RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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

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MISO: Energy Storage Could Work into Existing Market Structure Next Year

By Amanda Durish Cook

MISO could have a limited set of market rules for energy storage as early as 2017, RTO officials told the Market Subcommittee last week.

MISO External Affairs Policy Advisor Jennifer Richardson said storage provisions could be a "combination of using established definitions" and creating new market rules.

In the near term, MISO said it will work with stakeholders on minor revisions to the

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Source: AES Energy Storage

Exelon, Pepco Urge Compromise Deal to Win DC PSC Approval for Merger

By Suzanne Herel and Rich Heidorn Jr.

D.C. Councilwoman Mary Cheh (at podium) is joined by other councilmembers and candidates at a press conference opposing the merger Wednesday.

Exelon on Monday offered a split D.C. Public Service Commission a "middle ground proposal" in a bid to salvage its acquisition of Pepco Holdings Inc.

In a joint filing, the companies asked the commission to approve either the original settlement negotiated with Mayor Muriel Bowser or the revised proposal outlined by Commissioner Joanne Doddy Fort and supported by Commissioner Willie Phillips on Feb. 26. Commission Chairwoman Betty Ann Kane opposed the revised settlement after voting 2-1 with Fort to reject Bowser's deal. (See *DC PSC: Will OK Exelon-Pepco Deal for Additional Concessions*.)

The companies also offered a third alternative: adopting Fort's revised settlement, while addressing the mayor's concerns with shielding residential customers from rate hikes. It would give the PSC discretion to use an additional $20 million — which Bowser's settlement earmarked for smart grid and environmental

Continued on page 2

FERC Eliminates Intertie Convergence Bids in CAISO

By Robert Mullin

FERC last week approved a request by CAISO to eliminate from its Tariff a long-suspended provision establishing convergence bidding at scheduling points on the interties into California.

The commission's order eliminated the prospect that CAISO would reinstate a market mechanism it revoked within months of implementing it in 2011 (ER15-1451-001). At the time, the ISO's Market Monitor determined that bidding strategies at the interties underpinned a complex scheme to manipulate prices and inflate payouts in other areas of the California market.

CAISO has in recent years explored reviving the mechanism in light of structural changes

Virtual trades at CAISO's New Melones intertie are at the center of market manipulation allegations filed by FERC in December. *Source: U.S. Bureau of Reclamation*

in Western markets, but it ultimately sought a full repeal based on concerns that

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Exelon, Pepco Urge Compromise Deal to Win DC PSC Approval for Merger

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programs — for rate relief.

The companies did not offer to increase the $72.8 million customer investment fund (CIF) they are offering D.C. to approve the merger.

The deal began to look doubtful last Tuesday as Bowser, the Office of the People's Counsel and Attorney General Karl Racine announced their opposition to revised terms set out by Fort. D.C. Water followed with its rejection later in the week. (See *Exelon-Pepco Deal in Doubt as Mayor, Consumer Advocate Balk at New Terms*.)

Together they represent three of nine settling parties that must agree to the new deal in order for it to be approved without further commission action. At issue for all was the reallocation of $25.6 million from the CIF that would have shielded residential consumers from rate hikes until 2019. The PSC voted 2-1 to defer a decision on how to spend the funds until the next Pepco rate case, signaling that it would distribute the money to nonresidential customers as well.

The commission's Feb. 26 order had required responses from the settling parties by March 11. Exelon and Pepco asked the PSC to rule on their new proposal no later than April 7.

"The joint applicants believe that the commission can address its concerns with the residential customer base rate credit, as well as the settling parties' concerns with the terms of the [revised settlement], through additional alternative terms which preserve the function of the residential customer base credit and move $20 million in CIF monies from the newly created [Modernizing the Energy Delivery System for Increased Sustainability] pilot project subaccount to a separate customer base rate credit fund."

The $20 million fund would be spent following Pepco's next base rate case as directed by the commission, potentially providing commercial customers rate relief or increasing funding for the Low-Income Energy Assistance Program.

"In the event that the commission determines that any or all of the additional $20 million should not be used for these purposes, it could allocate any unused portion of the $20 million to the MEDSIS pilot project subaccount."

The companies said their proposal "does not prevent the commission from using CIF monies to advance the grid modernization proceedings in [a second docket,] Formal Case No. 1130. Instead, the revised allocation provides the commission with additional discretion over how best to use $20 million of the $72.8 million CIF to advance its competing priorities.

"It would be tragic if customers lost the $72.8 million CIF and the many other benefits of the merger recognized by the commission and the settling parties because of disputes over how a portion of the CIF should be allocated," they wrote.

The mayor, OPC and attorney general had no immediate comment on the companies' revised proposal.

The Power DC coalition immediately asked the PSC to reject it.

"Exelon's latest filing is another example of the company's total arrogance and disregard for D.C. residents," said spokeswoman Anya Schoolman. "The Public Service Commission shouldn't let Exelon rearrange deck chairs on the Titanic. It is time for D.C. to move on."

Councilwoman Mary Cheh also signaled her opposition. "We expected that Exelon would try a Hail Mary pass, but from my analysis it doesn't appear to satisfy requirements set forth by the Office of the People's Counsel in terms of protections for ratepayers," she said.

Exelon not Giving Up

CEO Christopher Crane said in a Feb. 3 earnings call that the company would abandon the merger and begin buying back the 57.5 million shares it issued for the $6.8 billion deal if D.C. regulators did not approve it by March 4.

But company officials said Thursday they were delaying the deadline as a result of the PSC's action Feb. 26.

"March 4 was the date after which Exelon and Pepco Holdings would have the right to stop pursuing the merger, if the Public Service Commission had not acted by then," Exelon said in a statement. "Because the commission issued its order on Feb. 26, the March 4 date is no longer a trigger, and we are free to stop pursuing the merger if either party so chooses."

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ERCOT NEWS

ERCOT Market Summit

Prospects for Wind, Solar, Storage, DR Dominate Talk

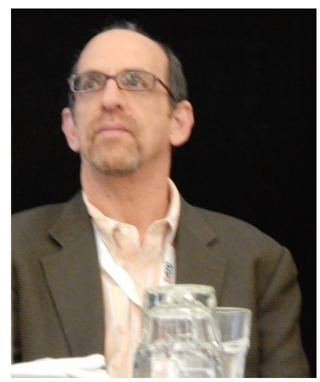
AUSTIN, Texas — Energy storage, demand response and solar have a place alongside wind in the Texas market, speakers at Infocast's ERCOT Market Summit said last week.

— Tom Kleckner

PTC Reductions will Challenge Wind

Matthew Burt, senior vice president for Renewable Energy Systems, said the gradual reduction of the PTC will be a challenge to the wind industry. Over "the next few years … we have to get the prices down," he said. "The wind itself is free, but the equipment is very expensive."

Susan Williams Sloan, the American Wind Energy Association's vice president for state policy, said the extension of the wind production tax credit provides "five years of certainty. It's what we have been looking for to compete in this industry, which requires so much capital."



William Golove, whose eponymous firm provides consulting services to renewable energy project developers, agreed. "If wind wants to remain competitive, it will have to find ways to generate more out of the assets it has, or reduce the costs of doing so," he said.

Ward Marshall, director of business development for independent power producer Pattern Development, said despite legal challenges, "We're definitely being very bullish on the [Clean Power Plan]. We think it will have an effect on the ERCOT market. It's kind of happening. It's coming."

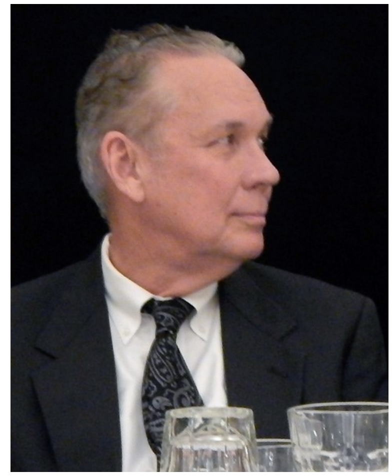
Jeff Ferguson, senior vice president for project development for Apex Clean Energy, which builds utility-scale renewable projects, said ERCOT has helped make renewables attractive to corporations not in the energy business.

"I would like to pat ERCOT on the back, because a lot of the [commercial customers] Apex is doing business with can only do business if they're operating in some sort of synthetic" power purchase agreement, he said. "They need an open market where they can get that synthetic PPA and swap it. You can't do that in a lot of markets. … I see more explosive growth this side of the business once the PTC expires."

ERCOT NEWS

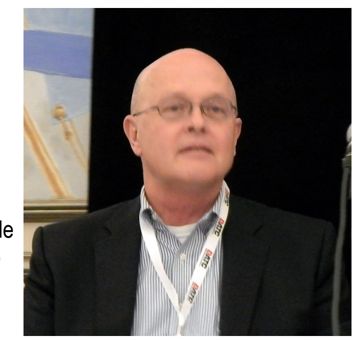
ERCOT Market Summit

Solar Needs Infrastructure



Paul Wattles, senior analyst for market design and development for ERCOT, said Texas needs to invest in more infrastructure to maximize solar power. “The best solar potential is West Texas, but the further west you get, the fewer lines we have. If we’re going to get to areas where you have the best solar irradiance, we’re going to need more wires outside the [Competitive Renewable Energy Zones] process.”

Kate Sherwood, senior director of central project development for SolarCity, said her company’s contracts with Wal-Mart have all been economic deals, rather than premised on their green attributes. “The large customers don’t see the risk” of bad contracts, she said. “They see the credits they receive helping them offset the risks.”



“We’ve matured to the point with utility-scale solar where we’re competing with traditional forms of generation,” said **Randall Jenks**, director of commercial operations for OCI Solar Power, which owns and operates projects in the U.S. and Mexico. “Now, when I go out and talk about PPAs, I’m talking about the future variables of gas. … If you wanted to build a simple combined cycle 15 years ago, it was easy to get a 20-year gas contract. Try to do that now. The average gas contracts are one, two years.”

Like wind, solar power will need to reduce costs with the phase-out of the investment tax credit, said **Colin Meehan**, director of regulatory and public affairs for First Solar. “Having some predictability is going to be important. The good thing with the phase-out is we’re going to find cost improvements.”

Charlie Hemmeline, executive director of the Texas Solar Power Association, also was confident. “As the [subsidy] fades out, the solar industry will find a way to sell, one way or the other,” he said.

ERCOT News

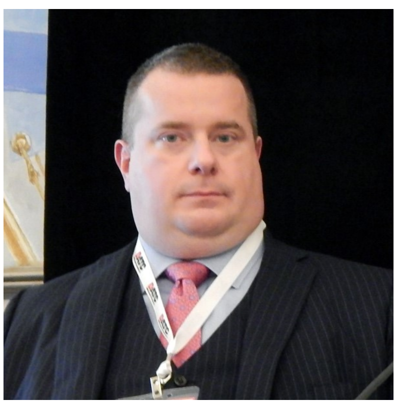
ERCOT Market Summit

A Place for Storage?

"We do have a lot of policy lifting to do with [energy] storage," said **Mark Bruce**, a principal with Cratylus Advisors. "There's nothing about storage in the [ERCOT] protocols, for instance. The system sees generation and loads. It's going to be a while before we reach the point where we have strong storage policy from a system perspective."

Bruce and **Ryan O'Keefe**, senior vice president of business development for equipment provider Ideal Power, said increasing demand charges will increase the number of customers who abandon the grid.

"A business can say, 'I've got meters, I've got connected meters ready for storage … I can defect from the grid or at least have a choice of doing so,'" said O'Keefe. "We're starting to see the economics make sense for businesses managing their energy profile."



Jeff Wehner, vice president of renewables operations for Duke Energy Renewables, sees value in upgraded lithium batteries. "We see the value in ancillary services more than anything else," he said. "I can't speak for ERCOT, but I think they see the value we provide."

"One of the things that's holding back storage and other resources is how much of a comfort level does ERCOT have with these resources being there," said **Chad Blevins**, senior consultant with The Butler Firm, which provides legal and consulting services on clean and renewable energy transactions.

Khalil Shalabi, vice president of energy market operations and resource planning for Austin Energy, said the impact of large renewables can be seen in pricing. "What I can't wait for is all the solar penetration on the grid," he said.

ERCOT News

ERCOT: Ample Capacity to Meet Spring, Summer Peaks

By Tom Kleckner

ERCOT said last week it continues to expect to have sufficient resources to meet projected peak-demand during the spring and summer, with more than 79,000 MW of generation capacity available.

The Texas grid operator is projecting a spring demand peak of 58,279 MW, a 700-MW increase from last November's preliminary spring assessment, said Pete Warnken, ERCOT's manager of resource adequacy, during a March 1 conference call. The revised peak is based on weather conditions from May 2006; the previous estimate used average weather conditions from 2002 to 2014.

Warnken said staff took into account multiple scenarios under a variety of conditions in issuing its Seasonal Assessment of Resource Adequacy (SARA) for this spring. The report includes a new scenario based on low wind power output during peak hours.

ERCOT estimates that even with 9,482 MW of maintenance and forced outages in May, it will still have 11,598 MW of capacity available for operating reserves, well above the 2,300 MW considered acceptable.

The spring forecast is based on expected weather conditions similar to those that occurred in May 2006 and typical seasonal generation outages, based on historical performance. ERCOT expects the spring peak to occur in late May, following completion of most seasonal plant maintenance to prepare for summer's heat.

"The month of May shows potential for above-normal temperatures, which could lead to an early taste of summer," said ERCOT meteorologist Chris Coleman.

The grid operator's latest SARA includes more than 200 MW of installed solar capacity. ERCOT estimates solar resource availability at a 58% capacity factor — or 171 MW — based on its typical performance during peak spring conditions.

