FERC] has already held — in the REC context — that such sales do not directly affect wholesale energy transactions."

As in *Allco*, the PSC continued, the state's program is not pre-empted by the Federal Power Act because FERC retains the ability to review any bilateral contracts that arise out of the program or — if the nuclear power sells in NYISO auctions — can regulate the terms of market participation and resulting clearing prices.

Judge Valerie Caproni of the U.S. District Court for the Southern District of New York heard oral arguments on New York's motion to dismiss on March 29 and is expected to rule soon.

Plaintiffs' Response

The plaintiffs contend that the Connecticut program survived the court challenge because the state's solicitation "did not require forced purchases, but rather allowed [load-serving entities] discretion to accept or reject bids. LSEs have no right to decline to enter into ZEC purchase contracts" under the New York and Illinois programs, the plaintiffs said.

The generators claimed that ZECs going only to in-state nuclear plants violates the dormant Commerce Clause's prohibition on geographic discrimination.

The 2nd Circuit ruled in *Allco* that it was not discriminatory for Connecticut to recognize renewable energy credits only from generators that could deliver energy into the New England grid, finding the distinction compatible with the state's legitimate aim of ensuring a reliable power supply. The state discriminates "only insofar as it piggybacks on top of geographic lines drawn by ISO-NE and the [New England Power Pool], both of which are supervised by FERC — not the state of Connecticut," the court said.

The New York PSC responded to complaints that its ZEC program unfairly benefited only in-state nuclear plants. "If an out-of-state nuclear plant were to provide electric energy to New York and later suffer financial difficulty jeopardizing its ability to continue providing its zero-emission attributes, the plant could seek ZECs in future tranches," the PSC said. "Thus, there is no geographic discrimination."

Hughes 'Key' to NY Case

Ari Peskoe, senior fellow in electricity law at Harvard Law School, said the 2nd Circuit ruling directly affects the New York case because of its interpretation of the *Hughes* ruling. "One of the key issues in *Allco* was what does the *Hughes* decision mean, and that's the key issue in this case too," he said. "So I think [Caproni] really had to wait to see what the 2nd Circuit was going to say before she issued her decision. It potentially could have been nullified by the 2nd Circuit decision."

While he doesn't like to speculate on the outcome of any case, Peskoe said, "Intuitively, to me, the states' reading of *Allco* is more straightforward than how the plaintiffs are trying to spin it. But that doesn't mean the judges see it that way. It's tempting to read into the oral arguments, but it's not always 'what you see is what you get.'"

Peskoe predicted that if New York wins a dismissal from Caproni, "the generators would likely appeal to the 2nd Circuit."

PJM NEWS

Operating Committee Briefs

OC Discusses Pro Forma Agreements for Pseudo-Ties, Dynamic Schedules

VALLEY FORGE, Pa. — PJM last week presented Operating Committee members with a proposed *pro forma* agreement for dynamic schedules, saying it would eliminate potential confusion and improve reliability.

Dynamic schedules are power flows into the RTO from a generator that is controlled by and located in a different grid operator's territory. Unlike pseudo-tied units, the flows are not modeled in PJM's systems as internal supply.

Because PJM lacks a standard agreement for dynamic schedules, individual agreements may contain variations in language that can result in incorrect operating procedures, the RTO said.


D'Antonio

Under PJM's proposal, the native balancing authority would only need to acknowledge awareness of the agreement because it remains operationally responsible for the resource. Unlike pseudo-ties, dynamic schedules require tagging and are subject to curtailment under NERC's transmission loading relief procedures, PJM's Phil D'Antonio said.

D'Antonio said PJM hadn't yet decided whether they would seek to make the agreement retroactively enforceable for existing schedules. The agreement will be brought to a vote at next month's OC meeting.

PJM's Jacqui Hugee gave the OC an update on additional Joint Operating Agreement revisions MISO has requested relating to the *pro forma* pseudo-tie agreement. "For the most part, the changes are to clarify the language that is there," she said. (See *Late Agreement with MISO Forces Another Delay on Pseudo-Ties*.)

Stakeholders voiced concerns about the language, but Hugee explained that PJM does not need, nor will it seek, stakeholder endorsement for the changes.

SCED Changes Implemented

PJM on Monday transitioned from a 15-minute to a 10-minute "look ahead" on its security constrained economic dispatch (SCED) engine. The changes went into effect at 9 a.m.

PJM's Joe Ciabattoni said the RTO will review the system's performance after a week to ensure there are no reliability issues and evaluate whether to retain the changes. Ciabattoni said PJM does not need stakeholder approval to make the changes.

"We're trying to better align real-time reserve levels with reserves calculated and dispatched by SCED," he said. "Historically, we started with a 22-minute look ahead and have moved it over time to 15 minutes."

Resilience Planning Moves Forward

PJM's Jonathon Monken reviewed the RTO's ongoing development of system resilience, noting that communication has expanded with related industries such as natural gas distributors. (See "Bryson Leads on Next Steps for Fuel Resiliency," *PJM OC Briefs*.)

"I would expect that this will drive a lot of exercises and drills, recognizing that when we identify a vulnerability, we would much prefer to test it in an exercise environment than experience it in real life," said Monken, senior director of systems resilience and strategic coordination.

He said that PJM is developing both internal and external roadmaps for enhancing resilience to severe weather, physical or cyber attacks or disruptions in fuel supplies. He also reviewed PJM's Resilience Steering Committee, which includes himself and 14 other PJM staffers with responsibilities for various aspects of the plan.

John Farber of the Delaware Public Service Commission questioned using resilience as a driver for approving projects in the Regional Transmission Expansion Plan. While it was not listed on the current version of the external roadmap he presented, Monken confirmed that it is still a focus.

Continued on page 16

PJM: No Change on MOPR Yet; Remand May Have Little Impact

By Rory D. Sweeney

VALLEY FORGE, Pa. — PJM said last week that a court ruling remanding a FERC order on the RTO's minimum offer price rule won't have any impact until the commission addresses the decision. And it may have little practical impact even after that, PJM's Jen Tribulski told the Market Implementation Committee on Wednesday.

The July 7 ruling from the D.C. Circuit Court of Appeals said the commission overstepped its authority when it denied a 2012 proposal from PJM to revise its MOPR provisions but then spelled out to the RTO what it would approve. PJM's proposal — a compromise between generators and load-serving entities — would have replaced the unit-specific MOPR exemption with two new ones and extended the mitigation period from one to three years before a unit could bid below the price floor.

Compromise Eliminated

FERC said it would accept the additional two exemptions if the unit-specific review were retained and the mitigation period remained unchanged. PJM agreed to FERC's changes even though it eliminated the deal PJM stakeholders had made to secure stakeholder endorsement of the proposal. (See *PJM MOPR Order Reversed; FERC Overstepped, Court Says*.)

FERC's ruling was vacated and remanded back to the commission, which must now write a new order for PJM. That can't happen until the commission restores its quorum. (See related story, *Trump Names Energy Lawyer McIntyre as FERC Chair*, p.1.)

"The court really only ruled on the legal issue of whether FERC exceeded its

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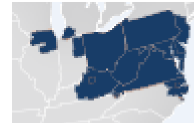
PJM NEWS



Operating Committee Briefs

Continued from page 15

Farber warned that evaluation of resilience in RTEP projects wouldn't be "as straightforward as described" and said completing quantifiable metrics by the end of 2018 is an aggressive timeline. "I would just note that the last time that PJM addressed drivers in the RTEP process … that took two and a half years. And those were, in my view anyway, difficult years," he said.

"We certainly recognize the fact that we're certainly not going to go faster than what the stakeholders would like it to go," Monken said.

Ramp Rate Changes

PJM's Cheryl Mae Velasco highlighted enhancements to its Markets Gateway online tool that will allow generators to adjust their regulation offers throughout the day instead of just once daily.

"The [web-coding] vendor had a chance to put them in," Velasco said. "They've been on the backlog for quite a while."

The announcement was met with appreciation, but also a request.

"These are items that could provide optionality in how we operate units, so to hear about it in the Operating Committee a week before [implementation] is, for me at least, problematic," American Electric Power's Brock Ondayko said. He asked that similar changes be brought to stakeholders' attention "preferably" two or three months in advance.

"Once we found out [that the vendor had made the updates], we sent the communications out as soon as possible," Velasco responded.

PJM's Ken Seiler acknowledged Ondayko's concern and said he would work with the RTO's Tech Change Forum to provide earlier notice in the future.

Ciabattoni said that generators making changes to their ramp rates will not require corresponding price points in their cost-based offers.

Solar Eclipse Impacts

PJM estimates a loss of up to 2,500 MW in solar output during the solar eclipse that will occur on Aug. 21. The event is expected to last about an hour.

While grid-connected and behind-the-meter systems will be impacted the same, the difference in deployed amounts means that grid-connected output is expected to drop about 500 MW, while BTM resources could drop about 2,000 MW. PJM expects it will need to increase non-solar generation by about 1,000 MW if it's an overcast day and up to 2,500 MW if it's sunny. Coordination will be important during the ramp up and ramp down periods.

PJM's Joe Mulhern said the eclipse is expected in the middle of the afternoon when the sun is high and solar generation is near its peak output. If it's a hot day, load will no doubt be near its peak as well, he said. However, a NERC analysis showed no reliability impacts are expected for the Bulk Power System.

Primary FR Task Force Begins July 25

Boyle

PJM's Glen Boyle announced that the Primary Frequency Response Senior Task Force will have its first meeting at 9 a.m. July 25, with monthly meetings to follow for at least six months. (See "PJM Defends Interest in Paying for Frequency Response," *PJM Markets and Reliability Committee Briefs*.)

— Rory D. Sweeney

PJM: No Change on MOPR Yet; Remand May Have Little Impact

Continued from page 15

authority under Section 205," Tribulski said. "Until those rules are changed on remand, that's our filed rate." She acknowledged suggestions from stakeholders to revert to the previous rate or to PJM's original proposal, but she said neither of those are appropriate because they are not what is currently approved by FERC and the court didn't entirely vacate that approval.

PJM also isn't planning to revise any auction results unless FERC orders a rules change. "We will wait to see what FERC does," Tribulski said.

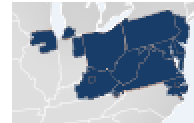
Gabel Associates' Mike Borgatti asked how this might impact generators' decision-making for filing exemptions, given that the exemptions for the 2018 Base Residual Auction must be requested by the end of this year. The ruling will not even be remanded to FERC until at least Aug. 28, Tribulski said, noting a 45-day appeals period and another seven days following that for the order to become official. That also assumes the commission will have a quorum by then and be caught up on its existing backlog of filings.

'Less than Meets the Eye'

She said there also might be "less than meets the eye here" because there haven't been any unit-specific exemptions approved while the vacated rules have been in effect. Unit-specific exemptions are the part of PJM's original MOPR proposal that FERC denied and recommended should be retained. "There may not be that big of an actual, practical impact," she said.

Exelon's Jason Barker said that as PJM is considering what parts of the ruling haven't been vacated, the RTO needs to be aware that stakeholders still wouldn't have had an opportunity to comment on them, which was a key part of the appeal.

"When FERC 'imposes an entirely new rate scheme' in response to a utility's proposal, the utility's customers do not have adequate notice of the proposed rate changes or an adequate opportunity to comment on the proposed changes," the court said. "That was the case here."



