RTO Insider

Your Eyes and Ears on the Organized Electric Markets

ERCOT ■ ISO-NE ■ MISO ■ NYISO ■ PJM ■ SPP

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Special Report: The Future of DR

Legal Challenge Behind it, DR Seeks to Overcome Behavioral Resistance, Varying State Rules

By Rich Heidorn Jr.

Having survived a legal challenge that could have crimped its development for years, demand response now has an opportunity to take a central role in combating climate change and reducing energy bills by taking advantage of the growing spread of advanced metering technology.

But the industry still faces formidable challenges due to varying state regulations and consumer resistance to time-of-use pricing, hurdles the Supreme Court's Jan. 25 ruling upholding FERC's authority to regulate wholesale DR did nothing to eliminate. (See *Supreme Court Upholds FERC Jurisdiction over DR*.)

"While the Supreme Court ruling puts federal regulators at the helm of modernizing the electric grid — at least for the 70% of the country operating in deregulated electric markets — individual states can still restrict or set strict criteria for participation in those DR markets, which in some cases are increasingly restrictive," said EnerKnol policy analyst Erin Carson in a research report released Monday.

Reflecting that sober assessment, shares of DR provider EnerNOC, which jumped 70% on the day of the ruling, retreated soon after, ending the week up 26%.

"Without establishment of price signals to customers, DR cannot fulfill its potential,"

Continued on page 29

MISO Plans Expansion of Carmel HQ, Begins Work on AV Upgrade

By Amanda Durish Cook

MISO's headquarters in Carmel, Ind.

CARMEL, Ind. — MISO revealed Thursday that it plans to increase its employee headcount and invest $30 million to update its Carmel, Ind., headquarters. The grid operator said it's in need of an expansion because it has outgrown the 133,409-square-foot facility that has served as its headquarters for more than a decade.

Over the next four years, MISO said it could add more than 80 employees to its workforce. The RTO hopes to gradually open 84 new positions by 2020 in order to qualify for $1.6 million in conditional tax credits and up to $100,000 in training grants offered by the Indiana Economic Development Corp. Final approval on both the employee additions and building expansion rests with MISO's Board of Directors.

MISO spokesperson Andy Shonert said MISO's investment plans are based on projections that are subject to performance-based checks. He noted that "future investment and headcount decisions are

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Entergy: NY Bid Won't Save FitzPatrick

Seeks Leverage on Indian Point

By William Opalka

Entergy said Wednesday that New York's proposed incentives for three of the state's four nuclear sites is too little, too late to save the James A. FitzPatrick plant. The company's stance appears calculated to provide leverage for its Indian Point plant, which was excluded from the state's plan.

Staff of the New York Public Service Commission on Monday released a clean energy standard proposal that includes incentives for the state's upstate nuclear fleet to remain a zero-emissions "bridge" until large-scale renewable generation is in place. Gov. Andrew Cuomo wants the PSC to adopt the CES by June. (See *New York Would Require Nuclear Power Mandate, Subsidy*.)

"We have advocated for a clean energy

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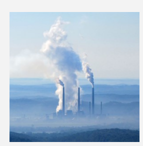
Also in this issue:



Dynegy, NRG Ask FERC to Void Ohio PPAs

Independent power producers and EPSA asked FERC to void PPAs FirstEnergy and AEP have proposed to Ohio regulators. (p.21)

SPP Completes First International Transaction

The transaction was thanks to Canadian interconnections that came with the Integrated System's addition to the RTO last year. (p.15)

ERCOT NEWS

ERCOT: No Consensus on Operating Reserve Changes

State Regulators Seeking Answers to Summer Incident

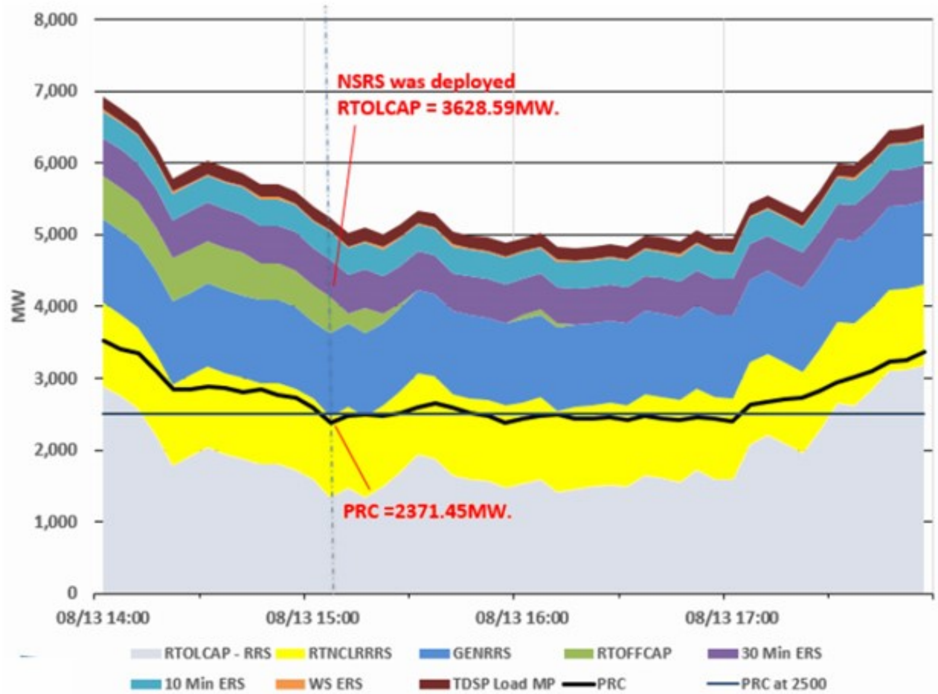
By Tom Kleckner

AUSTIN, Texas — ERCOT will send state regulators a white paper that outlines potential revisions to its operating reserve demand curve (ORDC) but makes no recommendations because of a lack of consensus on the need for changes.

The Technical Advisory Committee unanimously endorsed the white paper Thursday as "responsive" to questions Public Utility Commissioner Ken Anderson raised regarding the ORDC's performance last summer.

In a memo to his two fellow commissioners in October, Anderson called for a PUCT review of the methodology behind the ORDC, a price adder intended to reflect the value of reserves.

ERCOT instituted the ORDC in June 2014 in response to a PUCT order. Energy and reserves were previously priced separately, and ERCOT could show low energy prices during a reserve shortage, creating reliability concerns.



Case study: Aug. 13, 2015 *Source: ERCOT*

'Unexpected' Results

Anderson said the ORDC was an improvement. During late summer, however, he said it produced "unexpected" results, citing Aug. 13, when he said "the ORDC adder did not seem to reflect appropriately" a reduction in physical responsive capacity (PRC) — online generation able to quickly respond to system disturbances.

ERCOT operators can take out-of-market actions, such as calling Energy Emergency Alerts (EEA), when PRC drops too low. On Aug. 13, operators deployed non-spinning reserve service (NSRS) as the PRC dropped to 2,371 MW. However, real-time online reserve capacity (RTOLCAP) was 3,629 MW and wholesale prices reflected that availability.

ERCOT TAC meeting, Jan. 16 © *RTO Insider*

Anderson's memo — known as "the Aug. 13 memo" — questioned whether the inputs used to calculate the loss-of-load probability should be reevaluated. "I ask the question because at certain hours of certain days last summer the price adder resulting from the ORDC seem to suggest [a loss-of-load probability] of well under 1%, even though ERCOT was considering making conservation appeals."

Some stakeholders quoted in the white paper cited Anderson's observation, saying the incident demonstrated that the ORDC "is not aligned with operations."

Other stakeholders said that the ORDC is performing as intended. "There was sufficient additional offline generating capacity not counted in PRC available to the system during the 8/13/15 event, so it was appropriate for ORDC to recognize a low loss-of-load probability," the white paper said.

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ERCOT News

ERCOT: No Consensus on Operating Reserve Changes

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The Aug. 13 incident came just three days after ERCOT set a new peak demand of 69,877 MW.

ERCOT staff said the initial assumption was that the behavior was related to ORDC. However, it has since determined the event is related to how available reserves are counted.

Coordinated Review

Anderson suggested PUCT staff coordinate their work with ERCOT's in reviewing ORDC parameters. That includes the 2,000-MW threshold for operating reserves and whether they should be more closely correlated with the PRC, the value of lost load (currently $9,000/MWh), the calculations that go into the ORDC's loss-of-load probability curve and other data inputs.

ERCOT's Supply Analysis Working Group developed the 14-page white paper to address each of Anderson's bullet points and provide more informed discussion on his request. It collects stakeholder recommendations and staff analysis, but the paper "is not intended to address any threshold issues such as what an appropriate reserve margin is for the ERCOT region or how it should be attained," it said.

The paper also was endorsed by ERCOT's Wholesale Market Subcommittee, though it was careful to note the endorsement "does not reflect any unanimous recommendations by either WMS or SAWG."

SAWG stakeholders did agree that operators should not be given additional discretion in calling an EEA and that the "effective price cap" should remain at $9,000/MWh.

TAC Chair Randa Stephenson, of the Lower Colorado River Authority, praised the working group for its "Herculean effort in a short amount of time" before making it clear to the committee what it was endorsing.

Stephenson

"We're not endorsing the white paper, because there are lots of ideas but little discussion. But we're endorsing the white paper as being responsive to Commissioner Anderson," said Stephenson, newly re-elected as the TAC's chair.

ERCOT staff will file the white paper while staff, stakeholders and PUCT staff continue their ORDC review.

ERCOT Explains Delay in CRR Auction Results

On another matter, ERCOT staff explained a recent three-day delay in posting the results of February's monthly congestion revenue rights (CRR) auction as a result of "new, unidentified software behavior that was not compatible with our procedures." Staff said the error was not identified until CRR systems attempted to transfer auction transactions to the settlements systems and pre-assigned CRRs were not priced in the auction.

Market participants were notified the CRR auction was invalid 6 ½ hours after the incorrect results were initially posted Jan. 14. Updated results were posted almost 72 hours later, on Jan. 17.

Staff told the TAC the issue can be resolved with process changes.

Protocol Revision Requests OK'd

The TAC also unanimously approved eight protocol revision requests, ranging from aligning protocols with NERC reliability standards to reactive-power testing requirements:

- NPRR691, Alignment of Protocols with NERC Reliability Standard BAL-001-TRE-1;
- NPRR713, Reactive Power Testing Requirements;
- NPRR720, Update to Settlement Stability Reporting Requirements;
- NPRR734, Digital Attestation Signature Authority Expansion;
- NPRR739, Prohibiting Load Resources in Participating as Dynamically Scheduled Resources;
- NPRR740, Retail Clarification and Cleanup;
- NPRR742, CRR Balancing Account Invoice Data Cuts; and
- NPRR743, Revision to MCE to Have a Floor for Load Exposure.

GCPA Luncheon

Energy attorney Chris Reeder entertained a Gulf Coast Power Association luncheon audience Friday in Austin with his annual report on the Public Utility Commission of Texas' regulatory activities.

Reeder, who is with Husch Blackwell, said the PUCT is devoting more time to its water jurisdiction, with most of its 16 new full-time equivalents allocated by the state legislature "earmarked for water issues." With the possibility of gas-rate cases being moved from the state Railroad Commission to the PUCT, Reeder said the PUCT will continue to look to ERCOT to streamline issues.

The Austin GCPA luncheon completed Reeder's third annual trio of reports to the association's Austin, Dallas and Houston memberships. He was presented with a T-shirt that said "Tercera Vez" (Spanish for "third time") to mark the occasion, a nod to the GCPA's focus on Mexico's growing competitive markets.

ISO-NE NEWS

ISO-NE Could See Worse Supply Crunch in 2 Years

By William Opalka

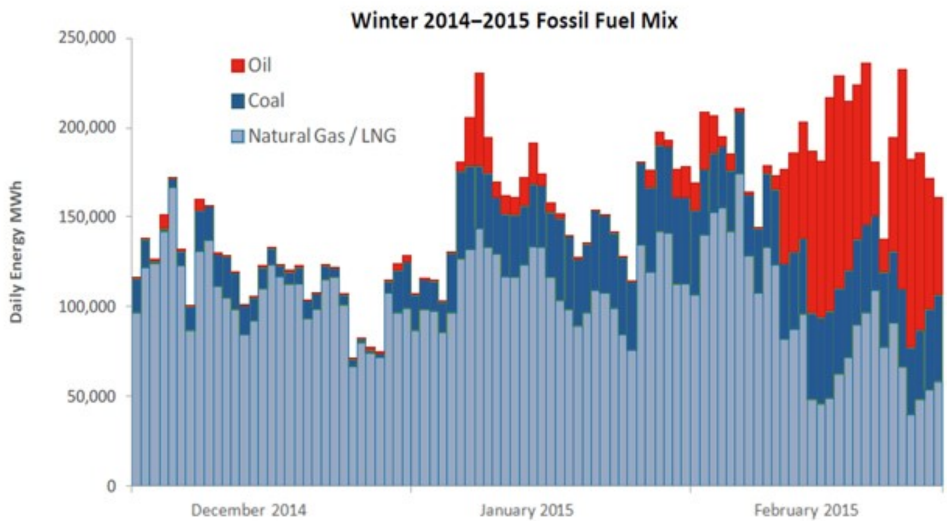
New England's winter energy supply crunch could be worse in two years because the closure of the Brayton Point coal-fired plant and the potential retirement of the Pilgrim nuclear plant will come before additional natural gas pipelines can fill the gap.

"The winter of 2017-2018 is the one that worries me the most, because we will have lost Brayton Point at that point, [and] there's a question mark about whether Pilgrim is available," said CEO Gordon van Welie during ISO-NE's annual "State of the Grid" media briefing last week.

About 4,200 MW of existing non-gas capacity — nuclear, coal and oil — is expected to retire by 2019. The 1,517-MW Brayton Point plant will close in early 2017 and the 680-MW Pilgrim plant will close no later than 2019, assuming the plant operates beyond its current fuel cycle, which ends in 2017. (See *Entergy Closing Pilgrim Nuclear Power Station*.)

The RTO's performance incentives to make additional generation available won't go into effect until mid-2018. Two proposed large-capacity natural gas pipelines, Northeast Energy Direct and Access Northeast, won't be ready to serve New England until 2018 at the earliest.

"This will be a period of vulnerability," van Welie added.



Tight gas supplies have forced a shift to coal and oil in the winter. *Source: ISO-NE*

Non-gas generation is finding it increasingly difficult to compete in the energy market, van Welie said.

"During most of the year, the low price of natural gas is setting the wholesale price of electric energy, so power plants using more expensive fuels are getting squeezed financially. As a result, more and more non-natural gas-fired generators are retiring," he said.

For the third consecutive year, the RTO will use its winter reliability program, which rewards dual-fuel gas/oil generators.

Meanwhile, higher capacity prices have attracted new investment. Capacity auction revenues have quadrupled from about $1 billion three years ago to $4 billion last year. Since auctions for those supplies are held three years in advance, customers have so far been shielded and will not see those price hikes for another year, he said.

Forward Capacity Auction 10, for the 2018/19 period, will be held Feb. 8. Van Welie said 147 new resources, totaling 6,700 MW of new generation, demand response and energy efficiency capacity, have qualified to participate.

MISO NEWS

MISO's December Energy Prices Hit 7-Year Low

December marked a return to energy prices not seen since 2009, MISO officials reported during Tuesday's Markets Committee of the Board of Directors meeting. December's average day-ahead and real-time energy prices were the lowest since MISO implemented the ancillary services market in January 2009.

"December was a relatively mild month," said David Patton, MISO's Independent Market Monitor. "The most notable thing that happened this month is the continued low gas prices… In addition to gas prices dropping, oil has continued to drop."

Patton said languishing prices were driven by low loads, low natural gas prices, strong wind output and the return of nearly 15 GW of generation from the fall outage season.

December's average real-time energy price was $21.23/MWh, representing a 31% drop when compared to December 2014. Load averaged 72.6 GW, which was lower than last December's average of 76.6 GW. On Dec. 17, load peaked at 87.1 GW, down from last December's peak of 93.1 GW.

Wind power alone produced 4,133 GWh, almost double the 2,461 GWh needed to satisfy combined state renewable portfolio standards.

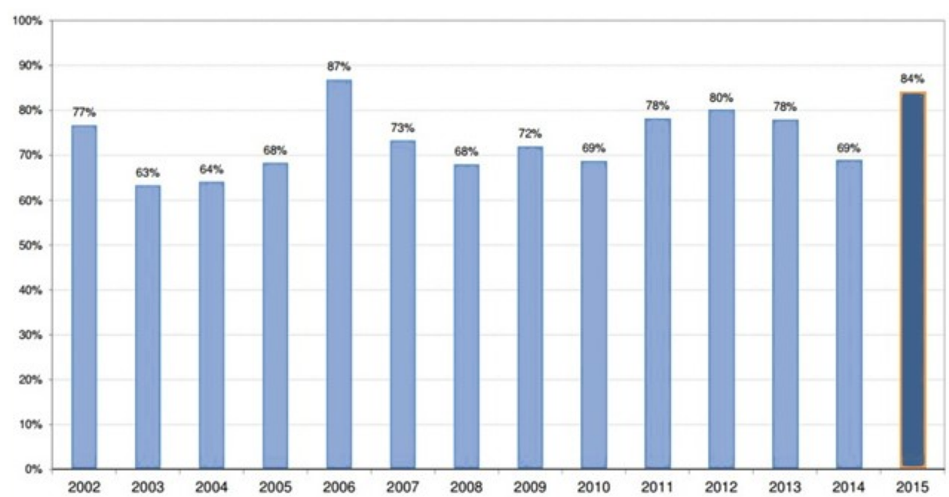
Todd Ramey, vice president for system operations and market services, said temperatures in the footprint were 5 to 8 degrees above normal during December. He said unusually high temperatures complicated day-ahead forecasting and led to a mid-term load forecast that exceeded the 2% error threshold for eight days during the month.

