

ISSN 2377-8016 : Volume 2016/Issue 7

February 23, 2016

NARUC 2016 Winter Meetings

Koppel's Doomsday Cyber Scenario Ignores Preparations, Critics Say

By Rich Heidorn Jr.

WASHINGTON — The National Association of Regulatory Utility Commissioners ended its winter meetings Wednesday with NARUC President Travis Kavulla's interview of broadcaster Ted Koppel, whose 2015 book "Lights Out" alleges the U.S. is unprepared for the threat of cyberattacks on the nation's grid.

Critics have accused Koppel of sensationalizing the threat and omitting key facts. But one might not have known that from the gentle probing Koppel received from Kavulla. The Montana regulator pressed Koppel on his contention that investor-owned utilities lack sufficient incentives to aggressively pursue cybersecurity. But he left unchallenged the author's claim that the electric industry can block FERC from imposing reliability standards that receive less than a two-thirds NERC membership vote.

"It's a unique situation where an industry, in effect, is granted the right to draw a line



NARUC President Travis Kavulla (left) and Ted Koppel © RTO Insider

under any restrictive legislation that the federal government might want to impose

Continued on page 2

FERC Likely to Eliminate Must-Offer Rule for West

BIACKOUT

By Robert Mullin

FERC last week proposed eliminating a market transparency rule imposed on the Western Electricity Coordinating Council (WECC) region during the height of the California energy crisis of 2000-2001,

from price manipulation.

Coordinating Council
(WECC) region during the height of the California energy crisis of 2000-2001, citing a decade of advances designed to protect state's organized electricity markets

The commission on Thursday ordered a Section 206 investigation into whether its West-wide must-offer obligation is still necessary in light of a progression of technical and structural developments that have improved the resiliency of California markets. But the wording of its order made clear the commission intends to end the 15-year-old policy (EL16-27).

"Due to the passage of time and significant changes to California's wholesale markets, the must-offer obligation established for the WECC in 2001 appears to have outlived its usefulness," FERC said.

FERC implemented the must-offer rule in June 2001 in response to what it called "serious market dysfunction" in California — the concerted effort by some of the region's generators to withhold power supplies to drive up prices in the now-defunct California Power Exchange.

The rule required most generators serving California to offer all capacity not already committed under bilateral agreements into the state's real-time market. The rule also required public and non-public utilities to post a daily log of available capacity on their websites, as well as to a site hosted by the Western Systems Power Pool (WSPP).

The must-offer and posting obligations were originally set to expire in September 2002, but a second commission order extended both requirements until "long-term market-based solutions" could be fully implemented in California.

In March 2015, WSPP sent a letter to then-Chairman Cheryl LaFleur, asking the commission to clarify whether the obligation was actually still in effect, given that the event precipitating the rule — the Western energy crisis — no longer existed.

Continued on page 35



More NARUC 2016 Coverage

- FERC Won't Revisit DR Pricing (p.4)
- Bay: 'Too Soon to Say' for PURPA Changes (p.5)
- Discussion Briefs (p.6)

Also in this issue:



CO₂ Emissions Increase in ISO-NE (p.8)

FERC Does 180 on Local Tx Cost Allocation in PJM (p.19)



Records Fall Again as SPP Convenes Wind Summit (p.23)

ISO-NE News (p.8-9)
MISO News (p.10-17)

NYISO News (p.18)

PJM News (p.20-22)

FERC News (p.24-25)

Company News (p.26-29)

Briefs: Company (p.29), Federal (p.30), State (p.32)

RTO Insider

ERCOT ■ ISO-NE PJM

Editorial

Editor-in-Chief / Co-Publisher Rich Heidorn Jr. 202-577-9221

Contributing Editor Ted Caddell 434-882-5589

Production Editor Michael Brooks 301-922-7687

Correspondents

MISO

Amanda Durish Cook 810-288-1847

Suzanne Herel 302-502-5793

SPP/ERCOT

Tom Kleckner 501-590-4077

ISO-NE/NYISO

William Opalka 860-657-9889

Business and Advertising

Chief Operating Officer / Co-Publisher Merry Eisner 240-401-7399

Marketing Assistant Meagan Nelson 301-983-0375

RTO Insider LLC 10837 Deborah Drive Potomac, MD 20854 (301) 983-0375

Subscription Rates:

	PDF-Only	PDF & Web
Annual:	\$1,175.00	\$1,425.00
Quarterly:	315.00	400.00
Monthly.	125 00	150 00

Discounts available for corporations purchasing multiple subscriptions, non-profits, trade associations, government agencies, law firms and small businesses.

See details and Subscriber Agreement at rtoinsider.com.

NARUC 2016 Winter Meetings

Koppel's Doomsday Cyber Scenario Ignores **Preparations, Critics Say**

Continued from page 1

upon it and say 'Sorry, we don't accept it,'" Koppel said. "You're all aware of the fact that ... if FERC proposes something to NERC, NERC takes a vote on it and unless there is a two-thirds majority of NERC members - of the 3,200 or so U.S. power companies - unless they have two-thirds majority vote in favor, it is not accepted. The federal government has no unilateral power to impose legislation on the power industry."

NERC Responds

NERC CEO Gerry Cauley, who was in the audience, disputed Koppel's statements in an interview afterward.



"He's missing the part where FERC can direct us to do a standard," Cauley said. "We have the physical security, upgrading the cybersecurity standard, the GMD standard [that were ordered by FERC]. So when they tell us to do a standard, it's not optional. And we actually have a backstop in our procedures ... which says if the industry fails to approve a standard by the majority vote that we've been directed to do, our board takes over and approves that standard.

"We would never let that fail. And it's never failed at this point. ... Our continued existence as the [Electric Reliability Organization] is dependent on being responsive."

Cauley said allowing NERC members to vote on standards is "valuable because it shows their support, that it's a practical standard, the costs being passed to the

customer are reasonable and there's not going to be any litigation around it once it's done. ... There's a value-add for having a vote, but it's not the end. There's no veto power by industry."

Koppel's publisher, Crown, did not respond to requests for comment on the criticism. FERC declined to comment.

Kavulla: Precise Language Needed

In an interview Friday, Kavulla defended his questioning of Koppel and said he was aware of controversy over the book.

He said both Koppel and Cauley — who complained to the NARUC president after the session — need to be more precise in their language.

"I'm not defending Ted Koppel. It seems to me clear that when he said the federal government had no unilateral authority. I think technically that's untrue," Kavulla said. "But what Gerry Cauley has told you is inaccurate or at least slightly misleading. Mr. Cauley is defending an approach where industry works to write regulations that regulate itself under generic direction by FERC ... and then you seem to have Ted Koppel arguing the opposite position: that this industry is too sensitive to leave it up to regulations written by industry and that the federal government should take a more proactive role. I don't know which is right."

Although FERC can order standards, "it doesn't proscribe what the standard should include," Kavulla continued.

"There is a so-called backstop in theory, but to be clear that has never actually happened. Gerry Cauley uses the present tense voice in saying 'Our board takes over.' The one thing Gerry Cauley isn't telling you is that has never occurred."

