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New NYISO Head: A 'Fantastic Opportunity'

By William Opalka

With transmission bottlenecks and aging and unprofitable legacy generation, New York presents a host of challenges for any experienced energy executive, let alone a newcomer. But a path-breaking initiative to transform the state's power business that has the whole nation watching and an established wholesale market proved an irresistible combination for Bradley Jones.

"This is a fantastic opportunity," Jones, who took over as president of NYISO in October, told *RTO Insider* last week. "It's a great state, it's a great market and I've enjoyed Albany quite a bit. It's a wonderful opportunity and it's the right place for me."

'The One I Wanted'

Jones, 53, came to New York from ERCOT, where he was senior vice president and



Jones in NYISO's control room Source: NYISO

chief operating officer — in line to contend for the top spot next year, when current CEO H.B. "Trip" Doggett plans to retire.

Yet after spending his entire, near-threedecade professional life in the Southwest, he moved cross country to replace the retiring Stephen C. Whitley, who headed New York's power grid for seven years.

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Transportation Bill Includes Grid Security Measures

Bill Vindicates, Rebukes Ex-FERC Chair

By Rich Heidorn Jr.

WASHINGTON — The transportation bill President Obama signed last week includes provisions intended to protect the grid from terrorist attacks and natural disasters, giving the secretary of energy emergency powers and creating a Strategic Transformer Reserve.

The <u>legislation</u>, which will provide \$305 billion in highway funding over five years, cleared the Senate 83-16 on Thursday, following a 359-65 vote in the House. Obama <u>signed</u> the bill Friday.

The bill represents both a vindication and a rebuke of former FERC Chairman Jon Wellinghoff's controversial campaign to raise awareness of the grid's vulnerability to sabotage.

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Merchant Generators Lead Opposition to FirstEnergy-Ohio Settlement

By Ted Caddell

In recent policy disputes over capacity markets and energy price caps, FirstEnergy and the independent power producers of the Electric Power Supply Association have usually been on the same side.

When EPSA won a federal appeals court ruling voiding FERC's authority over demand response last year, FirstEnergy asked the commission the same day to prevent DR from being included in PJM's capacity auction.

But when the Akron-based utility announced last week that it had reached a settlement with the staff of the Public Utilities Commission of Ohio to secure guaranteed rates for several of its merchant plants, the company found itself under at-

tack by many of its former allies.

By Thursday, EPSA had corralled Dynegy, Talen Energy, the PJM Power Providers Group (P3), the Sierra Club of Ohio, AARP and others in a coalition blasting the deal. Dynegy and Talen threatened to sue.

"The fault of FirstEnergy's inability to compete in Ohio lies with FirstEnergy and it should not be dependent on the citizens and businesses of Ohio to provide a bailout," said Robert C. Flexon, CEO of Dynegy, which increased its stake in PJM with its purchase of 12,500 MW of generation from Duke Energy and Energy Capital Partners earlier this year. (See <u>Dynegy Wins FERC OK for \$6.25B Duke, Energy Capital Partners Generation Deals.</u>)

"Dynegy will pursue all available avenues,

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Generators Dispute ISO-NE on Solar Capacity

By William Opalka

Generators are protesting the way in which ISO-NE calculated its installed capacity requirement for the 10th Forward Capacity Auction, saying the RTO hasn't sufficiently vetted the way it reflects behind-the-meter solar.

In anticipation of its 2019/20 auction scheduled for February, ISO-NE filed its ICR with FERC on Nov. 12 (ER16-307).

The RTO said the only change in its assumptions from prior auctions was the inclusion of behind-the-meter solar resources that are not yet reflected in historical loads, which resulted in a 390-MW reduction in the load forecast.

In a protest filed last week, the New England Power Generators Association said the calculation should be determined by a Section 205 proceeding before FERC, after a more complete examination by the New England Power Pool.

NEPGA and Dominion Resources, which owns nuclear and gas-fired generation in the region, said that the RTO had discussed with NEPOOL stakeholders how the new methodology would be implemented but had not adequately examined related mar-



ket and operational issues.

The ICR value failed to win endorsement by the NEPOOL Participants Committee, garnering a bare majority of 53%.

"A number of members expressed their opposition to those ICR values because of their view that the values were overstated because behind-the-meter PV was not properly and fully accounted for in the load forecast," the committee said in its comments.

In a January order accepting the RTO's filing in advance of FCA 9, the commission directed it to conduct a stakeholder process "to fully explore the incorporation of distributed generation" into its ICR calculations. (See FERC Rejects Bid to Increase DR, Distributed Generation in ISO-NE Capacity Calculations.)

ISO-NE said it developed the 390-MW solar forecast with stakeholders, including state regulators, over a 10-month period.

"In order to determine the load reduction impact of [behind-the-meter] PV resources, the ISO used solar PV production data of currently installed behind-the-meter PV resources provided by the states and distribution utilities. The ISO calculated the PV already embedded in load and then adjusted the load forecast by the forecasted" resources, the RTO wrote.

The New England States Committee on Electricity, which last year challenged the exclusion of distributed solar resources from the ICR calculations, supports ISO-NE's current ICR filing.

"The ICR ... must consider in a timely manner the rapid development of solar PV resources that are affecting system demand," it said in its comments. "New England consumers are increasingly investing in clean, distributed energy resources in furtherance of state energy programs and policies. The ICR cannot be divorced from these significant investments in solar PV resources."

ISO-NE is asking for FERC approval by Jan.

Connecticut Seeks Dismissal of PURPA Complaint

By William Opalka



Connecticut regulators asked FERC last week to dismiss a complaint from a renewable energy developer ALLCO® that contends the state's energy procurement practic-

es violate the Public Utility Regulatory Policies Act.

The Connecticut Department of Energy and **Environmental Protection and the Public** Utilities Regulatory Authority said Allco Renewable Energy's complaint is without merit because it is challenging a procurement program created by state law "that is different than, and a supplement to, Connecticut's federally mandated PURPA program" (EL16-11).

Allco asked FERC to void the state's award

of a contract to a 250-MW wind farm in Maine. It cited FERC and federal court rulings that say states have no authority to procure energy except under PURPA, which is limited to qualifying facilities (QFs) of 80 MW or less. (See Solar Developer Asks FERC for PURPA Enforcement.)

In their response, Connecticut officials said commission action is not warranted because Allco is not actually challenging the state's PURPA program. "Petitioner does not complain about any aspect of Connecticut's PURPA program and, in fact, concedes the 'potential availability of a PURPA contract,' but elects not to participate in the program," the officials wrote.

"Petitioner is a disappointed bidder in the Connecticut renewables solicitation conducted two years ago," they added. The officials said their procurement programs do not violate PURPA or the Federal Power

Act. "Cognizant of the commission's exclusive authority over wholesale sales of energy, the Connecticut agencies have not set or modified rates or otherwise acted on matters within the commission's FPA authority," they said.

Allco filed the complaint with FERC on Nov. 9 after a federal appeals court said the company had not exhausted its administrative remedies in challenging the state procure-

Allco said that the appeals court's decision endorsed its contention that the state had violated PURPA by preempting federal authority over wholesale contracts. However, the appeals court issued an amended decision on Dec. 1, disputing Allco's characterization. The court said it "express[es] no view on the merits of Allco's preemption theory."



MISO Proposes Two-Season Capacity Market, Appoints Team to Address III. Zone

By Amanda Durish Cook

CARMEL, Ind. — Signaling a newfound sense of urgency, MISO officials last week proposed a switch to a two-season capacity market procurement and appointed a team to consider ways to retain merchant generators in Illinois.

Under a <u>draft proposal</u> outlined to stakeholders last week, MISO would obtain capacity based on a four-month summer season (June-September) and eight-month winter (October-May), with separate seasonal resource accreditations, reserve margins and capacity import/export limits.

"We do see the value in two seasons and providing resource adequacy in both summer and winter. This felt like a place that is justifiable," Laura Rauch, manager of resource adequacy coordination, told stakeholders at a two-day joint meeting of the Supply Adequacy Working Group and the Loss of Load Expectation Working Group.

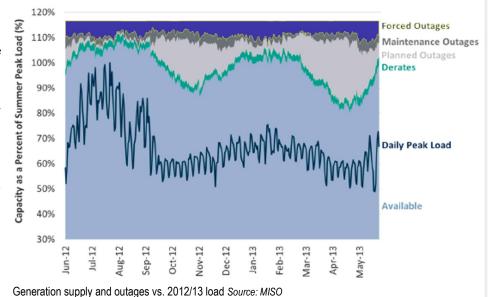
Officials said the proposal was driven by concerns over the year-round availability of resources such as demand response and generation imports. The RTO, which sets its reserve margins based on a summer loss-of-load probability of one day in 10 years, was awakened to its winter reliability risk in the 2013–2014 season, when forced generation outages peaked at 22 GW, almost 50% above the expected 15 GW.

The two-season proposal, which retains the current June 1-May 31 planning year, appeared to be a compromise between those who favored a four-season procurement, including the Organization of MISO States and the Independent Market Monitor, others who wanted monthly auctions and those who favored the status quo. (See <u>MISO Seasonal Procurement, Site Auctioning Proposals</u> Face Opposition.)

Task Team

The two-day stakeholder meeting also resulted in the announcement of a SAWG "task team" to recommend ways to accommodate merchant generators in MISO Zone 4 in Illinois, which unlike most of the RTO, allows retail choice.

The <u>move</u> followed an Oct. 20 FERC technical conference and a Nov. 19 policy session of the Illinois Commerce Commission



on the problems in Zone 4. (See <u>MISO</u> Stakeholder Process Under Scrutiny.)

The formation of the team came over the opposition of some stakeholders who said the RTO should delay action until after the ICC's second <u>session</u> on the subject, scheduled for this Thursday.

But Jeff Bladen, MISO's executive director of market design, told stakeholders Wednesday, "These issues are ripe whether we like it or not.

"If there was agreement on anything [at the Nov. 19 session], it was that Illinois is depending on MISO's markets as the primary mechanism to ensure resource adequacy," he said. "The process of asking for a task team was a dynamic one. It was a result of Illinois moving forward and describing that MISO needed to more proactively address the issue."

Bill Booth, of the Mississippi Public Service Commission, asked if MISO will develop rules that would work for both retail choice states and traditionally regulated states.

"Our goal would be to find solutions that are tailored and meet the needs of the states like Illinois with retail choice, but at the same time, we need to ensure that we ... meet the needs of non-retail states," Bladen said.

He said MISO is not looking to change states' planning processes. "I think what's been identified in Illinois is a gap," he said. "It is a very targeted, surgical matter that

needs to be tackled."

Illinois Senior Assistant Attorney General Susan Satter told stakeholders that the creation of a team could be "somewhat premature."

"It sounds like Illinois has directed MISO to address this ... I think there were several avenues that were being discussed and explored. So I think it needs to be kept within that perspective," Satter said.

Kevin Murray, chair of MISO's Advisory Committee, objected to the creation of a task team, arguing that stakeholders should have been given advance notice of a vote to create a group.

Supporters cited SAWG rules, which they said do not require a vote to form a task team. "This is a topic that pretty well suits the business for what a task team does," said SAWG Chairman Brian Glover, markets compliance and policy analyst for Great River Energy.

Urgency Needed

Glover said he favored "reaching a productive end" instead of inaction and delays.

Marka Shaw, director of wholesale market development for Exelon, also called for urgency. "There are retirements occurring in southern Illinois," she said. Dynegy cited a poorly designed capacity market in Illinois

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ITC Midwest Accused of Overcharges in Depreciation Dispute

By Amanda Durish Cook

ITC Midwest is overcharging its customers for network upgrades because it isn't applying for tax breaks to which it is entitled, customers and Iowa officials told FERC last week.

Among the projects affected is Wisconsin Power and Light's 201-MW Bent Tree Wind Farm in southern Minnesota.

In an unexecuted facilities services agreement <u>filed</u> with FERC, ITC said it needs \$38.8 million in network upgrades to support Bent Tree's generation. It sought to bill WPL \$418,020 monthly over 25 years.

WPL asked FERC last week to reject the rates, claiming the charges are excessive because they fail to reflect the "bonus" depreciation that ITC could claim on its federal taxes (ER16-206).

WPL's sister company, Interstate Power and Light in Iowa, filed a motion to intervene on Nov. 24, saying it could face an identical situation over its Marshalltown Generating Station, which is interconnecting into ITC's transmission system in Iowa.

"IPL has estimated that ITC Midwest's annual revenue requirement is roughly \$18 million higher in 2015 than it would have been had ITC Midwest taken available bonus depreciation in prior years in which it was eligible to do so. This results in an ITC Midwest transmission rate which is approximately 5% higher, unnecessarily increasing charges to ITC Midwest's customers — including IPL and its customers," IPL stated in its motion.

The Iowa Office of Consumer Advocate, Iowa Consumers Coalition, Iowa Utilities Board and Resale Power Group of Iowa have all filed to intervene in the matter.