Market Implementation Committee Briefs

Revision on Intraday Offers Postpones Vote

VALLEY FORGE, Pa. — PJM's Lisa Morelli presented the Market Implementation Committee last week with revisions to the RTO's proposal for handling intraday hourly offers in the energy market, delaying a scheduled vote on the plan.

The changes made to Manual 11: Energy & Ancillary Services since the first read on the proposal included a clarification that PJM's real-time security constrained economic dispatch (SCED) uses data that are effective for the look-ahead solution interval rather than the case execution time. In response to feedback from the Independent Market Monitor, it also clarifies that a generator's intraday opt-out election must be consistent with its fuel-cost policy.

Josyula

IMM staffers Siva Josyula and Joel Romero Luna also outlined the Monitor's concerns with PJM's proposal. (See "IMM's Proposed Fuel-Cost Policy Changes Denied," *PJM Markets and Reliability and Members Committees Briefs*.)

"Resources should not be able to circumvent [market power] mitigation just by changing the relative levels of price versus cost," Josyula said.

Romero Luna focused on how generators can elect to opt out of intraday offers. PJM's rules require that if generators change their price-based offer, they must also change their cost-based offer, he explained. "It'll be easier for anyone who has a fuel-cost policy to say, 'If I don't have it in there, my default is to opt out,'" he said. "If no one changes their fuel-cost policies to incorporate hourly offers, it's not clear how they can be compliant with the rule that has been presented because an intraday update to your price-based offer will require an intraday update to your cost-based offer and that update must remain compliant with your fuel cost policy."

It's unclear whether the Monitor's differences will result in separate proposals.

"It might be separate. We're not completely there yet to say … they are, in fact, two different things. That might be where we end up in another round of conversations," said PJM's Chantal Hendrzak, who chairs the MIC.

Morelli also announced that all generators, no matter if they plan to update schedules hourly or not, will need to update their schedule IDs to PJM's new list by Nov. 1. The RTO will be posting a step-by-step guide in its Markets Gateway online tool. With the implementation of intraday offers, PJM will only accept cost-based schedules 1-9, eliminating 70 others. The number of price-based schedules is being reduced from 19 to two.

PJM Indifferent on Black Start Fuel Compensation

Before presenting proposals from Calpine and the Monitor on calculating fuel-storage compensation for black start units, PJM's Tom Hauske made it clear the RTO is agnostic to the voting results. He was repeatedly asked for PJM's position, and he repeatedly declined to take one. (See "Started from the Bottom, Now We're at the MTSL," *PJM Market Implementation Committee Briefs*.)

"What we've taken as a position is that we can live with any of the three," he said, including the status quo among the options.

The Monitor's proposal would calculate the unit's compensation for fuel storage — known as minimum tank suction level (MTSL) — based on the ratio of the fuel tank's total volume to the amount of fuel needed to fulfill the black start requirements of 16 hours of continuous operation. The proposal from Calpine's David "Scarp" Scarpignato would compensate units based on the average annual fuel volume in the tank.

Scarp and Monitor Joe Bowring sparred for a while on the merits of Scarp's proposal. Bowring asked why "black start should pay an even bigger piece based on whatever random amount of oil is in the tank." PJM currently pays about $500,000 per year in compensation for black start fuel storage based on current rules that pay for the entire tank. So either proposal would reduce the costs, the sponsors say.

The conversation between Scarp and Bowring eventually devolved into a fast-food metaphor focused on how much frying oil a restaurant would need to switch menu options. At the end, Scarp asked for clarification on whether his proposal would be set for a vote as an alternative to the Monitor's proposal. When that was confirmed, he explained that he only meant for his proposal to spur discussion and asked that it be removed.

The vote at next month's meeting will be on the Monitor's proposal versus the status quo. Greg Poulos, executive director of the Consumer Advocates of the PJM States, announced his membership is leaning toward the Monitor's proposal.

Energy Efficiency Kicked to DR Subcommittee

PJM staff canceled plans to begin discussions in the MIC regarding rules for energy-efficiency products entering into the capacity market after stakeholders said they could resolve the issues more quickly through the Demand Response Subcommittee first. (See "EE Problem Statement Narrowly Approved," *PJM Market Implementation Committee Briefs*.)

CPower's Bruce Campbell pushed back on the change of venue, saying there were substantive jurisdictional concerns that a lower level committee should not be addressing. He also noted that the July 17 DR Subcommittee meeting conflicted with that of the Capacity Construct/Public Policy Senior Task Force, which is also dealing with state jurisdiction issues, leaving stakeholders unable to attend both.

PJM's Pete Langbein warned that the four- to six-month timeline for results indicated in the energy-efficiency issue charge is "very aggressive."

IMM Presents Problem Statements on Transmission

Bowring presented two problem statements and issue charges, one related to local scarcity and one related to interface pricing on first reading. The first problem statement and issue charge focuses on transmission penalty factors, for which he said PJM has no defined or transparent rules.

In its dispatch model, PJM allows transmis-

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PC/TEAC Briefs

Planning Committee

PJM Maintaining Separate Load Peaks in Model

VALLEY FORGE, Pa. — The Planning Committee last week approved PJM's recommendation to use 10-year historical data from 2003 to 2012 and to change the "world" peak week in its 2017 reserve requirement study.

Rocha-Garrido

PJM's Patricio Rocha-Garrido told stakeholders the RTO decided to separate its peak load from that of the "rest of world" because of software limitations. Coincident peak distributions from the PJM load forecast cannot be used directly in its PRISM (probabilistic reliability index study model) software, which handles model uncertainty by week rather than day-by-day.

"The world" comprises neighbors MISO, New York, the Tennessee Valley Authority and SERC Reliability's VACAR region in Virginia and the Carolinas — areas from which the RTO would seek to import generation if it runs short.

(See "ISO-NE out of this 'World,' According to PJM Reserve Requirement Study," PJM Planning Committee/TEAC Briefs.)

"When we have PJM and 'the world' peaking on the same week, effectively we're having PJM and 'the world' peaking on the same day," Rocha-Garrido said.

However, over the past 18 years, PJM and "the world" have peaked simultaneously eight times, while they have not peaked together 10 times.

In response, PJM moved the world peak to Week 11 in the summer and retained its peak on Week 10 to match the "historical diversity" in peaks.

Rocha-Garrido said the 2003-2012 load model, which was also used in last year's study, was "a close second place" to the top-ranked 2004-2012 time period but had the advantage of an extra year of data.

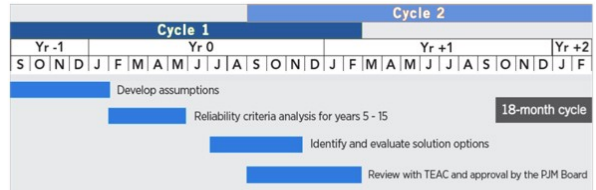
"We do not see evidence to change that this year," he said.

The recommendation was endorsed by acclimation, with no objections or abstentions.

RTEP Cycle Revisions Approved

The committee approved revisions to the rules for the Regional Transmission Expansion Plan, agreeing to extend the cycle from one year to 18 months.

PJM's Amanda Long said the planning cycle will begin in September and run through February of the following calendar year. A new cycle will begin every September, overlapping the previous cycle. (See PJM Making Cost Consciousness a Focus for RTEP Redesign.)



Overlapping 18-month planning cycles | *PJM*

The committee also approved Operating Agreement changes to extend the 30-day competitive proposal window for short-term projects to 60 days beginning about June annually. The long-term proposal window will remain at 120 days.

The proposal was endorsed by acclimation, with no objections or abstentions.

Resilience to Become Planning Driver

PJM's Mark Sims explained how the RTO's recent focus on resilience will impact its planning processes.

NERC's standards require PJM to consider in its planning critical "stressed" conditions so it can manage the system regardless of actual conditions on any day. In addition, NERC requires the RTO to conduct a system assessment and explore potential solutions of low-probability "extreme" events.

As a result, Sims said, PJM will seek to iden-

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sion constraints to be violated under some conditions. The violated constraints have defined penalty factors that affect LMPs to reflect the local scarcity. Bowring says the shadow price for a violated constraint, the incremental reduction in congestion cost achieved by relieving a constraint by 1 MW, should equal the penalty factor. PJM, however, uses "constraint relaxation logic" to affect the shadow prices, typically causing the shadow price to be below the penalty factor by varying amounts, Bowring says.

Other grid operators, such as MISO, have explicit rules on the topic, he said.

In a presentation on the issue at the Members Committee webinar last September that was also discussed in his annual State of the Market report, Bowring recommended that PJM explicitly state its policy on the use of transmission penalty factors: the level of the penalty factors; the line ratings to trigger their use; the allowed duration of a violation; and when the penalty factors will be used to set the shadow price.

"In asking you to approve this problem statement, I'm not asking you to agree with my characterization," he told the MIC on Wednesday. "There are no rules. It should be written down. … I don't know how long it's been occurring at PJM — probably since the beginning."

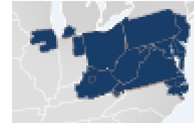
Morelli said PJM is in favor of the problem statement. "In addition to adding some consistency to how some of this works, it's also taking a look at constraint reorganization where, essentially, we don't allow the penalty factors to set price," she said.

The second problem statement and issue charge focuses on pricing point alignment for cross-border transactions with other ISO/RTOs. The current procedure allows for "scheduling energy inconsistent with power flows" that "creates harmful market inefficiencies," according to the problem statement.

"Our underlying principle is that pricing should be consistent with physical power flows — a radical concept, I know, but it's not currently being implemented," Bowring said.

— Rory D. Sweeney

PJM NEWS



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tify "worst offenders," such as circuits that frequently are involved in low-probability events. (See "PJM Reconsidering Planning Assumptions," *PJM Planning & Tx Expansion Advisory Committees Briefs*.)

"It's not involved in one low-probability event; it's involved in many. So in my opinion, it's no longer low-probability," Sims said, adding that it "might" make sense to fix these issues.

John Farber of the Delaware Public Service Commission reiterated his concerns from a similar conversation during the Operating Committee meeting earlier in the week.

"There are major issues with implementing resilience as a standalone driver in the RTEP," he said. "Achieving a sufficient level of objectivity to justify its inclusion as a standalone driver in the RTEP is just a difficult challenge to deal with."

He said it will be difficult to develop objective cost and benefits criteria to justify millions in spending, especially when individual states may have different viewpoints on spending the money.

Greg Poulos of the Consumer Advocates of the PJM States agreed. Developing appropriate metrics will be important to determine how goals will be achieved, he said. The timeline is another issue, he said.

"There's a lot of concern about things adding up," he said. "I certainly agree it's an evolution, but the consumer advocates are concerned it's a slippery slope. Where does it begin and where does it end?"

Sims assured stakeholders it would be a "very deterministic" process. "I think this paradigm is going to be a little bit of a shift," he said.

Winter Evaluation

PJM's Tom Falin provided an update on the RTO's analysis of winter resource adequacy and capacity requirements, the subject of an issue charge approved by stakeholders last year. The details highlighted the differences across the RTO. (See "Winter Resource Adequacy Analysis Raises Questions," *PJM Planning & Transmission Expansion Advisory Committee Briefs*.)

An analysis of the ratio between the winter and summer peaks in each locational deliverability area (LDA) found that the Eastern Kentucky Power Cooperative was the heaviest winter peaking LDA in the RTO, with a winter-summer ratio at about 1.3. The RTO itself is mostly summer peaking with a ratio of .87, and Rockland Electric is the heaviest summer-peaking LDA with a ratio of about .59.