ERCOT's preliminary summer SARA projects a summer peak of 70,588 MW, its first peak above 70,000. The current record is 69,877 MW, set last August.

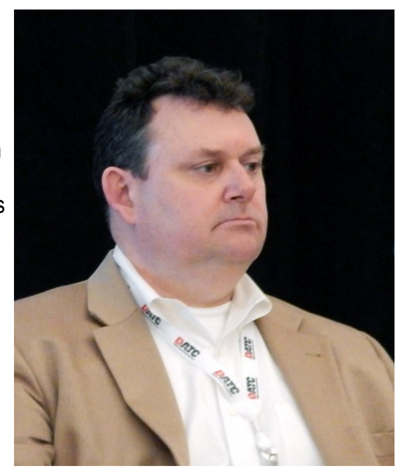
ERCOT estimates it will have more than 79,000 MW of available generation this summer, including an additional 731 MW of fossil, nuclear and biomass generation from the preliminary spring SARA, 1,068 MW of new gas-fired generation and 723 MW of additional wind energy.

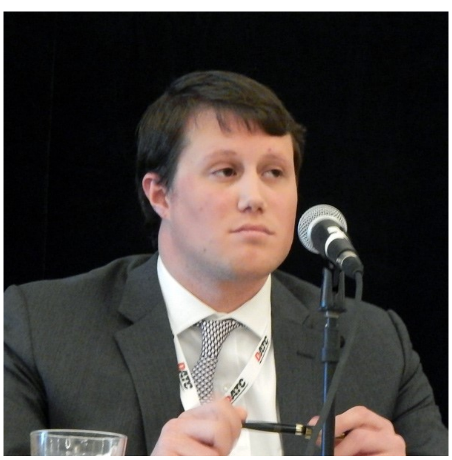
The final summer SARA is scheduled to be released in May.

ERCOT Market Summit

Demand Response

David Oberholzer, vice president of business and partner development for Weatherbug Home, said ERCOT is attractive to companies like his that are trying to increase the penetration of grid-connected thermostats, now about 12% nationally. "There's a lot of customer churn in the [retail] space that makes it difficult to monetize thermostats or take on the risks. … In Texas, you have a whole market you can go to at once."





But **Evan Pittman**, associate director of corporate strategy for Comverge, said ERCOT's lack of a capacity market is a challenge for expanding demand response. "I would point to the [non opt-in entities] as being a positive opportunity for demand response services. They don't have to worry about customers leaving in two years and they can operate their own distribution systems, so they can decide where this goes. [They] have a golden opportunity to act now."

Nathan Mancha, director of demand response for EDF Energy Services, said ERCOT's penetration rate of connected thermostats creates a market for residential DR. "We know some older generation in ERCOT will have to go away. If we take the time to replace them, we need to think how the residential side can be used to bridge the gap," he said. "We have an open market [in Texas] that is willing to try new things."

ISO-NE News

NECA Conference on Renewable Energy

Large Hydropower Joins the Renewable Energy Club

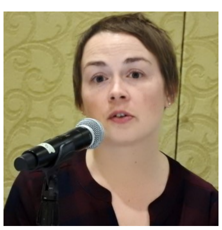
By William Opalka

Daniel-Johnson Dam and Manic 5 Generating Station *Source: Hydro-Quebec*

NEWTON, Mass. — Large hydropower projects shunned by New England's renewable portfolio standards are elbowing their way into the clean energy conversation, speakers at the 13th Northeast Energy and Commerce Association Conference on Renewable Energy said Thursday.

Hydropower projects larger than 30 MW have not qualified for financial incentives under most New England states' standards.

But with coal and nuclear fleets shrinking, large-scale Canadian hydropower is needed to avoid an overreliance on natural gas and meet aggressive carbon reduction goals, several speakers said. Wind and solar can't develop at scale fast enough to replace thousands of megawatts of legacy generation, they said.



"If we're going to achieve our climate and clean energy goals under the [Massachusetts] Global Warming Solutions Act and the various states' renewable energy targets, we're going to need a course correction," said **Leslie Malone**, a senior analyst at the energy and environmental organization The Acadia Center.

The Massachusetts law and similar legislation in Connecticut mandate a 25% cut in greenhouse gas emissions from 1990 levels by 2020 and an 80% reduction by 2050.

One potential solution, Malone said, is a "bundling" of firm hydro resources with intermittent wind energy to create a steady supply of clean power into the region.

Natural gas accounts for about half of the region's power mix, with that percentage expected to grow. ISO-NE estimates 4,200 MW of older generation will retire in the next few years, including the 1,517-MW coal-fired Brayton Point station and the 680-MW Pilgrim nuclear plant, both in Massachusetts.

Most of the new plants that have cleared in ISO-NE's recent Forward Capacity Auctions are natural gas generators.

id Wilby

David Wilby, senior vice president for state policy at SunEdison, noted that the pace of plant retirements has been faster than added capacity in recent years. SunEdison began as a solar energy developer, but in 2014 it acquired Boston-based First Wind, a developer of wind projects from Maine to Hawaii.

"As much as my company and others have added renewable megawatts as quickly as we can, we're basically treading water ... so we need big, large long-term investments to grow and to help the [power source] diversity," he said.

The proposed Northern Pass transmission project in New Hampshire would bring 1,090 MW of Canadian hydropower into the market. (See Committee Rules Northern Pass Application Complete.) Transmission Developers Inc.'s Clean Power Link, which would run under Lake Champlain and into Vermont, would transmit 1,000 MW. (See Vermont OKs Canadian Hydro Line.)

But those projects aren't enough to replace the retiring generation, said David O'Connor of ML Strategies, a government relations and consulting firm.

Massachusetts Gov. Charlie Baker's proposed legislation to authorize utilities to purchase 2,400 MW of large-scale imports also is insufficient, he said. "That would be ... about one-third of Massachusetts' needs, or only 10% for the entire region," he said. (See Baker: Hydropower Contracts Best Way to Lower Costs.)

The region's clean energy needs are sufficiently large that Canadian projects are no longer seen as crowding out local resources, Wilby said. "It's not hydro, or wind, or renewables; it's 'and' to get us where we need to go," he said. "It's not one thing that's going to get us there."

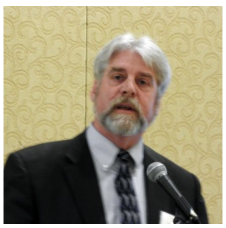
ISO-NE NEWS

NECA Conference on Renewable Energy

New England Stakeholders Debate Solar Subsidies, Grid Demand Charges

By William Opalka

NEWTON, Mass. — More than 150 people attended the Northeast Energy and Commerce Association's 13th Conference on Renewable Energy Thursday. Here are some highlights of the speakers' comments.



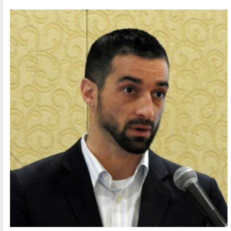
Timothy Rougan, National Grid's director of energy and environmental policy, and Cynthia Arcate, CEO of PowerOptions, said it's time for Massachusetts to reconsider its generous solar subsidies.

"What people are getting paid — whether it was $6 a watt on their house, or $1.50 a watt on a 5-MW solar farm — it's much more than in surrounding states," Roughan said. "There's only so much money in the pie and we need to make intelligent decisions on where it needs to go."

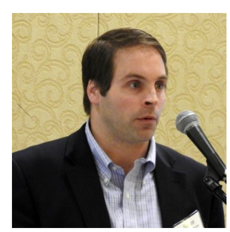
"The incentives in Massachusetts have done a phenomenal job in jump-starting the industry, but we're beyond the beta stage," said **Arcate**, whose company helps more than 500 nonprofits with $200 million in annual energy spending maximize their buying power. "I believe the incentives are too rich and we need to reconfigure it somehow."

Michael Cuzzi, senior vice president of VOX Global, a strategic communications firm, said the challenges of siting new infrastructure are especially acute in New England, "where our traditions of local control remain very strong and where resistance to change seems bred into our DNA."

"Questions about cost-competitiveness and subsidies still linger [and have an] ability to unite strange political bedfellows, with opposition to projects coming from the environmental left and the fiscally conservative and libertarian right. So for the politicians in the host communities, there is no political safe space."



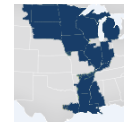
John Fernandes, director of policy and market development for Renewable Energy Systems' North American unit, which has built or has under construction more than 80 storage and renewable energy projects, said one benefit of storage is its flexibility. "I can do a lot more with a storage plant than I can do with 40 miles of transmission. All I can do with 40 miles of transmission is move electrons," he said. "Not to oversimplify it, but I can pick up and move a storage plant a lot easier."



Bryan Sanderson, senior vice president of Anbaric Transmission, made a pitch for the company's proposed Vermont Green Line, which would deliver Canadian hydropower and New York wind power over a transmission line partly under Lake Champlain.

"We view transmission paired with wind and hydro as the most cost-effective way to deliver clean energy at large scale into the region," he said.

MISO NEWS



IPPs Push 3-Year Forward Auction for MISO; Consumer Advocates Urge Caution

By Amanda Durish Cook

MISO stakeholders continued their debate over the RTO's capacity market rules Monday with independent power producers saying the RTO should borrow elements from PJM and consumer advocates warning that the proposals were premature and could increase prices.

The discussion, which focused largely on Illinois' Zone 4, came at a meeting of the Competitive Retail Solution Task Team.

NRG Energy, Noble American Energy Solutions and Mainline Energy called for a transition to a downward sloping demand curve from the current vertical curve, which critics say results in excessive price volatility.

Abraham Silverman, NRG Energy's assistant general counsel for regulatory affairs, presented a proposal that also called for a mandatory three-year forward auction for retail choice zones in Illinois and Michigan.

The auctions would be optional in the rest of MISO, which depends on state-run integrated resource plans — although load-serving entities in those states would be required to show they had adequate resources three years in advance through the auction, self-supply or bilateral transactions.

NRG's proposal was based on a study it commissioned by The Brattle Group. Brattle's study said MISO's survey of LSEs' capacity resources, conducted with the Organization of MISO States, "does not adequately ensure reliability."

"Shortages for retail choice customers would affect the reliability of the whole system, including traditionally regulated states," Brattle said.

Mainline Energy likewise advocated for procuring capacity three years in advance. "We're not trying to recreate the markets, we're trying to create a price signal here," said Michael Borgatti, director of RTO services for Gabel Associates, who appeared on behalf of Mainline Energy.

Borgatti said competition could drive down prices and volatility. "Let's be honest, in the last three years, we've seen capacity prices around $3 [per megawatt-day], we've seen $17 and we've seen $150," he said.

Noble American Energy Solutions' Roy Boston proposed a three-year auction and downward sloping demand curve modeled after PJM. MISO's "short-term procurement auctions do not give potential entrants an opportunity to participate in the auction, which increases the potential for incumbent generators to exercise market power," Boston said.

At a meeting of the task team last month, Exelon and Dynegy also proposed a move to a PJM-like construct. (See *Dynegy, Exelon Propose PJM-Type Capacity Auction for MISO Zone 4*.)

However, the Illinois Citizens Utility Board and AARP said MISO's goal of filing proposed new rules with FERC by May 5 was premature.

"Presentations made to this working group have so far been nothing more than ways to increase capacity prices for existing generators," said Bryan McDaniel of the CUB. "While generators give lip service to not making Zone 4 'an island,' their proposals would make Zone 4 even more of an island."

Bill Malcolm of AARP said there was sufficient capacity in MISO and questioned whether the RTO needed to consider changes.

Susan Satter, public utilities counsel for the Illinois Attorney General's Office, likewise said there was a "substantial surplus" of capacity in Zone 4 and there was no need to rush changes. She urged waiting on a long-term solution until the MISO-OMS survey is completed in July.

Satter's office said presentations to the task team so far "have failed to provide data or analysis to show that the [Planning Resource Auction] as constructed will result in insufficient resources."

"Generator desire for more revenue should not be the basis for radical changes in the PRA to increase capacity prices for Illinois," the office said.

MISO officials again withheld comment on whether they favored any of the proposals.

Jeff Bladen, MISO's executive director of market design, did offer one critique. "When you have three-year forward procurement, you have higher uncertainty about what's going to happen three years into the future. What you have is a higher installed reserve margin to meet that one-day-in-10-year standard," he said.

He also reminded stakeholders that the PRA isn't meant to function as the primary mechanism for ensuring sufficient capacity.

Independent Market Monitor David Patton also questioned the advantages of abandoning MISO's "prompt" auction, which procures capacity two months before the delivery year.

"I'm not sure the economic theories surrounding mandatory forward procurement have been robustly tested. We need to rigorously test the assumptions," Patton said. "There's not a lot of difference in prompt auctions and three-year forward auctions in how it motivates investments… The real question here is revenue."

Patton did reiterate his support for a switch to a sloped demand curve.

MISO reserve margins *Source: MISO, The Brattle Group*

MISO NEWS

MISO Delays Seasonal, Locational Capacity Constructs for One Year

Implementation Postponed to 2018/19

By Amanda Durish Cook

MISO will delay the introduction of seasonal and locational capacity constructs for a year, officials revealed Wednesday during the RTO's first-ever Resource Adequacy Subcommittee meeting.

MISO acknowledged that it missed its original goal of making a FERC filing in December and now hopes for a May filing, said Executive Director of Resource Adequacy and Transmission Access Planning Renuka Chatterjee, who conducted the meeting as stakeholders were still working through selections for chairman and vice chairman.

"Let us have some additional time to look through anything we're missing" before making the filing, Chatterjee told stakeholders.