The low energy prices caused capacity factors of coal-fired resources to drop to 45%, down from December 2014's 60%. Patton said the reduced utilization could accelerate coal retirements. "We're seeing some pretty significant changes in terms of types of dispatches," Patton said.

— Amanda Durish Cook

MISO: 2015 Best Year on Record for Unit Commitment Efficiency

By Amanda Durish Cook



Short-term incentive performance history *Source: MISO*

MISO's operators met their targets for minimizing online generation on 99.2% of the days in 2015, a record.

"This represents the best annual performance MISO has ever achieved on this metric," said Vice President of Human Resources Greg Powell. "This also represents the best year that MISO's ever had on unit commitment efficiency."

The operators' performance is penalized for Reliability Assessment Commitment (RAC) unit commitments and rewarded when online generation is minimized and sufficient to meet demand and constraints. Each day that MISO operators miss the goal costs market participants about $200,000 in uplift charges. Powell examined unit commitment efficiency and other annual metrics during a short-term incentive presentation at the Jan. 26 Human Resources Committee of the Board of Directors meeting. About 84% of short-term incentives were paid out, compared to 2014's 69% and 2006's all-time record of 87%.

MISO gave staff excellent ratings for unit commitment, reliability and compliance performance and said all strategic goals were completed.

The lowest ratings were on metrics for cost efficiency improvement, the customer satisfaction survey and capital budget. MISO also said the year's customer satisfaction survey received a passing — "threshold-plus" — grade, with 81% of those surveyed providing an average rating of five or better from a seven-point scale.

MISO rated its market funding efficiency — a measure of shortfalls or surpluses in financial transmission rights funding — at 94.8%, earning it a threshold-plus grade.

Operations spending came in 1.2% over budget, earning an "excellent" rating.

In keeping with the reliability performance of the prior eight years, no severe failures or violations occurred in 2015.

"2015 was a pretty good year for MISO," Powell summed up.

Board member Paul Feldman praised 2015's operation, saying MISO resolved the year's issues "quietly" and expeditiously.

MISO Director Judy Walsh said she would like MISO to examine what drives incentive payout, as hitting the metrics is becoming "day-to-day" routine.

MISO NEWS

MISO Steering Committee Briefs

Pseudo-Tie Issues Under Discussion in February, MISO to Retire Task Team

MISO and PJM will begin creating an alternative to their current pseudo-tie market rules during a Feb. 18 joint and common market meeting. The discussion will coincide with the retirement of MISO's pseudo-tie task team in February.

In the 2016/17 planning year, PJM expects MISO to request 2,061 MW worth of new pseudo-ties. PJM has said it wants to address immediate concerns before June 1 and explore long-term alternatives to its current agreement with MISO sometime after. Among other changes, the RTOs want to develop an outage notification process, better firm flow entitlement considerations, accurate pricing based on unit location, calculations dealing with congestion and market-to-market settlements and improved LMP convergence. MISO and PJM staff met on Jan. 5 to review a preliminary operating guide.

Kent Feliks, American Electric Power's manager of regulatory and RTO policy, asked if the proposed changes stemming from the meeting might affect pseudo-tie requests that are scheduled for March. Kim Sperry, MISO's director of market engineering, said the Tariff changes resulting from the joint meeting might include an option for existing pseudo-ties to continue under current rules or adopt the new ones. MISO Senior Director of Regional Operations David Zwergel said the issue would be long-term with potential Tariff changes and "lots of discussion," and he didn't foresee instantaneous changes.

The RTOs' meeting signals the end of MISO's pseudo-tie task team, created last year. "We don't plan on extending the task team. Its six-month life has run its course, and it's served its duty," Zwergel said, adding that remaining pseudo-tie issues could be assigned to the Planning Advisory Committee.

The Steering Committee unanimously passed a motion to assign two immediate pseudo-tie issues to the PAC: concern that the current transmission service request evaluation processes "do not appropriately capture pseudo-tie impacts to MISO's transmission system" and whether pseudo-tied resources have an "obligation to inform the native balancing authority of the intent to suspend or retire."

Stakeholder Redesign Continues with Training, Resource Adequacy Charter and Management Plan

Michelle Bloodworth, MISO's executive director of external and stakeholder affairs, said stakeholder redesign training for chairs and vice chairs of committees and subcommittees should be completed by May.

Bloodworth called the redesign a "landmark decision," saying it will reduce MISO's stakeholder bodies by 29% and meetings by more than 20%.

She also said implementing the redesign shouldn't interrupt other work in MISO's entities. "Everyone is very cognizant that we don't want to halt any work that's moving through committees," she said.

"I look forward to this time next year us taking a look back on [the progress of the stakeholder process]," MISO President and CEO John Bear said at an informational forum a day earlier.

Now, MISO is focusing on the timely posting of agenda information ahead of meetings. Part of the stakeholder redesign stipulates the posting of meeting materials seven days in advance of parent entity meetings. Bloodworth said in 2015, materials were posted on-time about 65% of the time for the PAC, Market Subcommittee and Reliability Subcommittee. She suggested that MISO parent entities strive for a 75% goal of on-time material posting ahead of meetings in 2016.

Under the redesign, MISO has already eliminated the Trading Hubs Task Force and created a Resource Adequacy Subcommittee (RASC) that will consolidate two working groups and a task force. (See *MISO Redesign Proceeds with New Committee*.)

The Steering Committee approved a draft charter and management plan for the newly formed RASC, set to replace the Supply Adequacy Working Group, Demand Response Working Group and the Electric and Natural Gas Coordination Task Force.

"The objective of the Resource Adequacy Subcommittee (RASC) is to provide input and policy guidance to MISO management and the Advisory Committee on all market and operational activities and processes that facilitate adequate planning resources within the MISO for the long-term planning horizon," according to the subcommittee's draft charter.

RASC meetings will be held on an as-needed basis and be open to all stakeholders. Bill SeDoris, director of MISO integration for Northern Indiana Public Service Co., said once the RASC has leadership, the charter

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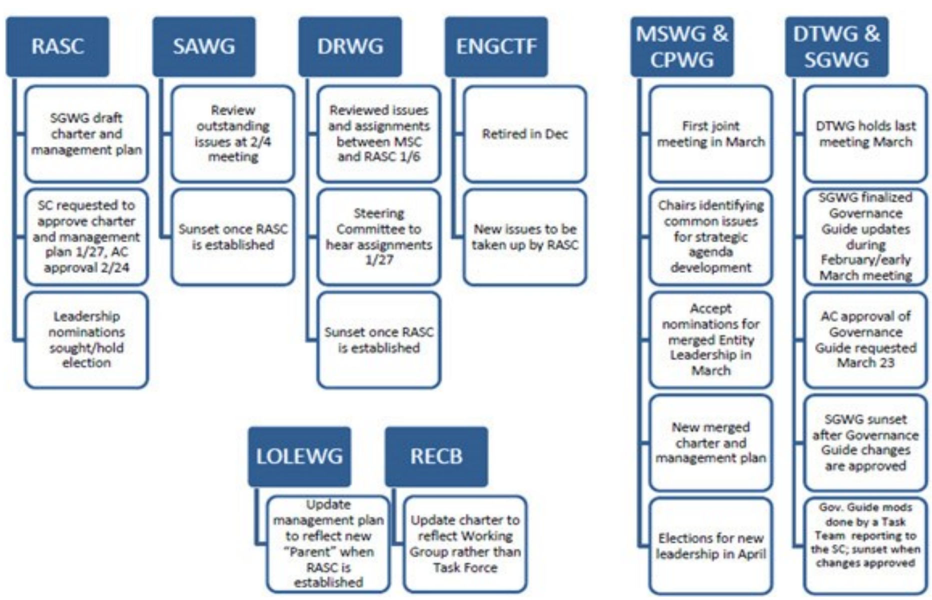
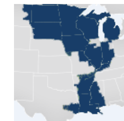


Stakeholder redesign entity transitions *Source: MISO*

MISO NEWS



MISO Files Changes to Capacity Rules; Seeks Adjustments on Import Limits

By Amanda Durish Cook

MISO told FERC last week that it needs to adjust the formulas in its calculation of capacity import limits to avoid reliability problems.

The RTO made its case in a request for clarification Friday in response to FERC's Dec. 31 order to change the way it conducts capacity auctions (EL15-70, et al.).

FERC said MISO's $155.79/MW-day maximum bid was too high and that its approach to determining capacity import limits doesn't take into account counter-flows. (See *FERC Orders MISO to Change Auction Rules*.)

MISO addressed the maximum bid issue in a compliance filing in which it submitted rule changes to set the initial reference level — part of the calculation of the opportunity cost of exporting capacity to PJM — to $0/MW-day. But it said it needs two adjustments to FERC's order regarding its treatment of capacity imports.

Illinois Attorney General Lisa Madigan and the Illinois Industrial Energy Consumers also filed a clarification and rehearing request Friday.

New Year's Eve Order

FERC's New Year's Eve order found that MISO's calculation of local clearing requirements is unjust and unreasonable "because it could underestimate the impact that counter-flows from capacity exports have on the capacity import limit" (EL15-70, et al.).

The commission ordered MISO to adopt the Independent Market Monitor's recommendation that adds back the amount of capacity exports included in base power transfer to eliminate the negative impact that capacity exports have on the calculation of the capacity import limits.

However, MISO said that two adjustments need to be made to comply with the order and maintain reliability.

First, the RTO proposes to remove the impacts of exports from the capacity import limit calculation. "If the full value of the exports must be realized exclusively through revisions to the capacity import limit, the capacity import limit calculation may overstate system capabilities, thereby causing a reliability problem," MISO wrote.

MISO also asked to subtract the amount of exports from non-pseudo-tied resources from the local clearing requirement. In prepared testimony, Laura Rauch, MISO's manager of resource adequacy coordination, said pseudo-tied units cannot be relied on because their "output is not directly available to the MISO region to relieve a constraint or in the case of an emergency."

MISO said FERC should "recognize the benefits exports can make in terms of satisfying local resource requirements." Rauch said that non-pseudo-tied resources that export their power outside of MISO can still meet local resource needs if needed during peak loads because MISO retains dispatch control over the resources. Rauch said the compromise would "accurately remove the impacts of exports from the capacity import limit calculations while acknowledging the support that these units may provide for their local resource zones."

MISO's position was supported by an affidavit from Market Monitor David Patton.

Should FERC refuse to clarify or grant rehearing, MISO asked the commission to allow it to employ its revised calculations to the 2016-2017 Planning Reserve Auction without an auction results resettlement. The auction is scheduled for April 1.

Illinois Wants 'Going-Forward' Costs Cleared Up

The IIEC and Madigan also sought clarification or rehearing on the Dec. 31 order, worried that "going-forward costs" could be interpreted to include sunk costs.

"The commission should clarify that the going-forward costs used to calculate facility-specific reference levels may include only prospective fixed costs that would be avoided by shutting down the facility during the forthcoming MISO planning year… The plain language of the term 'going-forward costs' implies that the only costs that may be included are costs that have not yet been incurred," the two parties wrote in a joint filing.

The Illinois parties are also asking that FERC explain "the procedure to be employed by the Independent Market Monitor for calculating lost opportunity costs in establishing facility-specific reference levels."

MISO Chief Operating Officer Richard Doying said during a Jan. 26 Markets Committee of the Board of Directors meeting that MISO will make a second compliance filing by March 30. To increase capacity supply and lower prices in the future, FERC gave MISO 90 days to develop default, technology-specific avoidable costs in time for the 2017/18 capacity auction.

In addition to FERC-ordered changes, MISO's creation of a two-season capacity market could be filed by spring and help alleviate pricing concerns associated with the 2017/18 auction, Doying said. (See *MISO Proposes Two-Season Capacity Market*.) Doying said he would have more details on MISO's response to PRA changes in June, after filings are made.

MISO Steering Committee Briefs

Continued from page 6

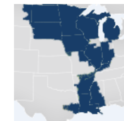
and management plan will be "fine-tuned" to further refine RASC responsibilities, with a final plan and charter brought before the Advisory Committee on Feb. 24. The RASC will oversee MISO's Loss of Load Expectation Working Group.

"This is just us getting the process moving," said Steering Committee Chair Tia Elliott. "It's a good place to start."

SeDoris said some resource adequacy responsibilities outlined in the Market Subcommittee's charter and management plan might have to be separated out for the RASC so the two subcommittees don't replicate tasks. Despite the concern, Steering Committee members approved the MSC's charter and management plan. Elliott said they could be revised later if necessary. The topic will be discussed at February's Steering Committee meeting.

— Amanda Durish Cook

MISO NEWS



MISO Plans Expansion of Carmel HQ, Begins Work on AV Upgrade

Continued from page 1

approved by the Board of Directors during the annual budget process."

"The investment numbers cited encompass a number of priorities that MISO has worked on with stakeholders, including reconfiguring our Carmel location to better support our workforce, meeting critical technology needs and lease payments for our office building," Shonert said, adding, "MISO always seeks to ensure we are good stewards of our members' resources."

A large portion of the expansion investment will go toward updating MISO's facilities and IT and computer networking systems.

If the employee goal is reached, the city of Carmel said it would consider additional incentives, although the "city rarely offers additional benefits," according to the *Indianapolis Business Journal*.

MISO's decision followed deliberations that began last fall on whether to expand or move into new headquarters.

"Indiana has been our home since we first started, and we are proud to continue that investment," MISO CEO John Bear said in a press release issued by the Indiana Economic Development Corp. "Fulfilling our mission of ensuring reliable operation of the electric grid requires the best and the brightest. This commitment to our Carmel facility will ensure that we have the people and technology to continue that mission in a way that provides value to our region."

Of MISO's 940 employees nationwide, more than 700 work in Indiana.

"We congratulate MISO on its big news today and we celebrate the fact that they chose to expand here in Carmel," said Carmel Mayor Jim Brainard. "MISO has been a part of Carmel's corporate family of 100-plus headquarters since the late 1990s and we look forward to watching their continued growth."

In the meantime, and as part of the improvements, MISO is undergoing an audio-visual overhaul at its Carmel location. MISO Conference Services Manager Mike Barber said the top priority is to "enhance the stakeholder experience" of meetings. Barber said MISO is installing state-of-the-art audio-visual equipment that will include allowing telecommuting stakeholders a presentation view of meetings.

The audio-visual improvements will extend to MISO's Eagan, Minn., location as well. Barber said construction at the Eagan facilities will begin on March 28 and last until May, while improvements to the Carmel facility began in late January and will last until April 11. Until then, meetings will be conducted offsite via telephone or at MISO's Little Rock and Metairie, La., locations.

During a Tuesday meeting of the Markets Committee of the Board of Directors, Wisconsin Public Service's Chris Plante asked if stakeholders will be required to use different software to view presentations online after the upgrade. Barber said that was something he couldn't answer until pilot testing the new equipment.

At the MISO Steering Committee on Jan. 27, MISO Stakeholder Relations Specialist Alison Lane said a new conference call operator is coming on board in March. With the change, there will be no limit to how many callers can call into MISO meetings; currently the number is capped at about 150 callers. "That is all being folded into our AV update, which is slowly underway," Lane said.

Lane said Board of Directors meetings and Advisory Committee meetings will continue to be operator-assisted, while all other meetings will not require an operator, "unless an issue arises."

FERC Denies NRG's FTR Auction Complaint Against MISO

By Amanda Durish Cook

FERC has dismissed NRG Power Marketing's complaint alleging MISO's 2013 revision of congestion pricing rendered the company's financial transmission rights worthless (EL16-3).

The commission on Monday found NRG's contentions "baseless." It said the company would not have bid differently into a late 2013 FTR auction even if it were made aware of the change to MISO South's commercial pricing nodes — revised as part of the region's integration — ahead of time. The commission relied on MISO's reporting that NRG entered the same number of megawatts into the auction as it did in the RTO's later annual auction revenue rights nomination.

"That NRG's nominations in the partial-year financial transmission right auction allocation were identical to the total number of megawatts for which it made nominations in the ensuing annual auction revenue rights nomination, as MISO states, undermines NRG's claim that it would have bid differently … had it anticipated MISO's actions," FERC wrote.

NRG filed its complaint last October, claiming MISO told market participants it was consolidating commercial pricing nodes in MISO South into a single node only after it closed the bid window for the FTR auction.

NRG said this "effectively nullified the results of those FTR auctions and rendered the FTRs purchased by NRG through those auctions valueless," according to FERC. The action, NRG argued, also nullified the results of the annual 2013 auction and October 2013 multi-period monthly auction.

MISO denied the allegations, arguing NRG failed to produce any evidence of unhedged congestion costs.

FERC said the consolidation wasn't in violation of the MISO Tariff, and that the RTO provided adequate notice to market participants via a working group. NRG representatives participated in four stakeholder meetings on the topic ahead of the change, and FERC said a complaint should have been filed earlier.

The commission also noted that it was clear that FTRs would be valued differently in the integrated MISO South. "It is evident that pre-integration, FTRs with both sources and sinks in what would become MISO South are fundamentally different products, with different potential values, than post-integration FTRs with both sources and sinks in MISO South. NRG purchased the former but now seeks to be compensated for the potential value of the latter in the post-integration world," FERC said.

NYISO News

Study Contemplates New York REV's Impact on Bulk Power System

By William Opalka

RENSSELAER, N.Y. — NYISO and the New York Public Service Commission have begun a joint study to determine how a changing generation resource mix will affect the bulk power system over the next 15 years.

The PSC outlined the study at the Wednesday meeting of the NYISO Management Committee.

The recently unveiled State Energy Plan, part of New York's Reforming the Energy Vision initiative, set a goal of 50% renewable energy generation by 2030.

The PSC has started a proceeding to develop a clean energy mandate to reach the goal (15-E-0302). Gov. Andrew Cuomo has ordered rules completed by June. (See *New York Would Require Nuclear Power Mandate, Subsidy*.)

The study's goals are to determine what mix of generation and distributed energy resources will be needed by 2030 to meet public policies, and what gas and electric transmission upgrades are needed to serve generation and maintain reliability.