"The heaviest summer-peaking LDAs are basically [in] New Jersey," Falin said.

The loss-of-load expectation analysis results found that, even including the outliers from the winter of 2014-15 that included the polar vortex effects, and assuming historical forced outages and the maximum historical planned outages, the LOLE was .02 days/year. Falin noted that these numbers only included generator forced outages and that transmission outages would need to be considered as well.

Going forward, Falin said PJM will compute summer and winter reliability requirements for the RTO and selected LDAs while continuing to investigate a winter load forecast model.

Solar Capacity Factors Class Averages

PJM has updated its capacity factors for wind and solar based on actual summer data from 2014-2016.

PJM's Jerry Bell said the analysis found that wind turbines have a capacity factor of 14.7% in mountainous terrain during peak summer hours between 3 and 6 p.m. and 17.6% in open, flat terrain during the same period. Solar capacity factors ranged from 60% for ground-mounted arrays that track the sun, to 42% for fixed ground-mounted panels, to 38% for all panel types other than ground-mounted.

The capacity factor affects generators' capacity revenues and a project's entitlement to capacity injection rights.

Renewable developers can request higher capacity factors for their projects if they can provide evidence to prove their generators operate at higher levels.

The study hasn't yet considered how capacity factors are affected by degradation of the equipment over time, but Bell said it will be added in the future. Several stations were removed from the analysis because they displayed obvious degradation over time, he said. Degradation is, however, factored into CIRs for stations, he said.

Transmission Expansion Advisory Committee

Transmission Proposal Window Opens

PJM opened a 45-day window last week seeking proposed transmission projects to fix reliability criteria violations on 43 flowgates. The window will close on Aug. 25.

The flowgates were identified in the 2022 analysis: 34 in PJM's Western Region, six in the Southern Region and three in the Mid-Atlantic Region. The remaining 161 flowgates from the analysis were excluded from the window as either immediate-need projects or under 200 kV, which is PJM's threshold for opening projects to competitive bidding. The RTO has found that projects under 200 kV tend to be upgrades handled by the incumbent transmission owner.

Updates to Artificial Island Analysis

Staff have updated PJM's beneficiary analysis for the Artificial Island project to address issues raised by stakeholders at the June 9 special Transmission Expansion Advisory Committee meeting. Among the additions was a list of transmission facilities that could compose a stability interface.

Most of the $280 million bill for the project would shift from Delaware to New Jersey and Pennsylvania under two alternative methodologies outlined in the analysis. But it will be up to PJM's TOs to petition FERC to adopt a new methodology for the project. "PJM does not have the authority to devise or file allocation methodologies as federal law makes clear that the Section 205 filing rights over rates and cost allocation in this area rests with the PJM transmission owners," the report says.

The project, PJM's first foray into competitive bidding under FERC Order 1000, has been bogged down in stakeholder infighting for years. In April, PJM's Board of Managers lifted a suspension on the project and re-awarded it to LS Power. (See *PJM: AI Costs Would Shift to NJ, PA Under New Allocations*.)

— Rory D. Sweeney

SPP NEWS

Divide Evident Between SPP Tx Owners, Users

By Tom Kleckner

DENVER — The divisions between SPP's transmission owners and their customers could not have been starker than they were during the Markets and Operations Policy Committee meeting last week.

Twice, load-serving TOs overwhelmingly endorsed voting items favorable to their customers and companies. One was a revision to SPP's transmission zonal placement process. The second was a motion to reject staff's recommended scope for a high-priority study that didn't address their concerns with the RTO's transmission planning process, which they say hasn't resolved systematic congestion on certain parts of the system.

Both times, the larger number of transmission-using members — 77 of the committee's 95 voting members — resulted in the TOs coming up on the short end after hours of back-and-forth comments.

"We had a good discussion. I'll leave it at that," MOPC Chair Paul Malone, of the Nebraska Public Power District, told the Strategic Planning Committee during its post-MOPC meeting Thursday.

Transmission Planning Process

Large load-serving entities complain that they are footing most of the bill for transmission expansions that also benefit transmission developers, wind developers and small municipal utilities and cooperatives.

Several members questioned the need for the high-priority study of congestion in the Texas Panhandle and western Oklahoma, pointing to recent changes to SPP's transmission planning process. Staff have streamlined the number of assessments into a single 10-year study that will produce an annual expansion plan addressing reliability, economic and policy needs. The process's first results will be shared in October 2019. (See "SPC, MOPC Approve Improvements to SPP's Tx Planning Process," SPP Strategic Planning Committee Briefs.)

A frustrated Greg McAuley of Oklahoma Gas & Electric told the MOPC that while the TOs weren't in lockstep, they all want to protect customers from additional costs.

McAuley

"What you see are those that have companies that have to pay for these things are being outvoted. That's a concern this organization needs to reconsider," McAuley said. "Our customers have just paid for [transmission planning process] improvements. What I'm hearing today is we're asking [our customers] to pay another million dollars for another ad hoc study, because our process does not work."

Transmission Zonal Placement

Buffington

Kansas City Power & Light's Denise Buffington, who shepherded the zonal placement revision request (RR172), tried to take MOPC's rejection of her proposal in stride. While waiting for a runner to bring her a microphone during the SPC's discussion of the proposal, she asked wryly, "Can I just scream?"

Heather Starnes waits her turn to speak at the MOPC meeting. | © RTO Insider

Buffington urged board members in attendance to consider adding additional municipalities and cities as members besides the large membership expansions, such as the Integrated System and Mountain West Transmission Group.

"Obviously, the votes that happened at MOPC show those that are paying the bills have less of a vote than those that aren't paying the bills," she said. "I encourage you to consider in your strategic analysis plan all types of membership expansion that affects the pool and members."

The load-serving TOs approved Buffington's revision request by a 15-3 margin, with the Basin Electric and Western Farmers cooperatives joining Grand River Dam Authority in

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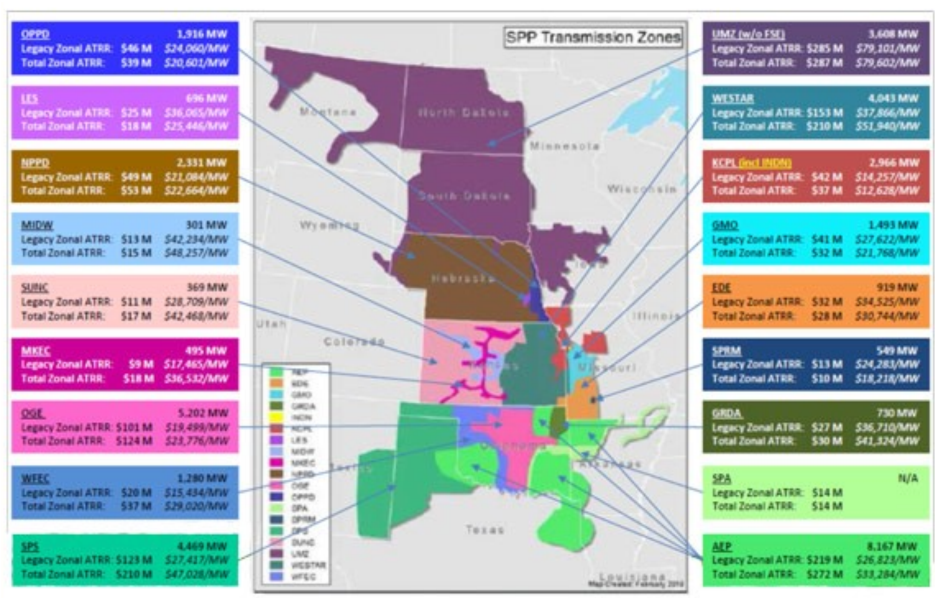


Current SPP transmission pricing zones. Zonal ATRR and load information based on data in RRR file for rates effective April 1, 2017. | KCP&L

SPP NEWS

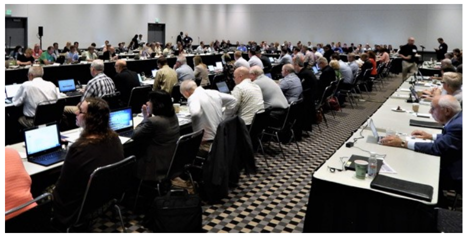
MOPC Briefs

More Z2 Woes; SPP to Resettle 9 Years of Data

DENVER — SPP's Z2 Task Force will likely soon be a relic of the past, but the issues with financial credits and obligations for sponsored transmission upgrades that spurred the creation of the group aren't going away.

The Markets and Operations Policy Committee last week endorsed the task force's request to conclude its work. Minutes later, SPP staff told the committee the RTO would have to resettle nine years of historical Z2 credits and obligations because of billing disputes, "minor" software defects and problems in calculating the present value of creditable balances.

SPP last fall identified about $200 million in revenue credits to be collected for transmission upgrades under its Tariff's Attachment Z2, which details how to reimburse sponsors of network upgrades. The bills covered eight years of credits and obligations for 2008-2016, when staff failed to apply credits, complicating the task of trying to accurately compensate project sponsors and



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claw back money from members with debts for the upgrades. (See *Preliminary Z2 Bills Released; Task Force Develops Options for Waiver Requests*.)

SPP's Charles Locke said the resettlement results will be similar to last year's processing and stressed they will not produce duplicate or additional charges.

"What you pay or owe is only the difference between the original settlement and the resettlement," he said.

However, Locke could provide few details beyond that. "Generally, the amounts will be small. I'm reluctant to say how small," he said.

That drew pushback from members, some of whom could recall early staff estimates of $50 million for creditable transmission upgrade projects, which eventually ballooned to nearly $850 million in assigned costs. (See *SPP MOPC Recommends 5-Year Timetable for Resolving $849M Z2 Bill*.)

"Is there a number by what you mean by small?" asked ITC Holdings' Marguerite Wagner. "It's hard for me to understand what that actually means."

Grant

"SPP assured us for years the amounts for Z2 were small, until they actually did the billing," said Southwest Public Service's Bill Grant. "I don't get a lot of comfort when you say the amounts will be small. I do understand the reason, but it still tends to create regulatory issues for your members when they go back [to their commissions] and say, 'Whoops! The calculations weren't correct, so we'll have to adjust it either up or down.' It's starting to get really painful."

SPP COO Carl Monroe suggested that members focus on the difference between last year's invoices and this year's.

"What's more important is the deltas," he

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Divide Evident Between SPP Tx Owners, Users

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opposing it. However, the transmission-using owners voted down the motion 30-12, with seven abstentions, leaving the proposal 11 percentage points short of the necessary 66% approval.

"I just want to put everyone on notice that we will be appealing to the board," Buffington said immediately after the vote. The Board of Directors and Members Committee meets July 25 in Denver.

"Shocker!" responded Heather Starnes, legal counsel for the Missouri Joint Municipal Electric Utility Commission and a nay vote.

Buffington has been working on RR172 for two and a half years to address what she says is a gap in the SPP Tariff.

Staff currently determine which of 18 transmission pricing zones to place new TOs in, which can result in cost shifts for those in the incumbent zone. (See *SPP Advances KCP&L Cost Shift Proposal*.)

The revision request was modified after "robust" stakeholder debate at the SPC and Regional Tariff Working Group, Buffington said. She said the modified RR172 is a "middle ground" and improves transparency in the new member zonal placement decisions by providing advance notice to TOs and their customers, allowing potentially affected entities to provide feedback before SPP makes a decision.

Buffington said RR172 also mitigates costs of zonal-placement decisions and protects both existing and new customers from cost shifts.