"The IUB also understands that when bonus depreciation is utilized, it is done so on all capital investments within a given class of assets in a given year, not just selected projects. Thus, ITC Midwest's choice to not utilize bonus depreciation will affect not only the Bent Tree or Marshall Generating Station network upgrades, but could affect all capital investments in the asset class, including investments elsewhere in the ITC Midwest transmission system, which could



Bent Tree Wind Farm Source: Alliant

directly affect Interstate Power and Light's customer costs of transmission service," the Iowa Utilities Board <u>said</u>.

Likewise, the Iowa Consumers Coalition said ITC should "articulate a sound rationale for not electing to take bonus depreciation."

ITC did not respond to a request for comment.

MISO Proposes Two-Season Capacity Market, Appoints Team to Address III. Zone

Continued from page 3

when it announced last month that it would close its 465-MW Wood River Power Station in 2016.

The task team is expected to have an approximate six-month lifespan and convene in time to deliver preliminary recommendations at the next SAWG meeting in January.

Shoulders Ignored?

Shaw was among several stakeholders who complained that the proposed two-season capacity structure ignores the spring and fall shoulder periods, when peaks are much lower.

Shaw said a planning auction modeled after two seasons isn't feasible in states with deregulated markets. "What MISO's doing here just won't work for what we're doing in Illinois. We're going to be requesting something different," she said.

The draft plan says MISO's current struc-

ture does "not explicitly ensure transparency or sufficiency of resource adequacy throughout the year. In addition, stakeholders expressed an interest in a less-thanannual requirement to account for the seasonal diversity, thus providing additional flexibility to meet load and reserve obligations."

MISO noted that several other regions also have addressed concern about winter reliability, citing ISO-NE's Pay-for-Performance and PJM's Capacity Performance programs.

Only New York currently uses separate summer and winter capacity periods, although Ontario is considering such a move, the report says. (See <u>Ontario Grid Looks Like the Past — and the Future — of the US.)</u>

MISO's recommendation calls for retaining the system-wide summer reserve margin (0.1 day/year LOLE risk) while setting the winter requirement based on a "negligible" one day in 100 years or 0.01 day/year LOLE.

The same targets would apply for local re-

source zones "if the zone's base model indicates zero LOLE risk in the winter season. If a zone's base model annual LOLE risk results in winter LOLE risk, then the annual LOLE will be driven to 0.1 day/year LOLE risk without deterministically dictating where the LOLE risk is distributed." The analysis would include seasonal capacity import and export limits.

MISO said it was unaware of other regions using season-specific reserve margin requirements.

The RTO would accredit resources based on continued use of the single real power test but using seasonal interconnection service for capacity accreditation, and with seasonal ratings for load modifying resources and intermittent generation. It also would reflect outages through a total capacity availability rate ("seasonal EORp").

Stakeholder feedback on the draft proposals is due Dec. 17. Design review of the constructs will begin in February with MISO unveiling proposed Tariff language. Tariff filings with FERC are targeted for March.

MISO NEWS



Market Subcommittee Briefs

MISO to Help Design Supercomputer MISO Wants to Know if Program for Grid Operations Data-Gathering Rule Sp

MISO's research and development team has been tapped to take part in a Department of Energy project to design faster and more accurate generation dispatch software.

MISO is partnering with Pacific Northwest National Laboratory, General Electric's Grid Solutions and Gurobi Optimization in the \$3.1 million, three-year High-Performance Power-Grid Operation (HIPPO) project, which is being funded by the department's Advanced Research Projects Agency-Energy (ARPA-E).

The project seeks to ease grid operators' optimization challenge — dispatching the cheapest generation to meet loads while maintaining reliability — through algorithms that allow supercomputers to conduct multiple equations simultaneously.

Jeff Bladen, MISO's executive director of market design, called HIPPO "a more robust approach to [security-constrained unit commitment] platforms that are used on a daily basis."

"This has become increasingly challenging as the power grid grows in complexity, including the addition of intermittent renewable energy, new regulations and the increased use of natural gas and smart grid technologies," Pacific Northwest National Laboratory said in a <u>release</u> on the project. "HIPPO could save consumers and power grid operators billions of dollars while also enabling greener and more sustainable grid operations."

Ramp timeline Source: MISO

MISO Wants to Know if Data-Gathering Rule Spells Tariff Changes, Audits

MISO officials will be watching closely today as FERC conducts a <u>technical conference</u> on its Notice of Proposed Rulemaking requiring RTOs and ISOs to begin registering market participants through common alphanumeric identifiers (<u>RM15-23</u>).

The NOPR, issued in September, would require market participants in RTOs to report extensive information about themselves and acquire a Legal Entity Identifier. FERC said the rule would aid its enforcement efforts by providing a way for identifying connections between companies and individuals. (See <u>Are You Two Related? FERC Wants to Know</u>.)

"We want to understand what the definition [of connected entities] is so we know what we need to do," said Dustin Grethen, a credit analyst at MISO.

Grethen said MISO needs to figure out if it will have to replace the Tariff term of "affiliate" with "connected entity" and whether the RTO would be required to audit connected entities based on the information contained in the submission alone. "MISO wouldn't be in a very good position to determine if [that data] is correct and right," Grethen said.

Aaron Fate, MISO's senior corporate counsel, said MISO found the NOPR a "little opaque."

Stakeholders: Ramp Capability Needs Explanation Before Product Testing

Stakeholders called on MISO to provide more information before beginning testing of the RTO's new ramp capability product in a month.

MISO expects to receive the software from its vendor this month, then have market participants take part in product testing in mid-January. The RTO is targeting an April 1 "go live" date pending a compliance filing with FERC.

The <u>software</u> is designed to alleviate net load variations by setting aside rampable capacity from the five-minute dispatch interval.

Dhiman Chatterjee, MISO's senior manager of market analysis, said "more detailed discussion" is needed on whether the software will be programmed for the existing hourly integrated prices or new five-minute dispatch settlements.

MISO's Kevin Larson said the software will be particularly helpful in managing wind generation.

Discussions on providing both up ramp capability and down ramp capability products began more than two years ago, and some stakeholders said the information posted on the topic has grown stale.

"A lot of ramp capability information is from 2013," observed Amber Metzker, Xcel Energy's manager of market operations.

Likewise, Travis Stewart, a senior associate with Gabel Associates, asked MISO to update the Q&A document to reflect its most recent information. Jeffery Moore, with Ameren Missouri's project management team, asked for a workshop to be held on the subject. Larson agreed; at press time, no date had been set for the workshop.

August 2013 MSC March 2014 MSC **FERC Order** Stakeholders endorsed MISO presented Tariff FERC approved Ramp Changes and asked for Capability Tariff changes MISO's conceptual design of Ramp Capability Products comments on September 16, 2015 MISO is preparing November 2013 MSC Filings with FERC Compliance filing MISO added provisions to MISO filed Tariff changes on address stakeholder request to June 10, 2014, with compliance for effective date filing December 30, 2014 incorporate offer flexibility of April 1, 2016

MISO NEWS



MISO Cuts Queue Admission, Adds 'Off-Ramps'

By Amanda Durish Cook

CARMEL, Ind. — MISO would reduce the price tag to enter its generator interconnection queue and provide "off ramps" for canceled projects under a final proposal presented Monday to the Planning Advisory Committee.

RTO officials said they reduced a proposed \$60,000 refundable deposit for study models based on stakeholder feedback. Instead, interconnection customers would have to pay a non-refundable \$5,000 study deposit.

Vikram Godbole, senior manager of MISO's generator interconnection planning group, said the non-refundable charge facilitates trust between the RTO and interconnection customers. "We need to have a relationship with interconnection customers before providing models because there's a lot of non-public information in these models," Godbole explained in a presentation during a special PAC meeting.

Discussions on the proposed reforms will continue at the Dec. 16 PAC meeting, after which the proposal will open to a final round of stakeholder comments. MISO plans to file Tariff changes by the end of the year, Godbole said.

MISO last revised its queue rules in 2012. The current revisions have been under development since August. (See <u>MISO Planning Advisory Committee Briefs</u>.)

In addition to reducing the study fee, MISO has also cut its proposed M4 milestone by

half; the new M4 cap will be set at \$5,000/MW instead of \$10,000/MW. The proposed \$2,000/MW floor remains intact. MISO said it was responding to stakeholder comments that existing milestones are high and act as a barrier to entry.

Additionally, MISO has relaxed some rigidity surrounding its queue, allowing interconnection customers to receive M2, M3 and M4 refunds on projects that withdraw before the first decision point, which doesn't occur until customers have the results of a system impact study.

Customers can also request provisional interconnection service up until their first decision point. Interconnection customers that request provisional interconnection service can now cancel their request, forgoing money spent on studies up to the cancellation date, and enter the definitive planning phase cycle.

"I think what we've done here is made this more flexible. If you want to proceed, that's fine. If you don't want to proceed, that's fine too," Godbole said. "The fact that we have these off-ramps built in; we expect that some interconnection customers will use them. I'm hoping these off-ramps will really help interconnection customers decide whether to get their M2 back." MISO's current queue doesn't allow for the refund of M2 payment for withdrawing projects.

MISO has also eliminated the potential for restudies after customers execute a generation interconnection agreement.

"If any conditions change, we're not going to

rope you back into a restudy," Godbole said.

"With the queue reform, one of the main goals was certainty," MISO Director of Interconnection and Planning Tim Aliff said, explaining that if interconnection customers "have done their homework" on project feasibility and economics before entering the queue, M2, M3 and M4 payments will come back to them.

Aliff added that projects that withdraw and forfeit milestone payments will benefit other projects that complete generation interconnect agreements. "Your costs are offset by what others have left in the bucket," he said.

Godbole said MISO has explored three transition options to the new queue rules, which are expected to take effect in February. In all three, MISO will grant existing projects priority over projects that have yet to join the queue. Interconnection customers will have the opportunity to request provisional agreements during the transition period to the new queue rules.

Godbole said MISO will produce a study calendar of pertinent dates after a transition plan is finalized.

"It's in our best interests to do everything as quickly as possible," Godbole said. He added that MISO plans to file Tariff changes by the end of the year. Discussions on queue reform will continue on Dec. 16's Planning Advisory Committee where no formal action is anticipated. The queue reform proposal will then move into a stakeholder comment period.

Market Subcommittee Briefs

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Testing, testing...

MISO is seeking to increase participation in its monthly load modifying resource drills.

Danielle Logsdon, senior project specialist, said the drills, held the second Tuesday of each month, exist to ensure reliability during shortage conditions and that generators know the process for emergency response.

According to MISO, as many as 55 market participants receive drill scheduling instructions every month. Of those, an average of six

persistently take no action, even after MISO makes follow-up calls.

"Consistently, it's the same [market participants] that do not participate," Logsdon said.

MISO's Demand Response Working Group asked that the Market Subcommittee take up the issue. Logsdon invited stakeholder suggestions on how to improve participation.

"I think the purpose for this surfacing is we've had the same level of non-participation from the same companies. That's how they want to run their shop," said DeWayne Todd, chair of the working group. Todd also asked stakeholders for suggestions on how to get non-participants involved in drills.

- Amanda Durish Cook



New NYISO Head: New York a 'Fantastic Opportunity'

Continued from page 1

(See <u>New NYISO Head Brings Broad Experience</u>.)

"I did have many opportunities, but this is the one I wanted," he said. "One of the things is the market changes I was trying to make happen at ERCOT I have found that New York had already done."

One of those is NYISO's look-ahead capability, which allows its operators to identify upcoming changes in conditions, such as equipment outages or changes in renewable energy output, and prepare the system to most efficiently respond.

"I was amazed to find that NYISO already had that in place and had already been applying those tools," Jones said.

Adding Transmission

Jones has extensive experience in what New York policymakers want — namely building infrastructure and integrating wind. "I hope my experience at ERCOT will show how to manage these things," he said. "My three initiatives, without joking, have always been transmission, transmission, transmission."

He said he was amazed that the ISO has had to curtail low-cost hydroelectricity because of the lack of transmission to move it west to east. But he's encouraged by the New York Public Service Commission's recent initiative to eliminate bottlenecks for downstate load centers.

The PSC is expected to vote this month on two transmission projects totaling an estimated \$1.2 billion. The proposed routes would satisfy Gov. Andrew Cuomo's Energy Highway goal to bring 1,000 MW of power generated upstate to areas of high demand in southeastern New York and New York City. (See NYPSC Staff Recommends \$1.2B in Transmission Projects.)

There are also transmission proposals to access wind resources in northern New York to help the state meet Cuomo's goal of 50% renewable electricity by 2030. "We can increase wind or renewables capacity by 50%, somewhere around 17.5 million MWh a year, from west and north to the rest of the state." Jones said.

Jones said the state's Reforming the Energy Vision will mostly effect change at the distribution network. "We expect we will be able to develop very quickly a platform for how that will work. We will be able to interconnect very quickly," he said.

Strategic Plan

On Monday, NYISO released its 2016-2020 Strategic Plan.

The plan addresses several trends:

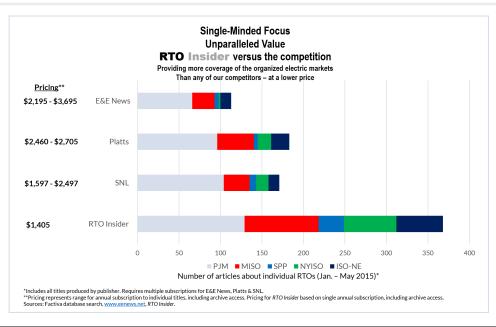
Gas-electric coordination: "The reliability of the bulk power system is increasingly linked to the performance of the

natural gas pipeline infrastructure, raising reliability concerns related to fuel delivery during periods of peak demand." The plan vows to improve coordination with the gas industry and develop market designs that promote fuel assurance among generators.