The delay means the changes won't be implemented until the 2018/19 planning year.

Two Seasons

MISO is contemplating two procurement seasons: a four-month summer season spanning June to September and an eight-month winter covering October to May. The locational change would allow for the formation of external resource zones for resources outside MISO and create capacity transfer rights for load-serving entities with long-term supply arrangements. (See *MISO Proposes Two-Season Capacity Market*.)

Chatterjee said the delay will ensure time for obtaining FERC approval and allows MISO time to define new reserve value requirements, capacity accreditation and capacity import limits. "We want to make sure [stakeholders'] commercial structures will be ready," she explained.

Laura Rauch, MISO's manager of resource adequacy coordination, said the delay was in response to stakeholder requests. "However, the same general proposal will hold. There will still be a two-season construct … and capacity accreditation will be based on planned outages," she said.

Mark Volpe, senior director of regulatory affairs for Dynegy, said MISO should consider pushing the filing back to early July to give the RASC time to hold more meetings. "At Dynegy, we applaud the plan to defer this for a year," Volpe said.

In light of the delay, the RASC decided to postpone a vote on new Tariff language implementing the seasonal construct. "We still think a vote is important, but for now we'd like to pull it back," said Matt King of electricity consulting firm GDS Associates.

Changes to Capacity Transfer Rights

MISO's Joe Milli said the RTO wants to make two changes to the draft Tariff language regarding capacity transfer rights. He said the consideration of transmission upgrades that increase capacity import limits and resources impacted by upcoming zonal boundary changes would come before historical supply arrangements and cost-shared projects in the capacity transfer rights hierarchy.

The changes stemmed from stakeholders asking if they would have a tool to protect themselves from risks resulting from the creation of external resource zones. Milli said auction clearing prices for external resources are currently priced at "whichever local resource zone they sneak into."

MISO also announced that it will not apply different capacity accreditations when dealing with planned outages in resources that clear versus resources that do not clear. The RTO said its "proposed process will include planned outages during critical periods in capacity accreditation," and that situation could become complicated for units that do not offer as capacity resources during a season, if they were treated differently than clearing units.

"We want to make sure the same paradigm applies to baseline units that clear over units that are new or units that were freshly clearing. Our concern is when those resources re-enter the auction, are we treating them the same as resources that have cleared? It's really making sure we have comparable treatment among resources," Rauch said.

David Sapper of Customized Energy Solutions suggested that MISO include a rate term definition of what the RTO should pay or what units should pay in outage rates. "We used to do it in the early days of MISO, and that's a long tortured history, but maybe we could get back to that," he said.

Cost-Benefit Analysis Sought

Marlene Parsley of Big Rivers Electric asked if MISO could provide a cost-benefit analysis of capacity accreditation. "I don't recall [MISO] providing a cost-benefit analysis for any of this. If we do have these numbers, can we factor those in … to see what kind of benefit we're going to get from this?"

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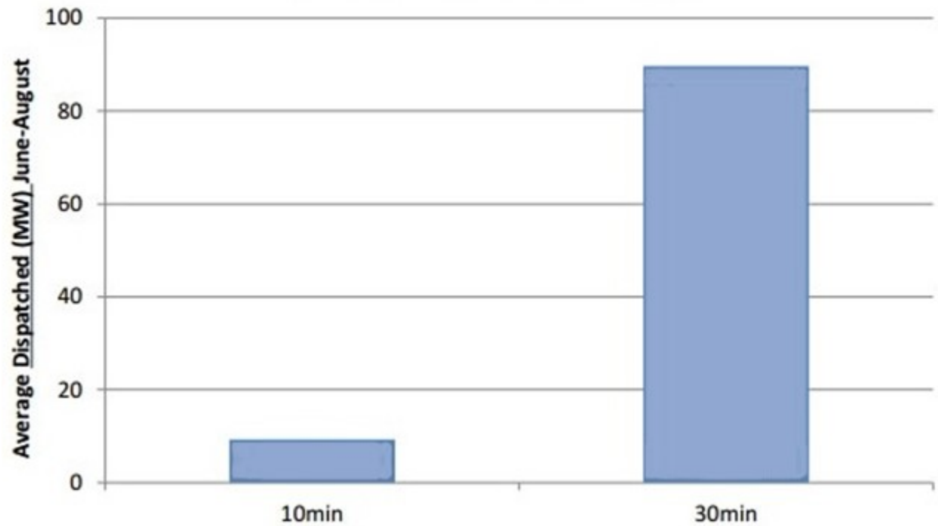
Local Resource Zone	Z1 (MN, ND, Western WI)	Z2 (Eastern WI, Upper MI)	Z3 (IA), Z5 (MO), Z7 (MI)	Z4 (IL)	Z6 (IN, KY)	Z8 (AR), Z9 (LA,TX), Z10 (MS)	System
Coincident Peak Forecast	16,386	12,386	36,969	9,474	17,011	30,786	123,013
Planning Reserve Margin Requirements	18,185	13,589	40,733	10,421	18,750	33,781	135,457
Total Installed Capacity	24,269	16,229	50,786	15,687	20,735	43,563	171,270

Preliminary 2016/17 Planning Resource Auction data (megawatts) *Source: MISO*

MISO NEWS

Market Subcommittee Briefs

ELMP Enters Phase 2 with 30-Minute Fast-Start Consideration



Estimated eligible fast-start resources in real time *Source: MISO*

A year after rolling out its extended LMP methodology, MISO plans to move into a second phase as it considers expanding online fast-start pricing to more peaking resources and investigating offline fast-start pricing.

MISO said it is considering using a 30-minute window instead of 10 minutes to summon fast-start resources. The change, according to MISO, could increase from 90 units contributing about 4,000 MW to 214 units contributing about 9,000 MW during summer peak capacity.

"Our intention is certainly not to raise prices, but to reflect the true price," said Jeff Bladen, executive director of market services, told the Market Subcommittee last week. He said if unnecessary costs were hiding in the revenue sufficiency guarantee, including more resources would bring more transparency to ELMP.

"Phase II is meant to capture broader benefits," MISO Market Design Engineer Congcong Wang said. "By expanding from 10 minutes to 30 minutes with fast-start resources, we would have the capacity almost doubled in terms of megawatts and units."

Wang said studies on moving the fast-start window would be completed by August. MISO is targeting a FERC filing and new software testing for the first quarter of 2017.

Some stakeholders said it wasn't reasonable to think fast-start resources would be able to commit to a five-minute interval and were afraid it would depress revenue sufficiency guarantee amounts. Others expressed concern that MISO would remain silent until August.

"This is not a proposal; it's an investigation at this point. The purpose today is to let you know … we're scoping out the project. We're taking a lot of notes on what we're hearing,"

Continued on page 12

MISO Delays Seasonal, Locational Capacity Constructs for One Year

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Rauch said MISO wasn't comfortable providing a cost-benefit analysis since the success of capacity accreditation depended heavily on market participants' actions.

Chatterjee said stakeholders would benefit from a future workshop on capacity accreditation. She suggested that the future chair and vice chair call a special meeting, once they're elected.

In the meantime, Milli, MISO liaison for the Competitive Retail Solutions Task Team, said his group hopes to post a design document that includes an overall auction modification recommendation on March 18. "This group will then pick that up and debate the merits," Milli told the RASC.

The task team is currently hearing stakeholder proposals on changes to the auction rules. Dynegy and Exelon so far have asked MISO to consider singling out Zone 4 with three-year forward auctions separate from the rest of the RTO. (See *Dynegy, Exelon Propose PJM-Type Capacity Auction for MISO Zone 4*.)

Chatterjee said it was too soon to tell if an auction solution will be recommended by a RASC vote. "Ultimately the goal is to make a recommendation after we've heard a variety of proposals and MISO's own thinking as to what would be responsive to the issues in front of us," Chatterjee said.

If a RASC vote does occur, it won't be in time to effect change on April's 2016/17 Planning Resource Auction.

To protect competitive information in local resource zones with a small number of market participants, zones 3 (Iowa), 5 (Missouri) and 7 (Michigan) will again be grouped together, said John Harmon, MISO manager of resource adequacy. Zones 8 (Arkansas), 9 (Louisiana and Texas) and 10 (Mississippi) will also be combined. The grouped zones will share planning reserve margins, local resource requirements, unforced capacity values and installed capacity values, but not capacity import and export limits, non-pseudo tied resources and local clearing requirements.

Auction Timeline

- March 9: Deadline for submission of fixed resource adequacy plans (FRAPs) to MISO
- March 15: MISO completes review of FRAPs
- March 26: Market Monitor provides unit-specific threshold data
- March 29: Auction window opens
- April 1: MISO begins auction
- April 14: Auction results posted

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said Dhiman Chatterjee, MISO's senior manager of market evaluation and design.

Chatterjee said MISO would provide stakeholders updates throughout the study process. He asked stakeholders to submit written questions and comments by March 15.

During the first six months of ELMP operations since last March, MISO said only about 40 units were enabled to set prices. MISO's Independent Market Monitor said the number represented only about 1% of online peaking resources that were eligible to set prices.

MISO defines fast-start resources, which participate in price-setting, as those that can start within 10 minutes of notification and have a minimum run time of an hour or less.

So far, MISO said ELMP has resulted in "modest" benefits. Using ELMP has decreased uplift charges by 1%, a projected annual savings of more than $165,000. The RTO also said that the deviation between day-ahead and real-time prices was reduced by 2.25%.

More Info Sought from Load-Modifying Resources

Hoping to boost pricing accuracy during shortages, MISO will begin requiring market participants to identify the reductions each of their load-modifying resources will provide in an LMR event. The RTO is adding an additional form to its communications system to capture the data.

The other stages of MISO's LMR reporting will be unaffected. Market participants will still use the system to report their daily LMR availability, with the RTO responding with scheduling instructions.

No date has been set for the change, but MISO hopes to have the additional reporting page active prior to the summer.

Jeff Knight of Entergy asked if participants could make changes on the form to select a different LMR to curtail without incurring additional charges. MISO Business Analyst Danielle Logsdon said market participants could make changes up to the hour before deployment.

"Just as baseball professionals are immersed in spring training for the upcoming season, this is preparation for emergency pricing implementation this summer, if it's needed," said Michael Robinson, MISO's principal adviser of market design. "This is an effort to better set prices when we're in these shortage conditions."

Logsdon said MISO's 2016 summer readiness training will be held April 14-May 19.

MISO Backs Make-Whole Fuel Payments

MISO has proposed reimbursing system support resources for unburned fuel when real-time schedules diverge from day-ahead schedules.

The RTO is also proposing that generation owners identify their fixed costs in filings with FERC. Currently, SSR units have to file directly with FERC only when MISO, the Monitor and the generation owner cannot negotiate a compensation agreement. MISO said having generation owners deal directly with FERC could reduce delays in implementing SSR agreements.

MISO said it "does not have independent information to evaluate SSR costs and relies on the generator owner for information on fixed cost compensation for the filing."

Robinson said MISO would accept written comments until March 15. He said it is eyeing filing rule changes by the end of March.

Most Second-Tier Commercial Pricing Nodes Being Eliminated

MISO will terminate 28 second-tier commercial pricing nodes effective June 1. The changes will take effect with the 2016/17 financial transmission rights auction and the annual allocation process for auction revenue rights.

The RTO said it is jettisoning most of its second-tier interface commercial pricing nodes to "reduce administrative burden and be consistent with external balancing authority boundaries."

"We reviewed these commercial pricing nodes and determined there is no business need for them," said Zhaoxia Xie, MISO's manager of modeling and market engineering.

MISO is evaluating the usefulness of six additional second-tier pricing nodes.

First-tier pricing nodes are associated with balancing authorities that are directly interconnected with MISO while second-tier nodes are not.

Illinois and Michigan Hub Definitions Changing

MISO is changing its Illinois and Michigan hub definitions as a result of the March 2016 model update, but the new descriptions are not expected to affect pricing substantially.

The Illinois and Michigan hubs will continue to have 151 and 265 elemental pricing nodes (EPNode), respectively. For both hubs, one EPNode was removed and replaced as a result of a substation closure.

For Illinois, the updated definition will reduce LMPs by less than a penny, according to MISO's analysis, with average real-time prices expected to decrease from $25.13/MWh to about $25.12/MWh. In Michigan, the switch is projected to also amount to a penny reduction in day-ahead LMPs, from $25.91/MWh to $25.90/MWh.

Prices for MISO's seven hubs are computed as the weighted average of the LMPs of the EPNodes comprising them.

Staff Considers Reusing Market Roadmap Information

MISO is considering reusing certain data in its Market Roadmap process to improve efficiency. The question of "prioritizing only new projects without reassessing existing projects" marked the beginning of the annual process at the MSC.

"What we're looking for today is based on feedback we got at the tail-end of last year's process. There were questions about the necessity of doing a full refresh of the Market Roadmap every year, where every item on the roadmap is looked at as it if were new or if we should only look at a subset of items," Bladen said. For instance, Bladen said MISO's roadmap could focus heavily on forward-looking projects beyond 2017 while using existing information for other projects.

MISO's Mia Adams said the RTO was looking for feedback on the proposal by the end of the month.

— Amanda Durish Cook

MISO NEWS

MISO: Energy Storage Could Work into Existing Market Structure Next Year

Continued from page 1

Tariff and business practice manuals that would open the market to short-term and medium-term storage. By summer, MISO hopes to have a clear idea if storage should be treated as a generation resource or a transmission asset and whether it can participate in MISO's capacity or ancillary service markets. For that, MISO needs to consider how behind-the-meter storage can function as load-modifying resources or demand response.