"This RR is primarily focused on the cost-shift issue … when SPP creates or expands multi-owner zones," Buffington said. "KCPL has tried to come up with compromise but hasn't been able to gain consensus. The alternative is litigation. To me, that's a lot of risk on both parties."

Some of those opposing the measure said there wasn't enough time to study the revisions to the proposal. Others questioned whether the MOPC should be voting on a Tariff change without any working group's approval. Some cited the "radical new policies" network customers would face in becoming TOs and fears of encroaching on FERC's rate-setting authority.

"Does this group, as a Markets and Operations Policy Committee, really want to pass a Tariff revision when FERC should be the decision-maker? Rates are in the FERC purview," said South Central MCN's Brett Hooton. "We've had a lot of long SPC meetings on this topic. I don't know that rehashing all that is going to change anyone's opinion today."

Starnes agreed with Hooton.

"We've beaten this horse until it's bloody and no one recognizes it anymore," she said, calling for the vote.

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said. "We won't know the deltas until we know the details of the resettlement. We won't know the details until we go through the actual resettlement."

Locke said staff intends to provide preliminary resettlement results in September, so members "at least have some indication of the numbers." Staff will in September begin reprocessing data from March 2008, adding the months through July 2017. It hopes to post updated invoices in October to keep up with a timeline approved last year.

While chairing the Strategic Planning Committee on July 13, Golden Spread Electric Cooperative's Mike Wise asked Locke whether the resettlement would be SPP's last.

"We're certainly hoping so," Locke responded. "The last resettlement of historic data."

In accepting the Z2 Task Force's recommendation to let its charter expire, the MOPC also approved two recommendations from the group, with nine "no" votes (out of a potential 95 votes) and two abstentions. The first eliminated credits for non-capacity upgrades, such as substation facilities, while the second disposed of credits for short-term transmission service of less than a year.

Ross

The task force also reviewed the use of incremental long-term congestion rights (ILTCRs) as a substitute for Z2 credits — a practice by other RTOs — but was unable to reach consensus. The group said "significant concern" was expressed over SPP's existing congestion rights processes and the "perceived lack of hedging."

"Existing customers may prefer the risk of waiting on cash recovery versus getting ILTCR's, which may have limited value in the future," according to the task force's recommendation to the MOPC.

The task force was formed last year to find "a more rounded solution" to Z2 credits. (See Board Approves Z2 Timeline Extension, Creates Task Force for Further Study.)

"We feel like at this point in time, the task force has done what it can about whether or not there is something else we can do to reduce the burden of Z2 and replace it with something else," the task force's chair, Kansas City Power & Light's Denise Buffington, told the MOPC. "After many, many, many meetings, we could not get to a decision on the underlying policy or whether to socialize those costs. Unfortunately, we are where we are."

American Electric Power's Richard Ross, who likes to hand out gold stars to his fellow stakeholders, said he was awarding Buffington a "Richard Ross Gold Star for Cat Herder of the Year."

MOPC Suggests 1-MW Threshold for Network Load

It came down to a single vote, but the MOPC offered direction to the Regional Tariff Working Group on how to address "inconsistency and uncertainty" over which behind-the-meter generation qualifies as network load.

The committee directed the RTWG to use a 1-MW threshold for reporting network load and to develop a list of inclusions and exclusions. In a roll-call vote, the last member to record its vote pushed approval of the motion from 65% to 66.2% — just above the 66% necessary for passage.

For customers taking network service, SPP currently follows FERC policy that sets all load at discrete delivery points as network load, which effectively sets the threshold at 0 MW for load served by BTM resources.

"At least this gives some guidance to MOPC," Monroe said, alluding to the difficulties the RTWG has had in tackling the issue.

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"If so, then make every member of the MOPC charter members of the [RTWG's] Billing Determinants Task Force, because that is what we spent two and a half years discussing," said Oklahoma Gas & Electric's David Kays, who chairs the RTWG. "If 10 members were in the room, we had 10 different exceptions. If 15 members were in the room, then we had 15 different exceptions."

The RTWG, through the BDTF, has been working on the problem since 2014 and has haggled over two revision requests (RR158 and RR 232). The task force developed the first and defined network load to include load served by certain BTM generators at discrete delivery points, while excluding load served by other BTM generators where load is shed automatically. The second revision request was developed with input from the SPC and excluded load served by a BTM generator or group of generators totaling 1 MW or less.

Members were never able to reach consensus on the proposed Tariff language. The RTWG in June rejected RR158 and RR232.

"We spent significant time on RR232 trying to cover as many issues related to behind-the-meter generation as possible," said BDTF Chair Heather Starnes, legal counsel for the Missouri Joint Municipal Electric Utility Commission. "Different people interpret the Tariff provisions related to network load … differently. Maybe it's not so straightforward to some folks."

The RTWG will bring back its list of exclusions and inclusions to the October governance meetings. Assuming clarity and approval of the network load list, Starnes said, the RTWG will then develop Tariff language once again subject to the stakeholder process.

"This is a need, an immediate need," Wise said. "I think there may be some cross-subsidization going on because of the way the network load is actually reported. I want to make sure we have consistency across the entire footprint and where the whole load gets reported accurately, because we do have substantial costs paid by the network load. All these loads need to pay their fair share of those costs."

Staff to Review AECI Joint Project After Cost Increase

David Kelley, SPP's director of interregional relations, told members he would spend this week reviewing an alternative to a previously approved transmission project that recently saw a 50% cost increase.

The joint project with Associated Electric Cooperative Inc., originally estimated at $9.2 million, was endorsed by the MOPC and SPP Board of Directors in January and included in the RTO's 2017 Integrated Transmission Planning 10-year assessment. It involves installing a new 345/161-kV transformer at AECI's Morgan substation and an uprate of a related 161-kV line, both near Springfield, Mo.

"As luck would have it," Kelley said, AECI notified him July 7 that it raised the project's cost estimate to "just shy of $14 million." Because the costs increased more than 20%, the parties can revisit the initial cost-sharing agreement.

"We had another alternative that wasn't a seams project. It provided comparable benefits but, at the time, significantly more expenses," Kelley said. "I'd like to spend the next few days making sure we're still making the right decision."

Kelley said if his revised analysis is not ready for the July 25 board meeting, he will present it during the October governance meetings.

The Morgan project would be regionally funded, as it solves congestion issues on SPP's side of the seam, and is contingent on

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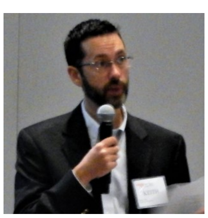
reaching an agreement for compensating AECI. SPP was to assume responsibility of $8.7 million of the original cost estimate. AECI will own the project and be responsible for its construction, operations and maintenance.

MWG to take Another Shot at MWP Manipulation

Members remanded back to the Market Working Group a previously rejected revision request (RR221) that addressed potential manipulation of make-whole payments (MWPs) related to mitigated energy offers and no-load offers for resources with a three-day minimum run time or greater.

RR221 would have added language that establishes a permissible percentage threshold above the mitigated offer at the time of the original commitment. Ross, the MWG's chair, said that as structured, RR221 would force SPP to report to FERC's Office of Enforcement deviations as little as a penny.

"Monitoring is not always clear and concise," Ross said. "We have concerns with moving forward with that request. There's no room for error when updating offers for fuel-price changes, and the burden of implementation is on the market participants to run the calculations. You could be one penny over the line because of a rounding error. You could violate the Tariff without any impact to the market."


Collins

Keith Collins, the Market Monitoring Unit's newly installed executive director, agreed with Ross. (See *SPP Names CAISO's Collins to Lead MMU*.)

"There has to be a bright line. Yes, it's a violation, but let's exercise some judgment first," he said. "It's been my experience with manuals and protocols that … they're nice guidance, but if you get to a circumstance where [they have] to be enforced, they don't carry the same weight."

Staff and members, in agreeing to send RR221 back to the MWG, said the issue was more of a market design problem.

"Let the market design experts take another shot at this," said Midwest Energy's Bill Dowling. "I'd prefer to see them deal with this issue one more time. Maybe there's a way to navigate this."

Wind Integration Study's Recommendations Move on

The MOPC unanimously approved staff study recommendations for how much wind energy the SPP system can reliably absorb. The RTO has routinely broken the 50% penetration level for wind and has said it can go even higher. (See *SPP Eyes 75% Wind Penetration Levels*.)

SPP set a record for North American RTOs in April when wind energy served 54.47% of its load — 58.67% with the addition of solar and hydro. The RTO had 15.7 GW of installed wind capacity when the study began last year and currently projects 17.2 GW by the end of 2017.

Casey Cathey, SPP's manager of operations analysis and support, said wind has exceeded 50% penetration several times and exceeded that mark for hours at a time.

"We're meeting all NERC standards, but there are things out there we can continually improve on," he said.

Last year's Variable Generation Integration Study (VIS) stressed the transmission system to a point of instability, identifying reliability impacts during high-wind and low-load scenarios. Staff analyzed 45% and 60% wind penetration levels and examined transient stability, frequency response, voltage stability and a targeted five-minute ramping.

The VIS recommends seven solutions and improvements to increase reliability, including the installation of online transient-stability and voltage-stability analysis tools. Staff has estimated the software will cost a combined $3.2 million.

Members OK Re-baselining Out-of-Bandwidth Projects

Members unanimously approved re-baselining four out-of-bandwidth projects, three of which were a combined $95.5 million less than original estimates once project owners lowered material, engineering and construction costs through more accurate data.

One estimate, an OG&E 500/161-kV transformer project, went from $15.1 million to $25.6 million because of an increase in internal costs, unforeseen site work and the need to keep the 161-kV lines energized throughout the project.

All four projects were regionally funded, with operating voltages of greater than 100 kV and cost estimates of more than $20 million. (The OG&E project was a legacy project.) They became eligible for re-baselining when their updated cost estimates exceeded the +/-20% variance bandwidth after receiving notifications to construct.

MOPC Approves 9 Revision Requests

The MOPC approved a modified two-year-old revision request (RR82) that ensures combined cycle units do not lose eligibility for start-up cost MWPs because of a physical or environmental limitation, avoiding outage deviation penalties in the process.

RR82 adds a previously discussed increase in the MWPs' grace period for commitments from one hour to two. The revision's implementation date was scheduled for this August to allow SPP to complete development of software that allows market participants to register and submit separate offers for combined cycle units' multiple configurations.

Final approval of the revision request is contingent upon the Regional Tariff Working Group's endorsement of Tariff language changes. RR82 was approved by the MOPC and board in October 2015, but staff identified the additional changes while developing the FERC filing letter.

The committee approved eight other revision requests as part of its consent agenda, which passed unanimously:

- MWG-RR185: Clarifies which SPP criteria document (Planning Criteria or Operating Criteria) is referenced when used in the market protocols and the Tariff's Attachment AE, and correctly directs users to the specific document.
- MWG-RR210: Changes the process for testing a contingency reserve deploy-

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SPP NEWS

Strategic Planning Committee Briefs

Committee Gives Congestion Study New Life

DENVER — The SPP Strategic Planning Committee last week directed RTO staff to move forward with a high-priority congestion study that earlier failed to gain traction in the Markets and Operations Policy Committee.

SPP Board Chair Jim Eckelberger suggested that staff incorporate suggestions from American Electric Power's Richard Ross, who presented the MOPC with a new approach to determining why customers participating in the congestion-hedging market are not being allocated their full auction revenue rights and long-term congestion rights (LTCRs).