Continued on page 3

Corrections

- In the Feb. 16 profile on ERCOT CEO Bill Magness, RTO Insider misstated the first name of one of his predecessors, Bob Kahn. The story also misstated the length of time Magness spent as a partner at an Austin law
- firm. He was a partner for 10 years.
- The Feb. 16 issue omitted the names of two new segment alternates at ERCOT, Invenergy Energy Management's Mark Soutter (Independent Generators) and CenterPoint Energy's Kenneth Mercado. (Investor-Owned Utilities).

Koppel's Doomsday Cyber Scenario Ignores Preparations, Critics Say

Continued from page 2

EEI Weighs In

One industry expert who was interviewed by Koppel for the book said the author seemed uninterested in any information that didn't support his thesis.

"We've heard this trope before: It's the fox guarding the henhouse," Scott Aaronson, the Edison Electric Institute's managing director for national security issues, said in an interview. "Every other piece of fact proves that's not the case."

Aaronson said the NERC standards drafting process follows American National Standards Institute rules. "It is an open process. Anyone can participate," he said. "We think that the process works very, very well despite Mr. Koppel's protestations."

Aaronson said Koppel also ignores "the important partnership that has developed between the government and owners and operators of critical infrastructure," including the Electricity Subsector Coordinating Council, which includes 30 CEOs of operating companies and trade groups that meet three times a year with senior federal government security officials.

"He came to this with a thesis," said Aaronson, who acknowledged he had not read the entire book. "It was effectively that the government is inept, the industry is profit-motivated and our only option is to buy canned goods."

Cauley agreed that Koppel appeared to dismiss the industry's preparations, particularly its plans for the grid's recovery after an attack.

Koppel "came to this with a thesis. It was effectively that the government is inept, the industry is profitmotivated and our only option is to buy canned goods."

Scott Aaronson, Edison Electric Institute

"It's a very serious area of concern cyberattacks can happen. Our systems are particularly well guarded, but you can never say it won't happen," Cauley said. "I think he's just not as aware of the things that have been done in preparation. ... There are playbooks that exist that talk about roles and responsibilities. We exercise them thoroughly. The Grid Ex III, the exercise we went through for two days [in November], was actually more severe than his scenarios and we learned a lot. We found out what we had, what we didn't have. We iterate on that every two years to keep getting better." (See Two-Day GridEx III Tests **Vulnerability to Terrorist Attacks.**)

"Whoever [Koppel] got to talk to, he needs to talk to some more people to get the whole story," Cauley continued.

In an earlier session, retired Gen. Keith Alexander, former director of the **National Security** Agency, said the federal government needs to increase its information sharing,



and the speed at which it does so, to address cybersecurity threats. "The government

[has to] share what it knows about these threats. My experience in dealing with industry is they knew about 25% of what the government did. That's insufficient. We've got to address that."



Marcus Sachs, NERC's chief security officer and the head of the **Electricity Information** Sharing and Analysis Center, agreed. "The offense needs to inform the defense. There's a lot

of really good national capabilities that are locked up [inside the] classified world. But those techniques need to be known to the defenders."

Bigger Question?

Kavulla said the issue of NERC's voting rules shouldn't distract from the broader policy debate: Is it better to have stakeholders write standards subject to federal oversight, or should regulators write the rules subject to stakeholder feedback?

"How different would the standards look," he asked, "if they were not subject to a twothirds vote?"



Rob Gramlich, the American Wind Energy Association's senior vice president for government and public affairs, said transmission built over the last decade to serve utility-scale renewables has had benefit-cost ratios of two- or three-to-one. But he said cost allocation disputes have been obstacles to more transmission growth and that FERC Order 1000 hasn't delivered on its promise. "In our view, it moved the ball forward, but there's a lot to be done," he said. "There really isn't much interregional planning at all. There isn't any meaningful consideration of public policy requirements... There's just a lot of unexploited economic opportunity. A lot of efficiency left on the table." © RTO Insider

FERC Won't Revisit Demand Response Pricing

By Rich Heidorn Jr.

WASHINGTON - FERC won't be revisiting the demand response compensation rules under Order 745, commissioners said Monday.

After the Supreme Court upheld Order 745 last month, Commissioner Tony Clark urged the commission to reconsider the order's requirement that RTOs pay DR the same LMPs as generation, which he said "continues to be widely panned by market experts." (See Clark Calls for New Look at Order 745.)

But at the National Association of Regulatory Utility Commissioners winter meetings, Chairman Norman Bay and the commission's two other members, Cheryl LaFleur and Colette Honorable, said they had no intention of revisiting the issue.

"I think that the Supreme Court got it right," Bay said in a brief interview after a question-and-answer session with NARUC President Travis Kavulla in front of

hundreds of regulators and industry stakeholders.

Bay told Kavulla, "I don't see [FERC undertaking] any major initiatives" as a result of the court's ruling that the order did not intrude on state jurisdiction and that its compensation scheme was not arbitrary and capricious. "I think it's really about implementing Order 745 at this point."

Honorable said afterward that she agreed with Bay. "I believe the court spoke very clearly. ... I don't see a need to revisit compensation because the courts have upheld" FERC's order, she said.

LaFleur, the only member of the current commission who cast a vote on the 2011 order, said she had no reason to second guess her position regarding compensation. "It's just starting to be actually used now as the cloud [of litigation] is lifted," she said.

The commission's majority, led by former Chairman Jon Wellinghoff, said full LMP was appropriate because rates should reflect the service provided rather than the

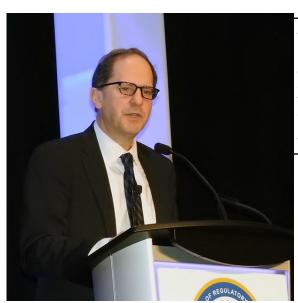
provider's cost. The commission also said it would be difficult to establish "G" in the formula because retail rates vary within states and over time.

Former Commissioner Philip Moeller dissented on the order, saying DR should be paid a price of LMP minus G, where "G" stands for the retail price of electricity.

Moeller, now an executive with the Edison Electric Institute, reiterated his position last week at a briefing of financial analysts in New York, saying he hoped the commission would re-evaluate the rule "sooner rather than later."

Under the commission's current composition, however, DR providers such as EnerNOC, Centrica's Direct Energy and Johnson Controls' Energy Connect have no reason to fear a pay cut.

Clark, who joined the commission after Order 745, won't be around to fight for a change, having announced that he won't seek reappointment when his term ends in June. (See Clark Won't Seek New FERC Term.)



Armond Cohen, co-founder and executive director of the Clean Air Task Force, said the U.S. cannot meaningfully reduce carbon emissions without new nuclear plants, such as Southern Co.'s Vogtle Units 3 and 4, under construction in Georgia. "It is true that they are over budget and [behind schedule], but that's very typical of a first-of-kind project. These are very advanced nuclear plants," he said. "If we had taken the same attitude towards wind or solar 25 years ago and said, 'Well we're not going to build anything until we can be sure there's going to be cost parity with fossil [fuel generation],' we wouldn't have had the buildout that would have driven the cost down. So I think you do need the long-term vision, with nuclear specifically. They're obviously very lumpy investments." © RTO Insider

John Moore, senior attorney with the National Resource Defense Council's Sustainable FERC Project, said the Supreme Court's ruling upholding FERC Order 745 removed uncertainty over state and federal jurisdiction over demand-side resources. "That's good, we think, not just for FERC but also for states who want to promote demand response, price-responsive demand, energy efficiency. It helps states couple those resources with FERC-jurisdictional wholesale market opportunities." © RTO Insider



Bay: 'Too Soon to Say' if PURPA Needs More Changes

By Rich Heidorn Jr.