- Integration of distributed energy resources: The plan anticipates that DER will grow due to improving economics and public policies, influencing the design of the grid. "The NYISO will work to integrate such resources into its markets in a manner that enhances system efficiencies through increased demand elasticity while deploying new planning and operational tools to ensure visibility into system conditions and future needs as distributed energy resources proliferate."
- Federal and state policies: The ISO's markets and planning functions will have to respond with more complex market designs to accommodate the growing role of renewables and DER under the EPA Clean Power Plan and the New York State Energy Plan.

Shaking Hands with 500

Jones said he will implement the plan by engaging every employee. He started on his first day, standing at the entrance of a welcome barbeque to shake everyone's hand. NYISO employs more than 500.



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Entergy Rebuffs Cuomo Offer; FitzPatrick Closing Unchanged

By Ted Caddell

Entergy said last week it is sticking to its plan to close the FitzPatrick nuclear generating station, despite a rescue attempt by New York officials and an offer by Exelon to provide it fuel at cost.

Entergy announced last month that competition from low-cost natural gas generation will force it to retire the 838-MW plant in late 2016 or early 2017, when the plant would otherwise be shutting temporarily for refueling. (See Entergy Closing FitzPatrick Nuclear Plant in New York.)

Then came news that New York Gov. Andrew Cuomo wants the Public Service Commission to mandate that 50% of the state's electricity come from renewable sources by 2030. Cuomo also called for incentives to

keep the state's nuclear plants operating until then. (See <u>Cuomo: 50% Renewables by 2030, Keep Nukes Going.</u>)

At the urging of Cuomo administration officials, Exelon agreed to acquire enough fuel for FitzPatrick and to give Entergy until next June to decide whether to use it based on the clean energy mandate. The PSC said that the proposed "fuel bridge" would allow Entergy to delay its decision without purchasing the \$50 million worth of fuel now.

The offers weren't enough to change Entergy's mind.

"We have explored every legitimate commercial arrangement that might have changed the decision regarding Fitzpatrick's retirement," Entergy spokeswoman Tammy Holden told <u>The Post-Standard</u>. "There is no viable alternative left to consider. The plant will retire at the end of



2016 or early 2017, as we previously announced and have formally advised" the Nuclear Regulatory Commission.

NYISO Seeks OK for New Scarcity Pricing Rules

NYISO last week asked for FERC approval to change its scarcity pricing logic, saying the proposed rules will more closely reflect the real-time value of demand response (ER16-425).

Scarcity pricing determines the value of energy and certain ancillary services when DR resources are called upon to maintain system reliability. The purpose is to ensure that real-time prices reflect the costs associated with deploying DR, the filing says.

NYISO said the filing was prompted by New York transmission owners' concerns that its current methodology could result in uplift because of inconsistencies between prices and resource schedules.

NYISO is also proposing to increase the value of 30-minute reserves in the Southeast New York region from \$25/MW to \$500/MW, effective at all times. "This increase appropriately recognizes that [emergency demand response program] resources and [special case resources] have historically been called upon to protect reserves in SENY," the ISO wrote.

NYISO is asking FERC to accept the revisions by Jan. 29, 2016, to give it enough time to develop and deploy software changes. The proposed revisions would become effective on or before June 30.

NYISO implemented its current, ex-post scarcity pricing logic in 2013. The logic allows it to adjust real-time energy prices after resource schedules have already been established in the load zones in which DR resources are used.

- William Opalka

POSITION AVAILABLE Senior Director RTO and Regulatory Affairs

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Operating Committee Briefs

Manual Changes to Detail Unit-Specific Operating Parameter Adjustment Process Under CP

VALLEY FORGE, Pa. — PJM is drafting manual changes to document the parameter adjustment process under Capacity Performance rules.

The process allows a generation operator to request an adjustment if it believes its resource's physical constraints will prevent it from meeting the parameters assigned by PJM.

Related revisions to Manual 11: Energy and Ancillary Services Market Operations will be presented for endorsement by the Markets and Reliability Committee this month.

At last week's Operating Committee meeting, the RTO gave a <u>presentation</u> comparing the unit-specific parameter adjustment process with parameter limited schedule (PLS) exceptions.

Unit-specific adjustments would be permitted only because of ongoing, long-term operational limitations, said PJM's Alpa Jani. Staffing, for example, would not qualify as a physical operating constraint.

PLS exceptions will be used to address short-term, temporary issues such as equipment damage.

Adjustment requests must be submitted to PJM no later than Feb. 28 before the delivery year. If the situation arises after that date, a waiver must be obtained from FERC.

Members also reviewed PJM's new soak time parameter. Soak time is defined as "the minimum number of hours a unit must run in real-time operations, from the time the unit is put online (breaker closure) to the time the unit is at economic minimum or dispatchable."

Until the new parameter is added to PJM manuals, adjustment requests similar to the soak time definition will be documented in the minimum run time parameter, and soak time will be noted in PJM internal documentation so it can be updated when a long-term solution is implemented.

In a related matter, the Market Implementation Committee approved an <u>issue charge</u> presented by Bob O'Connell on behalf of PPGI Fund A/B Development to study the

Unit-Specific Operating Parameter Adjustments

- Parameters based on resource's operating design
- Parameters used to establish base or infinite operating values
- Adjustments: Permitted for ongoing, long-term operational limitations

Parameter Limited Schedule Exception

- Exceptions based on a changed physical condition
- Exceptions are limited or finite:
 - Temporary: 30 days or less
 - Period: 31 days to 1 year
 - · Persistent: At least 1 year

Unit-specific operating parameter adjustments vs. PLS schedule exceptions Source: PJM

process of requesting exceptions to the default parameter limited schedule. (See "Parameter Limited Schedule Exemption Process to be Reviewed" in <u>PJM Market Implementation Committee Briefs.</u>)

The work will be conducted as part of regular MIC meetings and will seek to identify improvements to existing practices for requesting and obtaining PLS exceptions. The group is expected to recommend manual and possible Tariff changes to the MIC by April.

Members Mull Performance Assessment Hour Notifications

PJM also gave the OC a presentation in response to stakeholder questions about <u>performance assessment hours</u> under Capacity Performance.

Generators are subject to steep penalties for failing to meet their capacity obligations during performance assessment hours — periods for which PJM has declared an emergency action. (Base capacity resources are exempt from such penalties except during the June-September summer peak season.)

Members discussed the best way for PJM to communicate the start and stop times of a performance hour. PJM is proposing to post the information in a banner on its Emergency Procedures web page. The notice would direct resource owners to a page where they will be able to find what is expected of them.

Several stakeholders said the information is so crucial that an alert should be placed on the PJM homepage.

PJM Assistant General Counsel Jen Tribulski cautioned that the placement of the notice on the site would not affect market sellers' responsibility to perform.

"You're excused from the penalties during the assessment hours if PJM didn't call on you," she said. "If we've called on you and we have not dispatched you down, you are expected to perform, regardless of whether there's any notification on our website."

Also under review is a new signal providing a "desired" basepoint that would be used during performance hours, but it's not clear whether the signal would recognize a resource's economic max or unforced capacity commitment.

Members also were told that all units must operate under their local reliability constraints, but having to do so will not excuse them from penalties for not meeting performance requirements.

Charter Approved for Metering Task Force

The committee approved a <u>charter</u> for a task force charged with reviewing metering policies and requirements and implementing best practices.

The group will consider classifications such as real-time telemetry versus revenue metering, generator versus transmission system metering and large generation versus distributed generation applications.

The task force will report recommended manual revisions to the OC. Its work is expected to take six months.

- Suzanne Herel



Market Implementation Committee Briefs

Members Endorse Method for Measuring Non-Summer DR

VALLEY FORGE, Pa. — PJM will use the default economic capacity base load (CBL) to measure the non-summer response of Capacity Performance demand response under manual and Tariff revisions endorsed by the Market Implementation Committee last week.

The <u>method</u> will allow PJM to bypass the more labor-intensive relative root mean square error (RRMSE) test. Extensive analysis has determined that the process would deliver accurate CBLs for most customers, PJM's Pete Langbein said.

Market Monitor Joe Bowring reiterated his objection to the method.

"We think that the proposed measurement verification for DR for the winter ... would permit double-counting, and that's not appropriate," he said. "The simple fact that it may be administratively difficult to do [the mean square test] is not a reason not to do it"

Problem Statement to Define Operating Parameters Approved

Members endorsed a <u>problem statement</u> to develop standardized definitions of operating parameters under Capacity Performance.

PJM proposed the initiative after discovering that market sellers and PJM had different interpretations of various parameters for CP and base capacity resources.

PJM wants to expedite the work of defining the terms before June 1, when the CP rules take effect for delivery year 2016/17.

The definitions are expected to impact Manuals 11, 15 and 28 and include such terms as soak time, start-up time, start-up cost and no-load cost.

Several stakeholders expressed concern over rushing through defining such important terms, and many agreed that the MIC is not the appropriate committee to handle the task.

Market Monitor Joe Bowring took issue with the idea that the work is time-sensitive.

"There is no urgency. The issues, to the extent that any exist, have been around for a long time," he said.

PJM Provides Update on Line-Loss Refunds

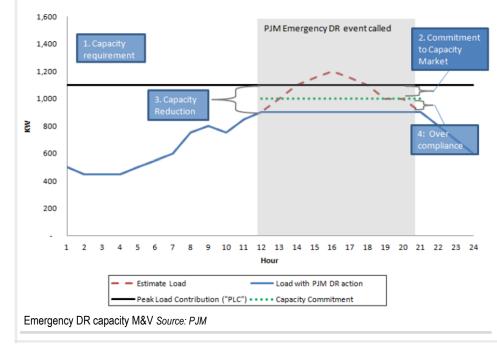
PJM CFO Suzanne Daugherty provided an <u>update</u> on marginal loss surplus allocation billing adjustments, responding to a recent FERC order regarding the seven-year-old issue.

Daugherty said PJM has completed the billing adjustments that were affirmed in FERC's November order. (See <u>FERC: PJM Entitled to Recoup Line-Loss Credits.</u>)

"Everyone who was owed a recoupment credit got it in full the summer of 2012," she said. If there is any money left to be refunded, it will only be going to members who paid default allocation assessments that summer, she said.

"There is no more charging related to this topic that I expect to occur," she said.

– Suzanne Herel



Planning and Transmission Expansion Advisory Committees Briefs

Distributed Solar to be Included in Load Forecast

VALLEY FORGE, Pa. — The Planning Committee approved <u>changes</u> to Manual 19 allowing distributed solar generation to be included in the load forecast model.

The group was split in its decision, with 77 voting yes, 18 voting no and 89 members abstaining.

Steve Herling, PJM vice president of planning, said adding distributed solar will lower the load forecast.

PJM's John Reynolds explained that to create a history of solar generation, planners used the generator attribute tracking system, or GATS.

"We know where they are, how big they are and how long they've been there," Reynolds said of the panels, which Herling noted are the ones not participating in the PJM market.

PJM NEWS



Planning and Transmission Expansion Advisory Committees Briefs

Continued from page 10

"We're not talking about big solar farms," Herling said.

Planners leveraged that with information from the National Oceanic and Atmospheric Administration to calculate where the sun was in the sky at various times and locations. Each panel was assigned to a weather station for information on cloud cover. Together, the data can estimate how much light was hitting the panels.

That calculation of solar output was aggregated to a zonal number and subtracted from the metered load, Reynolds said, noting that there is virtually no solar metered data available.

The second step was to forecast solar additions by state, for which PJM contracted IHS Energy. Planners took into consideration that some of the new solar likely would be replacing older equipment.

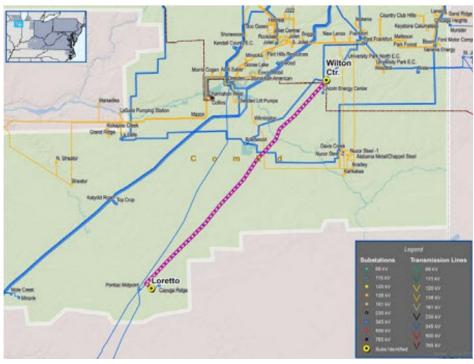
Planners want to break out solar generation because it is growing faster than other behind-the-meter generation and they want to get ahead of the trend.

"It's going to be important in the future. We're comfortable making the adjustment now with a procedure that might need refinement," Herling said. "It might not have a big impact now, but in five years it may. We want a procedure in place now for when solar takes off." (See "New Load Forecast Model, Related Manual Changes Adopted" in <u>PJM Markets and Reliability Committee</u> Briefs.)

Regardless of PSEG Wheel, 4 Reliability Projects Necessary

Even if Consolidated Edison of New York stops using the so-called PSEG wheel to deliver power into New York City, four baseline <u>upgrades</u> in northern New Jersey are still needed, PJM told Transmission Expansion Advisory Committee members. (See <u>Developer Questions Need for PSE&G Projects Without 'Wheel.</u>")

The four proposals, part of the Regional Transmission Expansion Plan, include the Sewaren storm-hardening project, two sections of the Bergen-Linden Corridor and the Edison Rebuild.