A "net-zero" house in New York. Between the solar panels and geothermal pumps, the house essentially produces as much energy as it consumes. The proliferation of distributed technologies is impacting the way New York will plan and design its bulk power system. *Source: Greenhill Contracting*

"There are going to be significant renewable energy resources needed to comply with both the [federal] Clean Power Plan and the SEP," said Leka Gjonaj, chief of the Bulk Electric System at the PSC.

Models would be run contemplating various scenarios for 2024 and 2030, extrapolating results from NYISO's most recent transmission needs analysis. Sensitivities — such as the retirement of the Indian Point nuclear facility, high natural gas prices, high load levels and the reduction or loss of dual-fuel generation — will be included.

Another scenario contemplates compliance with the CPP under different schemes. The third is implementation of the SEP and REV.

The study would determine resource mixes under each scenario and the infrastructure needed to support them. Ratepayer impacts are outside of the scope of this study.

Some members of the committee questioned how the study can incorporate the clean energy standard when its rules have not been finalized.

The base case scenarios and sensitivity results of the study have deadlines that run from February to July, with a final report due Aug. 9.

The consultants in the study will be paid about $850,000, with about $550,000 coming from NYISO. The ISO will also be contributing about one full-time-equivalent employee on the project, although several staff members will participate.

Also participating are the New York State Energy and Research Development Authority, New York Department of Environmental Conservation, the Utility Intervention Unit of the Department of State and the New York Transmission Owners.

NYISO NEWS

Entergy: NY Bid Won't Save Nuke

Continued from page 1

standard in New York for several years. Unfortunately, whatever this program may turn out to be, it would not be in place in time to change the outcome for FitzPatrick," the statement said.

The company in November said it would close the 838-MW plant near Syracuse in early 2017 due to low energy prices and repeated that stance a month later when Cuomo's offer of incentives became known. (See *Entergy Rebuffs Cuomo Offer; FitzPatrick Closing Unchanged*.)

"We do not know when the support might become effective, how much it might be, what terms and conditions would apply to receiving support or many other important details. And it appears that those details will not be addressed until later this year, at the earliest. Under these circumstances, we remain focused on safely operating FitzPatrick through the end of its current operating cycle, then safely decommissioning the plant," the statement continued.

Entergy is advocating the CES be applied to its Indian Point plant in the Hudson Valley, a facility Cuomo has vowed to close due to its proximity to New York City.

"If the state is focused on reducing CO_2 emissions, the clean energy standard should apply to Indian Point, which is an essential generation resource critical to the state's goal of reducing CO_2 emissions," it said.

Exelon, the owner of New York's other two nuclear plants, was more receptive to the CES plan.

"Our initial impression is that the proposed mechanism to support the continued operation of upstate nuclear facilities as a 'bridge' to a low-carbon future could provide a meaningful path to sustain these facilities, which are vital to achieving New York's clean air objectives," Exelon said.

The company's R.E. Ginna plant outside Rochester is likely to close in early 2017 when its ratepayer-subsidized reliability support services agreement expires. Its Nine Mile Point plant, adjacent to FitzPatrick, is also under financial stress.

"The implementation timeline is reasonable. We need to be certain that the mechanism provides the ability to maintain the safety and reliability of these facilities as the primary consideration. The economics of the proposal will be a critical determiner of its success, and we look forward to working with the governor, the PSC and other stakeholders to learn more," Exelon said.

FERC Upholds Constitution Pipeline OK; Allows Some Tree Cutting

By William Opalka

FERC set back efforts to stop a natural gas pipeline in New York on Thursday when it refused to rehear its December 2014 approval of the project (CP13-499).

In a separate ruling Friday, the commission allowed limited tree cutting along the Pennsylvania section of the pipeline route.

FERC dismissed a challenge by project opponent Stop the Pipeline to thwart the Constitution Pipeline project and a related compression station in Wright, N.Y. The project is designed to transport shale gas from the Marcellus region of Pennsylvania, connecting with existing pipelines that serve eastern New York and New England.

"In the 2014 order, the commission found that the benefits the Constitution Pipeline and Wright interconnection projects will provide to the market outweigh any adverse effects on existing shippers, on other pipelines and their captive customers, and on landowners and surrounding communities," FERC wrote.

FERC had agreed to reconsider the ruling almost a year ago. In the intervening months, the 2nd Circuit Court of Appeals denied a March 2015 petition by STP to force timely action by FERC. (See *Constitution Pipeline Opponents Asks Appeals Court to Force FERC Action*.)

The commission rejected complaints that the project failed to demonstrate a public benefit, that there was a lack of opportunities for public input and that the final environmental impact statement was incomplete.

Much of the opposition to the pipeline is now centered on FERC's approval of the project without a completed permit by state environmental officials under Section 401 of the federal Clean Water Act.

FERC said the lack of a permit is not an "absolute bar" from development activities and that its conditional approval of the project does not allow activities that impair waterways.

At a joint legislative budget hearing at the New York State Capitol in Albany on Thursday, Department of Environmental Conservation Acting Commissioner Basil Seggos noted Constitution is a significant project with a large number of stream crossings. "I'm not going to pressure my department to move more quickly than they believe is warranted," he said.

Also, on Friday, the commission granted partial permission to Constitution to proceed with limited tree felling in Pennsylvania only, in a letter from FERC's Division of Gas – Environment and Engineering. About 25 miles of the 124-mile route is within Pennsylvania, but FERC delayed similar operations in New York. (See *New York AG: No Tree Cutting for Pipeline Without Water Quality Permits*.)

Constitution Pipeline route *Source: Constitution Pipeline*

The letter notes that permission from landowners in Pennsylvania has been granted but does not address the controversy in New York, nor does it explain the prohibition there.

"This letter does **not** authorize tree felling in New York nor does it authorize the workspace variances in Constitution's May 19, 2015, and Jan. 8, 2016, requests in New York at this time," it states. The variances were requested to avoid wetlands or improve work site access.

PJM NEWS

MRC/MC Briefs

Markets and Reliability Committee

> "We're probably at the limit of what the words in the Tariff can accommodate."
>
> PJM Vice President of Planning Steve Herling, on incorporating distributed resources

Faster Path to Market for Distributed Resources to be Studied

WILMINGTON, Del. — A problem statement and issue charge that initially focused on the path for distributed battery storage systems to enter PJM markets failed to gain support at the Markets and Reliability Committee on Thursday until presenter Drew Adams rewrote the documents to address all distributed resources.

Adams

Adams, of battery developer A.F. Mensah, also limited the review to behind-the-meter generation of 20 MW or less. Members approved the revised proposal with one no vote and one abstention.

Currently, distributed resources have two options to join the markets: interconnect as a generation resource through the queue process or register as demand response. Going through the queue is cost-prohibitive and time-consuming for distributed resources, while entering the markets as a demand resource limits the value they can provide, Adams said.

PJM Vice President of Planning Steve Herling said a discussion will be useful. "More recently, we've had a number of these very, very small projects, but they can get into service much faster than the queue process. We have been trying to work within the bounds of the Tariff. We're probably at the limit of what the words in the Tariff can accommodate," he said.

Beacon Power storage facility, Hazleton, Pa.
Source: Department of Energy

"We're certainly in favor of looking at it in light of the number of requests we've had."

John Horstmann of Dayton Power & Light suggested in the initial discussions that the problem statement be broadened to include other types of generation, including distributed generation. The generation interconnection queue, he said, "was set up to accommodate units that cleared in [capacity auctions] and then had three years to build for the commercial delivery year. There is now generation that can get connected to the grid much faster than three years."

Tom Rutigliano of Achieving Equilibrium offered a friendly amendment to include similar resources that face the same types of obstacles.

John Farber of the Delaware Public Service Commission asked if there would be any state jurisdictional issues involved in making changes to the current process.

"Yes," Adams said. "That is one of the challenges, to identify and properly address the state versus federal jurisdictional issues."

Because the issue spans several PJM committees and there is no stakeholder forum to study the issue, it will be discussed at a series of special MRC sessions. Once education and background have been completed, action items will be assigned to a new MRC subgroup or other PJM committees.

Members Unanimously Reject Changing RPM Cost Allocation Method

A problem statement and issue charge proposed by PJM to review whether the cost allocation method for capacity charges should be revised did not garner a single yes vote from the MRC, leading CEO Andy Ott to declare the matter closed.

"At this point, we don't see a need to take further action," he said.

PJM allocates the cost of procured capacity based on each transmission zone's peak load forecast. It also posts the five hours with the highest coincident peak load for the entire RTO.

In its Capacity Performance filing, PJM proposed changing that method and using the coincident peak loads from the most recent calendar year. Given the protests and comments received, however, it asked FERC to postpone ruling on that component until the matter could be addressed through the stakeholder process.

"We continue to believe that the current cost allocation approach is appropriate," said Susan Bruce, of the PJM Industrial Customer Coalition, in comments that appeared to capture the consensus. "Relying on peak load is consistent with cost causation principles. Therefore, no problem exists."

Seasonal Resources in the Capacity Market to be Studied

Katie Guerry of EnerNOC received a lot of pushback for a problem statement and issue charge regarding incorporating seasonal resources into the Capacity Performance construct. But in the end, the item, which Guerry presented on behalf of the Advanced Energy Management Alliance's PJM members, passed on a sector vote with 68% support.

Capacity Performance rules allow aggregation of seasonal resources to convert them into "synthetic" annual resources, but none was submitted in the first Base Residual Auction involving CP. Stakeholders will be asked to consider rule changes to encourage seasonal resources to participate.

It's unclear, Guerry said, whether the lack of participation was due to the rules themselves or the timing of their release before the auction.

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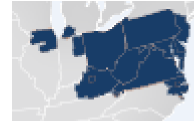

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PJM General Counsel Vince Duane (left) and Dave Anders, director of stakeholder affairs *Source: PJM Inside Lines*

> **"It's not our prerogative to have the right to deal with your financial interests behind closed doors."**
>
> **Vince Duane, PJM**

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What is clear, she said, is that it will be very expensive to make up for the loss of this base capacity in delivery year 2020/21, when the market goes to full Capacity Performance resources.

Bruce said the ICC supported looking at the issue. "What we're seeing, between Clean Power Plan initiatives as well as many state initiatives, is more and more resources that may have varying [output]. That might come to a head at the time we see base capacity go away. We need to figure out ways to reflect those resources — from an efficiency perspective as well as from a public policy perspective."

Marji Philips of Direct Energy requested that PJM and stakeholders devise a comprehensive approach to look at all of the issues arising from the implementation of CP, "so we're not piecemealing it with problem statements."

Jason Barker of Exelon, among others, noted that at the time Capacity Performance was approved, FERC rejected seasonal products. Because the reason for the lack of aggregation participation is unknown, he said, the "data point" of the 2018/19 BRA results does not show whether there is a market rule problem.

Guerry was undeterred. "The self-limiting reality of any kind of aggregation model exists no matter what," she said. "Now we have time to use this process to our best ability to devise appropriate and thoughtful solutions to the auction for the 20/21 delivery year."

Rejection of Tariff Revision Brings Sharp Words from PJM Counsel

The MRC approved most recommendations from the Governing Documents Enhancement and Clarification Subcommittee, tasked with cleaning up inconsistencies and clarifying definitions in PJM's governing documents.

But members rejected a revision to the term "alternative dispute resolution," with only 53.4% endorsing it, shy of the 66.8% threshold.

The revision sought to clarify that legal interpretations of the Tariff can't be mediated by ADR because FERC has jurisdiction over such matters.

PJM General Counsel Vince Duane expressed his disappointment at the following Members Committee meeting.

"The vote to me was perplexing. Nothing that took place in that task force was an indication that we wouldn't get that approved," he said. "That was a wrong decision."

ADR is fine if the dispute is factual, he said. However, he said, ADR can't be used for other disputes.

"Why? You guys spend a lot of time here coming up with rules that get filed at the commission," he said. "I don't think you intend those rules to get put in place and then when a dispute comes up," it's settled in private.

"And we settle it with your money," Duane said. "If it's a factual billing error, that's fine. But it's not our prerogative to have the right to deal with your financial interests behind closed doors."

> **"The self-limiting reality of any kind of aggregation model exists no matter what."**
>
> **EnerNOC's Katie Guerry, on seasonal resources in Capacity Performance**

Task Force will Examine Role of Virtual Transactions

Over one objection, the committee approved a proposed problem statement and issue charge addressing the nodes at which virtual transactions may be made.

The issue stems from a report PJM published in October, "Virtual Transactions in the PJM Energy Market," that identified instances in which existing market rules allow virtual transactions to be used in a manner that do not add value to the market commensurate to the costs imposed by them. (See *PJM Suggests Changes to Virtual Transactions*.)

The problem statement is intended to initiate stakeholder dialogue over whether any market rule changes should be made. Discussion is expected to take no more than 180 days.

Educational Session will Study Unit Commitment

The sponsor of a problem statement investigating the idea of separating financial day-ahead obligations from the physical unit commitment agreed to defer the matter until after an educational session requested by stakeholders.

Barry Trayers of Citigroup Energy agreed to delay action on the problem statement when it became clear that that many stakeholders did not fully grasp the scope of

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the proposal, and PJM staff agreed that the unit commitment process should be reviewed.

PJM already is working on clearing the day-ahead market more quickly, Trayers said, making it an appropriate time to study ways to identify generation needs faster.

"This is just to investigate a way to separate the commitments of physical units, and do it sooner so generators have an idea of what they're going to have to do tomorrow," he said.

Direct Energy's Philips opposed the idea, saying it might be good for generators but not for load-serving entities.

"I'm so confused I don't really know where to start. It seems like the basis of what you're asking is for a total reconsideration of the foundation of PJM. If you separate out day-ahead, how am I as load going to hedge on a daily basis under your proposal to separate financial from physical? Do we just create another day-ahead physical market?"

Responded Trayers, "I would think that load would want this done as efficiently as possible."

Market Monitor Joe Bowring supported the idea of holding an educational session before moving forward.

"I think Barry's raised a key issue that needs to be thought through," he said. "It would be appropriate to have education from a variety of sources, including the [Monitor] and sectors that have information to share with the members."

Low-voltage Projects to be Exempted from Competitive Window Process

With two no votes and one abstention, members approved revisions to the Operating Agreement that exempt transmission reliability projects of less than 200 kV from the competitive proposal windows. The revisions include a friendly amendment making explicit stakeholders' right to submit comments for PJM's consideration.

"Our view is Order 1000 very clearly said that when projects have regional cost allocation, there needs to be a competitive window associated with them."

Sharon Segner, LS Power

Such projects are almost always assigned to incumbent developers, and PJM said the change would enable its engineers to focus on problems more likely to result in a competitive greenfield project. (See "Voltage Threshold will Exempt Some Projects from Proposal Window," PJM Planning Committee and TEAC Briefs.)

Sharon Segner of LS Power reiterated her concern. "Our view is Order 1000 very clearly said that when projects have regional cost allocation, there needs to be a competitive window associated with them."

Brenda Prokop of ITC Holdings, who abstained, voiced similar concern.

But, she said, "We know PJM will implement a number of screenings to ensure that those projects that qualify for a competitive window will continue to qualify. We do have those implementation concerns."

Long-term Firm Transmission, PAR Manual Changes Endorsed

Members unanimously approved proposed manual changes that modify long-term firm transmission service methods.

Revisions to Manual 14A: Generation and Transmission Interconnection Process add a cost allocation obligation for new service requesters to fund facility upgrades.

Changes to 14B: PJM Regional Transmission Planning Process describe the baseline and new service request studies; the distribution factor and rating limit allowed to contribute to flowgates; and the interaction of baseline and new service request studies on constraints identified in the capacity import limit studies.

Separate changes to Manual 14A were endorsed with two abstentions. They make clear that phase angle regulator (PAR) technology is eligible for transmission injection rights. (See "Phase Angle Regulators Qualify for Transmission Rights," PJM Planning Committee and TEAC Briefs.)

Manual Changes Approved

The MRC on Thursday unanimously endorsed the following manual changes:

- Manual 27: Open Access Transmission Tariff Accounting. Changes allow for network service peak load values submitted by electric distribution companies to be scaled by the eRPM auction software if they do not add up to the annual network service peak load allocation for the area.
- Manual 38: Operations Planning. Changes resulting from annual review correct typos, revise terms for consistency and update PJM reliability study procedures.
- Manual 40: Training and Certification Requirements. Implements a new process requiring operators and dispatchers not in compliance be removed from their shifts. Also establishes a compliance score scheme that will trigger a violation notice to the company and potentially FERC. (See "New Operator Compliance Rules to Take Effect Feb. 1," PJM Operating Committee Briefs.)

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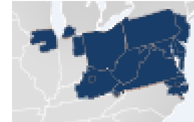
"I'm so confused I don't really know where to start. It seems like the basis for what you're asking is for a total reconsideration of the foundation of PJM."

Direct Energy's Marji Philips, on separating day-ahead commitments

PJM NEWS



FERC Denies AEP's Capacity Performance Waiver Request

By Michael Brooks

FERC last week denied American Electric Power's request for a waiver of nonperformance penalties under PJM's Capacity Performance construct for delivery year 2019/20.

AEP filed the request in November on behalf of four of its vertically integrated utilities that traditionally participate in PJM's capacity market as fixed resource requirement entities rather than in the Reliability Pricing Model: Appalachian Power, Kentucky Power, Wheeling Power and Indiana Michigan Power. The company argued that the waiver would make it easier for its utilities to decide whether to remain FRR entities by the March 7 deadline.

"To be clear, if AEP makes the election to remain an FRR entity for the 2019/2020 delivery year … it will comply with the CP rules applicable to FRR entities, including submitting a capacity plan comprised of 80% Capacity Performance qualifying resources," AEP said. "AEP seeks, simply for the sake of making that election in March 2016, a limited waiver of sections of the Tariff and [Reliability Assurance Agreement] imposing heightened nonperformance charges on FRR entities beginning in the 2019/2020 delivery year."