WASHINGTON -FERC Chairman Norman Bay said last week he is reserving judgment on whether the Public Utility **Regulatory Policies Act** needs another



overhaul until after an upcoming technical conference.

Speaking at the National Association of Regulatory Utility Commissioners winter meetings, Bay said FERC staff is planning the agenda for the June 29 technical conference (AD16-16), called in response to a request by congressional Republicans.

The 2005 Energy Policy Act amended the 1978 law, saying that utilities would no longer be required to purchase power from PURPA generators larger than 20 MW, which are shown to have nondiscriminatory access to wholesale markets. (See FERC: Entergy not Required to Buy from Large QFs.)

U.S. Sen. Lisa Murkowski (R-Alaska), chairman of the Senate Committee on Energy and Natural Resources, and U.S. Reps. Fred Upton (R-Mich.) and Ed Whitfield (R-Ky.), leaders of the House Energy and Commerce Committee, sent a letter to FERC in November asking for a technical conference to "identify any potential administrative or legislative reforms that may be necessary."

The Republicans noted significant changes since the 2005 amendments, including the falling price of natural gas and renewable energy. Their letter cited congressional testimony from Berkshire Hathaway Energy complaining that it was required to sign a PURPA contract at rates that are 43% above market prices, costing customers an extra \$1.1 billion over 10 years.

NARUC President Travis Kavulla asked Bay at a general session meeting whether any of the regulations implementing PURPA "stand out ... as hopelessly outdated."

"I don't want to prejudge what we might learn at the tech conference," Bay

responded.

Bay added that there are limits to what the commission can do regarding the law. "It's not like FERC can change anything that Congress has said," he said.

Democrats, led by Sen. Maria Cantwell (D-Wash.), ranking member of the Senate energy committee, responded to FERC's notice of the technical conference with their own letter Feb. 11, saying that the act "remains a singular federal backstop to support renewable energy in parts of the country that may otherwise have significant barriers."

"In the past year, legislators and electricity regulators across the country have rolled back or debated rolling back incentives for renewable energy including renewable portfolio standards, energy efficiency resource standards and net metering programs," they wrote. "... Until Congress chooses to act again, it would be improper for FERC to narrow the scope of [the law] any further."



Clair Moeller, MISO's executive vice president of transmission and technology, said it's "business as usual" for the RTO despite the Supreme Court's stay of the Clean Power Plan. "Our job as planners is to plan into an uncertain future where you don't actually know how fast regulations are going to change or what direction it's going to change. We always were carrying two dominant scenarios: one that the Clean Power Plan was overturned and one that it wasn't. It wasn't lost on us that 13 of our 15 states were in litigation against the Clean Power Plan. But it's also true that the majority or our states chose to proceed with the planning to make sure that when all is said and done, we're still able to keep the lights on in an economic way." © RTO Insider

Jim Robb, CEO of the Western Electricity Coordinating Council, said, "It was very easy to think about renewables and how they would contribute to peak load when they were 5% or 6% of the resource mix. But when they're 30%, maybe, across the interconnection in 10 years we have to be much more sophisticated. ... The high penetration of weather-dependent resources — wind, solar and hydro — that really changes your vulnerability. My biggest concern with us right now is the drought we've had in California and the lower 48 [states] migrates to British Columbia and the water flows dry up." He also expressed concern over the growing dependence on natural gas. "Gas infrastructure, which has been enormously reliable over its history, is not designed to electric reliability standards. I have 28 GW of generation dependent on the same pipeline." © RTO Insider



Briefs

Bay Previews Supreme Court Review in Hughes Case

WASHINGTON - FERC Chairman Norman Bay said he expects the Supreme Court to take a nuanced view of federal-state jurisdictional issues when it hears oral arguments Wednesday in a dispute involving state subsidies for generation developers.

Bay said he considered the case as one of the court's "FERC trilogy," following its April 2015 ruling in ONEOK v. Learjet and its Jan. 25 ruling upholding the commission's jurisdiction over wholesale demand response (FERC v. Electric Power Supply Association).

In the ONEOK case, the court found that state antitrust suits aimed at pipelines' price manipulation do not improperly interfere with federal jurisdiction under the Natural Gas Act.

"The court ended up saying these state antitrust actions don't have a direct aim of trying to interfere with the natural gas markets," Bay explained. "Rather, they're directed at many, many different kinds of markets. And so they said state jurisdiction there was not preemptive."

In the EPSA case, the court ruled that FERC Order 745 did not violate state jurisdiction even if it affects the quantity or terms of retail sales. (See Legal Challenge Behind it. DR Seeks to Overcome Behavioral Resistance, **Varying State Rules.**)

The court announced its decision to hear the latest jurisdictional dispute in October. (See SCOTUS Agrees to Hear Md., NJ-FERC Subsidy Case.)

The court will consider lower court rulings throwing out contracts in which generation developers won state-issued subsidies to build plants in New Jersey and Maryland. Competitive Power Ventures and state regulators have argued that the subsidies are legal. The courts ruled that the subsidies violated FERC jurisdiction over the wholesale electric market.

The two cases, Hughes v. Talen Energy, et al. (14-614) and CPV Maryland v. Talen Energy Marketing, et al. (14-623) were consolidated.

Based on its rulings in ONEOK and EPSA, Bay said, "I would expect the court to look to Ramsay said the court's unusual decision to see what the aim of the state law is as well as the impact on the wholesale market" in

its ruling.

"I think this is a sensible way of looking at things because the relationship between the wholesale and the retail markets is not one in which the two markets are hermetically sealed from one another," he said.

CPP Ruling may not Come Until 2018

NARUC General Counsel Brad Ramsay said a Supreme Court ruling on the merits of the Clean Power Plan is unlikely before late 2017 and might not come before 2018.



The court granted a stay, preventing EPA from enforcing the rule, on Feb. 9.

The case is scheduled for oral arguments June 2 before a three-judge D.C. Circuit Court of Appeals panel, with a decision likely about three months later, Ramsay said.

The losing party will have 45 days to request rehearing by the entire 11-judge circuit. A rehearing ruling would come three to four months later.

The earliest the Supreme Court will decide whether to hear the final D.C. Circuit ruling is the end of 2016. Ramsav said. "I think it's far more likely [in] the first quarter of 2017. It could easily go three, four months beyond that."

If the court schedules briefing and oral arguments in the first part of 2017, the court could rule on the merits before the end of its term in June 2017.

"I think it's more likely ... to see the decision in the second half of the year, maybe even into 2018," he said.

The Feb. 13 death of Justice Antonin Scalia, who sided with the majority in granting the stay, could change the timeline, however.

If Scalia's seat is not filled before the case reaches the court, the timeline could be shorter, wrote The Washington Post's Robert Barnes. "If the appeals court upholds the plan, would the four remaining conservatives feel it was worth accepting an appeal if it were clear that it would be impossible to get a fifth vote from one of the liberals?" he asked.

stay the rule absent a lower court ruling on the merits indicated that the court is likely

to grant certiorari and that several of the judges have serious doubts about the legality of the rule.

The stay "doesn't tell you what they're going to do on the merits, but it's the only hint we have," he said.