Recommended market efficiency project in ComEd zone Source: PJM

The cost allocation of three of the projects would change significantly in the absence of the wheel.

Currently, Con Ed and East Coast Power each share about half of the cost of the Sewaren upgrade. The change would move all of the cost to ECP.

All affected transmission owners would pay for the two sections of the Bergen-Linden Corridor under the current scenario. Absent the wheel, Con Ed's allocation would be moved to ECP and Hudson Transmission Partners.

Planners to Recommend ComEd's Loretto-Wilton Center Project

PJM planners in February will recommend the Board of Managers approve a market efficiency project to relieve constraints on a 345-kV line from Loretto to Wilton Center, III.

Proposed by Commonwealth Edison, the \$11.5 million project will mitigate sag limitations on the line and replace the station conductor at Wilton Center.

The projected in-service date is 2019.

PJM Continues to Study Effect of Clean Power Plan

PJM is updating its analysis of the economic and reliability impact of EPA's Clean Power Plan and expects to coordinate its work with MISO.

The primary study years will be 2023 and 2026. PJM also will look at years 2028 and 2030, but with less detailed modeling.

It will examine five mass- and rate-based scenarios for regional as well as individual state compliance.

States have until September to submit their compliance plans or request extensions from EPA.

The work is expected to be complete by July 31, and the TEAC will receive an update at its February meeting.

PJM released a reliability analysis based on the draft CPP in August, following an economic analysis published in March. (See <u>PJM Concerned About Lead Time on Transmis-</u> sion Needed for Wind.)

– Suzanne Herel

PJM NEWS



In case you missed it ...

(Originally published November 25)

FERC Questions Fairness of Artificial Island, PSE&G Cost Allocations

By Suzanne Herel

FERC ruled on Nov. 24 that PJM's cost allocation schemes for the Artificial Island and Bergen-Linden Corridor transmission projects may be unjust and unreasonable, ordering a technical conference to probe the issue.

The technical conference will "explore both whether there is a definable category of reliability projects within PJM for which the solution-based DFAX [distribution factor] cost allocation method may not be just and reasonable, such as projects addressing reliability violations that are not related to flow on the planned transmission facility, and whether an alternative just and reasonable *ex ante* cost allocation method could be established for any such category of projects," FERC said in its order (<u>EL15-95</u>).

Those wishing to participate may <u>submit</u> their requests by Dec. 18.

FERC accepted PJM's Tariff changes involving the cost allocations but suspended them pending the outcome of the technical conference.

Under PJM's rules, the cost of lower voltage facilities such as the Artificial Island and Bergen-Linden projects is computed up using the solution-based DFAX method. For regional facilities or "necessary lower voltage facilities," only half of the cost is allocated by DFAX, with the remaining expense distributed on a region-wide, postage-stamp basis.

In the case of the Bergen-Linden project, Consolidated Edison of New York and Linden VFT had complained to FERC that the DFAX method was inappropriate and assigned a disproportionate percentage of the cost to Linden, which would receive "negligible benefits." (See <u>Con Ed Rebuffed Again on NJ Cost Allocation Dispute.</u>)

Similarly, state agencies representing consumers in Maryland and Delaware, along with Easton Utilities Commission, Old Do-



Salem and Hope Creek nuclear reactors

minion Electric Cooperative and Linden VFT, argued that it was unfair to bill those states' customers for virtually all of the \$146 million price tag of the Artificial Island project, designed to fix a stability issue at the Salem and Hope Creek nuclear plants in New Jersey.

In response to the complaint, PJM conceded that the cost allocation may "appear disproportionate" but said its hands were tied by rules proposed by transmission owners and approved by FERC. (See <u>PJM: Artificial Island Cost Allocation Appears</u> 'Disproportionate.')

The DFAX methodology generally identifies reasonable beneficiaries of reliability projects based on power flows, it said. The Artificial Island project, however, is a stability fix, in which power flow is not the derived benefit.

The \$1.2 billion Bergen-Linden project intends to upgrade a short-circuit problem in the Public Service Electric and Gas transmission zone outside New York City. PJM

assigned \$629 million of the cost to Con Ed and \$52 million to PSE&G.

Responding to the ruling, PJM said, "FERC has determined that overall, the current method of allocating the costs of transmission projects is just and reasonable. However, in certain instances, the allocations led to complaints that individual results were unjust and unreasonable.

"Therefore, PJM will be pleased to support the FERC's process to explore alternative cost allocation methods for projects that may not fit into the current process."

FERC's order was welcomed by Delaware Gov. Jack Markell.

"This FERC decision is an important first step to protect Delawareans from a significant electric rate increase," he said in a statement. "I want to thank the FERC for its review and very sensible conclusion that the costs of a project designed to maximize power production and improve reliability in New Jersey should not fall entirely on Delaware and Maryland consumers."

SPP NEWS



FERC Rejects SPP Proposal for Seams Transmission Projects

By Tom Kleckner

FERC last week rejected SPP's proposal to create a new class of seams transmission projects, saying its plan was too broadly drawn (ER15-2705).

The commission's Nov. 30 order said that SPP did not distinguish "the criteria to be deemed a seams transmission project from the criteria to qualify under SPP's Order No. 1000 interregional processes." It said the revisions "do not contain any prohibitions or limitations to support SPP's assertions" that projects eligible for its Order 1000 interregional processes may not be classified and evaluated as seams transmission projects.

SPP had proposed seams transmission projects as a new category to fill a gap in its transmission planning. It said the proposal would identify potential transmission projects that "may fall outside the Order 1000 interregional planning process or may not be eligible for cost allocation under SPP's Order 1000 interregional processes," such as projects involving external entities that are not neighboring planning regions.

SPP's current rules designate transmission

Category	Regional Allocation	Local Zone Allocation
Highway (300 kV+)	100%	0%
Byway (100 kV to 300 kV)	33%	67%
100 kV and below	0%	100%

FERC rejected SPP's request to create a new class of seams transmission projects to supplement its approved highway-byway cost allocation. *Source:* SPP

facilities of 300 kV or above as "highway" facilities whose costs are allocated entirely on a region-wide, postage stamp basis. Facilities between 100 kV and 300 kV are "byway" facilities, with two-thirds of the costs assigned to the host zone and one-third allocated region-wide. Projects below 100 kV are allocated entirely to the host zone.

SPP proposed to define a seams project as one operating at 100 kV or above and costing at least \$5 million. It proposed a default regional cost allocation for such projects, with the RTO's Board of Directors able to choose an alternate allocation at its discre-

tion under certain conditions.

Xcel Energy protested the proposal, saying SPP had not provided "adequate analytical support" for the new category.

FERC agreed, saying the planning process for seams transmission projects "lacks clarity and does not adequately explain" how a seams project would progress from project identification to construction approval. It said SPP's proposal for projects identified through joint special studies or coordination agreements "does not adequately define the methodology it will use to evaluate the project's regional benefits."

FERC said it wasn't clear that regional review "will be transparent and include sufficient stakeholder involvement."

The commission said, however, that SPP could make project-by-project filings for non-Order 1000 facilities that "may relate to seams concerns with an associated cost allocation and [justification for] the specific cost allocation."

SPP legal staff expressed confusion over the ruling during a Dec. 3 meeting of the RTO's Seams Steering Committee, saying it is "still digesting" the order.

Its Work Complete for Now, CPP Task Force Takes a Break

By Tom Kleckner

An SPP task force preparing for EPA's Clean Power Plan suspended its work last week, having done all it can for the time being.

The task force spent what may have been its final face-to-face meeting Friday in Dallas discussing proposed comments to EPA and a staff-developed white paper assessing rate-based and mass-based compliance. The group will present the white paper — and its comments to EPA — to the SPP Board of Directors/Members Committee on Tuesday. The comments are due to EPA on Jan. 21.

The group agreed it had met its original charge. "I think we're done," said Golden Spread Electric Cooperative's Mike Wise, the task force's chair.

"There's not a whole lot left for this task force to do," agreed SPP Chief Compliance and Administrative Officer Michael Desselle, the task force's secretary.

The group determined it was too soon to address the implications of a proposed carbon-trading market or the RTO's role in it.

The draft white paper focuses on how best to determine the supply of allowances and credits and their monitoring, verification and tracking; allocation issues; leakage under mass-based plans; and reliability implications.

SPP Vice President of Engineering Lanny Nickell has taken the point in meeting with member legislative representatives and state air regulators. He told the task force he has been involved in "broad stakeholder discussions" in every state in SPP's footprint, with the exception of the Dakotas, Montana, Texas and Wyoming.

Nickell spoke most recently at Oklahoma Gov. Mary Fallin's energy conference in November. Nickell said he encouraged the state to develop a compliance plan despite Fallin's executive order in August directing



Left to right: SPP's Lanny Nickell, Okla. Gov. Mary Fallin and SPP's Mike Ross. Source: SPP

state agencies not to do so.

Nickell also said he is often asked when SPP will do an analysis on the final CPP in addition to the three studies it performed based on the draft rule. Dale Niezwaag, a senior legislative representative for Basin Electric Power Cooperative, said he would welcome such a study.

However, the task force decided against an additional study.

SPP NEWS



SPP, MISO Conclude Joint Study Process Wiser but Empty-Handed

By Tom Kleckner

MISO and SPP last week concluded their first joint study process, saying the exercise was a valuable learning experience even though it failed to produce a single interregional project.

Meeting in Dallas on Dec. 2, the MISO-SPP Interregional Planning Stakeholder Advisory Committee (IPSAC) reviewed stakeholder feedback and its next steps after a year in which it considered and ultimately rejected 67 potential transmission upgrades. Under the current stakeholder-designed process, the two RTOs conduct a coordinated study that can last up to 18 months, followed by two separate regional analyses.

"The process itself did what [it] intended to do," said David Kelley, SPP's director of interregional relations. "Unfortunately, we couldn't get any projects across the goal line. We have to find a way to get those done."

Eric Thoms, MISO's manager of planning coordination and strategy and Kelley's counterpart on IPSAC, said the session was an opportunity to collaborate with stakeholders to improve the process "so we can set ourselves up for success next time."

One of the sticking points is the so-called

"triple hurdle," created by necessary approvals from the joint-study process and each RTO's board. SPP and MISO initially identified three congestion-relieving upgrades that would qualify as interregional projects, but SPP recommended moving forward with only one, an 11-mile, 138-kV rebuild between South Shreveport, La., and Wallace Lake.

MISO declined to pursue any of the three.

The RTO had said in October it may revisit its decision on the Shreveport-Wallace Lake project, but this week it said that it no longer intends to pursue the project. The project is described in MISO's <u>2015 Transmission Expansion Plan</u>, which will be submitted at Thursday's MISO board meeting, but not listed among the approved projects in Appendix A.

Kip Fox, American Electric Power's director of transmission strategy and grid development in the southwest, called the Louisiana project's failure "very disheartening." He said AEP will eventually rebuild the 11-mile segment as a reliability project for SPP, "even though it provides significant economic value to MISO South."

"It's the right thing to do for ratepayers along the seam, even though MISO will not provide financial support for the project in the MTEP15," Fox said. Among the suggestions stakeholders provided to IPSAC was the idea to include task teams with stakeholder representation in the process for "specific topics and detailed discussions." However, the concept met with resistance over concerns it would create another level of approvals and diminish the IPSAC's transparency efforts.

Stakeholders suggested eliminating the "triple hurdle" by creating an interregional evaluation process that does not require separate regional reviews. Another suggestion was a cyclical 18-month process that aligns with the RTOs' transmission planning processes.

SPP is already working on changes to its transmission planning processes. (See "Work Continues on Transmission Planning Improvements" in <u>SPP Markets and Operations Policy Committee Briefs</u>.)

Both staffs agreed the interregional process had improved coordination between the two RTOs and increased the knowledge of each other's regional processes and stakeholders.

Staff will update the MISO-SPP Coordinated System Plan to include a report on the regional reviews by year-end. The IPSAC will next meet in the first quarter of 2016, focusing on potential improvements to interregional procedures.

CPP Task Force Breaks

Continued from page 13

"There are too many unknowns to do a study," Desselle said. "With the number of unknowns and the assumptions we would have to make, it would be too expensive."

But Wise cautioned the group, "That's not to say we can't change that view."

When discussion shifted to other actions SPP might take, its associate general counsel, Matt Morais, reminded the group the RTO is also working with its peers on the ISO/RTO Council to solidify its positions and determine further actions.

"To the extent there is agreement on these issues with other ISOs, that carries a lot more weight than doing it on our own," Morais said.

Briefs

SPP Moves Closer to Making First International Transactions

SPP is preparing to conduct its first international transactions through a joint operating agreement with SaskPower, the principal electric utility in Saskatchewan. SaskPower became an SPP seams neighbor with the Oct. 1 addition of the Integrated System. (See <u>Integrated System to Join SPP Market Oct. 1.</u>)

Staff told the Seams Steering Committee on Thursday that the JOA is pending execution of a billing agreement for emergency energy with NorthPoint Energy, SaskPower's marketing and billing agent. Once that agreement is executed, SPP will file with the Department of Energy for the necessary permits for international transactions.