AES Project Nears Completion

The storage conversation comes as AES' Indianapolis Power & Light edges closer to finishing the 20-MW Advancion Energy Storage Array in Indianapolis. The project, slated to be put into operation sometime in June, will be the first utility-level battery energy storage facility in the footprint.

Stakeholders have submitted a first round of comments on the issue in response to MISO's call for input in January. (See MISO Preparing a Place for Energy Storage in Tariff.)

"A lot of stakeholder comments focused on developing new software," said Yonghong Chen, MISO's principal advisor of market development and analysis, during a presentation to the subcommittee. "In the next few months, probably from April to July, we're going to work with stakeholders to determine what we can do [with existing software]. By next year, we hope to have implementation rules on how storage can participate with our current market software and market rules. … We have some existing language in the Tariff and BPMs that could apply, but some language needs clarification to apply to storage."

From mid-2017 onward, MISO plans to tackle how storage will fit into five-minute settlement schedules, voltage and local reliability commitments, minimum megawatt participation limits and automatic generation control enhancement, software that deploys fast ramping resources more quickly.

"We want to remain as technology-neutral as possible, but FERC may have to step in at some point," Richardson said.

Long-Term Plans

MISO said its longer-term storage considerations would run into 2019 and include make-whole payments, cost allocation and impacts to the annual Transmission Expansion Plan.

"We need more time to figure out how to make these work well together," Chen said.

Jeff Bladen, MISO's executive director of market design, said storage should work "holistically" with MISO's market.

"This is very much a topic on stakeholders' minds, as they're thinking of developing projects and bringing them to market," he said. "We have to be careful not to put energy storage into its own silo. It needs to fit into the larger Market Roadmap."

Stakeholder Comments

Ameren told MISO that it believes energy storage could be categorized as "generation, transmission or other, depending upon its characteristics." The company proposed that MISO classify storage as a use-limited resource, then perform an "initial asset evaluation" to determine if it should be treated as a generator or transmission asset. Use-limited resources are those "unable to operate continuously on a daily basis, but … able to operate for a minimum set of consecutive operating hours."

Madison Gas and Electric said storage could fit into a generation or transmission definition. The company went a step further, suggesting that MISO remove prescriptive resource definitions from the Tariff altogether. "To be agnostic or 'neutral' when it comes to technology, then we need to be neutral as to what type of resource provides services. The Tariff lists the products and services permitted by each resource type. To become neutral, we should remove prescriptive/descriptive limitations and allow resources to provide any product or service for which it can satisfactorily deliver. We can test and measure performance of resources, eliminating the need to limit products/services by resource type," Madison's Megan Wisersky wrote MISO.

Source: AES Energy Storage

ITC Holdings advocated leaving storage unclassified, saying it was "premature" to categorize the technology when it hadn't yet been integrated into the grid.

Amber Motley, manager of market operations for Xcel Energy, said market participants should be given the option of choosing to categorize storage as either generation or transmission, a position supported by MidAmerican Energy.

Chen said work on energy storage rules would play out in MISO's Planning Subcommittee and Resource Adequacy Subcommittee, as well as other committees, if needed.

"We're very mindful that stakeholders don't want to chase these issues in a hundred different committees. Believe me, we don't want that either. We'll try our best to iron out those hard questions internally before we bring them to stakeholders," Richardson said.

Chen asked for another round of stakeholder input before March 18.

> **"We need more time to figure out how to make these work well together."**
>
> **Yonghong Chen, MISO**

NYISO News

Court Delays New York 'Guaranteed Savings' Rules

By William Opalka

A state court Friday blocked New York regulators from implementing sweeping new rules over retail electric providers, ordering a show cause hearing April 14 (870-16).

The ruling by the Albany County Supreme Court stayed the first phase of regulations passed by the New York Public Service Commission last month, which would have required retail suppliers to guarantee savings for new customers and those with renewing contracts.

The Retail Energy Supply Association asked the court Thursday to block the rules, saying it was an overreach of the commission's authority and would effectively eliminate customer choice.

"This is great news for consumers, as it protects their right to freely decide for themselves what energy products offer value," RESA spokesman Bryan Lee said. "RESA looks forward to working collaboratively with the commission regarding its concerns in a productive way so that consumers retain the right to choose their energy provider and the value-added products and services that come along with such a choice."

The PSC said the rules, adopted Feb. 23, were put in place to counter deceptive business practices committed by some energy service companies. (See *Zibelman: Rules Meant to Enable Markets*.)

In its petition for a temporary restraining order, RESA said regulators were panicked by negative press coverage of unscrupulous retailers and rushed the order without giving proper notice or having fully developed procedures.

"The order sends a strong message that the commission and the attorney general's office cannot be trusted with enforcing the existing consumer protection laws against a small handful of alleged bad actors in the retail energy market," RESA wrote. "Further, the … order is an unconstitutional legislative act by an administrative agency with an expansive agenda, which has made a sweeping policy decision that monopoly pricing and monolithic commodity offerings in New York's energy sector are preferable to competition and customer choice."

Numerous energy service companies (ESCOs) had asked the PSC for a 45-day delay in implementing the rules, saying they were imprecise and that the companies needed more time to comply.

New York PSC Chair Audrey Zibelman

The Public Utility Law Project of New York opposed the extension, saying three related proceedings before the PSC should have alerted the ESCOs that tighter state regulation was coming.

"The reforms instituted by the Feb. 23 order have been foreshadowed for years, and if the ESCO industry chose not to put contingency plans into place, that is unfortunate for them," PULP wrote. "Meanwhile, mass market consumers have been overcharged, slammed and subjected to numerous other practices that have wrought considerable financial harm upon small commercial and low-income households who have long awaited the consumer protections soon to be in force."

FERC OKs Revision to NYISO DR Pricing

By William Opalka

FERC last Tuesday approved changes to NYISO's scarcity pricing logic that the ISO says will better reflect the real-time value of demand response (ER16-425).

NYISO implemented its current, ex-post scarcity pricing logic in 2013. The new logic allows the ISO to incorporate scarcity pricing into its real-time optimization. (See *NYISO Seeks OK for New Scarcity Pricing Rules*.)

"NYISO's proposal increases price transparency by ensuring consistency between resource schedules and pricing outcomes in real-time when NYISO activates [demand response] resources, thereby reducing the potential for uplift costs," the commission said.

"NYISO's proposal recognizes that capacity that is available within 30 to 60 minutes can be dispatched to meet load prior to activating [demand response] resources. Thus, NYISO will procure a greater amount of available operating capacity from the market before relying on [demand response] resources and triggering scarcity pricing than under its existing rules," FERC added.

As a result of the new logic, the ISO will:

- Increase the value of Southeastern New York 30-minute reserves from $25/MW to $500/MW at all times to align the value of reserves with the actual cost of providing them;
- Increase in the value of the middle pricing point of the regulation service demand curve (shortages of regulation service greater than 25 MW but less than 80 MW) from $400/MW to $525/MW at all times;
- Reduce the target level for Southeastern New York 30-minute reserves to zero during actual or anticipated severe weather conditions ("storm watch events"); and
- Increase the New York control area 30-minute reserve demand curve values priced at less than $500/MW to $500/MW, effective in real time during any DR activation.

The changes were supported by the Electric Power Supply Association, the Independent Power Producers of New York and the New York Transmission Owners.

The commission rejected protests by the New York Department of State's Utility Intervention Unit, saying its concern that NYISO's filing missed an opportunity to remedy an alleged flaw in its existing scarcity pricing mechanism was beyond the scope of the case.

FERC also rejected the UIU's argument that the proposal could result in less efficient dispatch of generating resources and higher

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NYISO NEWS

FERC Accepts Ginna Settlement but Reasserts Authority

By William Opalka

FERC last Tuesday approved New York regulators' plan to keep the Ginna nuclear power plant operating but objected to elements that it said encroached on its jurisdiction over wholesale power markets (ER15-1047).

The commission ruled that the reliability support services agreement between the R.E. Ginna nuclear plant and Rochester Gas & Electric approved Feb. 23 by the New York Public Service Commission was just and reasonable. (See *NYPSC OKs Ginna Deal*.)

The RSSA is between distribution utility RG&E and Exelon's Constellation Energy Group, which had threatened to close Ginna because it was losing money. RG&E will charge ratepayers $425 million to $510 million to cover Ginna's full cost of service, with the final amount determined by Ginna's revenues from the NYISO wholesale market. The utility also will apply $110 million in customer credits to the contract, making the total price tag as high as $620 million.

A parallel proceeding at FERC reviewed elements of the settlement, but it was suspended in January when it was apparent that most contested items were resolved in the state docket. However, one remaining issue was whether there was a sufficient disincentive for Ginna to prevent it from re-entering the market after the RSSA ended on March 31, 2017.

The environmental group Alliance for a Green Economy (AGREE) had contested that part of the settlement as inadequate.

AGREE says the $20.1 million capital recovery balance Ginna would have to repay if it re-enters the NYISO markets should be netted against RG&E's one-time settlement payment of almost $11.5 million to Ginna, meaning the plant's penalty would be only $8.6 million over two years, or 2% of the plant's revenue.

FERC disagreed.

"The settlement payment represents costs that Ginna will have incurred during the settlement RSSA's term, but, due to timing, Ginna will not yet have recovered those costs from RG&E by the end of the settlement RSSA's term," FERC said.

"Therefore, we are not persuaded that Ginna's recovery of those costs … should be netted against the capital recovery balance in assessing whether the capital recovery balance provides an adequate disincentive for Ginna to return to the NYISO markets."

The commission ordered changes to elements of the settlement agreement and RSSA that it said could infringe on FERC's jurisdiction because they allow the New York PSC to approve all aspects of the RSSA, "including the wholesale aspects of the settlement RSSA, and potentially reduce a wholesale rate in the settlement RSSA."

Under Supreme Court precedent, the commission said, "once [FERC] approves a wholesale rate, a state commission must allow 100% of the wholesale rate to be passed through to customers in the utility's retail rate design."

FERC also ordered removal of language related to a reliability-must-run agreement that state officials may approve after the RSSA expires. NYISO is in a separate proceeding before the commission to address RMR concerns in New York. (See *FERC Orders NYISO to Standardize RMR Terms in Tariff*.)

FERC OKs Revision to NYISO DR Pricing

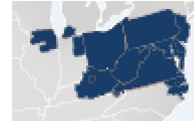
Continued from page 14

production costs. "We find that the benefits of increasing price transparency and incorporating scarcity pricing in the real-time market software outweigh such concerns," the commission said, adding that "additional system changes may be required to further optimize the scarcity pricing mechanism and avoid the potential issues" the UIU raised.

FERC ordered the ISO to submit a compliance filing clarifying tariff provisions differentiating between scarcity events, when it calls on DR, and shortage events, when the market is short of operating, regulation or transmission reserves.

The changes will become effective once NYISO deploys the required software changes. The ISO expects to complete the work by June 30.

PJM NEWS



FERC Rejects PJM's Method of Determining Capacity Offer Caps

By Suzanne Herel

FERC ordered PJM last week to change its method of calculating capacity market offer caps, saying it was inconsistent with its practice in the energy market.

"We find that PJM's Tariff is unjust and unreasonable because it allows the cost-based energy offer cap to be used as the sole measure of short-run marginal cost in calculating capacity market offer caps," it said (EL14-94).

"In the energy market, when a generation resource fails the three pivotal supplier test and submits a non-zero market-based offer less than its cost-based offer cap, PJM uses the lower, market-based offer, not the cost-based offer, as the basis for determining the resource's commitment and dispatch," FERC said. "When a resource is not subject to market power mitigation, PJM uses its offer as the basis for the resource's commitment and dispatch. In both cases, PJM's energy market relies on the offer, not the cap, as reflecting the resource's short-run marginal cost."

The ruling stemmed from a 2014 petition by FirstEnergy, which said PJM's Independent Market Monitor was violating the Tariff by calculating marginal cost using the lower of the market-based offer and the cost-based offer.

But the commission ruled that the Monitor's interpretation was appropriate and that the Tariff, which dictated use of cost-based offers only, was improper.

Joining FirstEnergy in support of the petition were PJM, Duke Energy, the PJM Power Providers Group and the Electric Power Supply Association. Opposing the petition were the Organization of PJM States, the Public Utilities Commission of Ohio, PJM Consumer Representatives, the Office of the Ohio Consumers' Counsel and the Monitor.

FirstEnergy contended that cost-based offers are an accurate, transparent method for estimating marginal cost, and that market-based offers reflect factors other than marginal cost.

But the Monitor said using only cost-based offers could lead to the exercise of market power. For example, units that can use multiple fuels could base their higher, cost-based offers on their secondary fuel and their lower market-based offers on the primary fuel, the Monitor said.

The commission ordered PJM to submit a compliance filing specifying a new procedure using a resource's non-zero market-based offer as proxy for marginal costs in most cases.

The cost-based offer would be used when the resource is mitigated and its market-based offer is above the cost-based offer cap, "as the market-based offer in this circumstance may reflect the exercise of market power," FERC said.

The cost-based offer also would be used when the market-based offer is less than its fuel and environmental costs, "since the generator is losing money for each megawatt produced, a reasonable projection of its energy and ancillary services revenue should reflect such a reduction."

2015 RTEP Reflects $3.2B in Spending, Shift to Natural Gas

By Suzanne Herel

Low load growth and the shift from coal- to natural gas-fired generation mean a need for smaller and fewer baseline transmission projects, PJM said in its 2015 Regional Transmission Expansion Plan report last week.

A slow recovery from the last recession and evolving customer behavior — such as more efficient home appliances and behind-the-meter solar installations — have stunted load growth, the report said.