AEP pointed to numerous factors making the decision more difficult:

- Capacity Performance has not yet been implemented, and neither PJM nor market participants have any experience with the new rules. (Delivery year 2016/17, the first to include Capacity Performance resources, begins June 1.)
- States in its service territories have yet to file compliance plans in response to EPA's Clean Power Plan, and the agency has not finalized its federal implementation plan, which would be imposed on states that do not file their own plans.
- Several cases before the U.S. Supreme Court regarding federal vs. state jurisdiction over market resources, including demand response. (The court has since ruled on the question of DR, reversing a lower court's decision voiding FERC's jurisdiction over DR resources. See *Supreme Court Upholds FERC Jurisdiction over Demand Response*.)

Last year, the commission approved PJM's Capacity Performance proposal, including the provision that FRR entities would be subject to the same nonperformance penalties as those participating in the auctions. Under the new construct, the resources in FRR entities' capacity plans must be at least 80% Capacity Performance. The decision to include FRR entities was opposed by state regulators, who saw it as infringing on state jurisdiction by effectively eliminating states' choice to opt out of the capacity auction process. (See *FERC OKs PJM Capacity Performance: What You Need to Know*.)

FERC was not convinced. The uncertainties faced by AEP are not unique to the company, the commission said. It suggested that AEP's utilities should simply elect to remain as FRR entities for now and reconsider its decision next year after gaining experience under Capacity Performance. "We disagree that AEP's election requirements are different from other similarly situated resources deciding whether to select the fixed resource requirement alternative or to participate in PJM's RPM capacity auction," FERC said.

The commission was also unpersuaded by AEP's claim that the waiver would not harm any other market participants. Granting the waiver would not be fair to other FRR entities who did face nonperformance penalties, FERC said.

AEP's request was opposed by PJM, the Independent Market Monitor for PJM, the PJM Power Providers Group and the Electric Power Supply Association. The Indiana Utility Regulatory Commission supported the waiver, arguing that RPM participants had more flexibility than FRR entities, as the former are able to buy out of their future capacity positions in the RTO's three Incremental Auctions.

The Base Residual Auction for delivery year 2019/20 is scheduled for May 11 to 17.

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Members Committee

PJM Files Conforming Cost Cap Tariff Changes with FERC

With one abstention, members approved Tariff and Operating Agreement changes conforming to FERC's order that revisions to the energy market offer cap exclude the 10% adder from cost-based offers more than $2,000.

The MRC endorsed the changes earlier with the same vote. (See *PJM Members OK $2,000/MWh Energy Market Offer Cap*.)

PJM filed the changes with FERC on Friday, requesting an effective date of March 29 (ER16-814).

The new cap is likely to be only temporary. FERC last month issued a Notice of Proposed Rulemaking that would cap all generators' incremental energy offers at the higher of $1,000/MWh or an RTO-verified cost-based offer. (See *FERC Proposes Uniform Offer Cap Across RTOs*.)

LC Charter Change Allows Leeway to Cancel Meetings

Members endorsed changes to the Liaison Committee charter.

The revisions provide for an LC meeting with the board or the second General Session meeting in a calendar year to be canceled upon a super-majority vote of the sector whips. The Members Committee would need to receive three business days' notice of such a vote. Any sector voting not to cancel a meeting would be required to provide at least one topic to be discussed.

– Suzanne Herel

SPP NEWS

SPP, SaskPower Make First International Trade

OKLAHOMA CITY — SPP completed its first international transaction late last year, thanks to Canadian interconnections that came with the Integrated System's addition to the RTO last year.

SPP Executive Vice President and COO Carl Monroe told the Regional State Committee last week that SaskPower, the principal electric utility in Saskatchewan, came to the RTO's aid during a mid-December "emergency situation" in North Dakota. Monroe said SaskPower was able to "facilitate power" during a storm and after some transmission outages via existing interconnections in the state.

SPP would not divulge additional details, claiming market sensitivities.

Bruce Rew, vice president of operations for SPP, told the committee the Integrated System also has helped with market-to-market congestion between the RTO and MISO.

The system "is very integrated with MISO in the upper Midwest," Rew said. "The market solutions with IS seem to be working very well for us."

SPP CEO Nick Brown thanked the committee for "being instrumental in helping us engage with your states" as the grid operator prepares to help its region comply with EPA's Clean Power Plan.

"We, as SPP staff, have been asked to assess the impacts of implementation," Brown reminded the committee. "We do continue to urge regional approaches over state-by-state approaches … but the biggest challenge for us is we don't know what to plan for yet."

Last week's quarterly RSC meeting was the first led by Patrick Lyons, chairman of the New Mexico Public Regulation Commission. Lyons welcomed Nebraska Power Review Board member Dennis Grennan as the committee's 10th and newest member.

— Tom Kleckner

SPP Adds Ex-MISO CEO, NERC Trustee to Board

Move Spurs Diversity Question

By Tom Kleckner

OKLAHOMA CITY — SPP last week added two additional members with high-level industry expertise to its Board of Directors with the election of former MISO CEO T. Graham Edwards and former NERC trustee Bruce Scherr.

SPP CEO Nick Brown told members last Tuesday the board's expansion was necessary for succession purposes. The board now consists of Brown and eight independent directors.

FERC approved SPP's request to add up to three more independent board members in August (ER15-1924).

Working with the Russell Reynolds Associates executive search firm, SPP's Corporate Governance Committee whittled 25 initial applicants to eight before selecting Edwards and Scherr as finalists. Their appointments became effective immediately, and the two new directors joined the board for last week's January meeting.

Kelly Harrison, Westar Energy's vice president of transmission, expressed disappointment with the selections, saying it is "painfully obvious we're not making progress on diversity." The nine-person board now includes seven white men and two African Americans, Phyllis Bernard and Josh Martin.


Edwards

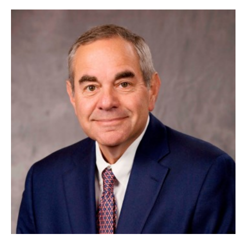
SPP board Chair Jim Eckelberger responded by noting the eight finalists included one minority and one woman.

"We think we chose the best two of the eight we interviewed," Eckelberger said. "Most members of the committee would agree we picked the best two."

Brown welcomed Graham and Bruce in a statement, referencing their broad industry experience with grid operators, compliance and critical infrastructure protection.

Edwards, 62, was CEO of North Carolina-based ElectriCities from 2009 until his retirement in November. He served on MISO's board from 2001 to 2009, the last three years as CEO.

Edwards was CEO and board chair for Santee Cooper in South Carolina, and one of the founders of The Energy Authority, a wholesale energy and marketing company. He served on the Western Electricity Coordinating Council's board. He currently serves on the board of directors for Peak Reliability, which is responsible for reliability coordination for the Western Interconnection.


Scherr

Edwards holds a bachelor's degree in business administration from Francis Marion University in Florence, S.C., and an MBA from The Citadel.

Scherr, 67, is the board chair and CEO emeritus of Informa Economics, a research and consulting firm specializing in agriculture and commodities. He has been with the company since 1987.

Scherr served on NERC's board of trustees from 2002 to 2015 and was also a member of the Global Strategy Institute Advisory Council of the Center for Strategic and International Studies. He sits on the boards of E. Ritter & Co., Santa Energy Co. and J. D. Heiskell & Co.

Scherr holds a bachelor's degree from Rutgers University, and a master's degree and doctorate from Purdue University, all in agricultural economics.

SPP NEWS

Board of Directors/Members Committee Briefs

Brown: Finishing Z2 Crediting Project RTO's Top Priority

OKLAHOMA CITY — Acknowledging members' dissatisfaction, SPP CEO Nick Brown promised the Board of Directors and Members Committee that the RTO will complete the oft-delayed Z2 crediting project this year.

"I know the frustration that's out there. I've had meetings with a number of members over the last year," Brown said in delivering his annual president's report during SPP's quarterly board meeting last Tuesday. "Z2 will be the focus of the organization this year, as it has been the focus of the organization the last several years."

The Z2 project began in 2008 as a result of years of incorrect credits for transmission upgrades. SPP staff told the Markets and Operations Policy Committee on Jan. 12 the project's complexity and challenges in processing historical data has pushed its expected completion to November of this year. (See *Latest Z2 Credit Project Delay Renews Old Frustrations*.)

Members have been frustrated with their inability to get an idea of their liabilities or credits.

SPP has resisted giving a rough estimate of the sponsored upgrades. Were staff to provide an estimate, "it would be nothing more than a shot in the dark," Brown said. "I'm hopeful, and I promise we're looking at engaging all internal resources to accelerate that [November] date."

According to the project's latest schedule, staff will begin processing historical data in late March, concluding the process in late August. The first reports will be submitted and reviewed in August and September, with invoicing beginning Nov. 4.

SPP CEO Nick Brown
© RTO Insider

The software handling the process consists of 58 system components and still requires some manual intervention. Brown pleaded for members' patience, saying, "We're on a course to get these calculations performed in this calendar year.

"From [a software] engine perspective, it's a thing of beauty. From a business perspective, boy it's complex. We've got to work very hard this year to balance the persistence of the effort and the patience to wait for the results."

Noman Williams, MOPC chairman and COO for South Central MCN, said SPP staff and outside consulting firm Accenture have accelerated the project by adding resources, reassigning work and compressing the testing schedule.

While the Z2 project will consume a significant amount of SPP's resources this year, Brown said the RTO also will be preparing for several audits, helping its members and states prepare to comply with the Clean Power Plan's federal rules and dealing with cybersecurity issues.

SPP is set for a SERC audit this year, and Brown said he expects the RTO to be one of the first to be audited under NERC's new Critical Infrastructure Protection version 5 standards effective April 1. He said staff will expend "a tremendous amount of energy the next several months" preparing for the audits.

"We're pursuing independent third-party assessments, penetration assessments … to get a sense of comfort we've done everything we can do" on cybersecurity, he said.

Brown said the RTO will continue to collaborate with states to prepare for the Clean Power Plan and possible trading plans. He said the "winners" will be able to maximize their assets, while the "losers" will be able minimize the effect on their end-use customers.

"It's going to be an interesting year."

"From [a software] engine perspective, it's a thing of beauty. From a business perspective, boy it's complex."

SPP CEO Nick Brown,
on the Z2 crediting project

FERC Audit Reviewing Market Monitor's Independence

SPP's Market Monitoring Unit is undergoing a FERC audit to assess its independence, said SPP Director Josh Martin, chair of the Oversight Committee.

Unlike most RTO market monitors, SPP's monitoring unit is housed internally. Martin said the Oversight Committee has finalized a position statement on the unit's independence.

"It's a step beyond where we've been in the past," Martin said. "We wanted to be as clear as we can the MMU is an independent entity."

According to the position statement, "The Oversight Committee is confident that an internal MMU provides both an appropriate level of independence and the level and depth of expertise needed to perform its functions and does so at a more economical cost than an external contractor."

The committee performs an annual assessment to "ensure the continuing effectiveness of the SPP's market monitoring approach," the statement said.

Potomac Economics, which performs market monitoring for MISO, ISO-NE, NYISO and ERCOT, is conducting this year's review of the Market Monitoring Unit. It also will be supplementing the Monitor's staff until two vacancies are filled.

Alan McQueen, the unit's director, will retire at the end of 2016, Martin announced. He said McQueen has offered to stay for a transition period.

Martin said Boston Pacific's annual "Looking Forward" report will cover retail customer

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SPP NEWS

Board of Directors/Members Committee Briefs

Continued from page 16

reactions to the cost of transmission facilities, how to pay for transmission used to export power from the SPP region and market effects from the unit's decisions.

> "Get your comments in, because we're going to have some big decisions to make."
>
> SPP Board Chairman Jim Eckelberger, on the RTO's wind integration study

Market Working Group Addressing Monitor's Recommendations

American Electric Power's Richard Ross, chair of the Market Working Group, reviewed the group's plan for addressing MMU recommendations to improve the Integrated Marketplace.

The Monitor identified nine issues in last year's annual State of the Market report, ranging from quick-start logic and ramp-constrained shortage pricing, to potential manipulation of make-whole payment provisions. The market report was the unit's first since the Integrated Marketplace's March 2014 implementation.

The MWG is working on numerous revision requests and has suggested forming a task force. While the group continues to work on some of the items, Ross said the group can always use SPP's revision-request process separately, if it thinks progress is too slow.

"I don't agree with everything being done, but that's to be expected," McQueen said. "These are complicated issues, but I agree with Richard's assessment [that] these things are in flight. I agree … these action items are being addressed."

Board Chairman Jim Eckelberger said the eventual disposition of the items will be on the July agenda, when a final report is expected.

"I hope it's final," Eckelberger said.

Board Approves MISO Settlement Language, Tariff Revisions

The board approved Tariff revisions, previously endorsed by the MOPC, that will set guidelines for distributing revenues from last year's settlement with MISO over its use of SPP's transmission grid. The approval was opposed by Xcel Energy and Golden Spread Electric Cooperative. Dogwood Energy abstained from the members' vote.

"Whenever we have cross-boundary issues on the Xcel system, we're following protocols," said David Hudson, president of Xcel subsidiary Southwestern Public Service. "[SPP] will have to show us why this is preferential to what's already in the Tariff."

MISO has agreed to pay SPP and impacted members $9.6 million to settle claims for compensation back to 2014. (See *SPP Board, Members Discuss MISO Settlement*.)

The Regional Tariff Working Group drafted language to handle revenues accrued during three different phases affecting SPP's transmission system: pre-Integrated System, with the Integrated System and moving forward. It also revised other Tariff sections to take the new revenue distribution into account. SPP has said it favored allocating the money to transmission owners, with benefits flowing through to the grid's load.

The board also passed a consent agenda that included seven Tariff revisions, five notification-to-construct modifications and the 2016 SPP Transmission Expansion Plan report (STEP), a comprehensive listing of all the RTO's transmission projects over a 20-year planning horizon. All were endorsed by the MOPC earlier in the month. (See *Markets and Operations Policy Committee Briefs*.)

The STEP report consists of 480 transmission upgrades costing $6.1 billion.

Wind Study, Capacity Margin Work Nears Completion

Bruce Rew, SPP vice president of operations, updated the board on the RTO's recent wind integration study, which indicated it can handle wind-penetration levels of up to 60% with additional transmission and monitoring tools. (See *Study: 60% Wind Penetration Possible in SPP*.)

The RTO's first wind integration study in six years projects the grid operator's wind energy will grow significantly beyond its current 14% of system capacity.

CEO Brown said he was happy to see the study recommend an additional study using phasor measurement unit applications to provide real-time analysis.

"I'm concerned we're evaluating our current situation with X-ray technology, when MRI technology is available," Brown said.

Rew said he was optimistic he can bring full results back to the board's next meeting in April. SPP is holding a two-day wind study summit in Little Rock, Ark., Feb. 17-18 to gather further stakeholder input.

The board also could see final reports and policy suggestions in April from the task forces looking at SPP's capacity margin and transmission-planning improvements.

"Get your comments in," Eckelberger urged the board and members, "because we're going to have some big decisions to make."

Longtime Member Working Group Chair Retires

Dennis Reed, most recently director of FERC compliance for Westar Energy, was recognized by the SPP board and members with a standing ovation for his 10 years as chairman of the Regional Tariff Working Group. Reed retired from Westar at the end of 2015, but he has promised to remain a presence at SPP meetings through his new venture, Midwest Regulatory Consulting.

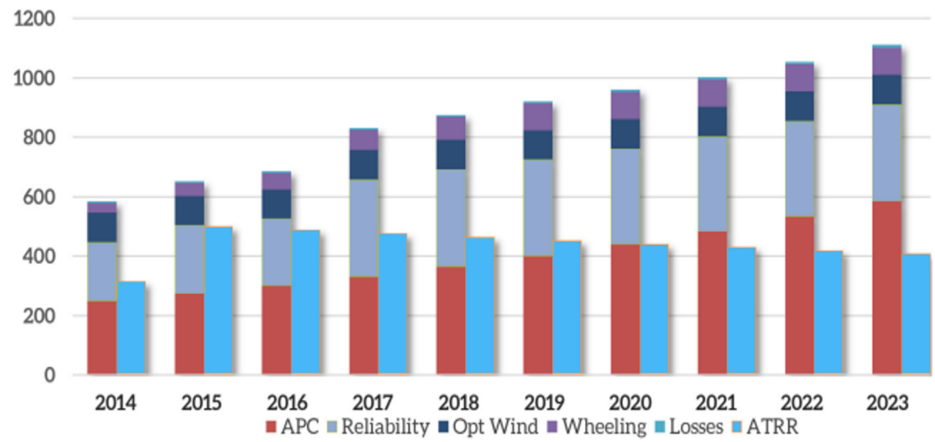
Brown said Reed oversaw 16 RTWG meetings and conducted 92 votes last year alone, which he extrapolated to nearly 1,000 votes overall. He also said SPP's Tariff was only 796 pages in 2005 when Reed first chaired the working group, but today "it's 5,530 pages of rates, terms and conditions."

— Tom Kleckner

SPP NEWS

SPP Begins Promotional Campaign to Tout Transmission Value

By Tom Kleckner



SPP transmission benefits and costs ($ millions, 2014-2023). Conservative benefits reflect average APC savings compared to year-end costs. *Source: SPP*

OKLAHOMA CITY — SPP last week kicked off a yearlong campaign to promote the value that the RTO's transmission infrastructure brings to end-use customers.

Ross

Mike Ross, SPP senior vice president of government affairs and public relations, briefed the Board of Directors and Members Committee last Tuesday on "The Value of Transmission" study and the RTO's promotional plans, which include use of social media and bill inserts by member utilities.

The study looked at the value provided by 348 transmission upgrades during 2012-2014, involving almost $3.4 billion of capital investment.The upgrades resulted in more than $240 million in fuel-cost savings for SPP members during the first year of its Integrated Marketplace (March 2014-February 2015), according to the study.

The analysis also quantified benefits "associated with reliability and resource adequacy, generation capacity cost savings, reduced transmission losses, increased wheeling revenues and public policy benefits associated with optimal wind development."

SPP expects the benefits to exceed a net present value of $16.6 billion over the next 40 years, a benefit-to-cost ratio of 3.5. (The $3.4 billion investment has a 40-year NPV of less than $5 billion.)