Eckelberger

Under the AEP plan, staff would study the last cycle of hedge requests, identify unfulfilled requests, determine the effects of counterflow not requested in the ARR process and determine upgrades necessary to allow awarding of those unfulfilled requests.

"There's significant congestion restricting service," Ross said. "Members played by the rules, sought out firm service, paid for upgrades on the system, paid for Z2 credits, but still find themselves in a situation where they are paying for congestion because TCRs are not feasible."

Ross' approach would focus on the first round of the annual auction, where market participants seek the congestion paths most important to them.

"We use that information to figure out what upgrades are needed," he said. "We need to go through this process to determine the bottlenecks and how to solve them. The motivation of the [market-clearing] engine is to maximize the clearing of those ARRs or TCRs. What happens is transmission requests or ARRs with small amounts end up eroding away the congestion hedges."

Ross' alternative approach was rejected by the MOPC, as was staff's hybrid approach using some of AEP's suggestions. Staff was directed to undertake the study addressing

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MOPC Briefs

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ment (CRD) by adding a deployment test instruction issued in conjunction with the out-of-merit energy dispatch, allowing sufficient time to review test results and provide accurate data. Also changes SPP's communication of the CRD's test results from 60 minutes to within one business day. Should a resource retest be requested, SPP agrees to complete the test within two business days, subject to its assessment of system stability.

- MWG-RR222: Includes a multiconfiguration combined cycle resource's (MCR) committed and actual configuration for each interval in a bill determinant report, allowing MCRs to shadow the configuration SPP is using to settle these resources.
- MWG-RR225: Cleans up confusing and misleading Tariff language on incremental long-term congestion rights (ILTCRs) that could construe ILTCRs as load-serving entities or non-LSEs.
- MWG-RR226: Changes settlement location pairs that have potential for unconstrained flow to electrically equivalent settlement locations during the auction revenue rights process, to comply with a FERC order (ER17-310). SPP will post the settlement locations before the annual ARR allocation process, along with the system topology and other data.
- MWG-RR229: Satisfies FERC Order 831's requirements on energy offer caps by using actual costs for make-whole payments on offers above $1,000/MWh. According to the order, costs underlying a resource's cost-based incremental energy offer above $1,000/MWh must be verified before that offer can be used to calculate LMPs.
- ORWG-RR228: Clarifies existing planning criteria language for system operating limits to reduce the potential of misinterpretation by entities complying with NERC reliability standards.
- RTWG-RR233: Ensures that eligible network customers will not be billed twice for the same delivery. Customers will also not be assessed charges against a specific use of a single owner's facilities that do not receive the benefit those charges provide to other transmission owners under the Tariff. The Southwestern Power Administration (SPA) and SPP have entered into a contract (Attachment AD) that provides for SPP to offer transmission service on SPA's facilities, including network integration transmission service (NITS), and allows SPA to participate in the RTO's transmission planning. SPA also voluntarily contributes to Schedule 11 representative of the grandfathered transmission service agreements (GFAs) it has in place for non-federal uses of its transmission facilities. SPA and SPP are transitioning customers with GFAs to NITS under the Tariff, creating implications for new customers who also receive federal hydropower deliveries.

The consent agenda also included:

- Modifications to the revamped revision process, adding the Integrated Transmission Planning Manual and certain technical documents to the approval process. (See "Changes Proposed for Revision Process," *SPP Markets and Operations Policy Committee Briefs*.)
- The scope for the expedited re-evaluation of the Kummer Ridge-Roundup 345-kV line. (See "MOPC Endorses Re-evaluation of Basin Electric Project," *SPP Markets and Operations Policy Committee Briefs*.)
- A waiver request to FERC restating settlement prices for transmission congestion rights (TCRs) at Omaha Public Power District's Fort Calhoun nuclear plant site. The plant was retired Dec. 1, 2016, but incorrect modeling of shift factors from Dec. 1 to Dec. 14, 2016, resulted in the marginal congestion component being overstated and the TCR settlements sourcing at the location being understated.

— Tom Kleckner

SPP NEWS

Strategic Planning Committee Briefs

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congestion in the Texas Panhandle and western Oklahoma during April's Board of Directors meeting, when directors and members canceled a major 345-kV Southwestern Public Service project near Amarillo. (See SPP Board Cancels Panhandle Line, Seeks New Congestion Study.)

SPP staff are to report back to the board next week with their study assumptions and scope. The study is to be completed no later than April 2018.

During the MOPC meeting, members pushed back against the idea of another one-off study because SPP's first assessment of future needs — part of its revamped transmission planning process — is due in October 2019.

Eckelberger said, "Let's ask the staff to bring us back in two weeks its best proposals on how we can swing through this process, learn something and get us a product we can execute in the April time frame of next year, as opposed to waiting until October '19.

"I'd say it's pretty easy," he said. "Don't put anything in [that study] that's speculative, like oncoming wind and solar. Use today's gas prices, because we're talking about something that works between now and a different approach in 2019."

Eckelberger suggested to staff and the SPC that any assumption of new wind capacity above 4 to 5 GW with signed interconnection agreements is speculative.

"I don't consider [the 4-5 GW] speculative," he said. "I consider it real. It's going to come by 2019 or 2020. Where it happens remains to be seen."

The chairman received support from members. Westar Energy's John Olsen said the congestion study's April deadline would mesh well with SPP's transmission planning and help the Economic Studies Working Group in preparing scenarios to be analyzed.

"That's about the same time we go into heavy data gathering of the [planning study]," Olsen said. "It will be a great help to the ESWG as it determines the next round of futures. It'll be a great way for them to have a head start on what the futures might look like, and where we need to go."

SPC Approves Zonal Placement Process Document

The SPC approved minor edits to a process document that lays out the steps SPP must follow in making transmission zonal placement decisions, although the document does little to quell stakeholder objections about cost shifts within the process. (See Divide Evident Between SPP Tx Owners, Users.)

The Transmission Owner Zonal Placement Process document addresses the growth of transmission zones in SPP's footprint and concerns expressed over the process in FERC proceedings. Since 2004, the RTO has gone from 15 pricing zones and 15 separate zonal annual transmission revenue requirement (ATRR) amounts to 18 pricing zones and 47 ATRR amounts.

"It's a first step. Denise's proposal was a first step," said SPS's Bill Grant, referring to Denise Buffington of Kansas City Power & Light, who submitted a revision request that was rejected by the MOPC. "There's still a lot of work to do in this area. If we vote this and move it forward and think our work is done … it's not even close to being done."

"This is as good as we're going to get," SPP's Michael Desselle said, noting the SPC had already decided it had done all it could with the zonal-placement issue. (See SPP Advances KCP&L Cost Shift Proposal.)

The process document spells out the following four steps:

1. The applicant transmission owner (ATO) notifies SPP of its intent to transfer functional control of existing facilities to SPP and to file with FERC to recover the ATRR.

Michael Deselle (left) and Mike Wise | © RTO Insider

© RTO Insider

2. SPP requests project information from the ATO upon notification.
3. SPP performs integration analysis following a preliminary review of the ATO's information. This step includes the RTO notifying TOs and network customers in zones into which the ATO could be integrated and providing them evaluation of cost shifts within 45 days after receiving the necessary information.
4. Negotiation between the affected parties to discuss the zonal placement decision, potential cost shifts and any other resulting issues. The discussion period is limited to 45 days, with SPP available to facilitate if requested.

"I remain concerned because it doesn't satisfy my concerns about lack of notice," Buffington said, noting SPP gave an ATO entering KCP&L's zone several alternatives before contacting the utility. "I understand SPP makes decisions on which zone to place someone, but when you talked to [the ATO], you showed them different options."

"I'd really like your mindset to be looking out for your members and coordinating with your members," Ross told SPP staff. "Don't even look at it as 'mother-may-I' with someone who isn't even part of system. Members who might be impacted should be your first thought, not your second."

In the end, Grant and Nebraska Public Power District's Traci Bender were the only members of the 14-person committee to vote against the motion. (Buffington is not a member of the SPC.) Kansas Electric Power Cooperative's Les Evans abstained.

"I think this is a really good step forward," said SPC Chair Mike Wise, of Golden Spread Electric Cooperative. "This gives a firm sense of the communication process."

— Tom Kleckner

COMPANY BRIEFS

NiSource Names Union Pacific Exec to Board

NiSource's Board of Directors last week appointed Union Pacific executive Eric L. Butler to the board. He will be up for re-election at next year's annual shareholders meeting.

Butler

Butler is executive vice president and chief administrative officer for the railroad company, where he previously served as chief marketing officer.

He has a bachelor's degree in mechanical engineering and a master's in industrial administration in 1986 from Carnegie Mellon University. He has been a director of the Omaha branch of the Federal Reserve Bank of Kansas City since 2015.

More: NiSource

Duke Energy to Build First Ky. Solar Projects

Duke Energy plans to build three utility-owned and operated solar projects in Kentucky, making it the fourth state in which a Duke-regulated utility owns solar farms.

Construction will start by the end of the summer for the projects, which are expected to cost a combined $14.8 million. Duke expects them to be online by 2018.

Two projects in Kenton County will have the capacity to produce more than 4 MW of electricity. The third project in Grant County will have the capacity to produce more than 2.7 MW.

More: Charlotte Business Journal

SolarWorld Americas Gets $6M Cash Infusion

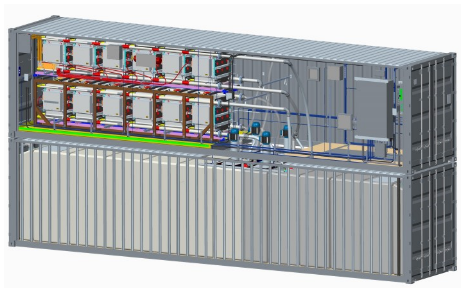
SolarWorld Americas, the U.S. division of bankrupt German solar company SolarWorld AG, will receive a $6 million cash infusion from creditors to enable the company to stabilize through this year.

The company said it expects to raise millions more this year by selling assets not required for operations. SolarWorld AG filed for insolvency in Germany in May.

"It means quite simply that we can reassure our business partners that we will remain a reliable force not only in supply leading solar technology but also in continuing to fight for fair trade in the U.S. market and improving market conditions there," SolarWorld Americas President Juergen Stein said.

More: PV Magazine

Zinc-Iron Battery Maker Claims 'Record Low' Price



ViZn Energy

ViZn Energy announced last week that its zinc-iron flow battery can deliver energy storage at a "record low price." The company said adding its 30-MW, four-hour system to a 100-MW solar plant can generate a 7% internal rate of return (IRR) with a 4-cent/kWh power purchase agreement. The price assumes both the solar and storage qualify for the federal investment tax credit.

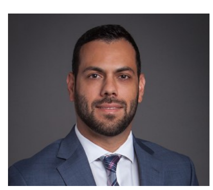
The company said the low cost is achievable in part because of the battery's projected 20-year lifespan — two or three times the life of lithium ion batteries.

EOS Energy Storage, which makes zinc hybrid cathode batteries, said in February that it could deliver dispatchable solar-plus-storage for 10 cents/kWh.

More: Energy Storage News; ViZn Energy

Rafael Pagan Joins Burns & McDonnell as Project Manager

Rafael Pagan has joined Burns & McDonnell as a project manager on its regional transmission and distribution team in the D.C. metropolitan area.



Pagan

In his new role, Pagan will oversee a team of power delivery engineers focused on design and execution of substation and transmission projects.