Those drivers also have lessened the need for new large-scale transmission projects.

In 2015, the Board of Managers approved 214 new baseline projects totaling $1.9 billion and 207 new network transmission projects totaling $1.3 billion.

The $3.2 billion total represented a $2.6 billion net increase in approved projects since the end of 2014. The new projects were partially offset by cost changes in existing projects as well as the removal of 202 network projects representing $677 million and 42 baseline projects totaling $300 million.

Among the new projects was the controversial stability fix at Artificial Island in New Jersey, home to the Hope Creek and Salem nuclear reactors. (See *FERC Questions Fairness of Artificial Island Cost Allocation*.)

The canceled network upgrades were the result of the withdrawal of 157 generation interconnection requests, a quarter of which were for wind-powered units. Together, the requests totaled 15,302 MW. Withdrawals can reflect developers' reactions to capacity auction prices and public policies on renewable fuel, PJM said.

The report notes the continuing shift from coal to natural gas because of plant retirements driven by environmental regulations and competition from cheap natural gas from the Marcellus and Utica reserves. PJM also is seeing new wind and solar units being encouraged by federal and state renewable energy incentives, while load has been tempered by demand resources and energy efficiency programs.

"Market activity suggests that total natural gas-fired generation capacity may exceed coal within several years," the report said.

PJM projects 20,300 MW of coal will have retired between 2011 and the end of 2016, much of which is more than four decades old.

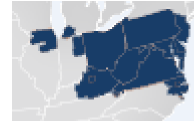
In 2015, PJM received deactivation notices totaling 1,626 MW, down from 4,291 MW the previous year and 7,745 MW in 2013. That compares with a total of 11,000 MW for the eight years ending Nov. 1, 2011.

Of all the active, under construction and suspended generation interconnection requests received by the end of 2015, more than 72% were for natural gas, more than 17% involved wind power and 2% represented nuclear units.

To address thermal and voltage reliability issues, PJM now includes low load and winter peak system conditions in its regional planning criteria.

Since 1999, PJM's board has greenlit nearly $28.3 billion in transmission system upgrades, including $23.5 billion in baseline projects and $4.8 billion in facilities needed to connect more than 71,000 MW of new generation.

PJM NEWS



Traders Deny FERC Charges; Seek Independent Review

By Ted Caddell

A Pennsylvania-based power trading company accused by FERC of making riskless up-to-congestion transactions to collect line loss payments denied any wrongdoing Friday and requested the matter be dismissed.

Coaltrain Energy said that it didn't manipulate the market, that its trading strategy wasn't deceptive and that it didn't engage in wash trades or try to affect market prices (IN16-4).

If the commission doesn't terminate the case, Coaltrain said it will seek a *de novo* trial, with a federal court deciding all issues of fact and law, rather than the company potentially appealing an unfavorable FERC ruling afterward.

One of the allegations levied by FERC was that Coaltrain's use of employee-monitoring software gave investigators evidence of the company's trading strategy. FERC said Coaltrain employees at first claimed they had forgotten about the software — Spector 360 — when the Office of Enforcement initially asked, and then repeatedly delayed giving up the data. (See *FERC: Spy Software Provides Evidence of UTC Scam*.)

In its response, Coaltrain denied attempting to conceal the data, which included logs of the company's trading.

"What actually happened is that it simply did not occur to the individuals involved that Spector 360 was a source of potentially responsive material at the time they were working on Coaltrain's initial document responses," the company said. "As soon as the issue was identified, Coaltrain promptly provided this data. The data was exculpatory, not inculpatory and there was no reason to conceal it."

The response revealed that the owners of Coaltrain, Shawn Sheehan and Peter Jones, did not have Spector 360 installed on their computers, and so their actions would not have been recorded.

The response also says that Coaltrain had several communications with PJM's Independent Market Monitor, Joe Bowring, and provided FERC with recordings of those discussions. "The content and context of these calls demonstrate that Coaltrain provided the IMM with accurate, truthful information that specifically addressed each of the IMM's stated concerns," the company said.

In one discussion, Bowring answered that he considered trades to be illegitimate if "the only reason you're making money from the transaction is you're buying and selling at the same price, and making money entirely from the payback of the marginal losses. Dr. Bowring reiterated that, in his view, Coaltrain's trades were 'not violating the rules.'"

When Bowring later expressed concern over Coaltrain's trades, the company said, "Coaltrain agreed to halt trades on specific paths and followed through on that promise."

FERC is seeking $42 million in penalties and unjust profits.

FERC Approves PJM Funding of Consumer Advocates

By Suzanne Herel

FERC last week approved PJM's creation of a funding mechanism to support the Consumer Advocates of the PJM States through a charge to residential electric customers.

Commissioner Tony Clark dissented from the vote, saying never before had FERC "endorsed the policy that the activities of non-decisional intervenor groups be funded through a dedicated utility tariff under the auspices of the [Federal Power Act]" and that it set a "troubling precedent" (ER16-561).

CAPS' participation in the stakeholder process should be funded through the appropriations of state legislatures, Clark said.

Beginning next year, CAPS will receive an initial annual budget of $450,000. FERC approval would be needed for any budget increase of more than 7.5%.

"This authorized 7.5% annual increase is described in the filing as a way to 'promote fiscal restraint,'" Clark wrote. "Only in government could a budget that allows for a near doubling every decade be considered parsimonious."

The assessment for a residential consumer using 12,000 kWh per year would be eight-tenths of a cent. The charge will be itemized on customers' bills.

The proposal was approved by PJM stakeholders in October by slightly more than 81% of a sector-weighted vote. (See *PJM Members Agree to Fund Consumer Advocates Group*.)

The group also would receive a one-time infusion of $350,000 from Exelon if the D.C. Public Service Commission approves the company's acquisition of Pepco Holdings Inc. (See *Exelon Not Quitting as Observers See Little Likelihood of Salvaging Pepco Merger*.)

Those supporting the filing included the Independent Market Monitor, various state agencies, Exelon and the PJM Industrial Customer Coalition.

"The Market Monitor offers that [the] CAPS funding schedule is a 'meaningful first step to obtain needed balance in the PJM stakeholder process' and that 'PJM consumers have been systematically underrepresented,'" the order said.

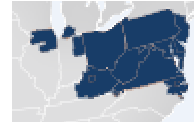
Opposing the funding were the PJM Power Providers Group, Talen Energy and Essential Power.

Protesters argued that FERC did not have the jurisdiction to approve the funding scheme, that PJM transmission customers that serve load would be forced to fund private speech with which they might disagree, and that CAPS' comments cannot be considered government speech, in part because not all of its members are government representatives.

CAPS, made up of consumer advocates from PJM states and D.C., was formed in 2012 with start-up funding from a FERC enforcement settlement with Constellation Energy (IN12-7-00).

The budget approved by FERC may be used for staffing and travel costs for the consumer advocates to participate in meetings. The funding may not be used for activities related to the proceedings of state or federal agencies other than FERC, litigation of matters at FERC stemming from Tariff or operating agreement changes by PJM or the hiring of counsel or expert witnesses to support the filings of other parties.

PJM NEWS



Exelon, Pepco Urge Compromise Deal to Win DC PSC Approval for Merger

Continued from page 1

> **"We expected that Exelon would try a Hail Mary pass, but from my analysis it doesn't appear to satisfy requirements set forth by the Office of the People's Counsel in terms of protections for ratepayers."**
>
> **D.C. Councilwoman Mary Cheh**

Political Posturing?

Guggenheim Securities analyst Shahriar Pourreza said the fate of the merger may depend on whether Bowser and other officials truly want out of the deal or are playing politics.

"The big swing factor is if the mayor, attorney general and Office of [the] People's Counsel are politically posturing or if they used Friday as an excuse to get out of this deal," he told *RTO Insider*. "If it's the former, it's probably workable." But, he said, "the longer they wait, the more the fundamentals of Pepco deteriorate and … the less attractive this transaction is."

The PSC said that if all settling parties agree to its offer, the merger will be approved without further commission action. None of the D.C. officials opposing the PSC settlement has proposed a counteroffer.

The acquisition would give Exelon Pepco's stable regulated income and the crown as the nation's largest utility. But Pourreza said the deal has "materially deteriorated" over time. In a research note earlier in the week, he said, "We believe there is increasing likelihood Exelon could walk from the deal."

Pepco 'in Distress'?

"You kind of wonder if this even makes sense for Exelon," he said. "There are plenty of single-state regulated utilities that they can go acquire that are not in as much as financial distress as Pepco. This is not a healthy utility as a standalone entity."

The PSC disagrees.

"There is no evidence in the record that Pepco could not continue to perform, and perform adequately and reliably as required by law, absent the ... approval of Pepco's sale to Exelon," it said in its order Feb. 26. "Indeed, as the commission found in [its August 2015 order in the case], 'PHI is financially healthy as a standalone company and would continue to be so if the merger is not consummated.'"

The merger already has the blessing of FERC and regulators in Delaware, Maryland, New Jersey and Virginia. They signed on under a "most favored nation" status, meaning in the end, all will be compensated equivalently — a disincentive for Exelon to sweeten the deal further with the district, Pourreza said.

If the merger doesn't go through, Pourreza said, other suitors might be deterred from trying to purchase Pepco, given the regulatory hurdles D.C. has presented. "I think that these regulators have jeopardized this utility," he said.

Dividend in Doubt?

On Monday afternoon, Pepco's stock closed at $24.22, down 20 cents (0.82%) for the day. Exelon's shares closed at $33.92, up 56 cents (1.68%).

If the merger doesn't close, Pepco shares could lose $4 to $5 per share, Pourreza wrote. "Given that [Pepco] has been out of a rate case since 2014 and the delays with this merger, [it] has materially deteriorated as a standalone company, in our view."

That could push its $1.08/share dividend to a 6% yield.

"It's even questionable if they can support the dividend," he said. "It's pretty mind-boggling, the games that these regulators are playing. The agreement that the commission brought on Friday is very workable. I sort of question whether the commission did this because they knew that the settling parties wouldn't go for this."

Pourreza said he was at a loss to speculate what more Exelon could offer to salvage the deal, noting that "in a perfect world," it should be offering less, not more, for Pepco at this point.

"I thought what the commissioners put out was equitable and now all of a sudden this is coming down to the $27 million issue," he said. "It doesn't make any sense to me. I tend to think [Bowser, Racine and OPC Sandra Mattavous-Frye] want out of this deal. … This is very abnormal."

Cheh said the difference between using the fund to insulate ratepayers temporarily, only to have Exelon recoup the difference after four years, and disbursing the money when there is an actual rate case is not dramatic.

That, she said, leads her to think that Mattavous-Frye — an initial opponent of the merger who reversed course to back the mayor's settlement — used the PSC's proposed changes as an excuse to back away from the deal.

"Once Mattavous-Frye was out, the mayor was kind of stuck, I kind of think, because what was she going to say, 'I think it was a good deal?'" Cheh said.

"What was at issue was a power struggle between the PSC and the mayor and who trusts whom," Cheh said. "The fact that it may be scuttled over who gets to play with this money seems another surprising turn in all of this."

One sticking point is that the rate relief would be shared with commercial customers, Cheh said. The U.S. General Services Administration, representing the federal government, the largest electricity consumer in the district, opposed the merger until the PSC offered the concession to broaden rate relief.

The settlement would have protected residential ratepayers through Bowser's four-year term and potential reelection campaign.

"People have been saying all kinds of things," Cheh said when asked if that might be a factor in Bowser's insistence on preserving the rate credit. "Now that my rate increase may come right in the middle of your term — if you were the mayor, that's something you would take into account."

SPP NEWS

SPP: FERC not Budging on non-Order 1000 Seams Projects

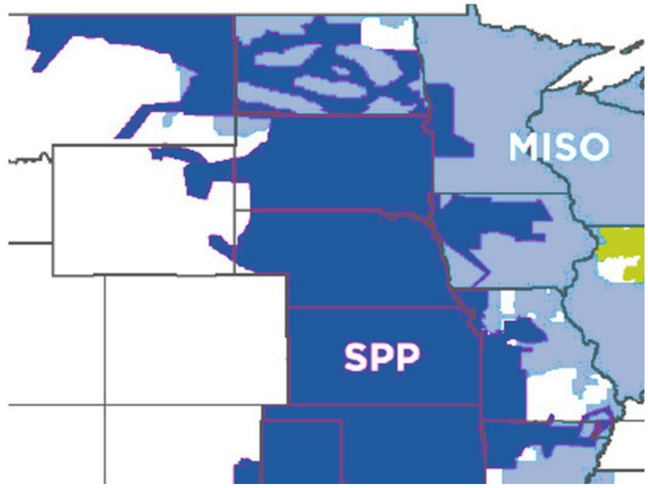
FERC staff is hesitant to entertain consideration of a regional cost allocation methodology for seams projects approved outside of an Order 1000 process, SPP staff told the Seams Steering Committee last week.

In recent discussions, said Brett Hooton, SPP's senior interregional coordinator, FERC staff seemed concerned about ensuring Order 1000 will be the only process "under which a planning region will include a regional cost allocation in [its] tariff for seams projects."

The discussions with FERC staff followed the commission's rejection of the RTO's proposed regional cost allocation for seams projects. (See *FERC Rejects SPP Proposal for Seams Transmission Projects*.)

Some SPP stakeholders expressed concern with FERC's position, saying it hurts the RTO's ability to approve a large number of potential projects not eligible under Order 1000.

SPP staff noted that no interregional projects have been approved anywhere in the country under Order 1000.



SPP's seams with MISO *Source: ACES*

Meetings This Week

The committee also previewed two meetings with MISO this week related to the joint operating agreement and interregional planning.