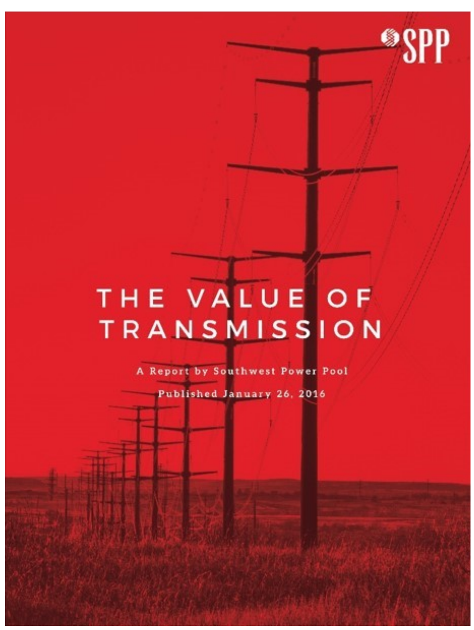
"We've done something we don't believe has been done before," Ross told the board and members. "We've taken transmission lines put in service between 2012 and 2014, looked at the production costs, compared that to what the production costs would have been without those lines and presented it in a way the general public can understand."

Conservative Estimate

Ross said SPP's estimate is a conservative one, noting that much of the new transmission went into service during the fourth quarter of 2014, meaning the study only captured three months of benefits.

The yearlong transmission study includes an endorsement from the economic-regulatory consulting firm, The Brattle Group, which performed an independent assessment of the RTO's work. Brattle consultants called the report a "path-breaking effort" and suggested the 3.5 benefit-to-cost ratio "is likely understated."

SPP said previous studies projected the expected future value of transmission construction based on "latest available forecast data," but the new analysis used "actual historical operating data" to document transmission value realized during the Integrated Marketplace's first year.



"Transmission … is an enabling resource that paves the way for numerous benefits to our stakeholders and their customers," SPP CEO Nick Brown said in a statement.

SPP members welcomed the study. They have been asking for a quantitative assessment of the RTO's value to the region for years to support their rate cases. "The cost of all this transmission is immediate," said Dave Osburn, the Oklahoma Municipal Power Authority's general manager.

"You see the costs on your bills right away, but the benefits take years to accrue and you sometimes don't see it. This is a step in the right direction."

Ross said staff has produced videos, bill-insert templates and a four-page brochure, to which he hopes members will apply their own logos. He also asked members to share success stories, photos and videos.

"We want to partner with members over the course of this year, and we need to do so in the most cost-effective manner possible," Ross said. "You asked us to tell this story, but we can't do it alone. I implore you, I beg you, I ask you, share our social media tweets and posts."

FERC NEWS

Utilities' Restoration and Recovery Plans Pass FERC, NERC Review

Best Practices, Recommended Changes Identified

By Rich Heidorn Jr.

A joint FERC-NERC review of nine unnamed utilities' system restoration and recovery plans found them "for the most part … thorough and highly detailed" but also identified room for improvement and called for additional studies.

"The reviewed plans require identification and testing of black start resources, identification of primary and alternate cranking paths, and periodic training and drilling on the restoration process under a variety of outage scenarios," the report said. "Likewise, the joint staff review team found that participants had extensive cyber security incident response and recovery plans for critical cyber assets covering the majority of the response and recovery stages."

Staff from FERC, NERC and Regional Entities gathered information from "a representative sample of nine registered entities with significant bulk power grid responsibilities, including some entities that are registered with NERC in multiple functions." The report emphasized that the staff review "was not a compliance or enforcement initiative."

The report identified several opportunities for improving readiness through measures including improving the clarity of some NERC reliability standards.

It also took note of best practices used by some participants that went beyond NERC requirements, such as the inclusion of illustrations and step-by-step procedures in restoration plans and conducting drills that involve the actual transfer of control center operations to an alternate site. "The actual evacuation and verification of functionality of recovery resources can reveal unknown issues or problems through use of the alternate site's cyber assets," it said.

MISO control room

Recommended changes included:

- Clarification on when system changes will trigger a requirement to update restoration plans. "In considering these measures, the kinds of events that may warrant an update to the system restoration plan should be identified, taking into account the length of time the system is affected, as well as the overall objective of ensuring that restoration plans are generally flexible enough so that system modifications can be addressed without continuous updates."
- Exercises and drills testing the transition from transmission operator island control to balancing authority area control error and automatic generation control.
- Cyber security incident response plans and recovery plans for critical cyber assets should designate accountability at the cyber asset level (e.g., energy management system (EMS) servers, remote terminal unit concentrators, network routers).
- More detail on the types of cyber security events that should trigger a response and reports. "While the team recognizes that [Critical Infrastructure Protection] version 5 will require responsible entities to have processes to identify cyber security incidents, consideration should be given as to whether any additional clarification or improvements are needed once some experience is gained with CIP version 5," which takes effect for some assets on April 1.
- Expanding the use of cyber security technical expertise and advanced technical tools.
- Reducing the risk of recovery plan "inventory assumptions." It said "entities may assume that hardware from external sources or other third-party vendor support needed for recovery of critical cyber assets will be available, without necessarily having measures to ensure availability. Likewise, entities may not consider interdependent or common-mode failure scenarios, which can create the need to recover multiple critical cyber assets concurrently from the same vendors."

Among the studies recommended were:

- Assessing system restoration steps that may be difficult if operators lose supervisory control and data acquisition computer systems, inter-control center communications protocol or EMS functions.
- Identifying factors to be considered for replacing black start resources, including locational diversity and dual-fuel capability.
- Determining the benefits of including existing or future voltage source converter DC lines in restoration plans.

COMPANY EARNINGS

Barge Sale Propels AEP's Q4 Earnings

By Michael Brooks

Despite posting a decrease in revenue and missing analysts' predictions, American Electric Power last week reported a 145% increase in fourth-quarter earnings, from $191 million ($0.39/share) in 2014 to $469 million ($0.96/share) in 2015.

The jump in earnings reflected the sale of the company's barge business, AEP River Operations, for $550 million to American Commercial Lines in October.

The company showed fourth-quarter revenue of $3.6 billion in 2015, less than the $3.8 billion it pulled in the same period last year and the $3.87 billion analysts had expected.

Despite the weak fourth-quarter revenue, it was a good year for AEP, which reported a 25% increase in earnings from 2014 off of only slightly higher revenue.

"Our strong 2015 earnings performance demonstrates that ongoing investment in our core, regulated operations is the right way to deliver enhanced service for our customers and value for our shareholders," CEO Nick Akins said. "We increased our earnings guidance twice in 2015 and achieved earnings performance solidly within our revised range, despite extremely warm temperatures in the fourth quarter."

In AEP's earnings conference call on Thursday, Akins said that "winter, particularly in December, never occurred; it was more like April." Akins also blamed a weak economy late in the year — as global markets fluctuated and oil prices continued to decline — for the less-than-expected revenue.

Source: AEP River Operations

The miss, however, has not seemed to faze investors. AEP's stock price spiked on news of the earnings, opening before the earnings release at $57.13 Thursday and closing out the week at $60.97. Earnings from AEP's vertically integrated utilities more than doubled in the fourth quarter and increased 26.7% year-over-year, reflecting positive rate cases and lower expenses. The company's transmission business also contributed to the earnings increase, both in the fourth quarter and for the full year.

Akins was confident that the company's proposed power purchase agreement in Ohio, which would provide a guaranteed return for its embattled generating stations for eight years, would be approved by regulators, despite a recent call by independent power producers for FERC to void the deal. (See Dynegy, NRG Ask FERC to Void Ohio PPAs.)

Akins cited the settlement AEP reached with Public Utilities Commission of Ohio staff and other stakeholders, including the Sierra Club. "This arrangement, when approved by the Ohio commission, will be a model that can be used nationally that sets the tone for parties with substantially different positions about generation resources and the pace of change to come together, focusing on the clean energy future and the mitigation of transition cost increases that our customers and the public expect," the CEO said during Thursday's call.

AEP's operating earnings per share for 2015 was $3.69, compared to $3.43 in 2014. The company reaffirmed its earnings guidance of $3.60 to $3.80 for 2016.

Xcel Remains Positive Despite Decrease in 2015 Earnings

By Michael Brooks

Xcel Energy last week reported net income of $984.5 million in 2015, a 3.6% decrease from $1.02 billion in 2014, as lagging sales and "negative" weather led to a decrease in revenue. The company brought in about $11 billion in 2015, compared to $11.7 billion in 2014.

In a year-end earnings call on Thursday, CFO Teresa Madden said that sales to both industrial and residential customers fell despite healthy economies in the company's service territories. While electricity sales were only slightly less than in 2014, natural gas revenue fell by 21% due to milder weather in the summer and winter.

Xcel officials focused on its reported earnings per share, $2.09, a 3% increase over its 2014 EPS of $2.03. Xcel had given an earnings guidance of $2.05 to $2.15 after it posted its third-quarter results. This was the 11th consecutive year the company met or exceeded its earnings guidance, Xcel said.

"I am pleased with our 2015 results," CEO Ben Fowke said. "We delivered earnings within our guidance range despite negative weather and certain regulatory challenges."

The $2.09 EPS excluded a $79 million charge ($0.15/share) from cost overruns on the upgrade of its Monticello nuclear plant.

The decrease in revenue was partially offset by reduced natural gas costs and operations and maintenance expenses, as Xcel improved efficiency at its nuclear plants.

Madden reaffirmed the company's earnings guidance of $2.12 to $2.27 per share for 2016.

Earlier this month, Xcel reported an increase in fourth-quarter earnings, with net income of $209 million ($0.41/share) in 2015 compared with $196.3 million ($0.39/share) in 2014, a 6.5% increase. Revenue for this quarter was also down from the previous quarter, but the decrease in expenses more than made up the difference.

Xcel said rate increases in several jurisdictions helped 2015 earnings. In December, however, Texas regulators rejected the company's request for a $42 million increase, instead ordering a decrease of $4 million effective this month.

Dynegy, NRG Ask FERC to Void Ohio PPAs

By Rich Heidorn Jr.

Dynegy, NRG Energy and other independent power producers asked FERC Wednesday to void the power purchase agreements FirstEnergy and American Electric Power have proposed to Ohio regulators, saying the deals fail the commission's *Edgar/Allegheny* test regarding affiliate transactions.

PJM, meanwhile, filed an amicus brief with regulators Monday, calling AEP's assertions that reliability would be threatened if its units retired "a red herring."

The IPPs and the Electric Power Supply Association jointly filed complaints against the AEP (EL16-33) and FirstEnergy (EL16-34) proposals, saying they were seeking to ensure that "abusive" affiliate power sales contracts do "not evade [FERC] review."

The Ohio-based companies have proposed PPAs to the Public Utilities Commission of Ohio that would provide a guaranteed return for their embattled generating stations for eight years. PUCO staff has signed on to both proposals.

The complainants said FERC should revoke the waivers it granted AEP and FirstEnergy regarding affiliate power sales to ensure a Section 205 review of the PPAs under the standards the commission set out in its 1991 *Edgar Electric Energy Co.* (55 FERC ¶61,382) and 2004 *Allegheny Energy Supply Co.* rulings (108 FERC¶61,082).

The *Edgar* ruling required demonstration that long-term PPAs utilities sign with their marketing affiliates are reasonably priced compared to alternatives. The commission said such a demonstration could include evidence of competition between affiliated and unaffiliated suppliers or a showing of prices paid by non-affiliated buyers. FERC refined its guidance in *Allegheny*.

"The fact that AEP has devised, and that the PUCO may approve, a clever scheme to shift costs of this abusive affiliate contract onto consumers does not alter the commission's statutory duty to protect consumers from the effects of unjust and unreasonable wholesale rates or in any way make it less critical to ensure the integrity of the PJM markets," the plaintiffs wrote, using nearly identical language in their FirstEnergy complaint.

The complainants cited "fundamental changes in circumstances since the commission granted the waiver that make it unjust, unreasonable and unduly discriminatory to allow AEP Generation Resources to enter into the affiliate PPA pursuant to its blanket market-based rate authorization."

Quick Action Sought

They asked the commission to act quickly, noting that PUCO may rule on the PPAs as soon as next month and contending the agreements could have a major impact on PJM's 2019/20 Base Residual Auction in May.

Joining EPSA, Dynegy and NRG in the complaint were the Retail Energy Supply Association and Eastern Generation, a subsidiary of a private equity fund managed by ArcLight Capital Partners, whose generation holdings include an 825-MW natural gas-fired generation facility in Vinton County, Ohio.

The Ohio Consumers' Counsel filed comments supporting the call for FERC review.

"We expected allegations similar to those made in the complaint that was filed at FERC, and we are confident that the PPA will pass the test," said FirstEnergy spokesman Doug Colafella.

"FirstEnergy's Ohio Utilities were granted authority to conduct transactions with our unregulated affiliates after Ohio restructured its electric markets to allow shopping with energy suppliers. This arrangement extends to our proposed purchased power agreement, so absent further FERC orders, separate FERC approval of the PPA is not necessary," he added. "We carefully evaluated this issue when preparing our filing with the Public Utilities Commission of Ohio — the regulatory agency that is solely authorized to approve the proposed retail stability rider on customer bills associated with the PPA."

AEP spokeswoman Melissa McHenry said PUCO "is fully able to protect retail customers. So, any allegations that AEP Ohio customers need to be protected from excessive charges are simply untrue."

"The core question for FERC is whether there is retail competition under Ohio law. FERC has determined in other cases that there is competition in Ohio and has agreed that the PUCO is better equipped to make that determination. The AEP Ohio PPA will provide rate stability for all AEP Ohio customers, and they can still choose any supplier for their electricity needs.

"The PUCO has conducted an extensive review process over the last two years to ensure that AEP Ohio customers are treated fairly and benefit from the PPA. The parties filing at FERC should participate in that process instead of appealing to a federal agency for relief at the last stage of the process," she said.

The plaintiffs said the affiliate PPAs threaten "exactly the harm to both captive consumers and markets that prompted the adoption of [FERC's] restrictions in the first place," saying it would "saddle captive Ohio consumers with hundreds of millions or even billions of dollars in above-market costs" and distort prices in the PJM markets by subsidizing the continued operation of more than 6 GW of generation that AEP and FirstEnergy say would otherwise retire.

AEP has said that PUCO must approve or reject the PPA as is, saying it "lacks jurisdiction over the rates and terms" of the agreement. At the same time, the company says it does not intend to submit the agreement for FERC review.

"Failure to review the affiliate PPA would recreate precisely the sort of regulatory gap that the [Federal Power Act] was enacted to fill" in 1935, the plaintiffs said.

'Greedy Tiger'

To conduct a review of the AEP proposal, the plaintiffs said the commission should first revoke the waiver it granted in 2014 regarding AEP Ohio, a franchised public utility, and its market-based affiliate AEP Generation (ER14-593). Because of Ohio's retail choice, the AEP companies said in their petition for a waiver, AEP Ohio would not have captive retail customers.

The plaintiffs said that is not true regarding the proposed PPAs because they would be funded by surcharges on all customers within AEP and FirstEnergy's service territories, regardless of whether they take provider of last resort service from the utilities or purchase from a competitive retail supplier.

"These retail customers could not be more captive with respect to costs of the affiliate PPA[s] if they were locked in a cage with a greedy tiger," they said.

As evidence that the PPAs would impose above-market costs, they cited the counteroffer Dynegy made to PUCO earlier this month, which the company said would save consumers $5 billion. Exelon also has made a counteroffer it says would be cheaper. (See *Next up in Ohio PPA Battle: Dynegy Weighs in*.)

The plaintiffs also cited the "enormous" impact the PPAs would have on the PJM

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Dynegy, NRG Ask FERC to Void Ohio PPAs

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markets.

"This case involves the same issue of 'uneconomic non-exit' — i.e., subsidized retention of resources that would otherwise have left the market — with which the commission has been confronted in other proceedings. Because capacity markets are designed to convey the price signals needed both to encourage entry of economic new resources and to discourage the premature exit of economic existing resources, it follows naturally that uneconomic non-exit will present the same threat to such markets as uneconomic entry."

$8 Billion in Excess Costs

The Ohio Consumers' Counsel (OCC) said it was up to FERC to protect the state's consumers from excess costs that could top $8 billion.

The counsel cited testimony by its consultant James Wilson, who projected that FirstEnergy's 1.9 million consumers could each pay about $800 ($3.6 billion total) and AEP's 1.3 million consumers could each pay about $700 ($1.9 billion) over the eight years of the PPAs.

Dan Doron, spokesman for the OCC, said the costs could be much higher if the power plants fail to clear in PJM's energy and capacity markets.

PJM Market Monitor Joe Bowring has said the generators should not be allowed to participate using subsidized prices. In testimony to PUCO, Bowring said that the generators would "be returned to the cost of service regulation regime that predated the introduction of competitive wholesale power markets."

Doron said that if the plants cannot participate in the PJM wholesale markets, "the estimated subsidies could increase to over $1,100, on average per customer, for FirstEnergy consumers ($5.15 billion) and over $1,000, on average per customer, for AEP Ohio consumers ($3.1 billion)."

PJM: Reliability Arguments a 'Red Herring'

On Monday, PJM filed a 12-page amicus brief with PUCO, criticizing AEP's assertions that reliability would be threatened if its units retired.

The RTO said new generation has replaced plants that retired in the past, ensuring Ohio continues to meet resource adequacy targets.

"Arguments that approval of the stipulation is needed to ensure reliability in Ohio are wide of the mark and represent a proverbial 'red herring' that should not distract from consideration of the issues presented in the record as to the merits of the proposed stipulation itself," PJM said.

PJM also urged the commission, if it approves the proposal, to clarify that offers from the units must be no lower than their actual cost, without consideration of revenue under the deal.

The RTO also said that the generators' owners — not ratepayers — should bear any nonperformance penalties under its Capacity Performance construct.