NARUC's Assistant General Counsel Jennifer Murphy gave an additional update following a conference call with EPA officials Tuesday.

Murphy said EPA officials acknowledged the September 2016 deadline for filing initial compliance plans "will slip although interestingly, Janet McCabe [acting assistant administrator for the Office of Air and Radiation] seemed to leave open that perhaps the compliance deadline of 2022 would not be slipping."

AWEA: Wind Growth to Continue Regardless of CPP Fate



Chris Brown (left) and Tom Kiernan © RTO Insider

American Wind Energy Association officials said wind power will continue growing for the next five years under the extended production tax credit even if the Clean Power Plan is struck down.

The trade group cited a report by Bloomberg New Energy Finance finding that 8.6 GW of wind power was added in the U.S. in 2015, besting solar (7.3 GW) and natural gas (6 GW). About 9.4 GW of wind is under construction with another 4.9 GW in advanced stages of development.

"The pipeline's busy. It's full," AWEA CEO Tom Kiernan said at a press conference at the NARUC meetings.

"The Clean Power Plan — I would say for the five-year PTC window - probably doesn't [have an] effect," said Chris Brown, president of turbine maker Vestas Americas and incoming AWEA board chair.

Without the PTC, Brown said, the loss of the CPP could have an impact on wind's competitiveness, along with "many different drivers - whether it's the price of gas,

Briefs

Continued from page 6

whether it's the other alternative sources of energy. What would we assume in terms of how much more efficient we can get?

"Obviously it's a better looking forecast with the CPP, but it's not a bad forecast without it either."

Although the levelized cost of wind energy has dropped by almost two-thirds over the past six years, Brown said there's no reason the wind industry can't continue to reduce costs by increasing tower heights and rotor sizes. He noted that onshore turbines are not yet as large as the 7-MW turbines used offshore.

"Our friends in the solar business aren't stopping [their cost-reduction efforts], so I don't think that's going to allow us to sleep very easy at night."

APPA, ISO-NE Spar on **Capacity Markets**

One of the livelier sessions at the winter meetings came last Tuesday afternoon, when Sue Kelly, CEO of the American Public Power Association, sparred with ISO-NE CEO Gordon van Welie over mandatory capacity markets.

Kelly was on the offense, complaining that capacity markets originally intended to supplement other resource procurement strategies have become dominant in the eastern RTOs.

"We believe resource decisions are better made closer to the customer. And that means at the state level and, in our case, at the community level," she said. She warned state regulators in attendance of an effort to include in the House energy bill a provision that would require other RTOs to adopt provisions similar to ISO-NE's Payfor-Performance and PJM's Capacity Performance rules.

Under Capacity Performance, she said,



From left to right: American Public Power Association CEO Sue Kelly; former Maryland PSC Commissioner Lawrence Brenner; and ISO-NE CEO Gordon van Welie © RTO Insider

"consumers are paying a lot more money for most of the same resources." She said RTO officials must be precise in how they identify the attributes they are seeking to procure, using "a scalpel rather than a meat cleaver."

Van Welie responded that ISO-NE's Forward Capacity Auction 10 last month saw a drop in prices from FCA 9, the first year that incorporated Pay-for-Performance, which rewards generators that over-perform while punishing those that fail to deliver. "One doesn't have to pay more for performance," he said. "This illustrates that a competitive market is really powerful at producing cost efficiencies. I would argue that there's a greater danger that long-term contracting will lock in obsolete technology."

Kelly and van Welie found some common ground, however, when the discussion turned to the Clean Power Plan.

Kelly said, "Regardless of what you thought of the [capacity] markets up until now, the era we are now entering into, I think is fundamentally unsuited for the current capacity market construct.

"We're going to be trying to balance a lot of policy factors, including fuel and resource diversity, the need for ramping capacity, environmental compliance, greenhouse gas emission reductions, minimizing the longterm cost to consumers, which we've always cared about, and coordination of the infrastructure we have in our industry, including transmission and generation with pipeline capacity and other subsidiary infrastructure in other industries that's needed for us." she said. "We feel like these markets do not support those goals and therefore need to be fundamentally relooked at."

Van Welie acknowledged a conflict between the policy objectives of ensuring reliability and moving to more renewable and lowcarbon energy.

"The challenge facing all of us is how do we keep these two policy objectives in balance?" he said. "Markets are working for reliability but they are not designed to favor fuel diversity."

Van Welie said the shifts are rendering the term "baseload" obsolete.

"The baseload of the past ... was coal and nuclear. I think we're moving very quickly into baseload being natural gas, nuclear, energy efficiency — which is off all the time and in the future I think we're going to see renewables being baseload. So to me, baseload is just whatever is most efficient at producing energy ... certain technologies are going to have high capital costs and low operating costs and those are going to tend to be the baseload resources."

- Rich Heidorn Jr.

"Regardless of what you thought of the [capacity] markets up until now, the era we are now entering into, I think is fundamentally unsuited for the current capacity market construct."

Sue Kelly, American Public Power Association CEO

ISO-NE News



CO₂ Emissions Increase in ISO-NE

Loss of Nuclear Plant Reverses Trend

By William Opalka

MILFORD, Mass. — Carbon dioxide emissions rose about 7% in New England last year as the loss of the Vermont Yankee nuclear plant increased fossil fuel generation, ISO-NE said last week.

 CO_2 emissions rose to just more than 30 million tons in 2015, up from 28 million tons in 2014. Patricio Silva. ISO-NE senior

analyst for system planning, told the Planning Advisory Committee during its annual environmental update Wednesday. That reversed a trend that has seen carbon emissions fall from 32 million tons in 2012 to 31 million tons in 2013. The figures are based on EPA data.

"Emissions rose slightly, probably because of the closing of Vermont Yankee" at the end of 2014, Silva said. (See <u>Vermont</u> Yankee Retirement Leaves ISO-NE More

Dependent on Gas.)

A separate data set from ISO-NE, which runs through only 2014 and includes emissions from smaller power plants not counted by EPA, shows CO_2 emissions had declined 26% from 2001 through 2014.

Entergy, which owns Vermont Yankee, also plans to shut the Pilgrim nuclear plant in Massachusetts no later than mid-2019. Its closure would leave New England with only three nuclear generators: the Seabrook plant in New Hampshire and the two-unit Millstone plant in Connecticut. (See <u>Entergy Closing Pilgrim Nuclear Power Station</u>.)

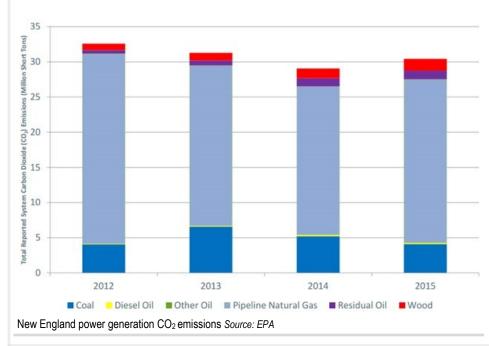
Ozone Standard

In addition to a discussion of the region's carbon emissions, the meeting also touched on EPA's stricter ozone standards. In a rule adopted in October, the standard was reduced to 70 parts per billion from the 75 ppb adopted in 2008.

"Rhode Island and most of Connecticut would be non-attainment for the 2015 ozone standard." Silva said.