He brings more than 10 years of experience in high-voltage transmission, substations and distribution systems. He's managed, developed and engineered projects across the U.S. ranging from 13-kV to 500-kV, with individual values exceeding $25 million.

More: Burns & McDonnell

NRG Plans to Sell Up to $4B in Power Assets

NRG Energy said Wednesday it is looking to sell up to $4 billion in assets across its coal, gas, solar and wind portfolio, including 6 GW of conventional power plants and, potentially, more than 3 GW of renewable energy plants.

The sale could include its entire stake in NRG Yield, its renewable energy business.

The company, which has lost more than $7 billion over the last two years, is seeking to lower debt by $13 billion and cut costs.

More: Greentech Media; The Associated Press

Dynegy to Sell 3 Plants for $300M

Dynegy has agreed to sell three of its generating plants for about $300 million, which, when combined with a previously announced sale of its Armstrong and Troy facilities, gives it about $780 million that it will use primarily for debt reduction.

Dynegy will sell its Lee Energy Facility for $180 million in cash to an affiliate of Rockland Capital. It also will sell its plants located in Dighton and Milford, Mass., to Starwood Energy Group Global for a total of $119 million.

The agreement fulfills its mitigation plan approved by FERC for its purchase of ENGIE's U.S.-based asset portfolio.

More: Dynegy; Seeking Alpha

DTE Names Rodney Cole State Government Affairs Director

DTE Energy last week named Rodney Cole as director of state government affairs, leading the company's policy and advocacy efforts in Lansing, Mich. He replaces Jim Padgett, who will retire in September.

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COMPANY BRIEFS

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In his new position, Cole will continue strengthening DTE's relationships with Michigan's public-sector leaders to create and implement policy that benefits customers statewide.


Cole

He most recently led DTE's Wayne County Regional Relations team, where he served as the primary contact between DTE and local municipalities and community partners.

More: DTE Energy

For 2nd Time, Faraday Future Scales Back Plans for EV Factory

Electric-car startup Faraday Future said last week it is scaling back for the second time its plans to build a factory in North Las Vegas.

The Chinese-funded startup previously announced plans to build a 3-million-square-foot factory, then reduced the size to 1 million. Now it is searching for an existing building to produce its luxury FF 91 electric car.

Assets belonging to the company's primary funder, entrepreneur Jia Yueting, and his wide-ranging technology company, LeEco, have been frozen by courts in China and elsewhere because of unpaid loans.

More: Los Angeles Times

Shell Plans to Spend $1B a Year On Renewable Energy by 2020

Royal Dutch Shell plans to spend as much as $1 billion a year by 2020 on its New Energies division as opportunities in electric vehicles and renewable power gain traction, CEO Ben van Beurden said last week.

Van Beurden, addressing the World Petroleum Congress in Istanbul, noted that in some parts of the world, electric cars are starting to gain consumer acceptance and that wind and solar costs are declining fast.

He spoke of the potential for fast-growing nations, such as Asia and sub-Saharan Africa, to vault to clean energy. "These are areas that are not, on the whole, locked in to a coal-driven system. There is the potential for them to shift more directly onto a less energy-intensive pathway to development."

More: Bloomberg

Mark Jones Named VP of Operations at JCP&L

Mark A. Jones has been named vice president of operations at FirstEnergy subsidiary Jersey Central Power & Light. John Anderson will replace Jones as vice president of external affairs.

In his new position, Jones, who served as vice president of external affairs since 2012, is responsible for the operation and maintenance of JCP&L's transmission and distribution systems. He joined FirstEnergy in 1999 and has served in various leadership positions.


Jones

Anderson will lead a team of 10 area managers and 21 customer support personnel in the external affairs group, which serves as liaisons with municipal governments, key commercial and industrial customers, and civic organizations, as well as provides support for community involvement activities.

More: JCP&L

AES, Siemens Partner to Sell Industrial-Scale Batteries

American energy firm AES and German engineering conglomerate Siemens said in regulatory filings last week that they are forming a joint venture that will sell industrial-scale batteries to large businesses.

The partnership, called Fluence, will be "fully funded for the next five years," AES chief executive Andres Gluski said. He declined to say how much the two companies are investing at the outset. The two firms will split ownership equally.

Pending regulatory approval, the companies expect the deal to close in the fourth quarter.

More: The Washington Post; Reuters

FEDERAL BRIEFS

Ex-Sen. Ayotte Joining Republican Climate Change Group

Former Sen. Kelly Ayotte (R-N.H.) will join the center-right Citizens for Responsible Energy Solutions (CRES) as a senior adviser. Ayotte lost her re-election bid last year to Democrat and then-Gov. Maggie Hassan.


Ayotte

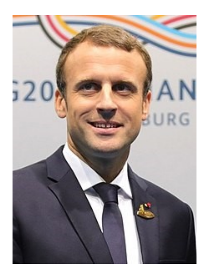
CRES aims to boost Republicans who prioritize "clean energy solutions" without compromising economic growth. "I find especially younger voters care very much about having clean air, clean water — it's an issue that we should be looking for ways for Republicans to lead on," Ayotte said.

Ayotte joins as the group plans its efforts for the 2018 congressional elections and, for the first time, in governors' races around the country. Founded in 2013, the group's endorsements have included candidates who are skeptical of climate science but support clean energy, as well as those more outspoken in fighting climate change.

More: McClatchy

Macron: Charm Offensive May Soften Trump's Climate Stance

French President Emmanuel Macron said his Paris charm offensive on Donald Trump may have changed the U.S. president's mind about climate change.


Macron

In an interview with *Le Journal du Dimanche*, Macron said Trump listened to his arguments in favor of the Paris Agreement, which Trump

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FEDERAL BRIEFS

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has disavowed. "He understood the reason for my position, notably the link between climate change and terrorism," Macron said. Droughts and other extreme weather blamed on climate change are exacerbating migration crises and conflicts over resources in some regions.

"He said he would try to find a solution in the coming months. We spoke in detail about what could allow him to return to the Paris deal," Macron said.

More: *Associated Press*

National Renewable Energy Lab's Allies Seek to Blunt Budget Cut

The National Renewable Energy Laboratory, which celebrated its 40th birthday on July 5, is facing an uncertain future in the face of proposed federal budget cuts.

President Trump has proposed cutting funding for the Department of Energy's Office of Energy Efficiency and Renewable Energy — which provides 80% of NREL's funding — by about 70%. A House committee has voted to increase funding for energy efficiency and renewable energy by $500 million more than Trump's request.

Sen. Cory Gardner (R-Colo.) said he will fight any "draconian cuts" to the lab, located in Golden, Colo. He said every $1 of taxpayer money invested through the lab results in $5 of private investment. NREL's economic impact was about $872 million nationwide in 2014. The lab's projected budget for fiscal 2017 is about $360 million.

More: *The Denver Post*

Draft DOE Study Says Renewables Don't Threaten Grid Reliability

Wind and solar power don't significantly threaten reliability of the U.S. power grid, according to a July draft of the electric grid study ordered by Energy Secretary Rick Perry.

The study, obtained by Bloomberg, was prepared by Energy Department staff members and contradicts previous statements by Perry that baseload sources that provide constant power are jeopardized by Obama-era incentives for renewable energy, thus making the grid unreliable.

Energy Department spokeswoman Shaylyn Hynes said the statements are not in the current draft and that the report is "constantly evolving." The report is weeks overdue.

More: *Bloomberg*

Trump Seeks to Steer UN Climate Cash to New Coal Plants

The U.S. will seek to use a United Nations fund designed to aid nations affected by climate change to promote the construction of coal-fired power plants around the world.

The U.S., which has donated $1 billion to the so-called Green Climate Fund, can use its seat on that board to advance American energy interests, according to a White House official who spoke on the condition of anonymity to describe climate negotiations at the G-20 summit in Germany.

A statement issued by the group cited a U.S. commitment to "work closely with other countries to help them access and use fossil fuels more cleanly and efficiently."

More: *Bloomberg*

IEA: Global Gas Demand To Grow 10% by 2022

Global natural gas demand is expected to grow by 1.6% a year for the next five years, with consumption reaching almost 4,000 billion cubic meters (bcm) by 2022, up from 3,630 bcm in 2016, according to the International Energy Agency's latest market analysis and five-year forecast.

Demand from the industrial sector will be the main driver of increased gas consumption, replacing power generation, where gas is competing with renewables and coal.

China will account for 40% of the growth. The U.S. — the world's largest gas consumer and producer — will account for 40% of the world's extra gas production to 2022.

More: *International Energy Agency*

Mountaintop Coal Mining Linked to 'Consistently Saltier' Rivers

Mountaintop-removal coal mining causes many streams and rivers in Appalachia to run consistently saltier for up to 80% of the year, according to a new study by researchers at the University of Wyoming and Duke University.

The scientists examined water quality in four watersheds that flow into southern West Virginia's Mud River basin, the site of extensive mountaintop mining in recent years. Mountaintop-removal mining results in the deposit of leftover debris and crushed rocks in neighboring valleys, creating "valley fills" that can bury entire streambeds.

"Over time, alkaline salts and other contaminants from the coal residue and crushed rocks in these valley fills leach into nearby streams and rivers, degrading water quality and causing dramatic increases in salinity that are harmful to downstream ecosystems," said Fabian Nippgen, assistant professor of ecosystem science and management at the University of Wyoming.

More: *American Association for the Advancement of Science*

DC Circuit Puts Methane Pollution Rule on Hold for 14 Days

The D.C. Circuit Court of Appeals on Thursday ordered that its July 3 decision rejecting EPA's delay of a methane pollution rule for oil and natural gas drilling be put on hold for 14 days while the Trump administration considers whether to appeal.

The court previously ruled EPA overstepped its authority under the Clean Air Act when it placed a 90-day pause on the Obama administration's regulation.

The court wrote that putting its decision on hold beyond 14 days would essentially hand EPA the delay it previously determined to be illegal. EPA asked the court to hold off on enforcing its order for 52 days.

More: *The Hill*

Energy Department Investing $46M in 48 Solar Projects

The Department of Energy announced Wednesday it has awarded $46.2 million for 48 early-stage solar power technology projects as part of its Sunshot Initiative.

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FEDERAL BRIEFS

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Twenty-eight projects aimed at advancing research in solar photovoltaic technology will receive $20.5 million. Twenty projects supporting entrepreneurs and small businesses in early-stage research will receive $25.7 million.

Cost-share requirements will leverage additional private-sector funds, raising the total investment to nearly $65 million.

More: Department of Energy

House Committee Approves $37B Spending Bill for DOE

The House Appropriations Committee on Wednesday approved a $37.6 billion annual spending bill for the Department of Energy and water infrastructure programs over objections from Democrats.

The bill, which provides $3.2 billion more than President Trump sought, would reduce funding for fiscal 2018 by $203 million compared with 2017 on an annualized basis.

Democrats criticized the bill for its deep cuts to department programs. Funding for the Office of Efficiency and Renewable Energy would be cut by about half, and the Advanced Research Projects Agency-Energy would be eliminated.

More: The Hill

Energy Department Grants $19M To Accelerate EV Research

The Department of Energy on Wednesday announced $19.4 million in funding for 22 projects meant to accelerate development of electric vehicles.

The new cost-shared projects through the Vehicle Technologies Office provide research on advanced batteries to power electric vehicles, lightweight materials, engine technologies and more energy-efficient mobility systems.

The award comes from fiscal year 2017 funding.