With the recent resignations of Richard Ross (American Electric Power) and Roy Boyer (Xcel Energy), the committee has seven open positions.

SPP Sets Seventh Wind Peak in Fall

SPP, which has already set six wind-peak records this fall, established another mark Nov. 23 when it recorded 9,564 MW of wind generation at 9:45 p.m., just the second time it has eclipsed the 9,000-MW level. The RTO generated about a third of its electricity from wind at the time, below its record penetration level of 38.3%.

- Tom Kleckner

FERC NEWS



Tony Clark Takes One for the Team — and Fights Back for North Dakota

ANALYSIS: No Longer at the End of the Table, Lone Republican Takes on Larger Role

By Rich Heidorn Jr.

WASHINGTON — FERC, which faces monthly protests by global warming activists for approving natural gas pipelines and LNG terminals, was summoned to Capitol Hill last week to answer Republican criticism that it isn't clearing infrastructure permits fast enough.

It fell not on Chairman Norman Bay but on the panel's lone Republican, Tony Clark, to defend FERC's record on natural gas before the House Energy and Power Subcommittee.

Clark said that the commission had completed 92% of all applications within 12 months for the last decade. But that percentage is bound to fall, he said, because of the crushing volume of pending applications.

Since August 2014, Clark said, pending applications have spiked from 1,000 miles of pipeline with a capacity of 24 BCF/d to 4,600 miles and 50 Bcf/d. "I think it is going to be very difficult to maintain that high average when you have this volume of [applications]," said Clark, now the senior Republican on the commission with the departure in October of Philip Moeller.

While Clark talked of infrastructure, Bay focused his prepared testimony on his priorities as chairman. Commissioner Cheryl LaFleur addressed reliability and competitive markets, while Commissioner Colette Honorable spoke about FERC's role under the Clean Power Plan.

Oversight Ritual

Congressional oversight hearings are a ritual of Washington. Each member of the committee gets five minutes to ask questions. While many members use their time to make policy statements, the best questions have often been picked clean by the



Clark

time those with less seniority get their turn.

Clark faced much the same dilemma after becoming the junior member of the commission in 2012. "I don't have any questions," he would often tell staff presenters at the monthly meetings with a sheepish smile. "But thank you for your report."

But with the departures of Moeller, Jon Wellinghoff and John Norris, and the arrival of Bay and Honorable, Clark is now second in seniority only to LaFleur.

At the Nov. 19 commission meeting, he settled for the first time into what had been Moeller's seat, to the left of Bay at the head of the semi-circular table. "I've never been accused of being to the left of anyone on this commission," he said to laughter. He has become increasingly assertive in the last year, both at commission meetings and in speeches around the country. (See <u>Clark Seeks Cease Fire in FERC-State Turf Fights</u> and <u>FERC's Clark: Energy Markets Need Tweaks</u>, not Overhaul.)

In their opening statements last Tuesday, Energy and Commerce Chairman Fred Upton (R-Mich.) and Power Subcommittee Chairman Ed Whitfield (R-Ky.) chided FERC over what Upton called "problems with the timeliness of FERC approvals."

North Dakota's emissions target under the Clean Power Plan is "so punitive that I struggle to conceive of a way it can meet it in an affordable manner."

Tony Clark, FERC Commissioner

They also criticized the Clean Power Plan, with Whitfield saying he is concerned "that FERC is allowing itself to become a helpless bystander as EPA increasingly dominates the electricity sector and does so in ways that serve to exacerbate the very problems FERC is supposed to protect consumers against."

In keeping with the bipartisan ethos that has governed FERC since at least the Pat Wood era, the commission has taken pains not to get embroiled in the partisan fight over climate change and the CPP.

"Thank you for your question, congressman," the commissioners prefaced their responses to even the most uninformed or repetitive questions.

Clark's even-handed responses left little policy daylight between himself and his Democratic colleagues.

'Punitive' Target for North Dakota

But things got personal when he talked about the impact of the CPP on his home state of North Dakota.

Between the draft and final rules, Clark said, the state's emissions reduction target quadrupled from 11% to 45%.

This, he said, even though carbon emissions dropped 11% between 2005 and 2014 and even though the state is one of only a few meeting EPA's National Ambient Air Quality Standards.

"Utilities during that timeframe built a significant amount of wind power, in part as a hedge against carbon regulatory risk," said Clark, whose term expires in 2016 and is rumored to have interest in running for Congress himself. "Unfortunately, it turned out to be a hedge for which they will receive no credit. Additionally, the state's coal fleet is still relatively young, and has thus incurred recent investments for environmental compliance."

Clark said the state's CPP target is "so punitive that I struggle to conceive of a way it can meet it in an affordable manner," citing a state estimate that compliance through emissions trading could exceed \$400 million annually. It is, he said, "a staggering figure for a state of less than 750,000 people."

COMPANY NEWS

Exelon, Pepco Make Final Case for Merger in DC PSC Hearings

By Michael Brooks

WASHINGTON — Having achieved a settlement with Mayor Muriel Bowser's administration, Exelon and Pepco Holdings Inc. tried to persuade the D.C. Public Service Commission over the course of three days of hearings last week that their nearly \$7 billion merger is now in the public interest.

Carim Khouzami, chief integration officer for Exelon, and David Velazquez, Pepco's executive vice president for power delivery, were among those that Chairman Betty Ann Kane and Commissioner Joanne Doddy Fort questioned on the details of the settlement. Commissioner Willie Phillips did not ask any questions.

Regulators unanimously rejected the deal in August, finding that it was not in the public interest. The Bowser administration brokered the settlement, which was filed in October. D.C. is the last jurisdiction needed to close the deal, with New Jersey, Maryland, Virginia, Delaware and FERC all having given their approval. (See <u>Mayor's Settlement Puts DC PSC on the Spot in Exelon-Pepco Deal</u>.)

"In retrospect, we realize that our failure to present a settlement agreement made it a very difficult task for this commission to find the merger was in the public interest," Peter Meier, vice president of legal services for Pepco, said in an opening statement. "We're here today because a settlement was agreed to."

Rate Impact

The D.C. commissioners questioned the officials about the logistics of the settlement: how rate credits would appear on customers' bills, what the structure of the new company would look like and whose overdue bills would be forgiven.

Kane was interested in how the promised credits would protect against rate shock. Exelon promised \$14 million in direct credits to residential customers and \$25.6 million in credits to offset future rate increases the company expects to file. Kane estimated that the distribution portion of customers' bills would jump 20 to 30% in 2019 after the \$25.6 million ran out.

"Ultimately the rate cases are the determination of the commission [and] what they



D.C. Public Service Commissioners Joanne Doddy Fort, Chairman Betty Ann Kane and Willie Phillips Source: D.C. PSC

see as reasonable and prudent," Khouzami said. But "with this commitment, \$25.6 million worth of rates will never be paid by customers." Without the merger, Pepco would still seek similar levels of rate increases and "customers would still be subject to that without an offset," he said.

Fort asked how \$5.2 million in contributions to district workforce development programs constituted a "direct and tangible benefit" to ratepayers, required to prove the merger is in the public interest.

In a pre-hearing brief, Velazquez said the contribution will provide training to district residents in "sustainable jobs."

At the hearing, however, the executives were vague about the types of jobs residents would be trained for in the workforce development programs, and what exactly was meant by "sustainable."

Residents would get "a skill set needed to get a good-paying, secure, sustainable job in the district that will help benefit them for years to come, so I think there's a true benefit here." Khouzami said. The companies



Pepco's Peter Meier (left) and Exelon's Paul Bonney Source: D.C. PSC

have not made a firm commitment to hiring residents who participate in the programs, he said in response to a question from Fort. The funds are "really intended to provide the job training needed so that individuals can actually select the job that they want, whether it's at Pepco or somewhere else in the district."

"It is my hope that through this program, we'll also be working with the district and having a discussion about the type of jobs that Pepco will need as we move forward with the grid of the future," Velazquez said. "These are jobs that are related to helping drive renewable energy, driving energy efficiency, driving microgrids, driving the smart grid. All those things are going to help create a more sustainable electric grid and a more sustainable use of electric energy."

District Official also Questioned

The director of the district's Department of Energy and Environment, Tommy Wells, was the first witness questioned by the commission on Wednesday.

The commissioners peppered Wells with questions about how money in the district's Renewable Energy Development Fund and the Sustainable Energy Trust Fund has been used to make up for shortfalls in the district's general fund. Under the settlement, Exelon will contribute \$3.5 million to each fund.

Wells admitted that transfers from the energy funds, which must be approved by the D.C. Council, are not prohibited under the settlement. But, Wells said, "it is completely in alignment with the plans and vision for this administration to expend those funds exactly as they've been negotiated.

COMPANY NEWS

Exelon, Pepco Make Final Case for Merger in DC PSC Hearings

Continued from page 16

"I can't speak to the whims of the council, but I believe the council" will respect the intent of the administration, Wells said.

Wells, like Khouzami and Velazquez, was also vague about the workforce development funds. Fort asked what agency would receive them.

"That's a great question because we're working on that now," Wells answered. He mentioned the University of the District of Columbia and the Department of Employment Services as possible candidates, but it's not clear yet if the money would even go to the government, he said. If it does, City Administrator Rashad Young would ultimately decide which agency receives the funds, he said.

Wells also said "sustainable" jobs was meant to refer to both green and long-lasting jobs.



Tommy Wells Source: D.C. PSC

Wells was questioned first at the request of the D.C. government, as he had to catch an afternoon flight to Paris, where he accepted an <u>award for green energy</u> on behalf of the district from the C40 Cities Climate Leadership Group. The group, comprising 78 cities around the world, honored the district for its 20-year power purchase agreement with Iberdrola Renewables that will supply 30% of the government's electricity through wind power.

The announcement of the award — which was followed by applause in the room — came during the hearing on Thursday, as Pepco cross examined Bruce Burcat, executive director of the Mid-Atlantic Renewable Energy Coalition. Iberdrola is a member of MAREC, which opposes the merger.

Looking Ahead

With the administration and the district's public advocate on its side, Exelon's chances appear to hinge on winning over Kane or Fort.

Phillips had issued a partial dissent in August, saying that he would have supported a merger that would have brought "benefits for ratepayers, the local economy and the environment."

The settlement brokered by the Bowser administration includes \$78 million in cus-

tomer benefits, up from \$14 million in the company's original offer.

Post-hearing briefs are due Dec. 16, with reply briefs due Dec. 23. The record will then close, starting the countdown to a commission decision.

On Monday, four councilmembers <u>sent</u> an 11-page letter to the PSC urging it to reject the deal, saying it offers "short-term benefits that in the long-term have detrimental costs."



Protesters gathered outside the commission building Wednesday morning. © RTO Insider

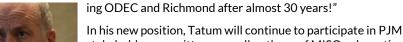
ODEC's Tatum Moves to AMP, MISO

Ed Tatum Jr., long one of PJM's most vocal stakeholders, will be taking his deep voice and courtly demeanor to MISO as American Municipal Power's vice president of transmission.

Tatum, who has more than 30 years of industry experience, previously was vice president of RTO and regulatory affairs for Old Dominion Electric Cooperative.

In his new post, he will be developing strategies to reduce transmission costs for Columbus, Ohio-based AMP, which has 132 members in nine states.

"I have known the folks from AMP for many years in both the PJM and FERC forums and have always enjoyed working with them. They are smart, innovative, eager to effectuate meaningful and positive change, and fair," Tatum told *RTO Insider*. "When this position opened up, we sat down, and I quickly realized this was an excellent opportunity for me — even with the consideration of leav-



stakeholder committees as well as those of MISO, advocating on transmission- and reliability-related issues. He also will be involved in interpreting and implementing regulations developed by FERC.

Tatum also has worked with Oglethorpe Power Cooperative in Tucker, Ga., and the Rural Electrification Administration in D.C.

He holds a bachelor's in electrical engineering from the University of Virginia and a master's in business administration from the University of Richmond.

"Costs and other issues associated with transmission are extremely important to our members," said AMP CEO Marc Gerken. "As transmission-dependent utilities, AMP members increasingly look to us for strategies and opportunities to control these costs."

– Suzanne Herel

COMPANY NEWS

Merchant Generators Lead Opposition to FirstEnergy-Ohio Settlement

Continued from page 1

including litigation, to prohibit the power purchase agreement from being enacted so as not to compromise the competitive market design, and we strongly encourage the PUCO commissioners to oppose and vote down this adverse anti-market public policy."

Dynegy said that FirstEnergy is already enjoying the benefits of the wholesale market and shouldn't need any further assistance.

"Recent market awards indicate that FirstEnergy is already set to receive significant revenue for capacity at all of their Ohio plants for the next three years," Dynegy said. "According to FirstEnergy's own data from their recent investor presentation at the Edison Electric Institute's Financial Conference, FirstEnergy's fleet has been awarded more than \$2.3 billion in revenues over the next three planning years from the PJM capacity auction with all of their generating plants clearing the most recent capacity auctions, which is significantly more than the amount expected at the time of FirstEnergy's original subsidy request. As part of the award, FirstEnergy's plants are now obligated to run through May 31, 2019, without the PPAs."