CEO Andy Ott echoed the RTO's position in a response to several of those who have written letters to PJM's Board of Managers seeking its intervention against the PPAs.

Timothy R. Eves, vice president of NTE Energy, which is building a 475-MW natural gas generator in Butler County, Ohio, said in a Jan. 27 letter to the board that the PPAs would "undermine confidence in the PJM markets and can lead to a chilling effect on future power plant development."

He asked PJM "to swiftly take necessary actions at the state-level, RTO-level and at FERC to mitigate this looming harm."

Oregon Clean Energy, an 860-MW gas-fired generator under construction in Lucas County, Ohio, made a similar appeal in a letter Jan. 22.

Suzanne Herel and Michael Brooks contributed to this article.

COMPANY BRIEFS

Dominion to Buy Natural Gas Co. Questar for $4.4B

Dominion Resources announced Monday that it is buying the Utah-based natural gas distributor Questar for $4.4 billion in cash in a deal aimed at expanding its gas business into the West.

Dominion said it expects to complete the acquisition by the end of the year. The company also said it would be assuming Questar's approximately $1.31 billion in long- and short-term debt.

Like Duke Energy, which announced in October it would purchase Piedmont Natural Gas, Dominion expects the value of natural gas to increase as more and more states switch to the fuel for electric generation in order to meet state and federal emissions mandates.

It is Dominion's latest big natural gas play. The company is one of the majority owners of the Atlantic Coast Pipeline project, a $5 billion, 550-mile pipeline that would bring natural gas from the shale fields in Pennsylvania, West Virginia and Ohio to markets and terminals in Virginia and North Carolina. It also has invested $3.8 billion to converting its liquefied natural gas import terminal at Cove Point, Md., on the western shore of the Chesapeake Bay into an export facility.

More: *Wall Street Journal* (subscription required)

GPI Names Bilek to Govt. Affairs and Communications

Amanda Bilek, who has held various positions at the Great Plains Institute since 2008, will become the director of government affairs and communications for the energy think tank.

"I look forward to the challenge of ensuring that our government affairs and communications efforts enhance the impact of our programs," she said.

"Amanda's extensive legislative and policy experience coupled with her management and communications skills make her a perfect fit for this new role," said GPI President Rolf Nordstrom.

More: *Great Plains Institute*

Invenergy Cuts Deal to Sell Wind Energy to Google

Invenergy announced it has signed a deal with Google to provide the Internet giant with 225 MW of wind energy. Craig Gordon, Invenergy's vice president of sales and marketing, said the power will be generated at the company's proposed wind facility near Lubbock, Texas, and will be transmitted through SPP to Google's energy-hungry data centers.

"They are always looking to partner up with folks like us to green up their energy supply," Gordon said. "Their needs are growing by leaps and bounds every year, and as a result their energy needs are growing by leaps and bounds every year." A price was not disclosed.

The agreement is part of a plan Google announced in December to partner with six companies in the U.S., Sweden and Chile to obtain 842 MW of clean energy.

More: *Chicago Tribune*

Duke Starts Coal Ash Removal From Riverbend Steam Station

Duke Energy began loading coal ash from its retired Riverbend Steam Station in Gaston County, N.C., using a rail spur it had built for the purpose. The company said each train can carry as much coal ash as 420 dump trucks, alleviating some of the community's traffic concerns.

Riverbend, on the Catawba River, was retired in 2013, but the coal ash dump there is one of four high-priority sites that have to be cleaned up by 2019. Duke says it will clean up all its coal ash sites by 2029.

More: *WSOC TV*

Montana Co-ops May Be Facing $5B Bill to Comply with CPP

Montana's electric cooperatives will likely share in a $5 billion bill to comply with the federal Clean Power Plan, officials said recently.

The $5 billion is what Basin Electric Power Cooperative, an SPP member, estimates it will need to cut greenhouse gases from its coal-fired power plants while also adding wind farms and gas-fired generators as replacement energy sources.

More: *Billings Gazette*

Basin Electric Growth Rate Projected to Drop to 1.4% Annually

Basin Electric Power Cooperative forecasts new load will increase 1,350 MW over the next 20 years, 739 MW lower than its forecast last year.

The forecast projects a 1.4% annual growth rate across Basin's membership, down from the previous year's estimate of 2.5 to 2.9% annually. The cancelled Keystone XL pipeline and oil price fluctuations account for much of the difference.

The load forecast show Basin Electric's service area growing at twice the rate of the rest of the U.S., even with oil prices at 12-year lows.

More: *Basin Electric Power Cooperative*

PNM Opens 3rd Solar Facility This Year, Adding 9.5 MW

Public Service Company of New Mexico opened a 9.5-MW solar facility south of Santa Fe, its 15th in the state.

The 40,000-panel solar center is part of the utility's much debated and critiqued energy portfolio, 15% of which is required by the state to be derived from renewable sources.

In December, the state Public Regulation Commission approved PNM's plan to close two of four coal-burning units at the aging San Juan Generating Station and replace that power with energy from nuclear and natural gas plants, additional coal power and some solar energy.

More: *The Santa Fe New Mexican*

Nonprofit Says PNM Broke Law With 64-MW Palo Verde Purchase

An advocacy group is fighting a requested rate increase by Public Service Company of New Mexico, which it says quietly purchased a 64-MW share of the Palo Verde Nuclear Generating Station in Arizona for $163.3 million without getting prior approval from state regulators. PNM previously had leased the capacity from the nuclear plant.

The nonprofit New Energy Economy filed a motion Jan. 20 with the state Public Regulation Commission, along with Bernalillo County, to dismiss a third of the utility's requested $123.5 million rate hike that would cover the $40 million cost of operating Palo Verde's Unit 2 for a year, including taxes, maintenance and fuel.

The advocacy group, which has been at odds with PNM for years, said that the utility should have submitted its proposed purchase first to the state commission. PNM said it filed the request in March with FERC,

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COMPANY BRIEFS

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and no public comments were submitted.

More: *The Santa Fe New Mexican*

Austin Energy Proposes Rate Cut for Most Businesses

Austin Energy has proposed cutting rates for most business customers to reduce revenue by $17.5 million a year.

Austin Energy officials publicly released their suggested rates Jan. 25 in what is shaping up to be a contentious discussion about reallocating costs among different customer classes.

The utility, which has 448,000 customers, says that residential customers as a whole are paying $53 million less than it costs to serve them, while businesses collectively are paying about $62 million more. Its new rates require City Council approval.

More: *Austin American-Statesman*

Akron Delves into Battery Storage with Solar Project

Smart battery builder Design Flux Technologies, a University of Akron spinoff, is building a battery-management system for a rooftop solar array being built in Akron, Ohio.

The facility will be built by Prism Solar Technology of Highland, N.Y., and will be affixed to the roof of the former B.F. Goodrich Tire plant, a 19th century building that now houses the Akron Global Business Accelerator, a business development organization. Design Flux Technologies is a resident company of the Akron Global Business Accelerator.

The city of Akron's $173,000 investment in the solar panels and storage equipment is expected to be recovered within five years, with power cost savings estimated between $30,000 and $40,000 annually.

More: *Crain's Cleveland Business*

WEC Energy to Replace Retiring CEO with Current President

WEC Energy Group announced last week that current president Allen Leverett will succeed Gale Klappa as chief executive on May 1.

Klappa, 65, is retiring and will serve as nonexecutive chairman. Leverett, 49, was recruited to WEC by Klappa in 2003 after the two worked together at Georgia Power in Atlanta.

The incoming CEO said his priorities will include the continued transition of the Integrys merger, working on upgrades as needed to WEC's natural gas distribution infrastructure and compliance with Wisconsin's Clean Power Plan strategy.

More: *Milwaukee Journal Sentinel*

Exelon Appoints Gioia To Board of Directors


Gioia

Nancy Gioia, retired director of global connectivity, electrical and user experience for Ford Motor Co., has been appointed to Exelon's board of directors, effective Feb. 1.

Gioia, 55, will serve on the generation oversight and finance and risk committees.

In more than 30 years at Ford, Gioia led global electrification efforts, working closely with the Edison Electric Institute and the Department of Energy.

More: *Exelon*

PECO: Smart Ideas Program Increasing Energy Efficiency

PECO Energy customers have received more than $500 million in energy savings, incentives and rebates in the past seven years using the Smart Ideas program, the Philadelphia utility says.

The program provides 15 ways to help residential and business customers save energy and money.

Smart Ideas is part of the company's effort to increase energy efficiency and demand response capability under the Pennsylvania Public Utility Commission's Act 129, which requires electric utilities to increasingly reduce their customers' energy usage through 2021.

More: *PECO*

FirstEnergy: Lake Shore Power Plant to be Demolished

FirstEnergy engineers say the architecturally significant, defunct Lake Shore power plant in Cleveland is too degraded to restore and will be demolished.

The coal-fired plant, which first generated power in 1911, sits on 57 acres overlooking Lake Erie.

FirstEnergy hopes to begin the $15 million demolition in late spring or early summer, and then offer the cleared site for sale. But the utility can't proceed with demolition until the city's Downtown/Flats Design Review Committee issues a permit.

More: *The Plain Dealer*

$1B Privately Funded Plant Will Power 1M Ill. Homes

Competitive Power Ventures plans to open a 1,100-MW combined cycle generating facility in the Three Rivers area of Grundy County, Ill.

The $1 billion CPV Three Rivers Energy Center will consist of two General Electric turbines and one steam turbine. It will be fueled by an existing 36-inch natural gas pipeline on the 80-acre site. The site is near Exelon's Dresden Generating Station in Goose Lake Township.

Construction is expected to start in 2018, with the facility in operation by 2021.

More: *Morris Herald-News*

Entergy Names 30-Year Industry Vet To Lead its Nuclear Operations

Chris Bakken will become Entergy's executive vice president and chief nuclear officer, effective April 6. Bakken replaces Jeff Forbes, who announced his retirement last year, and will report to Leo Denault, Entergy's chairman and chief executive.

Bakken will be responsible for oversight of New Orleans-based Entergy's 10 nuclear units at eight sites, which have nearly 10,000 MW of capacity. He will also be responsible for the company's management services to the Cooper Nuclear Station for the Nebraska Public Power District.

Bakken's career began in 1982 as a test engineer at Duquesne Light in Pittsburgh. He was most recently executive director for EDF Energy's nuclear new build group and has also worked for American Electric Power, Public Service Enterprise Group and British Energy.

More: *Entergy*

FEDERAL BRIEFS

SC Governor Seeks Suit Against DOE on MOX Plant


Haley

South Carolina Gov. Nikki Haley last week asked the state's top prosecutor to prepare a lawsuit against the U.S. Department of Energy for failing to complete a plant that was designed to turn weapons-grade plutonium into fuel for nuclear generating stations.

Haley threatened last year to sue the department and hold it to a $1 million daily fine if it didn't complete work at the Savannah River Site's mixed-oxide project according to its contractual obligations. The MOX project is years behind schedule and billions over budget.

"The federal government has, once again, failed to keep its promise to the people of our state," she wrote to Attorney General Alan Wilson. "South Carolina will not sit idly by while DOE continues — in violation of federal law — to ignore its commitment to the people of South Carolina."

More: *The Associated Press*

FERC Denies Request to Stay Algonquin Expansion Project

FERC has rejected requests to reopen hearings on a plan to expand Spectra Energy's Algonquin Pipeline project, saying its review of the environmental impacts was adequate. The decision means Spectra can go ahead with its plans to expand the line, which starts in New York state, crosses Connecticut and terminates in Massachusetts.

Several organizations had asked for either a stay or a rehearing, including the Allegheny Defense Project, Riverkeeper, individual landowners and several towns in Massachusetts and New York.

The expansion project will add 37.4 miles of pipeline and related compression facilities in New York, Connecticut and Massachusetts. A majority of the project, however, involves replacing existing pipeline in order to increase capacity to 342,000 dekatherms of gas a day.

More: *Peekskill-Cortlandt Patch*

Senate Dems Calling for EPA to Regulate Methane Leaks


Schatz

Twenty-one U.S Senate Democrats are calling for EPA to step in and regulate methane leaks from oil and natural gas wells. The group is led by Sens. Brian Schatz of Hawaii and Sheldon Whitehouse of Rhode Island.

They charge that EPA's most recent rules don't go far enough to control methane, as the new regulations do not apply to existing wells drilled before the rules' passage.

"Moving forward with this rulemaking would sustain our international leadership on this issue and put forward a precedent that other countries can follow, much as they have done with our current methane commitment," the group's letter states.

More: *The Hill*

NGSA Weighs in with Complaint on FERC NOPR

The National Gas Supply Association said it has "numerous concerns" about a proposed FERC rule requiring RTOs to disclose more information about parties with which they do business. FERC issued a Notice of Proposed Rulemaking calling for more information to prevent market manipulation.

The commission held a technical conference on the NOPR in December. In post-conference comments filed with FERC, the association outlined some of its concerns, even though the rule is aimed at RTOs and ISOs, rather than gas suppliers.

Although the proposed compliance obligations would not apply directly to the production, sale or transportation of natural gas, the association said the vague language in the proposed rule could make NGSA members "connected entities" for providing such services to ISO/RTO market participants, the association said. The group is concerned that suppliers might be forced to disclose commercially sensitive information.

More: *Natural Gas Intelligence*

DOE, NM Regulators Reach Settlement on Nuke Waste Incidents

The Department of Energy, the New Mexico Environment Department and a number of contractors have reached a settlement regarding incidents at a nuclear waste site and the Los Alamos National Laboratory. The settlement provides for $74 million for environmental projects at the Waste Isolation Pilot Plant, as well as for Los Alamos and surrounding communities.

The projects include the construction of an offsite emergency operations center, replacement of drinking water lines at Los Alamos and a fund to pay for monitoring in the future. The settlement brings an end to struggles between federal authorities, state officials and contractors related to a series of nuclear waste mishandling and spillage events.

More: *Department of Energy*

DOE Announces $2.85 Million In Funding for Fed Renewables

The Department of Energy announced it will spend $2.85 million to expand solar and biomass generation at federal facilities. The money will go toward a variety of solar projects, including at some overseas diplomatic posts, as well as a 10-MW biomass generator at a Marine installation in Georgia.

"As the nation's largest single user of energy, the federal government is leading by example and these projects will reduce carbon emissions, while strengthening America's economic, energy and environmental security," according to the department. "Currently, federal agencies are working toward a goal of achieving 30% of their electricity from renewable energy sources by 2025."

More: *Department of Energy*

STATE BRIEFS

REGIONAL

Companies Propose Multi-state Projects in New England

Hydropower and wind power developers have submitted two proposals to supply electricity to three New England states to meet renewable energy goals. Rhode Island, Connecticut and Massachusetts jointly solicited projects for more than 5,000 GWh of clean energy.

Anbaric Transmission and National Grid proposed building the 60-mile Vermont Green Line transmission system to deliver 400 MW of hydropower from Canada and electricity from a proposed wind project in Beekmantown, N.Y. The line would be buried along public roadways and underneath Lake Champlain to connect with the ISO-NE grid.

Central Maine Power and Emera Maine proposed building about 150 miles of new transmission lines and substations to deliver up to 1,200 MW of electricity from wind projects in the northern part of the state that are planned or under development. The Maine Renewable Energy Interconnect project would largely follow existing rights of way.

More: *National Grid*; *Portland Press Herald*

Mo. Lawmakers to Wash. State: More Time on Colstrip Plant

A delegation of Montana lawmakers recently made a pitch to their counterparts in Washington state to save the coal-fired Colstrip power plant — or at least give them time to plan for a partial shutdown.

A bill before the Washington State Legislature would authorize Colstrip's largest owner, Puget Sound Energy, to file a plan to decommission Colstrip's two oldest units and to allow the utility to buy additional ownership in one of the two newer units.

Four Montana lawmakers told a Washington State Senate committee on Jan. 20 even a partial shutdown would have dire economic consequences on the southeastern Montana community of Colstrip and on industrial users across the state that depend on cheap power from Colstrip Units 1 and 2.

More: *Billings Gazette*

AWEA Says Iowa Edges out California as No. 2 Producer

Iowa now is the second-largest wind-production state in the nation, edging past California in the annual rankings compiled by the American Wind Energy Association. Iowa now has about 6,000 MW of installed capacity, with the addition of about 300 MW in the fourth quarter of 2015.

Texas remains No. 1 with nearly 18,000 MW of installed capacity.

AWEA Manager of Data and Analysis John Hensley said about 5,000 MW of wind came online in the final quarter of 2015, the highest quarterly improvement since the fourth quarter of 2012. In both years, federal tax credits supporting wind production were set to expire, triggering a surge in construction.

More: *Radio Iowa*

INDIANA

Groups Challenge NIPSCO Fixed Rate Hike

The Citizens Action Coalition and the Environmental Law and Policy Center are challenging Northern Indiana Public Service Co.'s proposed 82% increase in the monthly fixed charge for residential customers, saying the boost from $11 to $20 would inordinately affect low-income, minority and elderly customers.

The consumer organization and the environmental group told the Utility Regulatory Commission that the proposed fixed-rate increase would also undermine the viability of energy efficiency programs. The groups urged NIPSCO to improve assistance to low-income customers.

NIPSCO says the rate increase is necessary to defray costs such as $95 million spent on distribution improvements and $90 million spent on meter replacements. The utility says that most of a customer's bill would still be associated with the volume of electricity consumed, retaining an incentive for customers to conserve.

More: *The Times of Northwest Indiana*

KANSAS

State Delays Controversial Plant After Lawmakers Raise Concerns

Gov. Sam Brownback's administration is suspending plans to build a new power plant in Topeka after lawmakers raised concerns about the project's cost.

The Department of Administration, which oversees the state's facilities, struck a $19.9 million deal with Bank of America in December to finance construction of a new energy center, which would provide heating and cooling for the capitol and four other state office buildings. Lawmakers of both parties raised concerns that the tax-exempt municipal lease with Bank of America was made without legislative approval.

"[Lawmakers] asked for some more time," said Brownback. "We followed the proper process, but if they think there's ways that we can save money, I'm willing to let people take more looks at those items."