More: Washington Examiner

Senate Panel Approves Trump's EPA, NRC Nominees

The Senate Environment and Public Works Committee approved three Trump administration nominees to EPA and the Nuclear Regulatory Commission, sending them to the full Senate for consideration.

Caputo

For NRC, the committee approved Annie Caputo, a senior adviser to committee Chair John Barrasso (R-Wyo.) and former official at Exelon. The committee also approved David Wright, a former South Carolina Public Service Commissioner.

The committee additionally approved Susan Bodine's nomination to lead EPA's Office of Enforcement and Compliance Assurance. Bodine is chief counsel for the committee.

More: The Hill

Bipartisan Carbon Capture Bill Introduced in Senate

A bill that would expand the tax credits for carbon capture was introduced in the Senate on Wednesday with bipartisan support from 25 senators.

The measure, sponsored by Sen. Heidi Heitkamp (D-N.D.), would provide a $50 tax credit per metric ton for carbon stored underground and $35 tax credit for carbon captured and injected into oil and natural gas fields. The government currently offers $20 and $10 tax credits respectively.

Carbon capture legislation introduced by Heitkamp last year had 19 bipartisan cosponsors but did not advance through the Senate.

More: Morning Consult; The Washington Post

EIA: Natural Gas-Fired Generation To Fall Behind Coal in 2017-18

Natural gas' share of U.S. electric generation will fall from 33.8% in 2016 to 31.1% in 2017 because of higher gas prices and more renewable generation, the Energy Information Administration predicted last week.

That would put it below coal, whose share is expected to rise from 30.4% in 2016 to 31.3% this year, EIA said in its latest Short-Term Energy Outlook.

Non-hydropower renewables are forecast to provide 9.4% of generation in 2017, up from 8.4% last year, while hydropower is projected to have a 7.4% share, up from 6.5%. Nuclear power will be unchanged at 19.7%, EIA said.

More: EIA

Study: 100 Companies Cause More than 70% of Emissions

Just 100 companies are responsible for more than 70% of the world's greenhouse gas emissions since 1988, according to a report published by environmental nonprofit CDP in collaboration with the Climate Accountability Institute.

According to the "CDP Carbon Majors Report 2017," more than half of global industrial emissions since 1988 can be traced to 25 corporate and state-owned entities. ExxonMobil, Shell, BP and Chevron are identified as among the highest-emitting investor-owned companies during that period.

The report also finds that if fossil fuels continue to be extracted at the same rate over the next 28 years as they were between 1988 and 2017, global average temperature would be likely to rise by 4 degrees Celsius by the end of the century.

More: The Guardian

House Republicans Reject Trump's Steep Cut to EPA Budget

House Republicans last week rejected President Trump's proposed 31% budget cut for EPA and instead introduced a bill calling for a more modest reduction.

The bill would cut the agency's roughly $8 billion budget by about 6.5% to $7.5 billion.

The $31.4 billion bill, which also includes more modest reductions in spending for the Interior Department, still provides funds for buyouts to EPA employees and "reflects the administration's goal to rein in outdated, unnecessary and potentially harmful regulations at the EPA," the Appropriations Committee said in a statement.

More: Bloomberg Politics

Trump Announces Nominees For 2 Key DOE Posts

President Trump last week announced his nominees for two key positions at the Department of Energy.

Trump will nominate Paul Dabbar, managing director for mergers and acquisitions for J.P. Morgan, to be the department's undersecre-

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tary for science. Dabbar has more than $400 billion in investment experience across all energy sectors and led the majority of the firm's nuclear transactions. He currently serves on the department's Environmental Management Advisory Board.

Trump also will nominate Mark Wesley Menezes to be undersecretary. Menezes is vice president of federal relations for Berkshire Hathaway Energy. He previously was a partner at the law firm of Hunton & Williams, heading its energy practice group.

More: White House

US Poised to Become One of The World's Top Oil Exporters

Increased shale production will drive growth in American crude exports to 2.25 million barrels a day by 2020, a four-fold increase from 2016, according to consultancy PIRA Energy Group.

The boon positions the U.S. in the years ahead to potentially be one of the 10 largest exporters of crude oil in the world, according to analyst Jenna Delaney.

U.S. crude production topped more than 9 million barrels a day in February, according to the U.S. Energy Information Administration. The number of rigs in operation has more than doubled from May 2016.

More: CNN Money

US Small-Scale PV Expected to Grow to 21.9 GW by End of 2018

U.S. small-scale solar photovoltaic capacity will grow from 14.3 GW at the end of April 2017 to 21.9 GW at the end of 2018, according to data from the U.S. Energy Information Administration.

The forecast 2018 capacity includes 13.7 GW in the residential sector and 8.2 GW in the commercial and industrial sectors. Residential small-scale solar photovoltaic capacity increased 43% from 2015, reaching 7.4 GW in 2016. In the commercial and industrial sectors, the combined small-scale solar photovoltaic capacity increased 26% last year, reaching nearly 5.8 GW.

Annual U.S. small-scale solar photovoltaic electricity generation is forecast to grow from 19,467 GWh in 2016 to 25,400 GWh this year and 32,900 GWh in 2018.

More: Energy Information Administration

IEA: Electricity Investment Passes Oil, Gas for 1st Time Ever in 2016

In 2016, investments in electricity exceeded those in oil and gas for the first time ever, according to the International Energy Agency.

But total energy investment fell for the second straight year by 12% to $1.7 trillion compared with 2015, IEA said. Oil and gas investments nosedived by 26% to $650 billion but are expected to rebound by 3% in 2017 because of a 53% upswing in U.S. shale and spending in Russia and the Middle East.

Electricity investment worldwide was $718 billion, buoyed by spending on renewable energy and power grids.

More: Reuters

STATE BRIEFS

CONNECTICUT

WalletHub: State Has Highest Energy Costs in US

State residents pay the highest energy costs in the U.S., according to an analysis released Wednesday by WalletHub, a D.C.-based personal finance website.

The analysis, which examined electricity, natural gas, motor fuel and home heating oil, found state residents are paying an average of $380/month in energy costs. Of the four categories analyzed, the state's most expensive energy source is electricity, for which the average resident pays $166/month. The average heating oil bill is $76/month; natural gas is $39/month; and motor vehicle fuel is $99/month.

Joel Gordes, a West Hartford-based energy consultant, blamed geography for the high energy costs. "We're at the end of the spigot," he said, referring to the state's location in relation to the nation's oil and natural gas fields.

More: New Haven Register

MASSACHUSETTS

State OKs Berkshire Gas Plan; Seeks End to Moratorium

State regulators on Friday approved Berkshire Gas' five-year forecast and supply plan and urged the company to lift a moratorium on new gas service in the upper Pioneer Valley.

Citing pipeline constraints, the company banned new and expanded gas hookups in its Eastern Division in 2014 and 2015. It had hoped the proposed Northeast Energy Direct pipeline, now suspended, would provide relief.

Some affected towns have accused Berkshire of trying to justify an unnecessary infrastructure expansion. The company has proposed a new, utility-owned pipeline spur linking to an interstate pipeline that crosses Hampden County. It also has offered a second option: a large storage facility for LNG in Franklin County.

More: The Republican

MINNESOTA

Unpaid Bills Cast Shadow On Aurora Solar Project

Aurora, which completed one of the state's largest solar energy projects last month, has left behind a trail of unpaid bills.

The $290 million project — 16 sites totaling 100 MW — has been hit with claims from scores of subcontractors who say they've gone unpaid. One attorney involved estimated that at least $85 million is owed.

The claims are a result of a dispute over delays and cost overruns between Aurora's parent, Enel Green Power NA, and its primary contractor, Biosar America, an arm of Athens-based conglomerate Aktor S.A.

More: Star Tribune

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STATE BRIEFS

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NEW JERSEY

For 3rd Time, Christie Blocks State from Rejoining RGGI

Saying the state is already a leader in curbing carbon emissions, Gov. Chris Christie vetoed legislation Thursday that would have the state rejoin the Regional Greenhouse Gas Initiative. The veto marks the third time he has blocked legislative efforts to participate in the program since pulling the state out five years ago.

"Pure and simple, the Legislature demonstrates its preference for higher taxes and social engineering, ignoring the overwhelming evidence proving the RGGI to be a failure,'' Christie said in his veto message.

Christie's veto comes one day after the Union of Concerned Scientists released a study detailing how up to 31 of the state's communities could be subject to chronic flooding from rising sea levels caused by climate change.

More: NJ Spotlight

NORTH CAROLINA

State Takes in Coal Ash from India While Grappling with Duke's

The Council of State last week approved a two-year lease with Ohio company Spartan Materials to store 150,000 tons of fly ash imported from India at the state port in Morehead City. The ash will go to concrete plants, a ports official said.

Spartan has the right of first refusal for a long-term lease of 2 acres at the port if it decides to build a bulk operation that could store 200,000 tons of ash a year, according to the official.

The state is taking in the ash after ordering Duke Energy to close dozens of basins in which the bulk of its 155 million tons of ash is stored. Duke expects ash cleanup in the Carolinas to cost $5.1 billion and wants customers to pay for it.

More: Tribune News Service

TEXAS

Prices Drop in Competitive Markets; Rise in Single-Provider Areas

Between 2006 and 2015, residential electric prices for residents living in deregulated markets decreased by 17.4%, while prices in areas with only one electricity provider increased by 5.5%, according to a report by the Texas Coalition for Affordable Power.

About 85% of state residents can purchase electricity from a number of providers in competitive markets, while 15% are limited to a single provider in their area. Although electricity tends to be more expensive in the state's deregulated markets, the gap is shrinking. In 2015, it "was the smallest since the beginning of deregulation," according to the report, which relies on data from the U.S. Energy Information Administration.

The study attributes the price drop to the prevalence of "low-priced individual deals" in the competitive marketplace.

More: *The Texas Tribune*

VERMONT

Regulators Investigating Vermont Gas Pipeline Depth

State regulators are investigating whether Vermont Gas Systems buried a pipeline completed in April in Addison County as deeply as required by its permit.

The pipeline's 2013 permit required burial at least 4-feet-deep in a 2,500-foot section near New Haven. But Vermont Gas acknowledges at least 18 locations where it did not meet that requirement and has filed a request with the Public Utility Commission asking for the permit to be retroactively amended. The Department of Public Service said the pipeline is buried deeply enough to be safe.

An attorney who represents pipeline opponents claims to have evidence that Vermont Gas failed to meet burial depths at far more locations than the 18 the commission is examining and has requested that the investigation be expanded to include the depth beneath waterways and residential areas.

More: VT Digger

PUC Rejects Governor's Call to Reduce Energy-Efficiency Funds

The Public Utility Commission issued an order that rejected calls by Gov. Phil Scott's administration to cut funding by 8% to the state's program that promotes energy efficiency.

The order means Efficiency Vermont will see an annual budget of about $53 million for the next three years, while Burlington Electric Department's efficiency program will run on a budget of about $2.5 million annually. Vermont Gas Systems' efficiency program will operate with about a $3 million annual budget.

Riley Allen, deputy commissioner of the Department of Public Service, said even without the funding decrease, the order represents a good investment.

More: VTDigger

VIRGINIA

State Reconsidering Controversial Tx Line Route

The State Corporation Commission said Friday that it will reconsider its decision to allow Dominion Energy to route 230-kV power lines through land near Haymarket that has been owned for more than a century by descendants of a freed slave.

The commission said it will consider appeals filed by local residents before reaching a final decision on whether to stick with the 6-mile route along Carver Road or choose a different path.