The JOA stakeholder meeting Tuesday will focus on ongoing operational issues between the regions and potential improvements to the market-to-market process.

At the March 9 Interregional Planning Stakeholder Advisory Committee meeting, stakeholders will discuss high-value M2M flowgates, the results of the RTOs' Clean Power Plan studies and whether the RTOs should conduct a joint transmission study this year.

— Tom Kleckner

FERC NEWS

Citizens Groups Seek Public Funding for FERC Interventions

By Rich Heidorn Jr.

A group of citizens groups has dusted off a forgotten provision of the 1978 Public Utility Regulatory Policies Act that it said requires FERC to provide public funding for interventions before the agency.

In a filing Monday, watchdog group Public Citizen and more than two dozen environmental and public interest groups called on FERC to create an Office of Public Participation, as they say was required by the act.

The act appropriated $2.4 million for compensating intervenors in fiscal year 1981, before FERC switched to its current funding mechanism, based on fees on industry participants.

"I don't know how much money we're talking about here," said **Tyson Slocum**, director of Public Citizen's energy program, adding that $2.4 million would be worth about $6.5 million now, adjusted for inflation. That, he said, does not include funding for the office's staff.

Slocum said it's unclear why the office was never created, speculating that FERC was unenthusiastic about complying and distracted by implementing other aspects of the act.

Although the Federal Power Act has been revised several times since 1978, he said, Congress never changed the public participation provision. "It just kind of dropped off the radar screen," he said.

He said Public Citizen decided to file the petition to force compliance after informal entreaties to FERC commissioners failed to result in any action. "We've known about it for a long time," he said.

The filing requests the commission to initiate a rulemaking to implement the directive.

"An Office of Public Participation is needed now, more than ever," the petition states, noting the changes in the industry since 1978. "More ratemaking is decided in FERC-jurisdictional markets than in state utility regulatory commissions. But while state utility commissions often feature robust procedures and public money dedicated for household consumer representation, no equivalent exists at FERC, leaving entities representing the interests of households at a severe financial disadvantage compared to interests representing the owners of power plants, power marketers and transmission owners."

FERC declined to comment.

Providing funding for ratepayer representation has also been an issue in some RTOs.

Last year, MISO rejected a request by the Public Consumer Advocates sector for $200,000 to help cover its legal costs in a fight over transmission owners' return on equity. (See *MISO to Consumer Sector: No Money for You*.)

Last week, FERC approved PJM's funding of the Consumer Advocates of PJM States. (See related story, *FERC Approves PJM Funding of Consumer Advocates*, p.18.)

FERC Closes out Resolved SPP-MISO Hurdle Rate Dispute

FERC attended to some housekeeping Friday by putting to rest a rehearing request rendered moot by MISO and SPP's settlement of their transmission dispute.

The commission dismissed MISO's rehearing request of its December 2014 order approving the RTO's use of a "hurdle rate" to manage its north-south flows (ER14-2445-002). The commission also dismissed a related compliance filing.

MISO and SPP reached an agreement that eliminated the need for the hurdle rate in mid-October. (See *SPP, MISO Reach Deal to End Transmission Dispute*.) FERC accepted the agreement in January.

MISO, its Market Monitor and several regulatory agencies and utilities had sought rehearing, arguing that FERC's order would cause the $9.57/MWh hurdle rate to climb by 4.5 times, rendering MISO's North-South interface transfers of more than 1,000 MW uneconomical.

"Because the hurdle rate is no longer effective, and in the [December 2014] order, the commission exercised its discretion to not order refunds … there is no need to address the" matters raised by MISO and others, the commission said.

MISO-SPP 1,000-MW tie *Source: SPP*

Under the settlement, MISO will pay SPP $1.33 million monthly until February 2017 to cover flows over 1,000 MW passing through MISO's North-South interface. MISO is temporarily collecting the funds from members through a miscellaneous charge based on market load ratio share while the RTO and stakeholders continue settlement discussions to decide on a long-term cost allocation (ER14-1736).

— Amanda Durish Cook

COMPANY BRIEFS

Coal is out at IPL's Harding Street Station

Indianapolis Power & Light's Harding Street power plant, one of Indiana's largest, will kick its coal habit completely by spring.

The company announced a $70 million investment to switch the plant to natural gas in 2014, and the conversion is expected to be complete in April, subject to approval by the state's Utility Regulatory Commission. Coal has been Harding Street's sole source of energy since the plant began operations in 1931.

IPL anticipates that the move will decrease its reliance on coal from 79% in 2007 to 44% in 2017. The company hasn't yet said how many jobs might be affected by the change. During 2015, the state lost 500 coal-related jobs.

More: *Inside Indiana Business*

ATC Plans Tx Line From Wisconsin to Illinois

American Transmission Co. is planning a new transmission line for 2020 to improve the flow of electricity from Wisconsin to Illinois.

The 3- to 5-mile segment targets the same location as a 345-kV line that opened in 2013 between Pleasant Prairie, Wis., and a natural gas-fired power plant in Lake County, Ill.

Since then, "market conditions have continued to change in Wisconsin and Illinois, leading to unanticipated congestion in the Wisconsin-Illinois electrical interface," an ATC spokesperson said. "This project is needed to resolve that."

More: *Milwaukee Journal Sentinel*

Ameren Official Named to 'Most Influential Blacks' List

Ameren Illinois President Richard Mark has been named one of *Savoy Magazine*'s Top 100 Most Influential Blacks in Corporate America, earning the distinction for the second time.

Mark

The magazine selects black leaders "who have made a positive impact in corporate America and have made a difference in the communities where they live and work."

Mark was named president of Ameren Illinois in June 2012.

"Richard is not only a great leader in our organization, but he is a champion for the customers we serve and a true leader in the community," Ameren CEO Warner Baxter said.

More: *Ameren*

Hunt's Proposed REIT Structure Could Scuttle Oncor Purchase

Two of three commissioners on the Public Utility Commission of Texas indicated last week they would only allow a consortium led by Dallas billionaire Ray Hunt to buy Oncor if some of the tax savings created by the sale are funneled back to consumers.

Commissioners Kenneth Anderson and Brandy Marty Marquez made clear during a March 3 hearing in Austin they will only support what they call a "risky" real estate investment trust (REIT) structure if Oncor's more than 3 million ratepayers get to share in the tax savings.

That stipulation could be a deal breaker for the Hunt group, which would attempt to transform the Dallas-based transmission company — the state's largest — into a REIT. The pending sale has attracted attention beyond Dallas because it could set a precedent for other utilities to become such trusts, including CenterPoint Energy, which is considering the same path.

More: *Houston Chronicle* (subscription required)

Duke Building 6-MW Solar Project on 50 Acres

Duke Energy said it will build a 6-MW solar facility on 50 acres in Rowan County, N.C., the third solar project the company hopes to complete in the state in 2016. If approved by the Utilities Commission, the plant should be online by the end of the year.

Duke is nearing completion of 141 MW of solar projects begun in the state last year and has announced plans to construct an additional 81 MW of solar this year. A 60-MW project is planned for near Monroe and a 15.4-MW facility is to be built in Mocksville.

More: *Duke Energy*

Long-Awaited EDP Wind Project Gets Timetable

EDP Renewables could add as many as 49 new wind turbines to the southwestern Wisconsin landscape by 2017 with a 98-MW project located in Seymour Township. The company said the project would create 10 to 15 full-time, permanent jobs and support more than 200 temporary construction jobs.

Josh Bohach, project manager for EDP Renewables, said workers will begin construction in 2017 and spend this year finishing surveying and design work. Jack Sauer, chairman of the Lafayette County Board, said the wind project has been under discussion for more than a decade, with grid interconnection alone taking years to hash out.

"It seems like with some of the bigger projects, you get your hopes up and they take a long time to come together or never get here at all," Sauer said. "I think a lot of people are a little surprised to see it finally coming together now."

More: *Telegraph Herald*

OG&E Moves Tx Project Timeline up by 3 Years

Oklahoma Gas and Electric is moving up the timeline for constructing a $190 million transmission line to help connect wind farms in northwestern Oklahoma, company executives said Feb. 26.

The utility will begin building the 126-mile 345-kV Windspeed II line from Woodward near the Texas Panhandle to its Cimarron substation northwest of Oklahoma City early next year. The line is expected to be in service by mid-2018, three years earlier than expected.

OG&E said the line will relieve congestion issues in northwestern Oklahoma, one of the reasons OG&E declined to commit to additional wind generation during a long-

Continued on page 23

COMPANY BRIEFS

Continued from page 22

running, $1.1 billion environmental compliance and replacement generation case at the Oklahoma Corporation Commission.

More: *The Oklahoman*

DTE Energy Announces Trio of Leadership Changes

DTE Energy said it will make multiple shifts in its senior executive structure on April 4.

Company President and COO Steve Kurmas will be appointed vice chairman, while Jerry Norcia, currently president and COO of DTE Electric and Gas Storage and Pipelines, will assume Kurmas' role.

Kurmas' new position will have him overseeing multiple large-scale projects, despite his plans to retire in 2017, ending a 38-year run with DTE. Norcia has 14 years' experience at the company and will head electric and gas business operations, major enterprise projects and the customer service division.

Norcia's position will be filled by Trevor Lauer, currently senior vice president of DTE's distribution operations. Lauer joined DTE in 2005.

More: *DTE Energy*

SPS Energizes $39M Project To Meet Texas, NM Demand

Southwestern Public Service last week activated a new $39 million, 38-mile addition to its transmission network in the eastern Texas Panhandle to meet growing demand and increase reliability, one of several SPP-approved projects to improve service in the region.

The improvements could eventually have a financial impact on customers of the Xcel Energy subsidiary, which already has a request for a $71.9 million annual rate increase pending before the Public Utility Commission of Texas. That request doesn't include the most recent construction.

Since July 2014, SPS has invested about $1 billion on system additions in service by the end of last year, part of an overall $3 billion plan to make improvements in its Texas and New Mexico service areas by 2020.

More: *Amarillo Globe-News*

NRG Posts $6 Billion Loss, Slashes Dividend

NRG Energy posted a $6.36 billion loss for the last quarter of 2015 and announced it would slash its annual dividend by nearly 80% to 12 cents/share, saving about $145 million a year.

The full-year loss of $6.44 billion translated into $19.46/share. NRG attributed its poor performance in part to the plunge in commodity prices, which weighed on the company's coal fleet.

The company also announced that it would reintegrate its NRG Renew business back into the flagship operation after creating the renewables arm just last year.

Under longtime CEO David Crane, NRG made strong moves into renewable energy, solar power and vehicle charging units. Crane was ousted in December after results came up short and replaced by COO Mauricio Gutierrez, who last week said NRG will now concentrate on merchant generation and retail energy sales.

More: *24/7 Wall St.*; *FuelFix Blog*

Invenergy Planning Wind Farm near Bloomington, Ill.

Invenergy is approaching landowners as it works on plans to construct a 120-turbine wind farm it seeks to have online by the end of 2017. Business development manager Allyson Sand said the company is looking in four different townships near Bloomington for sites for the facility, expected to be rated at 200 to 250 MW.

Sand would not discuss the costs of the project, but she said Invenergy expects to file for permits and arrange a power purchase agreement by the end of this year.

The region is seeing a spike in wind project planning and development, with a 240-turbine farm being planned for eastern McLean County. A wind farm in neighboring LaSalle County produced $1.79 million in tax revenue for the county last year.

More: *The Pantagraph*

Fermi 2, Davis-Besse Both Running at Reduced Levels

Separate, coincidental equipment problems left two Ohio nuclear plants operating at reduced levels last week.

The reactor at DTE Energy's Fermi 2 was powered down to 59% to allow for repairs on a feedwater system valve. FirstEnergy's Davis-Besse plant was reduced to 85% after mistaken signals were sent to its auxiliary feedwater system. That problem was fixed, but the plant operated at 100% for only two days before coasting down in anticipation of a scheduled refueling outage.

More: *The Blade*

Coal Company Asks Feds For OK to Seal Mine

St. Louis-based Foresight Energy last week asked the federal Mine Safety and Health Administration to close the company's central Illinois coal mine, the site of an underground fire burning since mid-2014.

The company hopes the fire in the Deer Run Mine near Hillsboro will be choked off if the mine is allowed to be sealed off temporarily. Foresight has tried to extinguish the fire by sealing off some mine sections and filling them with inert gas and extinguishing chemicals. In December, the company evacuated the longwall mine, then laid off 100 employees. By January, the company had stopped mine production altogether due to low demand for coal and high carbon monoxide levels underground.

The coal producer is also seeking authorization from the Illinois Commerce Commission to expand mining operations into areas unaffected by the fire.

More: *St. Louis Post-Dispatch*

Groundbreaking Held for Navy's Seabee Base Solar Plant

Mississippi Power held groundbreaking ceremonies March 2 for its proposed Seabee Base solar plant. The company is partnering with Hannah Solar and the U.S. Navy on the 23-acre, 3- to 4-MW solar project at the base in Gulfport, Miss.

The project, consisting of about 13,000 panels, will be able to provide power for approximately 450 homes.

"This is one of three utility-scale solar projects that have been approved by the Mississippi Public Service Commission, making our company the state's largest partner in renewable energy," Mississippi Power CEO Anthony Wilson said.

More: *Mississippi Power*

FEDERAL BRIEFS

Public Citizen: Energy Group Should Open Kimono

Public Citizen last week called for a House and Senate investigation into the Commercial Energy Working Group, an industry association the watchdog says appears to be violating federal lobbying rules by not disclosing its membership.