Reliability Threat

FirstEnergy has said that it needs the income guarantees, in the form of PPAs for its Davis-Besse Nuclear Power Station, the W.H. Sammis coal-fired plant and its share of Ohio Valley Electric Corp.'s generation output, to keep them profitable.

American Electric Power has a similar proposal pending before the Ohio commission. Without the guarantees, the companies say, they might have to retire their plants, threatening system reliability.

Sixteen parties, including PUCO staff and civic groups, signed on to the proposed settlement filed with the commission last Tuesday (14-1297-EL-SSO). Several other organizations, including the Office of the Ohio Consumers' Counsel, rejected the deal and joined in a motion to reopen the record.

FirstEnergy's first proposal, which PUCO staff rejected earlier this fall, called for income guarantees for 15 years. The settlement seeks income guarantees for eight

years. Ratepayers would make FirstEnergy whole if its generators were not profitable based on their capacity and energy sales in the competitive market.

Although PUCO staff approved the settlement, it still needs approval of the commission. FirstEnergy said it expects the commission to hold hearings on the proposal early next year.

Picking Winners and Losers

Talen joined Dynegy in promising to contest the deal in court if it is approved by the commission.

"As you are aware [PPL, one of Talen's predecessors] led successful legal challenges in the federal courts against generation subsidy initiatives in New Jersey and Maryland," Talen spokesman Todd Martin said Thursday. Before PPL's generation assets were spun off to form Talen, the company won court rulings voiding PPAs obtained by Competitive Power Ventures for two merchant plants. (See <u>CPV Md. Plant Goes Forward Despite FERC Ruling.</u>)

"We believe states with competitive electricity markets must let those markets operate without interference or subsidies, and should not in effect be picking winners and losers." Martin said.

P3 President Glen Thomas said PUCO staff's "about face" represents "corporate welfare at its worst."

"Forcing customers to buy overpriced electricity from uncompetitive plants to deliver windfall profits to FirstEnergy is a holiday offering that only the Grinch could support," said Trey Addison of AARP Ohio.

"This bailout would leave Ohio locked into outdated and costly coal and nuclear plants, when we should instead be working to transition to a cleaner and more competitive energy system," said Shannon Fisk, managing attorney with Earthjustice. Fisk was involved in settlement negotiations on behalf of the Sierra Club but withdrew in protest just before Thanksgiving.

Also weighing in was anti-nuclear group Beyond Nuclear, which blasted any deal that would result in the continued operations of FirstEnergy's Davis-Besse nuclear plant. "The ratepayers of Ohio would be gouged additional billions of dollars on their electricity bills to prop up the uncompetitive Davis-Besse atomic reactor, effectively being forced to fund 20 more years of radioactive Russian roulette at the problemplagued atomic reactor," Beyond Nuclear spokesman Kevin Kamps.

\$20/MWh Premium

Despite the opposition, UBS analysts predicted last week that the commission will approve the PPAs, which the analysts valued at \$68/MWh.

That would be \$20 MWh above market prices, based on Ohio's most recent auction for default service. PUCO in November accepted the results of AEP Ohio's third wholesale auction to determine the default price through May 2018, at \$48.29/MWh. That price will be blended in with result from other auctions to determine the price-to-compare for June 1, 2016, to May 31, 2018. The \$48.29 price was the result of a 13-round auction with six competitive suppliers participating.

On Monday, UBS <u>upgraded</u> AEP to "buy" on the expectation that it will win PUCO approval of its deal.

FE: Looking out for Ratepayers

For its part, FirstEnergy said it wasn't surprised to see the blowback from competitors.

It said it alone is looking out for Ohio's rate-payers. Although residential ratepayers would pay an extra \$3.25 to \$3.50 a month during the first year of the deal, the company claims it will produce overall savings of about \$560 million. FirstEnergy's projections, which assume sharply higher natural gas prices in the latter years of the deal, have been widely disputed.

"FirstEnergy has stated from the outset that customers will likely see a monthly charge in the first three years under this arrangement, with the charges converting to credits for customers for the remainder of the eight-year term," FirstEnergy spokesman Doug Colafella said Friday.

"Out-of-state power producers opposing our plan are betting on sharply higher power prices in Ohio down the road, so naturally they would oppose putting safeguards in place to protect our customers," Colafella said. "Our proposal is that safeguard."

COMPANY BRIEFS

NRG's Crane Resigns, Green Push not Producing

Just three months after admitting that its push into green energy wasn't producing returns for shareholders, NRG Energy CEO David Crane announced his resignation. Chief Operating Officer Mauricio Gutierrez will assume the role.



Crane

Under Crane's helm, NRG launched a billion-dollar push into rooftop solar, wind energy and car charging stations. But the company in September announced plans to return to its core conventional generation business. NRG stock has plummeted 60% so far this year.

Crane took over as CEO in 2003, when it was a regional power producer in bankruptcy. It became one of the nation's largest owners and operators of solar facilities.

More: Wall Street Journal

NRG Shedding Plants To Fix Balance Sheet

NRG Energy said it is selling two power plants for \$138 million to reduce debt and

improve cash flow.

In one of his last official announcements before resigning, NRG CEO David Crane said the plant sales are part of a "reset" process. "By streamlining our fleet, we can create additional value for our shareholders and meet the needs of our customers with reliable, efficient and economic power," he said.

NRG is selling its 535-MW, waste coal-fired Seward plant in Pennsylvania to Robindale Energy Services and its 352-MW, natural gas-fired plant in Shelby County, Ill., to The Woodlands-based Rockland Capital. NRG said the two plants would need about \$17 million in maintenance in the next three years.

More: Fuelfix

Century-old Iowa Plant To Go Offline in 2017

Alliant has said it will close its Dubuque Generating Station on Iowa's eastern border in June 2017. The Mississippi River plant, which used coal as a fuel source before being converted to gas four years ago, only ran occasionally and was not necessary to maintain system reliability.

Alliant this year settled EPA allegations of Clean Air Act violations, agreeing to close

the plant in 2019 or face fines. The facility's 13 employees will be offered positions at other plants.

Alliant has no plans to sell the property, where a power plant has been in operation for more than a century. If it does, the city of Dubuque has first rights to buy it.

More: Telegraph Herald

Google Surpasses 2 GW In Clean Energy PPAs

Google announced it has signed six deals on three continents to buy 842 MW of clean energy, bringing its worldwide renewable power purchases to more than 2 GW. Google said it now supplies 37% of its power needs with renewable energy, and the company eventually wants to power all 14 of its data centers with green energy.

"We're going to get renewable energy any way we can, no matter what it takes," said Michael Terrell, who leads energy policy and market strategy for Google's global infrastructure team. The new purchase of solar and wind energy is enough, as Wired pointed out, to power two cities the size of San Francisco.

Duke Energy was involved in several deals with the search giant: One in North Carolina

Continued on page 20

FERC Approves Talen Energy's Revised Mitigation Plan

By Suzanne Herel

FERC last week granted Talen Energy's request to sell four generators totaling 1,351 MW to satisfy divestiture conditions the commission ordered last year in approving the company's spinoff from PPL and Riverstone Holdings (EC14-112-02).

The original order offered two divestiture options; the alternate proposal FERC approved last week was submitted by Talen in September. (See <u>Talen Seeks Change in Divestiture Options</u>.)

FERC said the plan was in the public interest and had a comparable effect on competition as the other options.

Talen already has announced sales agreements for the four plants.

One is the 399-MW Crane coal-fired facility in Baltimore, which is being purchased by an affiliate of Avenue Capital Group, a global

alternative investment firm, for an undisclosed sum. (See <u>Talen to Sell Crane</u>, <u>Gets FERC OK on Deals</u>.)

The remaining three are in Pennsylvania: The 704-MW combined-cycle Ironwood plant is being sold to a subsidiary of Trans-Canada, based in Calgary, for \$654 million. The Holtwood and Lake Wallenpaupack hydroelectric projects, with a combined generating capacity of 292 MW, are being bought by a subsidiary of Quebec-based Brookfield Renewable Energy Partners for \$860 million. (See <u>Talen Energy to Sell 3 Pa. Generators for \$1.5 billion</u>.)

Talen requested the third divestiture option after failing to negotiate a lease extension for its 158-MW combined-cycle plant in Bayonne, N.J., which was part of the original two options. The lease expires Oct. 31, 2018, and Talen has notified PJM that it intends to deactivate the plant the following day.

That plant provides steam to a tank terminal

storage facility, which owns the land on which the generator sits. That facility is owned by a subsidiary of the Australian conglomerate Macquarie Infrastructure.

Macquarie filed the only protest to Talen's divestiture request, saying the terms of Bayonne's lease have been known for the past 28 years — contrary to Talen's claims that the lease termination was "not foreseeable or reasonably certain to occur when Bayonne was first included in the mitigation options."

In its protest, Macquarie said it made an offer to buy the facility, "but the second stage of the bidding process was canceled before completion."

FERC's decision allows Talen to retain a group of generators known as the "Sapphire Units." To address the commission's concerns of horizontal market power, Talen will offer them into the PJM energy market within the 5004/5005 submarket at costbased offers.

COMPANY BRIEFS

Continued from page 19

for 61 MW of solar from a project in Rutherford County; and two others in Oklahoma for 401 MW of power.

More: The Washington Post; Wired; The <u>Oklahoman</u>

FirstEnergy Names Farley Vice President of Sales

FirstEnergy named Brian A. Farley vice president of sales, where he will be responsible for strategic planning and day-to-day operations. The division includes the governmental aggregation, large commercial and industrial, and residential and municipal channels.

Farley, who joined FirstEnergy in 1989, most recently was director of wholesale and provider-of-last-resort transactions.

He holds a bachelor's in electrical engineering from Cleveland State University and a master's in business administration from Baldwin Wallace University.

More: FirstEnergy

10 Former Burleson Lawyers **Open Pittsburgh Office**

The law firm of Frost Brown Todd is opening a Pittsburgh office with the addition of 10 attorneys formerly with law firm Burleson. The attorneys will join the firm's energy industry practice.

The office is the firm's 12th and expands its presence to eight states. Kevin Colosimo is the member-in-charge of the new office.

More: Frost Brown Todd

Judge OKs Breaking Up Former TXU into 2 Companies





Energy Future Holdings Energy Future Holdings won bankruptcy court Luminant approval last week to shed about \$30 billion in

debt and split into two separate companies.

The bifurcated EFH can exit bankruptcy in a few months, provided that Texas regulators bless the reorganization and the company wins an Internal Revenue Service endorsement of the tax structure behind the deal. Luminant, the company's unregulated generating business, will go to senior lenders, who are owed about \$24 billion. Oncor, the regulated transmission unit, will go to a coalition of lower-ranking creditors and Hunt Consolidated, a Dallas-based energy and real estate company.

With lower debt, the two companies should be in a better position to weather the difficult market conditions that caused the \$48 billion leveraged buyout to flounder about seven years after it was completed under the leadership of KKR and TPG Capital. The new plan wipes out the buyout sponsors' equity.

More: Fort Worth Star-Telegram

EFH Agrees to \$2M Settlement Over New Mexico Uranium Mines

Energy Future Holdings has agreed to pay \$2 million to help EPA clean up closed uranium mines it owns in northwest New Mexico.

The agreement, filed Dec. 1, settles a dispute with the Justice Department, which objected to the company's bankruptcy plans, claiming EFH was trying to skirt its environmental responsibilities. According to court papers filed by the government, EPA found uranium contamination was still present decades later after a now shuttered subsidiary extracted uranium from four New Mexico mines in the 1970s and 80s.

The agency estimated the cost of the cleanup at \$23 million.

More: The Dallas Morning News

Luminant Acquiring 2 Gas Plants For \$1.6B from NextEra Energy

Luminant, the power generation subsidiary of Energy Future Holdings, is buying two Texas gas-fired power plants for \$1.6 billion from NextEra Energy Resources. The deal is expected to close in the first quarter of 2016.

Luminant said its purchase of the 1,912-MW Forney Energy Center and the 1,076-MW Lamar Energy Center in Paris have been approved by the U.S. Bankruptcy Court in Delaware, which is overseeing the reorganization of EFH.

More: Houston Chronicle

Southern Co. Buys 51% Interest In Texas' Largest Solar Farm

Southern Co. is buying the controlling interest in a 157-MW planned Texas solar farm. its first solar investment in the Lone Star State.

The Atlanta energy giant said it bought a

51% stake for an undisclosed sum in the planned Roserock solar facility in West Texas near Fort Stockton. Canadian Solar Inc., which is developing the project, will retain 49% ownership through its Recurrent Energy subsidiary.

The Roserock solar farm will provide power to the city of Austin and surrounding areas through a 20-year power purchase agreement with municipally owned Austin Energy. Roserock is one of the largest solar facilities planned in Texas.

More: Fuelfix

El Paso Customers Oppose Proposed \$71.5M Rate Increase

About 20 people gave El Paso Electric's proposed \$71.5 million rate increase a thumbs down at an El Paso City Council hearing Dec. 2. The utility is seeking a 10.15% rate of return.