Preliminary 2013-2015 data, based on eight-hour concentrations, show southwestern Connecticut exceeds even the less strenuous standard, at 81 ppb or more. Rhode Island and the much of the rest of Connecticut fall into the 71 to 80 ppb range. The rest of New England meets the new standard at less than 70 ppb.

The regulation has a seven-year phase-in period.



Exelon Appeals ISO-NE Zero-Price Offer Requirement

Exelon has asked the D.C. Circuit Court of Appeals to overturn two FERC orders that reaffirmed the zero-price offer requirement in ISO-NE's new entrant pricing rule (16-1042).

FERC last month again rejected complaints by Exelon and Calpine that the rule unreasonably suppresses capacity prices and discriminates against existing resources. The commission upheld the rule in January 2015 and denied rehearing last month. (See <u>FERC Again Rejects Challenge to ISO-NE New Entry Pricing.</u>) ISO-NE's rule allows new resources to lock in their first-year clearing price for up to six subsequent delivery years by offering as a price taker with a price of zero.

Exelon and Calpine argued that the rule creates a discriminatory two-tiered pricing scheme, with existing resources receiving lower prices than new ones if clearing prices fall in subsequent Forward Capacity Auctions.

The commission had acknowledged that the existence of the lock-in option "may result in lower capacity clearing prices" but said this was part of "a reasonable balance between incenting new entry through greater investor assurance and protecting consumers from very high prices."

In the FCA 10 auction this month, capacity prices dropped for the first time in four years, as new resources more than offset



Footprint Power's planned 674-MW natural gas plant cleared ISO-NE's seventh Forward Capacity Auction in 2013.

generation retirements. (See <u>Prices Down</u> 26% in ISO-NE Capacity Auction.)

– William Opalka

ISO-NE News



PAC Briefs

PAC Sets Process for Economic Study Requests

MILFORD, Mass. — Stakeholders have until April 1 to submit written requests for economic studies to be done in 2016 on generation additions or transmission upgrades that can relieve congestion and reduce LMPs.

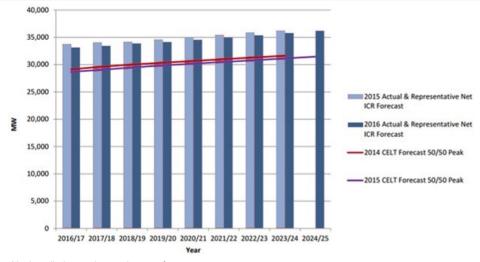
ISO-NE will develop a scope of work and cost estimate for all requested studies and may add its own proposals. The RTO also will develop a preliminary prioritization based on expected benefits.

Presentations on proposals will be made at the April 20 PAC meeting.

"We need to have some specificity — the locations, the what, where and when," said Michael Henderson, ISO-NE director, regional planning and coordination.

The PAC is scheduled to select up to three studies to be conducted, and determine the final order of priority, by June 1.

Last year, the RTO considered wind expansion scenarios in the Keene Road area of Maine, Northern New England and offshore Rhode Island and Massachusetts. (See "Draft Study Shows Greater Wind Penetration Benefits," <u>ISO-NE Planning Advisory Committee Briefs</u>.)



Net installed capacity requirement forecast Source: ISO-NE

ICR Forecast Shows Slowing Rate of Increase

ISO-NE is reducing its installed capacity requirement for commitment periods four to nine years into the future by an average of 500 MW compared with last year's forecast, due to slowing load growth and the increase of behind-the-meter solar generation.

The calculations are based on the RTO's 10year forecast for capacity, energy, load and transmission, otherwise known as the CELT forecast. The models were adjusted to account for the announced closure of the Pilgrim nuclear power plant, slated for no later than mid-2019.

The RTO cited behind-the-meter solar in reducing its load forecast by 390 MW for the recently concluded 10th Forward Capacity Auction for the 2019/20 capacity commitment period. (See <u>FERC Accepts ISO -NE's Solar Count over Protests</u>.)

The new ICR study period includes the years for FCA 11-15.

- William Opalka





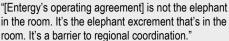


GCPA 3rd Annual MISO South Regional Conference

"Obviously, we were pleased when the [Clean Power Plan] stay was issued by the Supreme Court. From Texas' standpoint, we're so disadvantaged by it, it's hard to see really meaningful ways to comply. What really hurts us the most ... is Texas has accomplished a really dramatic reduction in CO₂ since 2005. It's been driven by our market design, and it continues. Yet none of that activity — zero — do we get any credit for. To us, that says the EPA wants us to double down. It leaves us speechless... The more I think about it, the angrier I get." — Ken Anderson, Texas Public Utility Commissioner

"I think it's easy to hit the little EPA rag doll ... mash its head in. We need better than that. We're going to be prepared ... if you don't think there's going to be carbon regulations in the future, I don't think you're forecasting the future right. The CPP is probably not going to go away because one of the votes just went away."





ANDERSON





"Change is part of [the electric utility] business and right now, change is happening quickly in this business. We're going to have to be aggressive and be smart about it, because you're not going to stop changing. You'll just end up behind the curve." — Lambert Boissiere III, Louisiana PSC Commissioner

"If the [Louisiana] legislature decides tax rates on corporations should be raised, if they say the deduction from corporate taxes should be eliminated, it sends the message Louisiana might not be the most business-friendly state anymore. I don't want to see them legislate the best economic package Texas has ever seen." — Dan Borne, Louisiana Chemical Association President





"Everyone says keep studying [the Clean Power Plan], but we want to understand what the implications are. Even though the stay is there, the thought that it's going to go away and there will be nothing in its place is probably not true. It may be a different EPA rule in some form." — John Bear, MISO President and CEO

"I don't think you will eliminate all the seams issues. Our goal is to minimize those through more efficient interregional planning." — Patrick Brown, Executive Director of Transmission Planning for MISO South





GCPA 3rd Annual MISO South Regional Conference

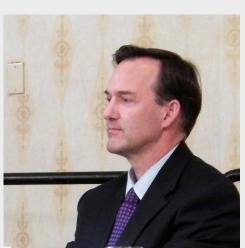


"Within SPP, we're seeing large interest with transmission developers coming in and building projects within our footprint. In years past, we might get two to three options for resolving an issue. Now, we're getting literally thousands. SPP has assessed only one competitive project so far. If we continue to see one project a year that's competitively bid out, I don't know how those people are going to stay in business." — David Kelley, SPP Director of Interregional Relations

"We have seen lately requests for major DC lines come into the system. This [joint study with MISO] will really be a good opportunity for us to learn as we work on major studies ... to see how we work with the outside." — Prabhu Gnanam, ERCOT Manager of Transmission and Interconnection Studies



"I see where folks in West Virginia are saying put your pencils down [following Clean Power Plan's stay]. I think now is the time to sharpen your pencils and come up with something."