The energy group operates out of the offices of D.C. law firm Sutherland, Asbill & Brennan, which has represented it in filings with FERC, the Commodity Futures Trading Commission, the Securities and Exchange Commission, the Federal Reserve and Congress.

In the second quarter of 2015, the firm reported to Congress $60,000 in lobbying income for the group, but the filing did not list the sources of that income despite a requirement that lobbyists disclose contributions of $5,000 or more, Public Citizen says. Based on records obtained through the Freedom of Information Act, Public Citizen said the group's members appear to include Vitol, Royal Dutch Shell, NextEra Energy, ConocoPhillips and Hess Corp.

More: *Public Citizen*

NRC Engineers Urge Fix for Flaw in Most US Reactors

A group of Nuclear Regulatory Commission engineers is urging the agency to order U.S. nuclear plant operators to fix a problem that lurks in nearly all reactors.

In February, the seven engineers petitioned the agency to order immediate action to address a flaw that puts the reactors at risk of so-called "open phase events" where unbalanced voltage could cause motors to burn out and deactivate emergency cooling systems. Such an event happened at Exelon's Byron 2 reactor in 2012, shutting down the unit for a week.

Although NRC alerted operators of that event, the agency didn't require any action. Dave Lochbaum, a nuclear expert and frequent industry critic, said NRC has known about the issue and didn't push for action. "Why the NRC snatched defeat from the jaws of victory, I don't know," he said. By NRC's own procedure, the agency has until March 21 to respond to the engineers' request.

More: *Reuters*

Delaware Riverkeeper Files Suit Against FERC

The environmental group Delaware Riverkeeper Network is suing FERC, charging that the agency's oversight process for pipeline projects is "infected with bias" and demanding substantial changes to how the commission works.

The suit alleges that FERC is essentially financed by the industries it oversees through charges and fees. "Because FERC gets its funding from the big companies it is supposed to be monitoring, it has become, perhaps inevitably, a corrupt, rogue agency," says Maya van Rossum, leader of the Delaware Riverkeeper Network. "That's why FERC has approved 100% of pipeline projects — literally every single one of them — that it has considered since 1986."

The suit, filed in U.S. District Court., seeks a declaration that FERC's approval process is biased and that its funding structure is unconstitutional. The commission said it does not comment on pending lawsuits.

More: *NJ.com*

Chief Justice Rejects Request to Block MATS Rule

Chief Justice John Roberts on Thursday rejected a request from 20 states to block the enforcement of EPA's Mecury and Air Toxics Standards.

Michigan and 19 other states asked for a stay or an injunction blocking enforcement of the MATS rule, noting that the court itself last year ruled 5-4 that the rule is illegal.

But EPA said a stay was not necessary as the agency was addressing the parts of the rule the court found invalid. "The requested stay would harm the public interest by undermining reliance interests and the public health and environmental benefits associated with the rule," the agency said. "The application lacks merit and should be denied."

Roberts acted unilaterally, without taking the question to the whole court.

More: *The Hill*

US Energy Storage Market Has Best Quarter, Year

The fledgling U.S. energy storage market deployed 112 MW of capacity in the fourth quarter of 2015, more than in 2013 and 2014 combined. According to GTM Research and the Energy Storage Association's U.S. Energy Storage Monitor 2015 Year in Review, 161 MW were added in 2015, bringing the U.S. total to 221 MW.

The report, broken down into residential, non-residential and utility segments, notes the last segment continues to be the largest, accounting for about 85% of all new storage. Most of that was deployed in PJM, which saw 160 MW of new storage introduced.

But residential behind-the-meter systems grew at the fastest pace, showing an increase of 405% in 2015.

More: *Greentech Media*

NRC Tags Entergy for Palisades Storage Leak

The Nuclear Regulatory Commission has put Entergy on notice for three apparent violations relating to a leaking storage tank discovered at its Palisades nuclear generating station in Michigan in 2013. The agency sent the company a letter alleging that Palisades deliberately failed to properly document the leak at a safety injection and refueling water storage tank during the event.

Entergy was cited for "willful failure" to document the leak, as well as failure to "perform adequate operability determinations" after the leak and to undertake additional testing of the leak site.

The company said the conditions have been corrected since the incident. "Entergy does not tolerate deliberately failing to follow procedures or falsifying or manipulating data in any way," the company said.

More: *Mlive*

Feds Move to Drop McClendon Indictment After Fatal Crash

Authorities are taking steps to drop the indictment against former Chesapeake Energy CEO Aubrey McClendon, who died hours after the indictment was handed up last week. McClendon was under investigation for alleged bid rigging relating to natural gas leases.

A federal grand jury handed up the indictment Tuesday. McClendon died in Oklahoma City last week when his SUV crashed at high speed into a bridge abutment. That accident remains under investigation.

More: *The Associated Press*

STATE BRIEFS

REGIONAL

RGGI Auctions Competitive, Potomac Economics Says

The Independent Market Monitor for the Regional Greenhouse Gas Initiative found no evidence of anti-competitive behavior in the secondary market for CO_2 allowances in the fourth quarter of 2015, according to a recent report.

Part of Potomac Economics' ongoing monitoring of RGGI auctions and the secondary markets for CO_2, the report includes futures prices, market activity and allowance holdings. The analysis addresses the period from October to December 2015 and is based on data reported to the Commodity Futures Trading Commission and the Intercontinental Exchange, as well as other sources.

ISO-NE Capacity Auction Results Filed

ISO-NE's 10th Forward Capacity Auction cleared at $7.03/kW-month for all resources within New England and imports from Québec, lower than the previous auction. There was no price separation between capacity pricing zones.

The Feb. 8 auction, for the 2019/20 commitment period, procured 35,567 MW of capacity to meet a 34,151-MW installed capacity requirement. In all, 40,131 MW of resources, including 6,700 MW of new resources, qualified to compete in the auction.

The auction acquired 31,371 MW of generation, including 1,459 MW of new generation. Three new power plants will help close the gap created by recent or pending retirements of more than 4,200 MW of coal, oil and nuclear generation. The auction also cleared 2,746 MW of demand-side resources, including energy efficiency measures and demand response assets, as well as 1,450 MW of imports from New York and Canada.

More: *ISO-NE*

ARKANSAS

Wind Project Withdrawn Following Repeal of Annexation

Dragonfly Industries International has withdrawn a proposal for the state's first wind farm following a March 1 vote by Elm Springs residents to repeal annexation of land set aside for the facility.

The Elm Springs City Council voted to annex the land into the city last year, but the project met opposition months before the acquisition. Disagreement between opponents and proponents of the project became even more contentious when it was revealed Dragonfly CEO Jody Davis had a federal embezzlement conviction, while a Dragonfly spokesman had financial troubles of his own.

More: *KFSM*

DELAWARE

Opponents Wary of Proposed Natural Gas Plant

Opponents of a proposed natural gas-fired power plant in Middletown staged a protest last week, asking the city's mayor for more information about the project, which has dominated local politics because of concerns about pollution.

Cirrus Delaware plans to build the facility as a backup power supply for a 228,000-square-foot data center.

The plant would generate 52.5 MW and operate during peak times, selling power back to the grid.

More: *The News Journal*

MICHIGAN

AG Opposes Second DTE Rate Increase Request

DTE Energy residential ratepayers could be handed another $75 annual hike in electric bills just three months after an increase of $114, but Attorney General Bill Schuette wants to halt the request.

"Electricity is a basic need for families and businesses across Michigan," Schuette said in a prepared statement. "I am asking the Michigan Public Service Commission to closely examine the request being made by DTE that will raise rates for a second time in just a short period."

DTE's second rate hike would amount to a 6.6% increase in electric rates, after regulators approved an 11% increase in December. The latest request seeks to place costs associated with peak demand solely on residential customers, compared with the current practice of sharing those costs with business and industrial customers. The PSC has twice denied similar requests from DTE.

If the increase is approved, the state would have the highest electric rates in the northern Midwest, according to the U.S. Energy Information Administration.

More: *Birmingham Patch*

MINNESOTA

Community Solar Generating Uptick in Complaints

The push to build community "solar gardens" — facilities in which homeowners can hold individual shares of the output — has translated into increased calls to the attorney general's office.

Deputy Attorney General James Canaday says people are confused about the proliferation of unsolicited offers they are receiving. "The solar garden business is very new," he told Minnesota Public Radio. "It's the Wild West right now."

Although there are only 17 community solar facilities currently operating in the state, that number is expected to increase to 200 by the end of the year. Each operates differently, with some offering monthly billing and others requiring large upfront charges and long-term commitments. Any long-term commitment deserves careful study, said Canaday, noting that for the most part, solar gardens are not regulated.

More: *Minnesota Public Radio*

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STATE BRIEFS

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MISSOURI

PSC Approves KCP&L Solar Facility Application

The Public Service Commission last week granted KCP&L-Greater Missouri Operations a certificate of convenience and necessity to construct, own, operate and maintain a solar generation facility in Jackson County.

When completed, the solar plant will generate around 4,700 MWh annually, or enough electricity for about 440 customers, according to KCP&L's application. The company said it wants the facility to begin operating by late July.

The PSC noted that KCP&L proposed to build the plant as a pilot to give the company "hands-on" experience for designing, constructing and operating additional solar facilities. "Gaining that experience now is important so that GMO can remain in front of the upcoming adoption curve," the commission wrote.

More: *The Missouri Times*

NEW HAMPSHIRE

State DOT Added to Northern Pass Complaint

The Society for the Protection of New Hampshire Forests has filed a motion to add the state Department of Transportation to its lawsuit against Northern Pass Transmission.

The group included the department because Northern Pass argued that it is the only party with the authority to allow developers to bury the cable along highway rights of way. The society says it owns land under and along certain state highways, including Route 3, which is being eyed by Northern Pass as part of the cable's route and is adjacent to the Washburn Family Forest.

"We have a legal and ethical obligation to defend conserved lands like the Washburn Family Forest from private commercial development such as Northern Pass," said Jane Difley, president of the society.

More: *New Hampshire Union Leader*

NEW JERSEY

BPU Approves $5.3M in EE to Reduce Demand

The Board of Public Utilities has approved $5.3 million in energy efficiency incentives that it said will enable several entities in the state to make investments expected to reduce annual power demand by 19.5 MWh.

The incentives will be provided through the state's Clean Energy Program. The recipients are NJ Transit, Clement Pappas & Co., Eickhoff Supermarkets, Village Supermarkets, ShopRite, Grand LHN 1 Urban Renewal and New Jersey American Water.

More: *New Jersey Board of Public Utilities*

NEW MEXICO

Opposition Firms up as PNM Readies for Hearings

Public Service Company of New Mexico could face an uphill battle in its bid to win approval of a 14.4% rate hike from the Public Regulation Commission. The utility is seeking $123.5 million in additional annual revenue to recover capital investments since 2010 — the last time it requested a rate hike — and to offset a decline in sales.

Environmental and clean energy organizations, consumer advocates and industrial and institutional power users are lining up against PNM's proposals, which the commission will review during two weeks of public hearings starting March 14.

Opponents say the company is seeking much more money than is justified and that the rate hikes will shift more system costs to residential and small consumers. Company executives say the rate request is critical to keep the grid running reliably without interruption.

More: *Albuquerque Journal*

NEW YORK

Cuomo Requests Another Indian Point Investigation

Gov. Andrew Cuomo ordered state agencies to ask FERC to immediately halt construction of the Algonquin natural gas pipeline until a safety review is completed.

The FERC-approved pipeline would run close to the Indian Point nuclear plant, which has experienced several safety incidents in recent months, prompting the state to conduct its own investigation into the facility.

"Although the project applicant has agreed to more stringent construction measures near Indian Point, ongoing state investigations will assess the adequacy of these measures and may also reveal new information about the environmental, health and safety risks posed by the project's siting," the governor's statement said.

More: *Gov. Andrew Cuomo*

Entergy: Bird Droppings Shut down Indian Point

Bird droppings likely caused the three-day shutdown of the Indian Point plant in December, according to plant owner Entergy.

The reactor shut down automatically when bird excrement apparently produced an electric arc between wires on a feeder line at a transmission tower, Entergy said in a report to the Nuclear Regulatory Commission. The company said it is revising preventive maintenance for additional inspection and cleaning and installing bird guards on transmission towers.

More: *CBS*

NORTH CAROLINA

Duke Gets OK for Two Natural Gas Plants in Asheville

The Utilities Commission has approved Duke Energy's plan to build two new natural gas-fired units at its coal-fired power plant in Asheville. The company was denied permission for a third gas unit intended for

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use as a backup peaker.

The commission did not address the estimated $1 billion cost of construction, which is likely to be passed through to customers.

In its ruling, the commission also ordered Duke to consider retrofitting four coal-burning units at the company's Roxboro plant to improve efficiency.

More: *The Charlotte Observer*

SOUTH DAKOTA

Bill Would Spread Wind Revenue Throughout State

A state task force charged with increasing teacher salaries has proposed legislation that would distribute tax money collected from wind farms to school systems throughout the state, rather than allowing the jurisdiction hosting a facility to keep all the revenue. Critics contend the bill would dampen incentives for localities to site wind farms.

The redistribution plan is being proposed alongside a separate increase in the state's sales and use tax. Both pieces of legislation would blunt wind farm development in the state, critics say.

"I see more projects going into North Dakota, Minnesota and Nebraska than here," said Steve Wegman, who recruits investors for state wind projects. "Raise the tax and nobody will build. End of story."

More: *Midwest Energy News*

TEXAS

EPE, El Paso City Council Agree to $37M Rate Hike

El Paso's city council has agreed to grant El Paso Electric a $37 million rate hike, about 8% above current rates. The increase is $44.5 million less than the original $71.5 million request, which was revised down to $63.3 million in January.