Most of those speaking at the hearing were solar advocates. They included homeowners with solar rooftop systems who said their rates would increase more than other residential customers, and solar system installers who said the utility's proposed new rate class for residential solar customers would discourage consumers from embracing renewable energy.

Representatives of Western Refining's El Paso refinery, the utility's largest customer, said the proposed increase has prompted the company to begin exploring the possibility of generating its own electricity.

More: El Paso Times

Aksamit Announces \$725M **Investment, 3 Neb. Wind Farms**

Aksamit Resource Management announced plans to build three wind farms generating 449 MW in southeastern Nebraska, representing a \$725 million investment.

The developer said it has filed with SPP for permission to hook up two of the wind farms to transmission lines owned by the Nebraska Public Power District. The projects include a 150-turbine farm spread over 30,000 acres with a capacity of 300 MW and a 76-MW project with 40 turbines on 8,000 acres.

Aksamit said a third project, a 40-turbine farm in Saline County that can produce 73 MW, will be up and running within the next two years.

More: Lincoln Journal Star

Transportation Bill Includes Efforts to Improve Grid Security

Continued from page 1

It also checked off an item on current Chairman Norman Bay's wish list. Testifying before the House Energy and Power Subcommittee last Tuesday, Bay said it was essential that the government have emergency powers to respond to a cyberattack.

"That emergency authority does not need to reside with FERC. It could reside elsewhere in the federal government," Bay said. "But someone needs to have it."

Presidential Declaration

Title 55 of the bill includes five "Energy Security" sections, including Section 61003, which authorizes the president to declare a grid security emergency in response to a geomagnetic storm, electromagnetic pulse, or cyber or physical attack. Such a declaration would authorize the energy secretary to issue emergency orders to protect or restore electric infrastructure critical to "national security, economic security, public health or safety."

The emergency orders could apply to the North American Electric Reliability Corp., regional entities and owners and operators of critical electric infrastructure.

The bill gives the secretary six months to develop rules of procedure regarding the exercise of emergency authority. FERC would be permitted to order cost recovery for such actions assuming the costs were "prudently incurred and cannot reasonably be recovered through regulated rates or market prices."

Entities complying with emergency orders would not be liable for violating the Federal Power Act, FERC orders or reliability standards as long as they did not act in a "grossly negligent manner."

Another provision, Section 61002, clarifies that generators won't be liable for exceeding emissions limits while operating under emergency orders. Such orders would be required to minimize environmental impacts and limited to 90 days but could be renewed.

Strategic Transformer Reserve

Section 61004 requires the secretary to submit a plan to Congress within a year for the development of a Strategic Transformer Reserve, including enough large transform-



Metcalf substation

ers (100 MVA or higher) and trailermounted emergency mobile substations "to temporarily replace critically damaged large power transformers and substations that are critical electric infrastructure or serve defense and military installations."

The provisions are a response to the April 2013 attack on Pacific Gas and Electric's substation in Metcalf, Calif.

Continued on page 26

FEDERAL BRIEFS

Moeller Calls for New Look at Order 1000

Former FERC Commissioner Philip Moeller, who helped steer efforts to reform regional transmission system planning that became Order 1000, told an audience last week that it is time to take a look at compliance with the landmark 2010 rule.

Moeller told a TransForum East gathering in D.C. that he was "kind of a lukewarm supporter of Order 1000." He decried what he called "Order 1000 fatigue," saying that some compliance filings were on their third or fourth iteration, and he called for FERC to look at what is and isn't working, and perhaps to make changes.

"I believe we've spent way, way, way too much time talking about the cost of transmission and way, way, way too little time talking about the value of transmission," he said. "The debate really focuses on cost, whereas I think the debate really should focus on value."

More: Electric Light & Power

Judge Dismisses Suit Challenging Va. Uranium Mining Moratorium

A U.S. District Court judge has dismissed a suit that sought to overturn Virginia's 1982 moratorium on uranium mining.

Virginia Uranium and three other companies sued Gov. Terry McAuliffe and various other state officials after Virginia denied a permit to mine an estimated 119-millionton uranium deposit in Pittsylvania County. Judge Jackson L. Kiser said that since the moratorium dates to 1982, long before McAuliffe was in office, current officials couldn't be named in the suit.

Kiser also dismissed the plaintiffs' argument that the federal Atomic Energy Act of 1954 gives the federal government sole regulatory authority over safety concerns at the heart of the state's moratorium. The federal act, the judge said, "institutes no permitting regime respecting nonfederal uranium deposits' conventional mining and does not otherwise regulate nonfederal uranium deposits or their conventional mining."

More: Richmond Times-Dispatch

DOE Teams with Israel On Clean Energy Projects



The Department of Energy and Israel's Ministry of National Infrastructure,

Energy and Water Resources chose six joint American and Israeli clean energy projects to receive \$5.1 million in funding. Energy Secretary Ernest Moniz said the Binational Industrial Research and Development Energy Program will help both countries develop cleaner energy.

The projects include remote metering and analytic tools for smart grids by Jerusalembased Ayyeka Technologies and Michiganbased UIS Holdings (\$1 million); and the development of software that would assess threats to birds by wind farms, by The Hebrew University of Jerusalem and New York -based Applied Biomathematics (\$500,000).

More: <u>Transmission & Distribution World</u>

REGIONAL

New England Supplies Deemed Adequate



New England electricity supplies new england should be sufficient to meet consumer demand this winter,

but constraints on the region's natural gas pipelines could pose a challenge to reliable fuel supplies for generators, according to ISO-NE. (See ISO-NE: Little Room for Error in Winter.)

The region will once again rely on the RTO's Winter Reliability Program to incentivize oil-fired power plants and natural gas generators that can access liquefied natural gas to procure sufficient backup fuel before winter begins. "The program has been a key factor in our ability to keep the lights on the last two winters," said Vamsi Chadalavada, executive vice president and chief operating officer of ISO-NE.

More than 45% of the total generating capacity in New England - about 13,650 MW — uses natural gas as its primary fuel. Natural gas generated 44% of the region's power in 2014, up from 15% in 2000.

More: ISO-NE

CONNECTICUT

Regulators Grant Approval To CPV Towantic Plant



The Department of Energy and Environmental Protection has issued the permits necessary for the 805-MW CPV Towantic

Energy power plant to be built in Oxford.

DEEP officials said in a statement that the plant "will comply with some of the most stringent air pollution control requirements in the country and meet emissions limits designed to protect human health and the environment." The CPV Towantic Energy power plant will operate primarily on natural gas, with the capability to use oil as a backup fuel.

The town of Middlebury and several property owners near the proposed site have challenged in court the Siting Council's approval of the plant in May.

More: New Haven Register

Palmco Power CT Supplier Investigated



Palmco Power CT, a third-party electricity supplier for more than 3,500 residents, is being investigated by the Pub-

lic Utilities Regulatory Authority for alleged deceptive marketing practices, according to Consumer Counsel Elin Swanson Katz. PU-RA is scheduled to hold public hearings on the allegations next week, and Katz is encouraging customers who feel they were subjected to Palmco's alleged intimidating marketing tactics to come speak.

Palmco has come under fire for charging some of the highest electricity rates in the state. The company has also been investigated by New York and New Jersey authorities for alleged improper practices. Katz said one New York settlement resulted in Palmco and its partners agreeing to pay more than \$2 million in refunds to consumers in that state, plus a \$200,000 state penalty.

"In aggregate, Palmco customers in Connecticut paid over \$412,000 more than the standard service rate ... in September alone," Katz said. Palmco recently stopped marketing to new customers in Connecticut after the state outlawed variable-rate contracts for residential customers.

More: Hartford Courant

ILLINOIS

Officials to Probe Steep **Cost of Chicago Gas Mains**

PE@PLES GAS.

State regulators are taking a deeper look at the escalating price

tag on a gas main replacement program for Peoples Gas, an Integrys Energy Group subsidiary based in Chicago.

The Commerce Commission will formally investigate whether Wisconsin Energy Corp. and Integrys conspired to conceal the escalating costs in order to win approval of their merger into WEC Energy Group. In November, Attorney General Lisa Madigan accused the companies of withholding details on the cost of the gas main replacement program, which is now estimated to cost \$8 billion.

"Our commissioners and staff believe the scope of this investigation is broad enough to ensure all instances of misrepresentations on this matter are properly adjudicated," ICC Chairman Brien Sheahan said in a statement. He said the commission would aggressively oversee reforms of the gas main replacement program "and will ensure that customers do not bear any costs of program mismanagement."

More: Midwest Energy News

MAINE

Utility Seeking Developer for State's Largest Solar Project

Madison Electric Works, a municipal utility, is seeking proposals for a 4-MW solar project to be located in the Madison Business Park. The company would buy power from the bid winner at a fixed price for between 20 and 30 years and eventually purchase the facility.

The utility, which provides electricity to about 2,300 customers in the town about 40 miles north of Augusta, says the project would cost about \$8 million and would be located on about 15 acres. It would be the largest solar project in the state after Bowdoin College's 1.2-MW solar farm.

More: Portland Press Herald

Court Strikes Down **Penobscot Wind Project**

A proposed \$100 million wind project lost its final appeal before the state's highest court, ending a six-year battle over the public's right to enjoy views unimpeded by wind turbines.

The Supreme Judicial Court upheld the Board of Environmental Protection's rejection of the SunEdison project, consisting of 16 turbines generating 48 MW in an area designated for wind-power generation.

Regulators had to weigh two competing aspects of state law: a developer's right to build a wind farm in a designated zone versus the public's right to scenic vistas from nine nearby lakes.

More: Portland Press Herald

MARYLAND

PSC Orders BGE to Slash Opt-Out Charge in Half

The Public Service Commission ordered Baltimore Gas and Electric to reduce the

Continued from page 22

monthly fee for residential and small commercial customers who opt out of smart meter installation from \$11 to \$5.50 in January. A one-time initial opt-out charge of \$75 remains in effect.

The commission ruled the lower charge was more appropriate given the current opt-out levels of 4%, compared with the predicted 1% assumption.

BGE also must report quarterly on the collection of opt-out revenues and the costs for servicing customers who choose to stay with meters that must be manually read.

More: Maryland Public Service Commission

MASSACHUSETTS

Clean Energy Industry **Experiences Growth Spurt**



CLEAN ENERGY energy sector workforce grew by 12% this year to 98,900,

its strongest growth since the state began tracking these jobs in 2010, according to a new report by the Clean Energy Center.

The publicly funded center that promotes clean energy says that the sector's employment has grown consistently for five straight years, up 64% since 2010.

Employment growth occurred statewide this year, although in the western region jobs increased by only 2.7%. The sector now represents 3.3% of the state's entire workforce, according to the report. Slightly more than half of the companies have 10 or fewer employees.

More: The Boston Globe

Power Interests Line Up Behind Imported Hydro



Canada's hydropower Québec companies and New England transmission

developers are teaming up to persuade the state legislature to pass a bill to compel National Grid and Eversource Energy to enter into long-term contracts to buy Canadian hydropower.

The consortium includes Brookfield Renewable, Hydro-Quebec, Nalcor Energy, TDI New England, Emera and SunEdison.

The import contracts would likely be hand-

ed out through a competitive bidding process. However, there's no guarantee that the price of the hydropower, including the costs of new transmission lines, would be cheaper than the market rates for electricity.

More: The Boston Globe

MICHIGAN

Consumers Energy Granted \$130M Rate Increase



Consumers Energy's electric rates went up Count on Us on Dec. 1 after the Public Service Com-

mission last month approved a 4.5% rate increase that will allow the utility to recover more than \$130 million annually, including funding for a natural gas plant in Jackson.

Rates will retreat slightly next April after the utility retires seven coal plants. The utility originally requested an increase of \$199 million.

More: MLive

MISSISSIPPI

Entergy Requesting To Cut Rates Again



Entergy Mississippi is poised to lower electric rates a second time this year because of falling natural gas prices, pend-

ing approval by the Public Service Commission.

Entergy collected an excess of \$48 million for fuel costs in 2015, even after a \$46 million rate cut went into effect in September, according to Mara Hartmann, an Entergy spokeswoman. Under state law, utilities must pass through increases or decreases of energy costs without a markup.

Under the proposal set to go into effect in February, the monthly bill of a residential customer using 1,000 kWh/month would drop from \$100 to \$93.

More: Associated Press

NEW HAMPSHIRE

Network Seeks to Limit **Infrastructure Projects**

The New Hampshire Community Rights Network, formed largely in reaction to major energy projects proposed in the state, has convinced a group of lawmakers to introduce a constitutional amendment that would grant cities and towns veto power over large-scale infrastructure projects.

The coalition consists mostly of communities that would host a portion of the Northern Pass hydroelectric project, the Kinder Morgan natural gas pipeline or industrialscale wind turbines.

Constitutional amendments are a long shot under any circumstances, and this one faces an uphill battle, according to New Hampshire Union Leader columnist Dave Solomon.

More: New Hampshire Union Leader

Politicians Line Up Against Pipeline



Several top state politicians have lined up against

a proposed Kinder Morgan natural gas pipeline, which would deliver Appalachian shale gas to New England. The list now includes the state's Republican U.S. senator, both representatives in Congress and the Democratic governor.