More: *The Wichita Eagle*

MICHIGAN

DEQ Wants Better Records of Underground Natural Gas Storage

The Department of Environmental Quality wants energy companies to keep better records of underground natural gas storage infrastructure in light of a continuing Southern California methane gas leak involving a failed 61-year-old pipe.

Some of the state's aging natural gas storage facilities have been in place since 1941, and the DEQ is worried that utilities like DTE Energy and Consumers Energy aren't reporting enough on the condition of their storage infrastructure. In 2013, the state had more natural gas stored underground in depleted gas formations than any other

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STATE BRIEFS

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state: 58 storage fields containing 1.1 trillion cubic feet of natural gas.

"If a piece of steel has been in the ground for 60 to 70 years, it could be corroded," William Harrison, a geosciences professor at Western Michigan University, told MLive. "That's why they monitor and test these wells on a regular basis."

More: MLive

MISSISSIPPI

PSC Says Net Metering Rule Stands for now

The Public Service Commission declined to reconsider its new net-metering rules for solar customers, which have attracted criticism from solar advocates as well as trade associations representing electric cooperatives.

The new rules, approved in December after a five-year drafting process, provide for net-metering customers to receive credit for 7 cents to 7.5 cents/kWh of power distributed on the grid. Solar advocates had proposed the customers receive the going retail rate, which is about 10 cents/kWh for customers of Entergy, one of the state's two investor-owned utilities. The utilities had sought a lower rate.

The Electric Power Associations of Mississippi, which represents distribution cooperatives, and the South Mississippi Power Association, a transmission and generation cooperative, asked the PSC to reconsider the rules, saying they were an illegal intrusion into retail rate-setting. Entergy said it was satisfied with the rules as passed and is "moving forward with net-metering implementation."

More: Mississippi Business Journal

MONTANA

PSC: NorthWestern Must Explain Tax Burden Portion of Bills

The Public Service Commission last week voted 4-1 to require NorthWestern Energy to spell out how much of customers' bills goes toward paying company taxes. The regulators criticized a state law that permits NorthWestern to pass its tax burden along to ratepayers directly with little control from the PSC.

"Year after year, the Department of Revenue uses an extremely subjective method to calculate NorthWestern's property taxes. State law then sticks ratepayers with the bill," PSC Chairman Brad Johnson stated in a press release. Legislation to end the pass-through failed to gain traction in 2015 in spite of the commission's unanimous approval.

"The automatic pass-through of taxes to NorthWestern's customers is nothing more than a hidden sales tax on energy," said PSC Vice Chairman Travis Kavulla. "Consumers deserve to know what they are really paying for."

More: Missoulian

CPP Requirements Could Cost Some Montanans $178 Annually

Montana-Dakota Utilities customers could end up paying an extra $178/year if the utility has to upgrade its coal-fired plants to meet new federal environmental standards.

The Public Service Commission is meeting Feb. 9 to determine whether to sign off on MDU's 21% rate increase request, some of which would go toward upgrading its coal-fired plants.

MDU's plan to upgrade its plants may not be sufficient to meet the new Clean Power Plan standards, and some question whether the utility might be making a bad investment. "You shouldn't want to make large capital investments in power plants that are then subject to other regulations that could shut them down," said PSC Vice Chairman Travis Kavulla.

More: Billings Gazette

NEBRASKA

Compromise Reached with NPPD On Proposed Wind Energy Bill

Nebraska Public Power District has lined up behind proposed wind energy legislation that would spur projects by removing some barriers for wind projects while meeting the requirements of the transmission authority.

"We were initially opposed, but we found common ground," NPPD Vice President Tom Kent said. Sen. John McCollister of Omaha helped reach the compromise, which he called "a big boost to rural communities" by providing property tax relief and economic incentives for wind development.

Critics said the bill would essentially deregulate wind development. Developers will no longer need a power purchase agreement as a requirement for gaining project approval.

More: Lincoln Journal Star

NEW JERSEY

BPU Approves 28-Mile, $130M Nat Gas Pipeline

By a vote of 5-0, the Board of Public Utilities last week approved construction of a 28-mile natural gas pipeline, but the $130 million project still needs state and local approvals. The Southern Reliability Link, proposed by New Jersey Natural Gas, would run from Chesterfield, through military-held Joint Base McGuire-Dix-Lakehurst before terminating at NJNG's system in Manchester.

Company officials and BPU President Richard Mroz have said the pipeline is necessary to provide supply reliability and to meet future demand.

The project continues to be hotly contested, however.

Jeff Tittel of the New Jersey Sierra Club had strong words against the decision. "This pipeline is not for resiliency; it is for growth and development along the coast," he said. "The BPU does not listen to the people, they just do what the utility companies want," he said. "Putting in this pipeline will be like putting a blowtorch in people's backyards."

More: NJ.com

NEW MEXICO

Environmental Groups Plan Opposition to Four Corners Plant

A coalition of environmental groups has given legal notice that it plans to oppose the federal approval of operations at the Four Corners Power Plant and Navajo Mine.

The groups on Dec. 21 filed a 60-day notice of intent to sue the U.S. Office of Surface

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STATE BRIEFS

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Mining, the U.S. Fish and Wildlife Service and other federal agencies for approving the Four Corners Power Plant and Navajo Mine Energy Project last summer. The approvals gave the coal-fired plant the ability to operate until 2041.

The environmentalists contend that the U.S. government's impact study on the plant and the mine that supplies it was flawed. The groups claim the study failed to look at enough viable clean energy alternatives for power generation at the plant and failed to consider the impacts from carbon pollution.

More: *The Albuquerque Journal*

Solar Tax Credit Bill's Fate Uncertain in Legislature

Legislators have proposed extending a solar tax credit that is set to expire at the end of the year. A similar extension was approved with bipartisan support in both houses of the Legislature last year but was vetoed by Gov. Susana Martinez.

House Bill 26 would allocate $5 million annually for residents who install solar thermal or photovoltaic systems at their homes or businesses. They would receive a tax rebate of 10% of the cost of installation — up to $9,000 — until 2019. The proposed rebate will then decrease each year until 2024.

The current tax credit has been in effect since 2006, and over the last five years an average of $38 million has been spent installing solar panels. In 2014, 1,600 people were employed in solar jobs, according to the Legislative Finance Committee, and solar installations have grown an average of 81% between 2010 and 2013.

More: *The Santa Fe New Mexican*

NEW YORK

Cuomo: ReCharge NY Programs Support Jobs Growth

Gov. Andrew Cuomo claims in a new report that the ReCharge NY program, an economic development plan that provides discounted power from the New York Power Authority, has supported 400,000 jobs since its inception five years ago.

ReCharge NY provides power that costs 5 to 25% less than electricity generally available through the local utility. The report says that 741 customers, including 71 non-profits, are beneficiaries.

"Through ReCharge NY, we're making it cheaper for businesses to compete, grow and ultimately thrive in New York state," Cuomo said. "Electricity can be a major expense for any company, but by providing low-cost power to employers we're making local communities more affordable, helping create jobs and ultimately strengthening the economy."

More: *Gov. Andrew Cuomo*

NORTH DAKOTA

Mine Shutting down, Laying off 95 Employees

Dakota Westmoreland's Beulah coal mine will lay off 95 employees in March and April as it winds down coal deliveries to the nearby Coyote Station power plant, which is switching suppliers.

The Coyote Station will start receiving coal in May from a new North American Coal operation called the Coyote Creek Mining Co., now poised to dig just to the southwest of Dakota Westmoreland. Dakota Westmoreland will retain 40 employees to produce the half-million tons it is scheduled to deliver annually through 2021 to another power plant.

Coyote Station is operated by Otter Tail Power, one of four owners, along with Montana-Dakota Utilities. Owners said they switched coal suppliers because North American offered a better price. Dakota Westmoreland, whose 9,000-acre Beulah surface mine complex produced 2.9 million tons of lignite annually, is owned by Westmoreland Coal.

More: *The Bismarck Tribune*

OHIO

Power Plant Emissions to Worsen Lake Erie Algal Blooms

Researchers say pollution from fossil fuel

plants will contribute to severe algal blooms in Lake Erie, which are expected to double over the next 100 years.

Researchers Noel Aloysius, of Ohio State University, and Hans Paerl, of the University of North Carolina at Chapel Hill, said that along with fertilizer use, additional rainfall and runoff caused by the changing climate contributed to 2015's unprecedented algal bloom in Lake Erie. The two said toxic algal blooms are putting Lake Erie's commercial fishing industry at risk.

The researchers contend the emission of nitrogen oxides from fossil fuel plants, which run into the water, also exacerbated blooms.

More: *Midwest Energy News*

OKLAHOMA

State Paying Millions More In Wind Incentives than Planned

A controversial tax incentive designed to lure wind developers to the state has drained nearly $45 million from state coffers in two years, beyond what officials had expected.

The state tax commission paid wind companies $27.3 million in cash incentives for 2013, the most recent tax year for which data is available, up nearly 50% from $18.2 million claimed the year before. Lawmakers had anticipated claims would tally $19 million in 2018. Lawmakers approved the credit in 2001 in a line tacked onto a bill releasing money for boating safety.

Supporters and critics of the state's zero-emissions tax credit agree that its impact will continue to grow as developers build wind farms to meet increasing demand for renewable energy.

More: *The Norman Transcript*

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STATE BRIEFS

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PENNSYLVANIA

PUC Moves to Expedite PGW Pipeline Replacement

The Public Utility Commission last week took several actions regarding cost recovery that will enable Philadelphia Gas Works to more rapidly replace its aging pipelines. They include raising the cap for the Distribution System Improvement Charge from 5% to 7.5% of billed revenue to help pay for infrastructure replacement.

However, Vice Chairman Andrew Place urged the utility to look for additional, internally generated funds to ease the burden on ratepayers.

PGW has the highest percentage of at-risk cast iron and bare steel pipe of any regulated gas company in the state, according to the PUC.

More: *Pennsylvania PUC*

WISCONSIN

Dairyland Power to Own 9% of Cardinal-Hickory Creek Line

Dairyland Power Cooperative will own a 9% share of the 125-mile Cardinal-Hickory Creek transmission line.

American Transmission Co. and ITC Midwest own the remaining shares of the proposed project. The 345-kV line, set to be built in 2019 and in use by 2020, would extend from near Madison to a planned substation in eastern Iowa. The sponsors say it will improve reliability, relieve congestion and connect to wind energy sources.

Seven possible routes are under consideration, said ITC spokesperson Tom Petersen.

More: *TH Online*

SPECIAL REPORT: The Future of DR

Legal Challenge Behind it, DR Seeks to Overcome Behavioral Resistance, Varying State Rules

Continued from page 1

concluded a report released a week before the Supreme Court ruling by the Evolution of DR Project (EDP).

"The vast majority of residential customers are not exposed to price signals," said the report, the result of a "multi-party dialogue" that included utilities, RTOs, state and federal policymakers, DR providers and other stakeholders.

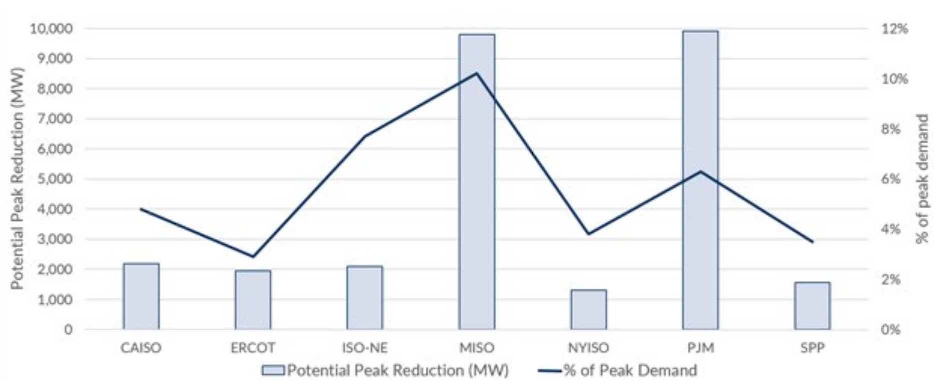
Impact of Supreme Court Ruling

Although the Supreme Court case dealt explicitly with DR in wholesale energy markets, many observers predicted a rejection by the court would also jeopardize the resource's participation in the capacity markets, where DR earns most of its revenue. (See related story, *Clark Calls for New Look at Order 745*, p. 31.)

Kevin Lucas, director of research for the Alliance to Save Energy, noted that DR revenue is essential to justifying investments in data analytics and building controls. "Fair, market-based compensation in competitive wholesale energy markets is a critical step toward increasing the deployment of energy-saving technologies such as whole-building controls and smart-grid-enabled analytics," he said in a press release. "With major legal questions now resolved, the direct benefits to consumers of these products and services are sure to follow."

Smart meter installation

"Business uncertainty about the outcome of the Supreme Court case has held innovators and implementers in limbo for months," wrote Denis Du Bois, a clean technology consultant and host of the Energy Priorities radio program. "Not only was the future of demand response in question, but similar ideas for energy efficiency markets also had a foggy outlook. By upholding the order, the court has removed that uncertainty for demand response and clarified the future of energy efficiency as well."



Demand response by RTO (2013) *Source: FERC*

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SPECIAL REPORT: The Future of DR

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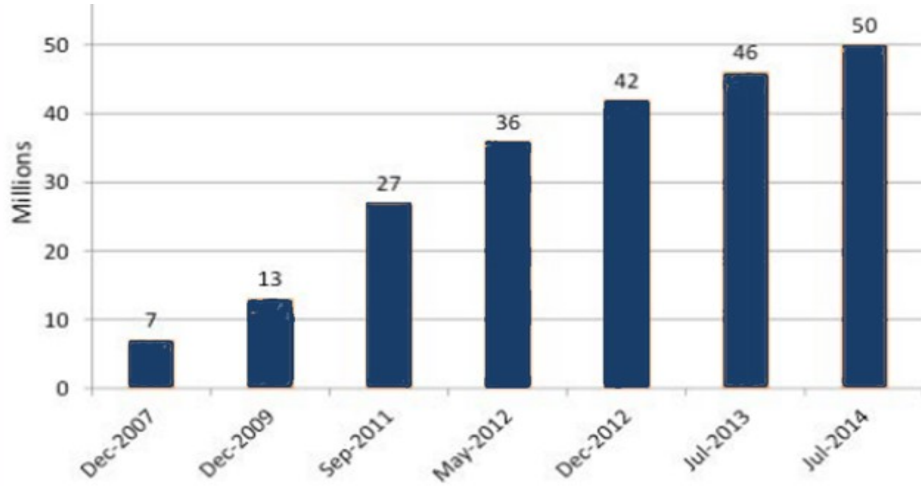

Installed smart meters *Source: Institute for Electric Innovation*

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Smart Meter Deployment

If maximizing DR requires exposing consumers to price signals, it also requires smart meters, devices capable of two-way communication and capturing real-time usage.

The Obama administration spent more than $3 billion in stimulus funds on smart meters and other smart grid investments. And while the spread of the technology has been unmistakable, there is disagreement over the current penetration of smart meters.

FERC's ninth annual Assessment of Demand Response and Advanced Metering report, released in December, cited Energy Information Administration data that put penetration at 30% through 2012. The Edison Foundation's Institute for Electric Innovation reported that more than 50 million smart meters were deployed as of July 2014, representing more than 43% of U.S. homes.

The EDP report estimates that about 70% of meters have been upgraded to smart meters or are planned for replacement in the near future, in line with projections by research group NPD, which predicted 75% by 2016.

FERC found the Texas Regional Entity leading with penetration of 70%, followed by the Western Electric Coordinating Council at 51%. Bringing up the rear were ReliabilityFirst Corp., which includes portions of PJM and MISO, at 17%, and the Northeast Power Coordinating Council at 12%.

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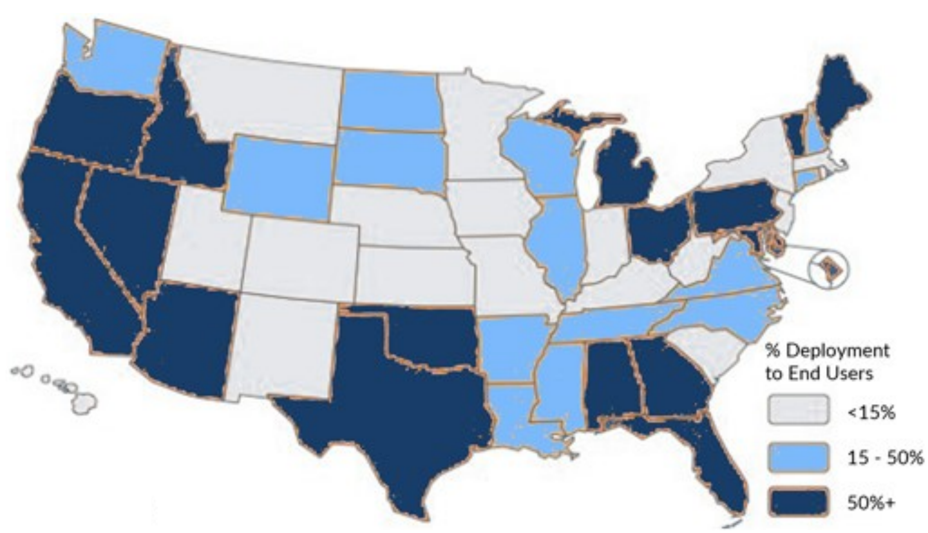

Expected smart meter deployments by state (2015) *Source: Institute for Electric Innovation*

A Half Century of DR

The Evolution of DR Project report provides a succinct history of demand response, beginning in the 1950s and 60s, when utilities began offering incentive-based "interruptible" programs to large commercial and industrial customers.

Between 1980 and 2000, direct load control programs offered savings to smaller customers through radio controls allowing utilities to turn off hot water heaters and air conditioning during peak demand.

The term "demand response" came into use after 2000, when the creation of ISOs and RTOs created "a new platform" for the resource, including market-based DR.