Under the proposed settlement, EPE's West Texas residential customers would see monthly bills rise an average of almost 10%, while bills for small commercial customers would increase by about 3%. The rate settlement would also implement a surcharge of up to $11/month for residential customers who have installed or applied to install rooftop solar systems after Aug. 10, 2015, a provision being challenged by solar organizations and the state's consumer advocate.

The agreement is still subject to approval by the Public Utility Commission.

More: *El Paso Times*

VIRGINIA

McAuliffe's Vetoes Bill Giving Legislature CPP Authority

McAuliffe

A bill that would have given the General Assembly control over implementation of the federal Clean Power Plan mandates was vetoed by Gov. Terry McAuliffe.

The governor said the bill represented an "impermissible breach of Virginia's constitutional separation of powers." He said the power to delegate such environmental power properly goes to the state's Department of Environmental Quality. "This process rests squarely in the executive branch of state government," not the legislative, McAuliffe said.

Lawmakers are crying foul, however. The impact of the federal mandates "impacts far too many Virginians to be left to unelected bureaucrats," said one Republican lawmaker.

More: *Richmond Times-Dispatch*

County Urges Dominion to Reconsider 230-kV Tx Line

Culpeper County's Board of Supervisors is urging Dominion Virginia Power to re-examine its plan to construct a 38.1-mile transmission line between Remington and Gordonsville. The board is concerned about property values along the line and the effect on landowners where a wider right of way will be needed.

Dominion plans to upgrade an existing link between the towns with a 230-kV line on 106-foot monopoles that are nearly double the height of the existing poles. The county board also voted 6-1 to become an official respondent in the case before the State Corporation Commission, making it eligible to later intervene in opposition if necessary.

The project is slated for completion in 2019.

More: *The Daily Progress*

WISCONSIN

Bill Would Cut Funding For Energy Efficiency

A bill that aims to cut "double charging" to fund state energy efficiency programs through both wholesale and retail electricity sales would slice about $7 million from the Focus on Energy program.

The bill, which passed the State Assembly and is currently before the State Senate, aims to recalculate how funds are collected by limiting charges to just retail sales. While lowering the costs customers pay directly, energy efficiency proponents say those customers will lose out on benefits of the program.

"This change is going to hurt customers; they'll have less opportunity to take advantage of the programs that Focus on Energy offers, and those programs help customers lower their bills," said Mitch Brey, campaign organizer of the citizen group RePower Madison.

More: *Midwest Energy News*

FERC Eliminates Intertie Convergence Bids in CAISO

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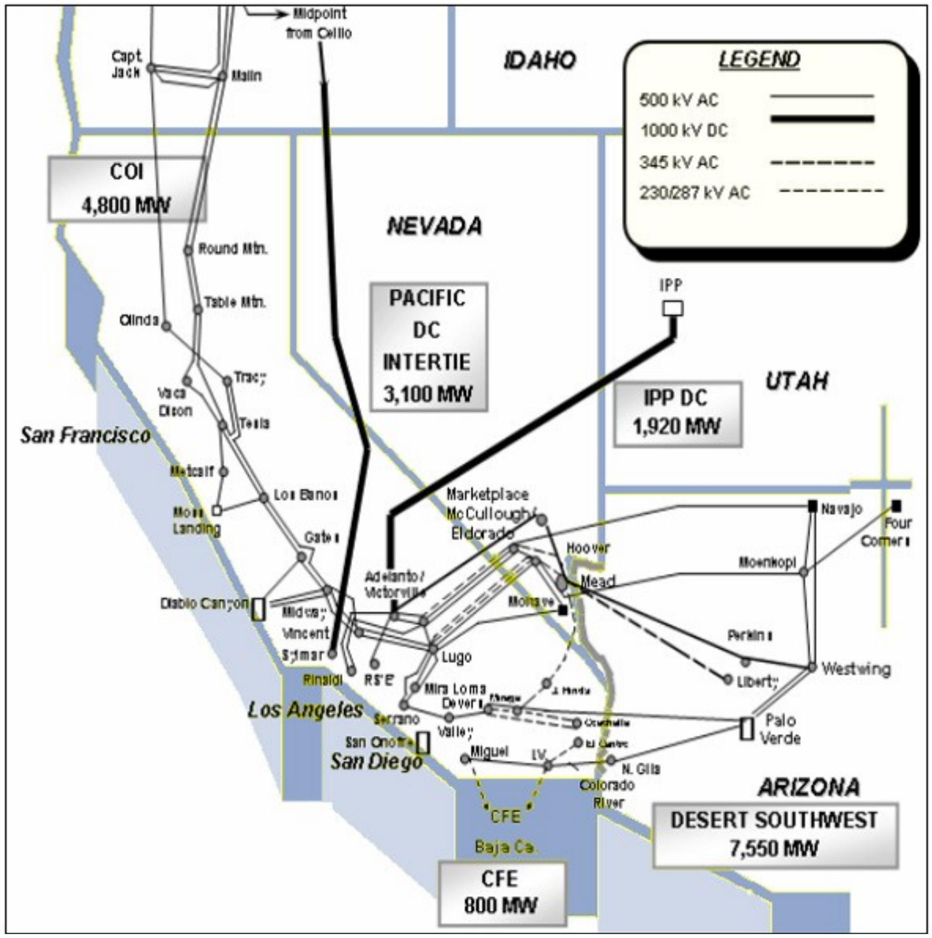

California transmission interconnections *Source: California Energy Commission, 2003*

illiquidity in 15-minute trading left intertie points vulnerable to gaming.

FERC's ruling did not affect convergence bidding at points inside the ISO balancing area. At the request of municipal utilities in Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, FERC also directed CAISO to delete from its Tariff an additional reference to virtual bidding in order to avoid ambiguity.

Convergence — or virtual — bidding allows market participants to hedge their physical positions and limit exposure to day-ahead and real-time price differentials. A convergence bid is a purely financial bid implying no obligation to take or deliver electricity. Instead, a market participant buys or sells "virtual" energy in the day-ahead market, a position required to be automatically liquidated in the opposite direction in real time.

Depending on the relative movements in the two markets, the participant either pockets or pays the difference between the two prices. Bidders are not required to control physical resources or serve loads in the ISO, allowing speculators to take positions in the market.

RTOs have adopted convergence bidding under the theory that the practice narrows the gap between day-ahead and real-time prices as traders arbitrage spreads between the two markets. The benefit is a more predictable spot market, protecting utilities from price swings stemming from load fluctuations and unplanned generating outages.

Troubled from the Start

In California, convergence bidding was fraught with problems since CAISO introduced the practice two years after restoring its day-ahead market. A week after implementing the market in February 2011, CAISO suspended bidding at nodes on nine interties linked to the Mountain States region because of a software glitch that risked overscheduling those points in the physical day-ahead market.

That incident was followed months later by the more serious discovery that some CAISO market participants were using virtual supply bids on the interties to offset virtual demand bids at nodes located just inside the state, a gaming strategy that produced no benefit for the physical market and cost the ISO more than $50 million.

(Virtual trades at CAISO's New Melones intertie are at the center of market manipulation allegations filed by FERC in December. The defendant last week asked FERC to compel CAISO to disclose information about market design flaws (IN16-2). See earlier story, *FERC Seeks $2.5M Fine in CAISO Market Manipulation*.)

The strategy was facilitated by predictable differences in prices stemming from what the ISO referred to as a "bifurcated" settlement process, with the interties settled at the hour-ahead price and internal points in real time. Shortly after identifying the issue, CAISO suspended bidding at the interties indefinitely — or at least until it could resolve the bifurcation issue.

Liquidity Concerns

That goal would ultimately elude CAISO. While FERC Order 764 — which mandated 15-minute scheduling between neighboring balancing areas — should have helped, the ISO became concerned about declining short-term trading volumes at the interties, which could reintroduce opportunities for strategic bidding. A 2015 report from the ISO's Market Monitor indicated that "most of the dozens of CAISO interties have no market participants providing economic bids in the 15-minute market and only a few interties have multiple market participants providing such bids."

CAISO hoped Bonneville Power Administration's implementation of 15-minute scheduling — synching it with

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NV Energy has Smooth EIM Integration, CAISO Says

By Robert Mullin

NV Energy had a smooth integration into the Western Energy Imbalance Market, CAISO said Monday in its fourth-quarter market report.

Department of Market Monitoring (DMM) manager Keith Collins noted that after NV Energy joined the EIM on Dec. 1, Nevada imbalance prices quickly converged with those in CAISO's broader system, a development that has so far continued into this year. That stood in contrast with the price swings that still beset PacifiCorp's balancing area, stemming from physical constraints on the system.

"One of the things we noted with the [NV Energy] launch was that the variability [of prices] within the Nevada area was fairly limited," Collins said.

CAISO attributed NV Energy's easy adjustment to the high amount of transfer capability between Nevada and California. Limited congestion translates into a freer flow of both imbalance energy and capacity between the balancing areas, avoiding the need to relax CAISO's flexible ramping constraints in load pockets poorly served by flexible capacity. Relaxation of the constraints ultimately drives up real-time energy prices by forcing relatively fast, efficient units out of the 15-minute energy market queue and into the obligatory market for ramping capacity.

By comparison, flexible capacity issues continue to weigh the EIM's PacifiCorp East area, with the ramping constraint being relaxed in more than 10% of intervals over the quarter, frequently boosting real-time prices by the maximum $60/MWh adder associated with capacity procurement shortfalls. CAISO did note, however, that relaxations in PacifiCorp East declined during December, reversing the uptrend seen in the previous quarter. While generating units returning from outages likely helped relieve constraints, the DMM suggested that NV Energy's entry into the EIM might be providing longer-term structural benefits for PacifiCorp.

"The market is more of a regional market with the inclusion of NV Energy because of the increased transfer capacity," said Collins. "It's more of a single market."

Bid Cost Recovery Payments Down

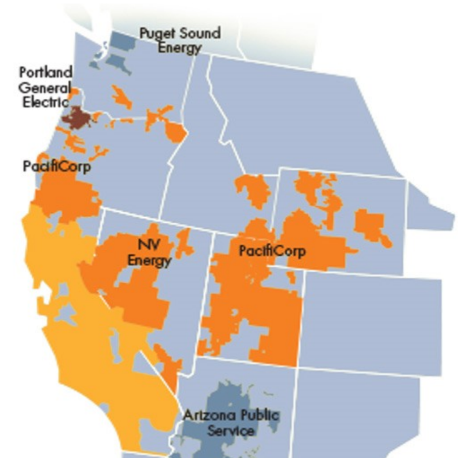
Collins pointed to the decline in bid cost recovery (BCR) payments as the second biggest "theme" of the fourth quarter. CAISO payouts came to $25 million under the market mechanism, compared with $31 million in the third quarter and $25 million during the same period in 2014. BCR payments attributed to residual unit commitments (RUC) fell from $10 million to $3 million quarter over quarter because of decreased payouts to "long-start" units.

"This is a big shift, although virtual supply has played a role," Collins said.

The DMM report describes the link between the virtual — or convergence — bidding market and bid cost recovery payment volumes, explaining that lower virtual supply volumes in the fourth quarter "primarily" caused the RUC process to commit fewer resources compared with the prior period. The report notes that RUC procurement "appears" to be driven by the need to replace cleared virtual supply bids, which offset physical supply in the day-ahead market.

"Part of that is that renewables tend to be under-scheduled," Collins said. "Virtual schedules are counterbalancing that."

The report also showed that real-time commitments accounted for $12 million in



BCR payments, in line with historical norms, while day-ahead payments were lower than any fourth quarter since 2011.

Additional highlights from the Market Monitor's report:

- Day-ahead and 15-minute prices declined to the lowest level of the year, with day-ahead peak averaging $33/MWh. December saw both markets fall to their 15-month lows. Collins noted that both loads and natural gas prices continued to trend lower, with the latter hitting 15-year lows.
- Price spikes increased in the five- and 15-minute markets but remained "relatively infrequent." October saw an "unusually high" number of intervals in which prices surged to more than $1,000/MWh because of low day-ahead scheduled load and regional congestion.
- Congestion in the ISO was relatively low and had little impact on prices.
- The volume of dispatchable import bids in the 15-minute market increased by 19% compared with the third quarter, while export bids jumped 20%. Most 15-minute import-export activity was submitted by small number of entities on three interties — Malin, Palo Verde and Rancho Seco.

FERC Eliminates Intertie Convergence Bids in CAISO

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CAISO's schedule — would boost exports from the Pacific Northwest. But the change had little impact on trading activity.

"The CAISO does not yet understand the causes of this low market liquidity," the grid operator wrote in an April 2015 filing asking FERC to extend the suspension of convergence bidding on the interties. "Based on informal feedback from market participants, the CAISO believes that some of the possible causes may be neighboring balancing areas not supporting 15-minute schedule changes, difficulty in procuring transmission in 15-minute blocks, an absence of bilateral trading at a 15-minute granularity and reticence of resource owners to adjust their output within the hour."

According to a report by CAISO's Department of Market Monitoring (DMM), low 15-minute liquidity could translate into a situation in which convergence bids would first settle at a day-ahead market price that includes intertie congestion, then be liquidated at a 15-minute market price not subject to congestion because of light physical volumes. That would give bidders incentive to profit from the structural differences between congestion prices in the day-ahead market and the 15-minute market.

"Regardless of the causes," CAISO wrote in its April 2015 filing, "based on DMM's recent analysis, the CAISO has determined that the existence of such low market liquidity, as evidenced by the lack of economic bids submitted in the 15-minute market, makes it problematic to reinstate intertie virtual bidding."