Sen. Kelly Ayotte sent a letter to local officials in towns potentially affected by the Northeast Energy Direct proposal, telling them she will oppose the project before FERC. Gov. Maggie Hassan and U.S. Reps. Ann McLane Kuster, a Democrat, and Frank Guinta, a Republican, have also expressed opposition.

The 36-inch diameter pipeline would pass through about 80 miles of the state. Kinder Morgan re-routed the pipeline through the state after opposition formed along its original path through Massachusetts. (See Northeast Energy Direct Files for FERC Certificate.)

More: New Hampshire Union Leader

NEW MEXICO

Xcel Energy Expands In State with 42-Mile Line



Xcel Energy on the first section

of a new 42-mile transmission line that it says will improve the state's power system. Xcel said the 230-kV line is the first step in a major expansion of the area's new bulk elec-

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tricity transmission network.

Xcel has also recently completed a 20-mile, 115-kV project in Lea County. Both projects include more than 250 miles of transmission and distribution lines and seven new substations

More: Albuquerque Journal

NEW YORK

Adequate Winter Electricity **Predicted in NYISO**



NYISO said the state's electric system has the

capacity to meet demand for power and the necessary operating reserves during extreme cold weather conditions through the 2015-2016 winter season.

NYISO anticipates a peak load demand of 24,515 MW for the winter season, comparable to last winter's peak of 24,648 MW. The state's record winter peak was set in 2014, during polar vortex conditions that pushed load to 25,738 MW.

Installed generation capacity in New York state this winter amounts to 41,312 MW. Net external capacity purchases, plus projected demand response, guarantees that sufficient electricity is available in the event of unanticipated power plant outages, transmission outages or unexpected increases in power consumption, NYISO said. (See Diversity Helps NYISO, but Gas Still Rules.)

More: NYISO

Town Wants Buildings To Go Off-grid

nationalgrid The upstate town of Nassau has formed a

committee to ex-

plore ways the town can install its own distributed power systems to disconnect municipal facilities from the area's electric utility.

Supervisor David Fleming said the town suffers frequent outages during storms because of aging utility equipment. The initiative would not affect residential or commercial services, just municipal operations such as the highway garage and the transfer station. Fleming said the goal is to have all town services operate independent of the grid by 2020.

National Grid spokesman Patrick Stella said this was the first that the utility had heard that the town was contemplating removing itself from the electric grid. "We will be reaching out to the town to find out exactly what their needs are and how we can best meet them," he said.

More: Times Union

OKLAHOMA

Advocates Criticize OG&E **Solar Demand Charges**

🕶 Solar advocates are criticizing Oklahoma Gas and Electric's proposal to as-OGE Energy Corp. sess a demand charge on customers with rooftop

solar installations as a way for the utility to protect its business model and to suppress the state's fledgling solar market.

At a hearing before the Corporation Commission, a former Ohio regulator testifying on behalf of OG&E said the proposed tariff for new distributed generation customers was an attempt to make billing more transparent. He said it would ensure those customers pay the right amount of gridconnection costs.

The proposed tariff would affect 15 current customers. The utility proposes to charge distributed generation customers \$2.68/kW of peak demand. Most households have peak usage of 6 to 8 kW, meaning the monthly charge would be \$16 to \$21 for a typical residential solar customer.

More: The Oklahoman

Commission Rejects OG&E **Environmental Compliance Plan**

After five months of deliberation, the Corporation Commission voted 2-1 to reject Oklahoma Gas and Electric's application for preapproval of \$1.1 billion in environmental compliance and replacement generation costs. The proposal would have increased residential customer bills 15 to 19% by 2019.

The commissioners voting against the proposal said OG&E hadn't provided enough information to allow preapproval of its application.

OG&E wanted permission to begin charging customers for \$700 million in upgrades needed to meet federal Regional Haze and Mercury and Air Toxics Standards. It also wanted preapproval to spend about \$400

million to replace its aging Mustang natural gas plant in western Oklahoma City.

More: The Oklahoman

PENNSYLVANIA

HIKO Energy Fined For Deceptive Practices

HIKO Energy must issue \$2 million in customer refunds, pay a \$1.8 million civil penalty, give \$25,000 to electric distribution companies' Hardship Fund and modify its marketing practices, the Public Utility Commission has ordered.

The penalties stem from "deceptive actions" following the polar vortex in the winter of 2013-14.

The company previously refunded \$159,000 to customers it had overcharged after having promised to give them rates lower than their utility's standard offer.

More: Pennsylvania Public Utility Commission; The Philadelphia Inquirer

RHODE ISLAND

Solar Development Conditions Eyed in Cranston

In response to public concerns about a proposed solar project, Cranston local officials have proposed an ordinance that would create "performance standards" for largescale solar projects that would regulate noise, soil removal and decommissioning after the project's useful life ends.

The developer of a proposed project, RES America Development, has promised that the solar farm will meet all of the conditions spelled out in the ordinance, although the legislation has not yet been enacted. RES proposes to lease land now mostly planted for corn to erect the solar farm.

More: Providence Journal

TEXAS

Lawsuit Seeks Decision on **Power Plant, Refinery Permits**

Four environmental groups are suing the state to force it to approve or deny longdelayed air pollution permit applications at five refineries and three power plants. By failing to issue permits, the Commission on

Continued from page 24

Environmental Quality is keeping the public from knowing how much pollution the companies are putting into the air, said Ilan Levin, spokesman for the Environmental Integrity Project.

The lawsuit says TCEQ is supposed to rule on permits within 18 months, but the commission has failed to approve permits submitted as long as six years ago. The Environmental Integrity Project is joined in the lawsuit by the Sierra Club, Air Alliance Houston and the Texas Campaign for the Environment.

Three coal-fired power generators were listed as defendants in the lawsuit: American Electric Power's Welsh plant in East Texas, Luminant's Oak Grove plant in Central Texas and the Sand Creek plant near Waco.

More: Houston Chronicle

VIRGINIA

Dominion's Plan for James River Transmission Towers Criticized



Concerned over a dwindling sturgeon **Dominion** population, environmentalists are oppos-

ing Dominion Resources' plan to erect 17 transmission towers in the James River.

Dominion says the transmission line and the towers are needed because new federal emissions restrictions are forcing the company to close two coal-fired plants in Yorktown. Without the transmission line, the utility says it may have to conduct rolling blackouts during usage spikes.

The Army Corps of Engineers is in the final phase of deciding whether the proposal should move forward.

More: The Washington Post

WISCONSIN

PSC Grants Xcel Fixed Charge Increase amid Criticisms

The Public Service Commission will allow Xcel Energy to increase its fixed monthly customer charge from \$8 to \$14. Xcel had sought an \$18 monthly charge.

The moves comes a year after the PSC approved similar increases for We Energies, Madison Gas and Electric and Wisconsin Public Service, and just a month after the commission boosted the monthly fixed-rate fee for WPS customers from \$19 to \$21.

More than 500 commenters filed objections to the rate hike with the commission. The state is approving increases in utility fixedrate charges at "exceptionally higher" rate than the regulatory agencies of other states, Tyler Huebner, executive director of the advocacy group RENEW Wisconsin, said in a statement.

More: Midwest Energy News

New Generation Boosts ERCOT's Reserve Margins Through 2025

By Tom Kleckner

ERCOT will add about 9.300 MW of additional capacity by 2019, relieving concerns that the grid's reserve margins would drop as load continued to grow, according to a new analysis.

The updated 10-year Capacity, Demand and Reserves (CDR) report released last week shows a continuing rise in planning reserve margins - topping 20% in the "next several years." The Texas grid operator's reserve margin has stood at 13.75% since December 2010.

The latest CDR shows about 6,250 MW of planned resources have become eligible to be included since the May 2015 report (a net of 3,660 MW after discounting wind nameplate additions). Planning reserve margins increased for all years except 2016.

Gas turbines and wind and solar farms account for much of the expected new capacity. ERCOT said solar capacity should increase from its current 193 MW of installed capacity to 1,789 MW by 2017. Nameplate wind capacity is expected to grow 45% to more than 4,200 MW over the same period, while natural gas capacity is projected to grow 1% to more than 51,000 MW.

ERCOT's director of system planning, War-

ren Lasher, said the new generation was responding to the state's continued growth. "We continue to see the demand for electricity here increase as more people and businesses move into Texas," he said during a Dec. 1 conference call.

"The generation mix is also growing and changing," Lasher said. He said some of the capacity growth could be offset by fossil unit retirements as "changing environmental rules begin to take effect."

ERCOT forecasts a peak of more than 70,500 MW next summer, growing to almost 78,000 MW by summer 2025.

Two years ago, ERCOT was predicting a 20% decrease in its reserve margin. The grid operator had come perilously close to rolling blackouts during a blistering summer of 2011 and plant construction was practically

Recent summer temperatures have not reached predictions and new capacity has come online since then, but ERCOT also revised its planning standards last year. Staff has incorporated growth trends in customer accounts, or premises, to better project regional demand growth.

"We have been able to provide a more accurate look at future demand and energy use," said Calvin Opheim, ERCOT's manager of load forecasting and analysis. "I've been

very happy with how our new forecasting model has performed."

The latest CDR forecasts peak loads averaging more than 500 MW higher through 2021 than the forecast used for the May CDR. ERCOT said the report is based on average weather over the past 13 years and includes additional electricity demand from a liquefied natural gas facility near Houston, which is scheduled to be fully operational by summer 2019.

The CDR's data on generation comes from information provided by resource owners.

The report counts as capacity 4,700 MW of coal generation ERCOT expects to retire as a result of EPA's Clean Power Plan and Regional Haze Program. The draft Regional Haze rule would require scrubber upgrades or retrofits at 12 coal-fired units by 2020. A final rule is expected in several months. The next CDR update is scheduled for release in May 2016.

ERCOT Sets Another New Wind Peak

ERCOT set a new record for wind generation Nov. 25 with 12,971 MW. That accounted for nearly 37% of the grid's load at the time (9:10 p.m.).

The wind peak is ERCOT's third since Oct.

Transportation Bill Includes Efforts to Improve Grid Security

Continued from page 21

At least two gunmen were believed involved in the attack on the 500/230-kV substation near San Jose, causing more than \$15 million in damage that idled the substation for nearly a month. The gunmen targeted transformer radiators, firing an estimated 150 rounds and hitting 10 of 11 banks.

Wellinghoff, who served as FERC chairman from 2009 to 2013, called the Metcalf attack "the most significant incident of domestic terrorism involving the grid" to date.

Wellinghoff a Lightning Rod

The former chairman found himself under fire after The Wall Street Journal quoted him in articles about a confidential FERC analysis that concluded the country's entire grid could be shut down for weeks or months by disabling only nine critical substations. Transformers are typically custom designed and can take 18 to 36 months to replace.

The newspaper did not identify the locations of those substations or its source for the study, but it quoted Wellinghoff saying "there are probably less than 100 critical high voltage substations on our grid in this country that need to be protected from a physical attack."

NERC, members of Congress and Wellinghoff's former FERC colleagues complained



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PECO Audubon substation, near PJM headquarters. © RTO Insider

that the disclosures had jeopardized, not improved, security.

Wellinghoff also came under scrutiny in February, when Department of Energy Inspector General Gregory Friedman warned that FERC's protection of information on the vulnerability of the grid is "severely lacking" and suggested that Wellinghoff had not been truthful when questioned about the disclosures. (See DOE IG Warns FERC Information Security 'Severely Lacking.')

Critical Electric Infrastructure Information

Section 61003 requires FERC to develop regulations governing how it classifies information as critical electric infrastructure information (CEII), including "appropriate sanctions ... for commissioners, officers, employees or agents of the commission who knowingly and willfully disclose critical electric infrastructure information in a manner that is not authorized." The section also exempts CEII from disclosure under federal, state or local public records laws.

The former chairman, currently a partner at the energy law firm of Stoel Rives, did not respond to a request for comment.

Pipeline Drills

The bill echoes steps taken by FERC and RTOs to improve gas-electric coordination following the 2014 polar vortex, when some fossil fuel plants had to shut down for lack of fuel.

It requires the energy secretary to improve DOE's assessments of supply chain problems and to streamline processes for obtaining temporary regulatory relief to speed up emergency response. It also mandates emergency drills involving state and federal

officials and oil and gas pipelines. (Section 61001, Emergency preparedness for energy supply disruptions.)

The final energy section, 61005, requires the secretary to propose within one year a method for evaluating how government policies impact energy supply and diversity, competitive energy markets, the U.S. balance of trade and national security.

The provision appears to be at least in part a response to complaints that EPA's Clean Power Plan will weaken fuel diversity by replacing coal-fired generation with gas and renewables. Its sponsor, Rep. Richard Hudson (R-N.C.), opposes the EPA rule.

More to Do

In her own testimony before the House subcommittee last week, Commissioner Chervl LaFleur suggested policymakers have more work to do



LaFleur

"I think that the [reliability] standards that we've put in place, which require every transmission owner to identify the most critical facilities and protect them, are an important step," she said. "But I think beyond that, a lot of the protection has to come from how we build the grid — building more redundancy so we kind of 'decriticalize' those places so that a physical attack won't cause as much damage, and building in more standardization so if something goes wrong we can share transformers more rather than having to build a custom one in every place."