"What I tell folks is November is not that far away. We're going to know an awful lot [after the presidential election] in November about what the states need to do. We probably have much time, so putting the pen down isn't the end of the world." -Mark Nasi, Partner, Jackson Walker LLP



Dr. Chuck Brown, Louisiana Secretary of **Environmental Quality**

BARLOW

"There was a coming together in Paris that didn't happen in Kyoto, Montreal or Rio [de Janeiro]. One of the reasons ... was because the world's leading emitters of CO₂ were there saying they wanted to do something about it. A lot of countries are going to continue building coal units, because that's all they have. We can't stand on the moral high ground and say, 'You can't use coal." Chuck Barlow, Entergy Vice President of Environmental Strategies



Mass-Based Plans Best for States, MISO Says

Despite Supreme Court Stay, CPP will Still Influence MTEP17, Siting Process Review

By Amanda Durish Cook

CARMEL, Ind. — Only a heavy, region-wide build-out of solar, wind and energy efficiency could make rate-based compliance less expensive than the mass-based path and only if all states go along according to MISO's nearterm analysis of the Clean Power Plan.

Jordan Bakke, senior policy studies engineer at MISO, told the Planning Advisory Committee Wednesday that it would take a major change in the region's resource mix to

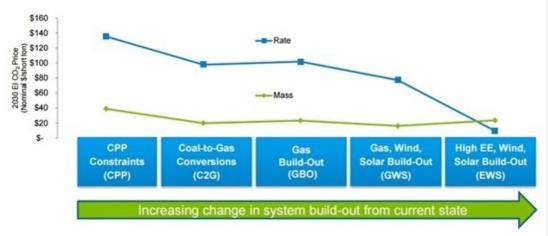
make the rate-based option attractive. Even varying natural gas prices don't change the bottom line.

When looking at the states individually, MISO found that only Michigan and Louisiana realized economic advantages using rate-based compliance. But that benefit was lost when groups of other states choose mass compliance, the models indicate.

MISO used Arkansas' coal-heavy generation fleet to study capacity scenarios and found the state would need to buy emission rate credits or allowances to achieve compliance unless "a balance of coal retirements and renewables penetration positions it as a seller." Eddy Moore of the Arkansas Public Service Commission said he was impressed with MISO's level of modeling, which he hadn't seen from other RTOs.

The new state-specific results bolster MISO's earlier conclusion that mass-based compliance would be far cheaper than ratebased compliance. (See MISO: Mass-Based CPP Plan 1/3 Cost of Rate-Based).

MISO said its analysis indicates similar amounts of additional generation and transmission would be needed under both rate-based and mass-based compliance. Although states have a lot of latitude in what generation they choose to expand with, MISO's near-term modeling is not identifying an optimal resource mix or looking at which pipelines or transmission projects need to be built.



Rate-based compliance in the footprint becomes less expensive than mass-based compliance only if a wide-scale buildout of renewables occurs. Source: MISO

The RTO said mass-based compliance would they become available for modeling. foster interstate trade in emission rate credits and "produces a more balanced mix of buyers and sellers within MISO."

MISO said it will present additional nearterm results at the March Planning Advisory Committee.

Analysis Continues Despite Stay

Bakke said MISO was continuing its analyses despite the Supreme Court's Feb. 9 order preventing EPA from enforcing the CPP pending an appellate court challenge. The uncertainty over the impact of the stay only increased with the death, four days later, of Justice Antonin Scalia. (See Scalia **Death Scrambles Clean Power Plan Odds.**)

The stay "means it's still in effect but on hold. It's not overturned. Because it's only a hold, MISO feels it's important to continue studying the impacts of the Clean Power Plan," Bakke said.

Anthony Artman of Ameren asked how long-term study efforts will be affected if states in the footprint decide to delay CPP plan development.

Bakke said the near- and mid-term analyses will be largely unaffected by any delays in compliance resulting from the stay. "The big change will be how the stay impacts the long-term analysis," he said.

MISO said it intends to use state plans as

To date, most states in the footprint are either still reviewing the stay or haven't announced plans. Kentucky, North Dakota, South Dakota and Montana have suspended planning, while Minnesota said it will continue. Bakke said MISO would continue to be in touch with stakeholders and state officials. He also said questions about how the stay will affect long-term modeling would be best answered in upcoming stakeholder CPP workshops.

"We have a bit of a chicken-and-egg problem here when we don't know how states plan to comply," Bakke said. He said the RTO will refine the modeling as it receives more information from states over the next three years. "There's definitely going to be a lot of uncertainty and a lot of iteration until then," Bakke said.

Impact on MTEP

Bakke said MISO's mid-term analysis will still be used to influence its Transmission Expansion Plan 2017 futures and its siting process review. "After the study is complete, we're feeding this information into our processes, so it won't be lost," he

Planning will kick off today at the MTEP Futures Development Workshop, according to Senior Transmission Planning Engineer

MISO News



Mass-Based Plans Best for States, MISO Says

Continued from page 12

Matt Ellis.

Ellis said the futures need "bookends" to determine how anticipated coal retirements, natural gas prices and the economic viability of renewables affect the fleet. He said although MISO would use a presentation with examples to start discussion on the futures' parameters, the numbers would not be final.

"Anytime we bring numbers to stakeholders, we run the risk of 'Oh MISO, you've already got this figured out," Ellis said. "And that's definitely not the case.

These are just to start the conversation. ... Future definitions are still to be determined."

Cross-State Rule

In tandem with long-term CPP modeling, MISO will conduct a study to evaluate the impact of the proposed Cross State Air Pollution Standard (CSAPR) on its system. The standard, which could be implemented in 23 states by May, would mandate that states install modern combustion controls such as low NOx burners, operate existing control technologies, shift generation to lower NOx-emitting units and increase dispatch of natural gas combined cycle plants while reducing coal-fired generation.

"All-pollutant modeling is something we do, and we have studied cross-state air pollution in the past," said J.T. Smith, MISO's director of policy studies.

"Like with the Clean Power Plan, we need to have discussions with stakeholders ... on the nuances of the [state emission limits]," Smith said, noting that CSAPR might be subject to additional court challenges.

He said MISO would examine the standard's impact on reliability as well as costs, drawing on a business-as-usual model from the 2015 Transmission Expansion Plan for the study. Based on the findings, the standard could be incorporated into MTEP17.

While Smith said MISO would move "as quickly as possible to get this off our plate," he didn't place any deadlines on the study.



FERC Grants 12.28% Rate in GIA for Illinois Wind Farm

FERC last week approved a revised generation interconnection agreement proposed by MISO to link the Hoopeston wind project in rural Illinois to Ameren's transmission.

FERC accepted MISO's option A GIA, which proposed a 12.28% fixed charge rate on network upgrades, and rejected option B, which proposed a 12.82% rate. The restated GIA bears an Aug. 15, 2013, effective date.

The order (ER13-2157) approved in part MISO's December 2014 compliance filing and denied Ameren's October 2014 rehearing request.

Apex Clean Energy's Hoopeston Wind

consists of 49 wind turbines spread across east-central Illinois farmland. The wind company disputed Ameren's proposed cost recovery for network upgrades, which stipulated that upgrade costs be subject to participant funding only if an interconnection customer offers up-front funding for the work.

MISO presented the two GIA options in response to an order directing the RTO to revise the restated Hoopeston GIA "so that the self-fund option does not include the recovery of costs other than the return of and on the capital costs of the network upgrades."

Amanda Durish Cook



Hoopeston's first turbine in 2014 Source: Hoopeston



MISO/PJM Joint and Common Market Meeting Briefs

Ready for Pseudo-Tie Switchover

MISO and PJM said last week they're ready for the March 1 transfer of 300 MW of MISO <u>pseudo-tied</u> resources to PJM, and a 2,000-MW transfer set for June 1. The March 1 transition will result in the creation of 80 new flowgates.