Using new technology and directed by FERC policies, the RTOs "moved beyond emergency programs and began to incorporate DR as a market resource that could compete with supply resources. DR began to be viewed as a dynamic, controllable and dispatchable resource that could help balance supply and demand in a wholesale market."

DR began providing ancillary services, including operating reserves and regulation.

Potential peak reduction in RTOs and ISOs grew to 6% of peak demand in 2013, from 5.6% in 2012, according to FERC's annual Assessment of Demand Response and Advanced Metering report in December. (See *FERC Report Shows Spotty Growth for Demand Response, Advanced Meters*.)

At the same time, utilities began installing advanced metering infrastructure — smart meters — that provided both more precise time-based measurement and two-way communications.

In contrast with traditional energy efficiency — making devices and equipment use less power — DR was "dynamic, controllable and dispatchable."

A new term emerged — intelligent efficiency — to describe building technology that can respond to price or other inputs automatically.

In the last five years, DR backers have sought to ensure the resource has a role alongside rooftop solar and microgrids in the move to distributed energy resources.

SPECIAL REPORT: The Future of DR

Clark Calls for New Look at Order 745

ISO-NE to Resume Expansion Plans; Status Quo for PJM, MISO

FERC Commissioner Tony Clark said last week that the Supreme Court's ruling upholding FERC's jurisdiction over wholesale demand response frees the commission to take another look at Order 745's requirement that RTOs pay DR providers LMPs equal to generation.

"With the disposition of these matters, I would encourage the commission to turn its attention towards a thorough assessment of the underpinnings of a compensation regime that continues to be widely panned by market experts," he said in a statement.

"That this case has garnered so much attention says much about how financially lucrative the current mechanism is to one particular type of market participant. Yet the commission's job is not to support a particular technology, resource class or business model based on its subjective preferences; it is to dispassionately create mechanisms that find economically proper prices."

The Supreme Court rejected the D.C. Circuit Court of Appeals' ruling that FERC overstepped its jurisdiction and that the pricing regime required by Order 745 was "arbitrary and capricious." (See related story, *Legal Challenge Behind it, DR Seeks to Overcome Behavioral Resistance, Varying State Rules*.)

Critics, including former Commissioner Philip Moeller, who dissented on the 2011 order, contend DR should be paid a price of LMP minus G, where "G" stands for the retail price of electricity.

The majority said full LMPs was appropriate because rates should reflect the service provided rather than the provider's cost. It said its reasoning was consistent with the single-price clearing method used by RTOs: nuclear, coal, gas and wind generators are all paid LMPs regardless of their fuel costs or tax advantages.

The commission also said it would be difficult to establish "G" in the formula because retail rates vary within states and change over time.

It's unclear whether the commission will take up the matter. In any event, Clark — who joined the commission after Order 745 — likely won't be around to see it relitigated, having announced last month that he won't seek reappointment when his term ends in June. (See *Clark Won't Seek New FERC Term*.)

ISO-NE Resumes Work to Integrate DR into Energy Market

Two other cases dropped off FERC's to-do list last week as a result of the Supreme Court ruling. On Friday, FirstEnergy (EL14-55) and the New England Power Generators Association (EL15-21) withdrew complaints they had filed seeking to bar DR from participating in the PJM and ISO-NE capacity markets, respectively.

ISO-NE spokeswoman Marcia Blomberg said Monday the ruling will allow the RTO to resume its work to "fully integrate" DR into all of the RTO's markets, including the day-ahead and real-time energy and operating reserves. The RTO had suspended work on the project because of the legal challenge.

"We will work to accomplish this by June 1, 2018, on the schedule we worked out with our stakeholders to ensure a reliable transition through implementation of well-designed market rules and thoroughly tested modifications of energy management software."

Once integration is complete, DR will offer into the day-ahead market alongside generators and be subject to the same Pay-for-Performance incentives.

Currently, small levels of DR participate in

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Legal Challenge Behind it, DR Seeks to Overcome Behavioral Resistance, Varying State Rules

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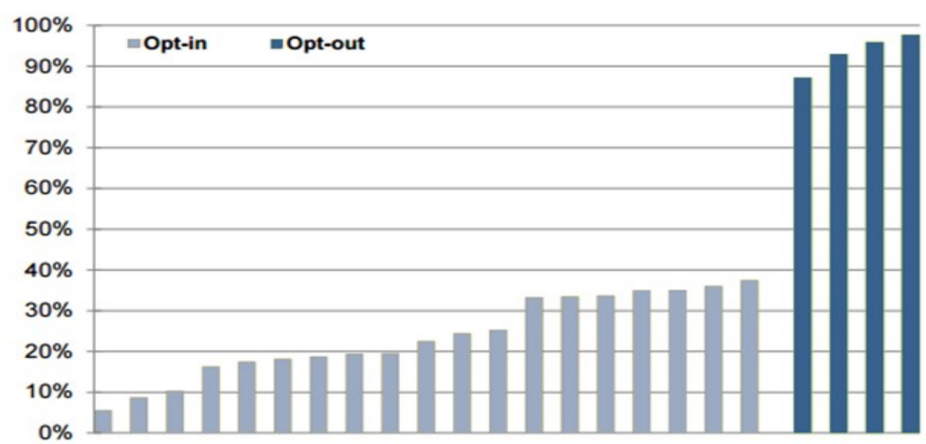
Real-time Pricing

Despite the growing availability of smart meters, EDP noted that "at the residential level, nearly all customers are on retail rates that are fixed and do not vary with time or location."

"Efficiently integrating new technologies such as storage and electric vehicles may require exposure to time-varying rates/prices to reflect the true marginal cost of power in each interval of time," it said. "Without such time-varying rates/prices, the customer cannot know when inexpensive electricity should be bought and stored, and when the stored electricity should be utilized to avoid buying expensive electricity."

But political aversion to price spikes and human nature has made it a challenge to make that vision a reality. Indeed, the FERC report found that enrollment in time-based DR programs dropped by 6.1% between 2011 and 2012.

A Department of Energy report last June looked at customer response to time-based



Enrollment rates for opt-in and opt-out pricing programs *Source: Department of Energy*

rates based on studies of 10 utilities.

The utilities in the study ran at least one of four types of time-based rate programs: critical peak pricing (CPP), critical peak rebates (CPR), time-of-use (TOU) pricing

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SPECIAL REPORT: The Future of DR

Clark Calls for New Look at Order 745

ISO-NE to Resume Expansion Plans; Status Quo for PJM, MISO

Continued from page 31

the RTO's energy markets, but their offers are cleared administratively and not in the market, Blomberg said. DR and energy efficiency resources have been participating in the RTO's capacity market since it began in 2010.

PJM, MISO: Business as Usual

For PJM and MISO, meanwhile, the ruling meant mostly business as usual.

PJM General Counsel Vince Duane started off last Thursday's Markets and Reliability Committee meeting with some comments about what the ruling will change for PJM. In a word: "Nothing."

"We have not done anything to change the status prior to this. The Tariff is as the Tariff has been," he said. "DR has cleared, it has future obligations. It's really business as usual."

He told members not to be concerned over the fact that the ruling returns the matter to the D.C. Circuit, calling it a formality.

Duane's counterpart at MISO, Senior Vice President of Legal and Compliance Service Steve Kozey, had the same message. Most of MISO's DR assets are managed through state programs, and Kozey said state laws won't have to be adjusted in the MISO footprint.

Kozey said he felt comfortable talking about the order in open session because MISO wasn't a party to it and won't be directly affected. "It was a big deal to PJM [and] New England … where a great deal of turmoil and uncertainty has been brought to an end," he said.

Little Impact on PJM Capacity Market

Despite the ruling, DR participation is unlikely to increase in PJM's capacity auctions, Morningstar analyst Jordan Grimes said in a Jan. 25 research report, noting that "almost all other PJM rule changes have been more restrictive to DR." Under Capacity Performance rules, DR will be required to respond year-round and, like generation, will face high penalties for nonperformance. Lead times were cut to 30 minutes with an hour minimum dispatch.

"Ultimately DR market saturation will be the limiting factor. The more DR in PJM the more likely it is that the resource will be dispatched," he wrote. "Because DR providers receive more than 90% of their revenues from the capacity market and the mainstream revenues from other economic activity (i.e. producing steel, cement), it is unlikely that DR providers will submit offers competitive with physical generation."

The ruling is unlikely to have a significant impact on PJM energy and capacity prices, Grimes said. In contrast, capacity prices could have moved to the net cost of new entry price cap had the court vacated Order 745 and the market needed to replace DR, he said.

New York, ERCOT

ERCOT spokeswoman Robbie Searcy noted that the grid operator is not regulated by FERC and thus was not affected by the ruling. "Demand response continues to be an important tool in ERCOT, and our stakeholders continue to evaluate other opportunities for these resources to participate in the wholesale energy market."

The order also had no evident impact in New York. As part of its Reforming the Energy Vision initiative, the New York Public Service Commission last June approved rules for utilities to offer customers financial payments for DR (14-E-0423, et al.). The retail programs, modeled after those in place at Consolidated Edison, will begin in some areas in July with a full rollout planned for summer 2017. (See *Demand Response for All Coming to New York*.)

Suzanne Herel, Amanda Durish Cook, Tom Kleckner and William Opalka contributed to this article.

Legal Challenge Behind it, DR Seeks to Overcome Behavioral Resistance, Varying State Rules

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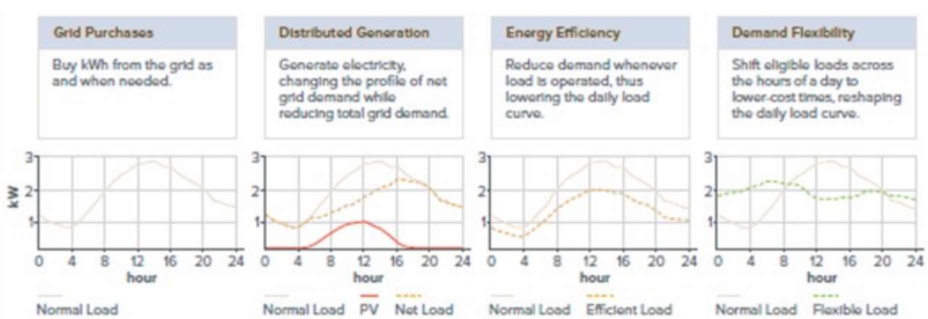
and variable peak pricing (VPP).

The report concluded that opt-out enrollment rates were about 3.5 times higher than they were for opt-in programs (93% vs. 24%), but there was no significant difference in retention rates (91% for opt-out, 92% for opt-in).

The department report attributed the results to what social scientists call the "default bias."

"When facing choices that include default options, people are predisposed to accept the default over the other options offered," the Energy Department report said. The department said the findings indicate cost-benefit advantages to using opt-out approaches.



Megawatts, negawatts and flexiwatts *Source: Rocky Mountain Institute*

The Sacramento Municipal Utility District found, conversely, that peak period demand reductions for opt-in TOU customers were about twice (12%) as large as they were for opt-out customers (6%). Peak period demand reductions for SMUD's opt-in CPP customers were about 50% higher (24%) than they were for opt-out customers (14%).

The study also found that retention rates were higher for critical peak rebates than for critical peak pricing.

This, the researchers said, was consistent

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SPECIAL REPORT: The Future of DR

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with the theory of loss aversion, which holds that, given a choice, people are more likely to seek to avoid a loss rather than acquire a gain. "The risk from nonperformance during critical events under CPP is greater than under CPR, and this could be a motivating factor that decreases enrollment and retention," the report said.

State Policies

Some states are attempting to overcome behavioral obstacles.

The California Public Utilities Commission is requiring the three investor-owned utilities in the state to establish default TOU rates for residential customers starting in 2019. The Massachusetts Department of Public Utilities is requiring that load-serving entities implement time-varying rates as smart meters are deployed.

Last June, the Michigan Public Service Commission ordered DTE Electric and Consumers Energy to offer opt-in TOU and dynamic pricing rate structures over the next two years.

The EDP report cited complaints of DR providers and multi-state utilities over inconsistencies in DR rules from state to state and the complications of wholesale market programs that "can underlay or overlay" state DR programs.

It recommended that state-level policies on distribution platforms consider how distribution-level DR will be coordinated with regional wholesale DR. It also called for RTOs to participate in the proceedings that develop distribution-based market systems.

Some others say more action is needed to clarify federal and state jurisdiction. "My take is that [the Supreme Court] decision can guide the development of demand response, but we still need congressional action (and perhaps a broader Supreme Court decision) to update a U.S. electricity market framework that is over 80 years old," wrote Varun Sivaram, an advisor to New York's Reforming the Energy Vision initiative.

How Flexiwatts Work

Hot water heaters do their heating during low-cost periods, ensuring enough hot water is present in the tank during high-cost periods so that the heating elements do not have to run, and that there is always enough so customers do not have to change their schedules.

Air conditioning is controlled to allow temperatures to rise up to 4°F during high-cost periods.

Costs of electric dryers are reduced by shifting the start time of each cycle by up to six hours in either direction to minimize total cycle costs – achieved either via behavioral change or smart controls that allow a customer to load the dryer and delay the start time automatically.

Electric vehicle charging occurs during least-cost hours when the vehicle is parked and plugged in, always charging to 100% by the time the driver next needs the car.

Source: Rocky Mountain Institute

From Negawatts to Flexiwatts

An August 2015 report by the Rocky Mountain Institute said that although the Supreme Court ruling would be "immensely important" for demand response, the industry was limited by "traditional, top-down grid paradigms."

"By focusing on DR's revenue potential in wholesale markets, a huge part of the core value proposition of demand flexibility is lost — namely, the economic benefits of flexible, controllable demand to individual customers," it said.

The institute's co-founder, Amory Lovins, is credited with inventing the term "negawatt" — power saved through conservation or efficiency.

The institute's new report, The Economics of Demand Flexibility, coins a new term, "flexiwatts" — demand that can be moved across the hours of a day or night based on economic or other signals.

The report concludes that residential demand flexibility can save $9 billion per year in spending on transmission investments — a cut of more than 10% of forecast spending — and $4 billion annually in energy production and ancillary services. That could reduce consumers' electric bills by 10% to 40%.

Flexiwatts can reduce capacity spending by reducing peak loads and flattening aggregate demand profiles of customers. In the energy market it can shift load from high-price to low-price times. They can also reshape load profiles to complement the increasing intermittent generation expected in response to EPA's Clean Power Plan.

While DR is deployed infrequently and often used only as a last resort during peak demand, demand flexibility can be used continuously and proactively to reduce costs year-round, resulting in direct bill reductions instead of infrequent incentive payments.

Demand flexibility can use automatic controls to reshape a customer's demand profile in ways that either are invisible to the customer (for example, using storage to decouple the timing of consumption from the grid impact) or minimally affect the customer (shifting the timing of non-critical loads within customer-set thresholds).

It also takes advantage of time-of-use or real-time pricing, demand charges and distributed solar PV export pricing to provide retail price signals directly to customers or through third-party aggregators.

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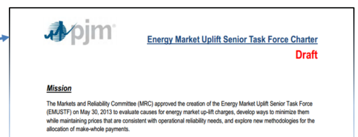
MRC/MC Preview

7. ENERGY MARKET UP-LIFT SENIOR TASK FORCE (EMUSTF) Charter (11:00-11:10)

Members will be asked to approve the charter for the Energy Market Uplift Senior Task Force (EMUSTF). The MRC approved the creation of the task force in May to take a broad review of its method of providing Operating Reserve payments.

PJM said the changes were needed to reduce growing uplift costs resulting from Operating Reserves, "make whole" payments that ensure generators dispatched out of merit for system reliability don't operate at a loss.

See *PJM Proposes Operating Reserve Changes to Cut Uplift*



PJM Proposes Operating Reserve Changes to Cut Uplift

April 30, 2013

PJM called Thursday for a broad review of its method of providing Operating Reserve payments, saying changes were needed to reduce growing uplift costs.

Operating Reserves are "make whole" payments that ensure generators dispatched out of merit for system reliability don't operate at a loss. Because they are collected through uplift charges, and not reflected in day-ahead or real-time locational marginal prices, they cannot be hedged.

In 2012, operating reserve payments totaled a near record $649 million, 2.2% of total billing. Day-ahead operating reserve charges increased by about 90% in 2012, spiking in September after PJM increased the number of "must run" units dispatched in the day-ahead market.

- **Federal and state regulatory news briefs**

OHIO

Industry Likes Efficiency Rule, Wants Spending Cap

The Ohio Manufacturers Association favors the state's energy efficiency standards but wants a cap on how much utilities can charge for efficiency riders. The group said is still studying provisions of a bill that has been introduced to make changes in the program.

Meanwhile, wind energy supporters argued against a provision in the bill that would eliminate requirements that utilities buy a certain amount of in-state renewable energy.

More: *Columbus Business First; The Columbus Dispatch*

- **Voting summaries**

Trading Limits

Reason for Change: PJM proposed the cap because high bid volumes can make it difficult for the RTO's day-ahead markets software to reach solutions.

Impact: PJM can limit market participants to no more than 3,000 UTC transactions each in the day-ahead market when necessary for market operations. (A similar cap also applies to increment offers and decrement bids.)

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Current Capacity Imports OK: Study

October 1, 2013

PJM should be able to absorb the more than 7,000 MW of imports that cleared in May's capacity auction for 2016-17, officials said. -more-

PJM to Consider Storage as Capacity

October 1, 2013

Members agreed to consider new rules to allow batteries, flywheels and other advanced storage technologies to bid in the capacity market. -more-

PJM Likely to Limit Capacity Imports

September 17, 2013

PJM will seek to set a limit on capacity imports before next year's Base Reliability Auction under a problem statement approved Thursday by the Planning Committee. -more-

Installed Reserve Margin May Increase for 2014

September 17, 2013

PJM's recommended Installed Reserve Margin (IRM) will increase slightly because of the increasing alignment of the RTO's peak demand with demand outside of the region, according to a preliminary analysis presented to the Planning Committee Thursday. -more-

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Your Eyes and Ears on the Organized Electric Markets