Opponents say the health and environmental impacts along Carver Road would be too great and that the Amazon subsidiary that is pursuing a data center project on 38 acres of land does not need the extra capacity to operate because it doesn't know when it will build its two warehouse-size buildings.

More: *The Washington Post*

Conservation Group Sues to Stop Tx Line Across James River

The National Parks Conservation Association filed a lawsuit in a D.C. federal court on Wednesday against the U.S. Army Corps of Engineers seeking to stop Dominion Energy from building a 500-kV transmission line carried by 17 towers across the James River

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STATE BRIEFS

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near Historic Jamestown.

Dominion, which won federal approval for the project earlier in the month, has said it is necessary to provide power to the Peninsula region as two coal-fired plants in Yorktown are phased out because of environmental standards.

The conservation group maintains the corps did not conduct a full environmental impact statement and is asking the court to halt the project until alternatives are given more consideration. "We will continue to fight in court to ensure that reckless development does not destroy this treasured and historic area," said Theresa Pierno, chief executive of the group.

More: The Washington Post

WEST VIRGINIA

Declining Coal Production Sinks State to Last in Business Rankings

Declining coal production sunk the state to a last-place finish in CNBC's Top States for Business rankings for 2017, released last week.

Factored into the loss was a 40% drop in mining jobs during the past five years, with some parts of the state seeing a 70% drop, and a 0.9% decline in GDP for 2016, which, according to U.S. Commerce Department statistics, was almost entirely because of the decline in mining.

CNBC also noted the state reportedly produces about half the coal it did in 2008.

More: CNBC

WISCONSIN

Environmentalists Drop Suit over Frac Sand Facility

Groups opposed to a proposed Monroe County frac sand operation have dropped court cases against the state Department of Natural Resources but are continuing efforts to overturn the agency's approval of a permit to fill wetlands.

In May, the DNR granted Meteor Timber

permits to fill 16.25 acres of wetlands for a $65 million processing and loading facility that would serve a nearby mining site. It would be the largest single destruction of wetlands in the state for an industrial frack sand project, according to the group Clean Wisconsin.

The group and other environmentalists withdrew their suits after acknowledging they failed to properly notify the DNR of the court proceedings. In each case, notice was delivered to the state attorney representing the DNR but not the agency itself, as required by law. Because the case was filed on the last possible day, there was no time to correct the error.

More: LaCrosse Tribune

Illinois Zero-Emission Credit Suit Dismissed

Continued from page 1

The ZECs were authorized by the Future Energy Jobs Act, which the Illinois legislature approved in December after Exelon threatened to close its Clinton and Quad Cities nuclear plants. Following the bill's signing, Exelon pledged to keep the plants — which it said had lost more than $800 million over the last six years — operating for another 10 years, saving 4,200 direct and secondary jobs.

2 Challenges Combined

The Electric Power Supply Association (EPSA) and members Calpine, Dynegy, Eastern Generation and NRG Energy filed suit in February, saying they stand to lose millions because the subsidized nuclear plants will suppress capacity and energy prices. (See *IPPs File Challenge to Illinois Nuclear Subsidies*.) The court combined EPSA's suit with one filed by customers of Exelon's Commonwealth Edison utility. Exelon intervened in both cases to defend the ZEC program.

On Monday, EPSA and its members filed an appeal with the 7th U.S. Circuit Court of Appeals. NRG spokesman David Gaier said the plaintiffs will ask for an expedited ruling. "If upheld, the Illinois decision would effectively strip FERC of its authority to regulate wholesale markets, would harm ratepayers and threaten FERC's ability to drive investment in energy infrastructure," he said.

The suits both alleged the ZEC program violates the U.S. Constitution's dormant Commerce Clause and that it is pre-empted by the Federal Power Act. The consumer plaintiffs also said the ZECs violated the Fourteenth Amendment's Equal Protection Clause because only Illinois ratepayers will be billed to pay for the subsidy. The court cited an estimate that the ZECs will cost state ratepayers $235 million annually over 10 years.

> ***"The injury caused by the ZEC subsidy is not traceable to the price adjustment, because that injury would exist even if the statute were cured of its ties to wholesale auction prices."***
>
> **Judge Manish Shah, U.S. District Court for the Northern District of Illinois**

Illinois modeled the ZECs on renewable energy credit programs enacted by Illinois and most other states, which have not been found to intrude on federal jurisdiction. The Illinois Power Agency will issue ZECs equal to 16% of the electricity delivered by each electric utility to retail customers in the state during calendar year 2014. Retail suppliers are required to purchase the ZECs under 10-year contracts ending May 31, 2027. The price for each ZEC is EPA's social cost of carbon minus a "price adjustment," based on energy and capacity prices.

Legal Tests

The Illinois suits raised state-federal jurisdictional issues similar to two cases the Supreme Court ruled on last year. In a January 2016 ruling, the court rejected EPSA's challenge to FERC Order 745, upholding the commission's jurisdiction over wholesale market operators' compensation of demand response. (See *Supreme Court Upholds FERC Jurisdiction over DR*.)

In its April 2016 decision in *Hughes v. Talen*, the court found Maryland's attempt to subsidize construction of a natural gas-fired generator encroached on FERC's authority under the Federal Power Act. (See *Supreme Court Rejects MD Subsidy for CPV Plant*.)

The same issues have been cited in EPSA's federal court challenge to the New York's ZEC program. (See related story, *NY Cites Allco Ruling in Defense of ZECs*, p.14.)

EPSA and its members also have filed complaints asking FERC to subject the subsidized nuclear plants to the minimum offer price rule (MOPR) in capacity market auctions.

Plaintiffs' Standing

In evaluating the motions to dismiss, the court assumed the facts represented by the plaintiffs were true; the case was terminated without any fact finding on the "injuries" the plaintiffs claimed.

To establish the right to sue under Article III of the Constitution, Shah said the plaintiffs must show an "injury in fact" that is "fairly traceable" to Illinois' conduct and can be fixed by the court. Shah ruled that the plaintiffs lacked Article III standing to challenge the price adjustment, noting Exelon's observation that eliminating the price adjustment would result in the ZECs being priced at the social cost of carbon. "The injury caused by the ZEC subsidy is not traceable to the price adjustment, because that injury would exist even if the statute were cured of its ties to wholesale auction prices," Shah ruled.

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Trump Names Energy Lawyer McIntyre as FERC Chair

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Taps Senate Aide, Former Lobbyist for FERC.)

Trump has yet to officially nominate Glick, however. And Chatterjee and Powelson are on a list of 44 others awaiting a confirmation vote.

The Senate has been mired in its effort to repeal the Affordable Care Act. McConnell on July 11 announced he would delay the chamber's usual August recess for two weeks to ensure more time to complete action on legislation and nominations.

FERC has been down to one commissioner — acting Chair Cheryl LaFleur — since the departure of Commissioner Colette Honorable at the end of last month. It has been without the necessary three-person quorum since Bay left in February.

The Natural Gas Supply Association and the Center for Liquefied Natural Gas released a joint statement praising McIntyre's nomination but lamenting the amount of time it is taking to restore FERC's quorum.

"Billions of dollars of investment and thousands of job opportunities in the U.S. continue to be sidelined by a lack of a quorum at FERC," NGSA CEO Dena Wiggins said. "It is essential that the nominees be given the opportunity to be approved as quickly as possible."

CLNG Executive Director Charlie Riedl added: "Restoring a quorum at FERC is essential to the LNG approval process, and we hope that Kevin McIntyre and the rest of the nominees will have their floor vote as soon as possible."

Illinois Zero-Emission Credit Suit Dismissed

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The judge also ruled the consumers did not have statutory standing for their complaint because the states have authority to regulate retail sales, making the retail surcharge funding the ZECs "outside of the zone of interests of the federal statutes."

Dormant Commerce Clause

The court was no more sympathetic to the generators' dormant Commerce Clause claim that the ZECs favor the Clinton and Quad Cities nuclear plants and discriminate against nuclear generators outside the state. "Regardless of whether ZEC recipients are in Illinois or not, the generator plaintiffs' injury from lower wholesale prices remains the same, and the consumer plaintiffs will receive higher bills," the judge said. "Since plaintiffs' injuries are not traceable to the alleged in-state favoritism, they do not have Article III standing to challenge it."

Shah said the validity of dormant Commerce Clause claims "turn on a 'sensitive, case-by-case analysis' of the facts, including the 'purposes and effects' of the law at issue."

"Where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits," he said. "The governor's and some legislators' celebratory remarks about the potential job-saving effects of the law do not negate the ZEC program's environmental purpose and public health interests."

Pre-emption

The plaintiffs had asked for an injunction to block the ZECs on the grounds that the program is pre-empted by FERC's authority under the Federal Power Act. Shah ruled the FPA makes FERC responsible for adjudicating such issues and generally does not authorize private causes of action.

"Parties can bring a complaint to FERC if they believe a practice interferes with the markets or creates unjust or unreasonable rates or practices; FERC can take corrective actions to ensure that wholesale rates and practices remain just and reasonable; and parties that disagree with FERC's decision can seek review in the circuit courts," Shah said. "A coherent regulatory policy for interstate electricity markets is a desirable outcome, and it is one that private suits undermine."

He also said the *EPSA* and *Hughes* rulings found that "pre-emption applies whenever a tether to wholesale rates is indistinguishable from a direct effect on wholesale rates."

"The qualifier 'direct' is important; influencing the market by subsidizing a participant, without subsidizing the actual wholesale transaction, is indirect and not pre-empted," he continued. "Since a generator can receive ZECs for producing electricity and the credits are not directly conditioned on clearing wholesale auctions, ZEC payments do not suffer from the 'fatal defect' in *Hughes.*"

Shah also said FERC was equipped to respond to any "market distortion" resulting from the nuclear subsidies. The plaintiffs' contention that Illinois' program conflicts with FERC's preference for competitive auctions is "too broad a theory of pre-emption and would inappropriately limit state authority," he said.

"So long as FERC can address any problem the ZEC program creates with respect to just and reasonable wholesale rates — and nothing in the complaints suggest that FERC is hobbled in any way by the state statute — there is no conflict," he said. "The complaint … does not allege that FERC is damaged in its ability to determine just and reasonable rates. The regulatory structure remains unaltered, and FERC's power undiminished. Consequently, the ZEC program does not conflict with the Federal Power Act."

Shah's ruling on this point appears to differ from the Supreme Court's ruling in *Hughes,* which said "Maryland cannot regulate in a domain Congress assigned to FERC and then require FERC to accommodate Maryland's intrusion." In that case, however, the court ruled that Maryland's contract-for-differences subsidy directly and improperly tied the generator's compensation to PJM capacity market prices.

Equal Protection Claim

Also rejected was the consumers' complaint that they were being discriminated against because only Illinois ratepayers would fund the ZECs. "The Constitution only requires Illinois to treat equally the people within its jurisdiction. As such, Illinois does not run afoul of the Fourteenth Amendment by treating Illinoisans differently from citizens from other states that live in the MISO or PJM regions," Shah said. "Furthermore, the complaint does not allege that Illinois could have imposed a surcharge on people in the MISO and PJM regions that lived outside of Illinois."

The judge noted that courts usually allow plaintiffs to amend a complaint after an initial dismissal. "Here, however, the deficiencies in plaintiffs' claims cannot be cured with different allegations," he said. "These plaintiffs cannot pursue the legal theories they have articulated (or they do not have standing to do so). Therefore, I decline to give them leave to amend."