The 2,300 MW PJM and MISO will pseudotie over the 2016/17 planning year is a big jump from the 156 MW in pseudo-tied resources added in 2015/16.

MISO has said it wants to address price convergence and congestion management issues resulting from pseudo-ties before the June 1 transfer. MISO staff say there is little language on pseudo-ties in their Tariff.

During a Joint and Common Market meeting on Thursday, MISO proposed requiring the host RTO to provide capacity, schedule the firm exports, abide by a dayahead must-offer requirement and provide resource status information. It also said that both RTOs should have a say in approving planned outages.

While PJM did not provide its own proposal, multiple PJM stakeholders criticized MISO's plan, saying it was too similar to one proposed by MISO in 2012 and later scrapped. When some stakeholders suggested that the RTOs back a policy fix rather than an operational fix on capacity flows, Stu Bresler, PJM's vice president of market operations, said a policy solution may exist, but it's "much, much bigger than this group."

"Our main concern was to ensure reliability. And to do that, we needed two things in place: good modeling ... and an operating agreement," Andy Witmeier, MISO's manager of expansion planning, said at a Feb. 10 Reliability Subcommittee meeting.

Witmeier said some details will not be resolved in time for the March and June implementation. "We are continuing to develop a compensation mechanism for use when unit commitment is needed for local congestion and cannot use [market-to-market]," he said. In the meantime, Witmeier said, "Safe Op Mode" will be used to compensate such units.

MISO Senior Director of Regional Operations David Zwergel said other commercial issues could arise as a result of Load Center Generator Center

PJM/MISO Seam

MISO's Path: PJM generation center to MISO load center

PJM's Path: PJM load center to the seam

MISO & PJM pricing interface overlap Source: MISO, PJM

the additional resources. MISO officials have said they do not expect full implementation of new pseudo-tie market rules before the 2017/18 planning year.

Regions Begin FFE Exchanges

PJM's Tim Horger said the first day-ahead exchange of firm flow entitlements took place on Jan. 28, with the transfer of about 40 MW from MISO to PJM. About seven exchanges have occurred since, he said. A firm flow entitlement is the amount of firm flow on a flowgate an entity is entitled to use based on historical usage.

"I don't think it was substantial as far as dollars are concerned, but it was the first one," Horger said. "We think this is going to be very beneficial. We're going to keep doing exchanges as long as it's efficient for the markets. I think it's good news here."

Horger said the RTOs will monitor FFE exchanges and report on their progress during upcoming JCM meetings.

No Consensus on Interface Pricing

MISO and PJM said they have not reached a compromise on their interface pricing rules, so current rules will remain in place for at least a year.

Discrepancies in the RTOs' <u>interface pricing</u> methodologies can result in double counting

congestion, causing a revenue imbalance and uplift. The RTOs said the issue would be put on hold until mid-2017 while MISO conducts an analysis that uses data from December.

Jason Barker of Exelon said traders won't use coordinated transaction scheduling without common interface pricing in place first.

MISO had proposed a solution using a "centroid-to-centroid" approach, with the non-monitoring RTO excluding a transaction's impact on the constraint while PJM preserved its 10-bus common interface definition. (See "MISO-PJM Interface Pricing Project Heads to Final Four," <u>MISO Market Subcommittee Briefs.</u>)

PJM, however, said that approach would have an "adverse impact on PJM market-to-market constraints" because the approach only accounts for half of the misplaced incentive for transactions and fails to eliminate the pricing overlap that exists in the RTOs' current interface.

JOA Work not Done

FERC approved the RTOs' revised joint operating agreement just last month, but officials concede there's more work to be done on the pact (ER15-2613, et al.).



Entergy Granted Waiver in New Orleans 15th Ward Transfer

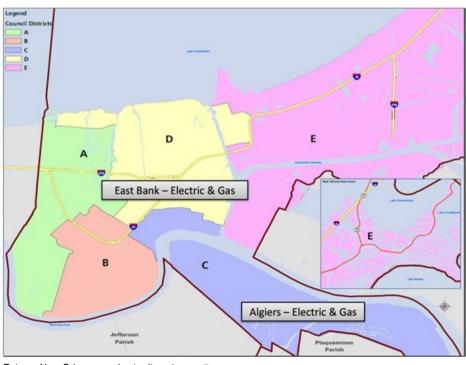
FERC last week granted Entergy permission to use a one-time load adjustment in the transfer of transmission facilities in New Orleans' 15th Ward, Algiers, from Entergy Louisiana to Entergy New Orleans.

The order (ER15-1922) grants a limited waiver to include an estimate for the Algiers load in the historical Entergy New Orleans calculation and subsequent removal from the Entergy Louisiana calculation to avoid discrepancies. Without the waiver, the transfer would require a responsibility ratio calculation and a phase-in period that would occur over a year, the company said. Responsibility ratios, used to allocate costs in the Entergy intra-system bill, are calculated as a rolling 12-month average.

Entergy said the Algiers asset transfer required immediate, not gradual, cost allocation and asked for a "one-time reset of the Entergy New Orleans and Entergy Louisiana responsibility ratios to complete the Algiers asset transfer."

Entergy sought the asset transfer in December 2014 because Entergy Louisiana had been subject to retail jurisdiction of the New Orleans City Council in addition to the Louisiana Public Service Commission. Entergy Louisiana serviced Algiers as well as customers outside the city. Entergy New Orleans delivered electricity to all of the city except Algiers.

In April 2015, FERC approved the transfer,



Entergy New Orleans service territory Source: Entergy

and in September, approximately 8.3 miles of 115-kV and 230-kV transmission lines and two transmission substations were passed to Entergy New Orleans, ending Entergy Louisiana's dual jurisdictions. As a result, 1.84% of the capacity from Entergy Louisiana's existing generation portfolio moved to Entergy New Orleans.

The commission determined that the historical load estimate Entergy developed was thorough, relying on "load research sample interval data, sample and total class billing kilowatt-hours, sample strata weighting factors and monthly Entergy system peak demand times."

- Amanda Durish Cook

MISO/PJM Joint and Common Market Meeting Briefs

Continued from page 14

"If you look at the language in the JOA today, it's cumbersome. We don't think it makes a lot of sense for these quick-hit, targeted studies. ... Some have said that there's too many hurdles to interregional projects," said Paul McGlynn, PJM's senior director of system planning.

MISO is considering revising the JOA to give consideration to projects with lower voltage than the current 345-kV limit. McGlynn said he'd be interested in eliminating "undue thresholds" from the cross-border project approval process. Currently, interregional projects between MISO and PJM require both regional and

interregional approval, and the RTOs use different evaluation metrics.

The new JOA includes rules for coordinating outages of pseudo-tied units and stipulates that a market-to-market approach should be followed when dispatching pseudo-tied generation for capacity and congestion.

It also establishes communication protocols between host balancing authorities (the physical location of the pseudo-tied generator), attaining balancing authorities (the region importing the generator's output), transmission operators and market participants.

In approving the agreement, FERC praised the addition of FFEs, noting they "increase efficiencies in the day-ahead market, better

align the operations of the day-ahead and real-time markets, and enhance revenue adequacy for other markets, such as financial transmission rights." It was a marked change in tone from a year ago, when FERC expressed exasperation over PJM and MISO's boundary disputes. (See Impatient FERC Hints at Action on PJM-MISO Seams Disputes.)

On Feb. 5, FERC also approved the RTOs' request to remove their \$20 million threshold on interregional market efficiency projects (ER16-488 and ER16-490).

The RTOs are soliciting stakeholder feedback for an annual issues review in April.

- Amanda Durish Cook



Planning Advisory Committee Briefs

BPM Review Process to be Posted; Stakeholders Granted Additional Review

After a late amendment, the Planning Advisory Committee last week approved a document describing the process for reviewing Business Practices Manual changes.

PAC Chair Bob McKee, with consent from the sector representatives, asked that a single sentence be added to allow an additional stakeholder review of any BPM changes made during MISO legal and compliance review. Previously, stakeholders had no procedure for getting a final look at changes made by MISO's legal department at the end of the process.

Matthew Tackett, a MISO principal adviser, agreed to the addition.

Based on stakeholder input since December, MISO also included a statement to the <u>language</u> to explain how to update the document itself. MISO has worked on the updated process since November. (See "Business Practices Manuals Review Process Gets a Final Look," <u>MISO Planning</u> Advisory Committee Briefs.)

However, MISO would not commit to allowing the comment period for new BPM language to extend over two consecutive meetings, as stakeholders advocated. "MISO will endeavor to provide additional time for comments... However, there may be times when BPM changes must be expedited, and under these situations, less time may be available for comments," the RTO wrote.

MISO staff said it would post the finalized BPM process language on the MISO website under the planning tab, but the document will not be considered an official MISO governing document. MISO said it would be "posted for informational purposes only to codify the general process used by the Planning Advisory Committee and reporting committees regarding the review of BPM changes."

Attachment Y Adjustments Put on Hold for a Month

Changes to Attachment Y of MISO's Tariff, which deals with the planning process behind system support resources, will be put on hold for a month, said Neil Shah, an adviser on seams administration.

Shah said MISO didn't receive enough substantive comments on the proposed changes. As a result, MISO is now planning to file Tariff language by the end of March instead of the end of February. Shah said staff wants to discuss the changes at the March 1 Market Subcommittee meeting before filing.

MISO is <u>proposing</u> that all generation resources planning to suspend or retire, including pseudo-tied units, black start units and generators on a forced outage, be required to submit Attachment Y notices to MISO.

— Amanda Durish Cook

FERC Denies Ark. City Second Round of Refunds from Entergy

FERC last week rejected the city of Osceola's demand that Entergy Arkansas provide refunds for unlawful bandwidth equalization payments it allegedly passed on to the city over three years. The commission said Osceola had already settled its claim with Entergy and is not entitled to another set of refunds (EL 16-7).

The northeastern Arkansas city took issue with Entergy's 2007, 2008 and 2009 formula rate update proceedings. Osceola asked that Entergy refund \$4.48 million plus interest for charges it said were improperly passed on to the city.

The city argued that Entergy violated the filed rate doctrine because the formula rate in Entergy's service agreement precedes FERC's 2015 Entergy bandwidth remedy, which was created to equalize production



costs among Entergy's several companies by making sure no Entergy arm has production costs 11% above or below the Entergy

system average.

Osceola said the dispute was "substantially identical" to a dispute Entergy had with Union Electric, which obtained bandwidth payment refunds.

But FERC found that Osceola previously settled the claim in "black-box" settlements.

"We find that these pleadings, settlement agreements and commission orders fully dispose of the complaint. ... We likewise decline to invade the formula rate update proceedings' privileged settlement negotiations by discussing which party sought or provided what data or by inquiring what lies inside the black-box agreements," FERC wrote.

— Amanda Durish Cook

Connect with us on your favorite social media











Planning Subcommittee Briefs

Expedited Review Process Nears Approval with 'Good Consensus'

MISO's Transmission Planning Business Practice Manual 020, which controls the expedited review process and replaces the current out-of-cycle reviews, is nearly complete, Matthew Tackett, a MISO principal adviser, told the Planning Subcommittee last week.

"In October, we approached the PSC with changes, and they were significant, with a complete rewrite of the bottom-up planning," Tackett said during a presentation. The process change would take into account both near-term reliability planning implications, which MISO refers to as "bottom-up" planning, and long-term economic planning implications, which MISO calls "top-down" planning.

Tackett said the new BPM 020 language eliminates the cost allocation of baseline reliability projects under FERC Order 1000. His update to the subcommittee followed stakeholders' comments on a second draft of the manual, which was circulated in December.

"We agreed that since the changes were fairly widespread, stakeholders should comment. We think we've got the draft BPM down pretty well ... and we've got pretty good consensus," Tackett said. (See "MISO Adds Conditions for Stakeholder Notification and Advice into Expedited Review Process," MISO Planning Advisory Committee Briefs.)

MISO made minor editorial fixes and accepted one request from stakeholders while declining a pair of others. The RTO agreed to the Transmission Owner sector's proposal to include a reference in the BPM to TOs' local transmission planning criteria.

But MISO rejected a suggestion that it remove the "redundant" practice of planning for maintenance outages and a NERC category P1 contingency (controlled interruption of electric supply to local network customers connected to or supplied by the faulted element). The RTO said it "continues to believe it is important to plan for maintenance outages in off-peak planning cases to ensure the system is designed with sufficient flexibility and robustness to provide options to outage coordination for allowing for planned maintenance."

"It's important that we plan the system with enough flexibility so we don't tie [transmission owners'] hands," Tackett said. "The bottom line is we need to make sure the system is planned to incorporate maintenance, but we also need to plan for contingencies."

MISO also declined a suggestion that it specify a default measure to determine when a generator pulls out of synchronism. The RTO said that it would leave stability criteria up to individual TOs. "We don't think we need that as default criteria because individual transmission owners have their own criteria, and we'll respect that," Tackett said.

MISO will present the final version of the language to the Planning Advisory Committee in March and ask for written feedback. Tackett said the goal is to incorporate all of the proposed changes by late spring during the annual review of BPM 020. MISO's Senior Manager of **Transmission Expansion Planning** Thompson Adu said the RTO is targeting a May 8 deadline for completing revisions to all BPMs currently under review.

"When you think you have a lot of time, the clock tends to start ticking very fast, so we want to keep moving on this, but do our due diligence.

> MISO Principal Adviser Matthew Tackett, on the Clean Power Plan

MISO: More Time Needed to **Refine Non-Transmission Alternatives Process**

MISO planners will take another month to work on a rewrite of their non-transmission alternatives process.

"There are lots of different issues we need to work through, and those would really impact MISO's internal work processes. There were lots of good issues raised, and we need a bit more time with this," Tackett said. The RTO would also have to incorporate NERC standards for transmission planning compliance, he said.

MISO is considering the use of an optimization tool to evaluate nontransmission alternatives and using modeling to determine if a non-transmission option is viable for an identified transmission need. Tackett said he preferred an approach that puts reliability

Tackett said there was sufficient time to go over the non-transmission process because it would be implemented in a subsequent planning cycle, most likely the 2017 Transmission Expansion Plan.

"When you think you have a lot of time, the clock tends to start ticking very fast, so we want to keep moving on this, but do our due diligence," Tackett said.

He said his goal was to return with a presentation at the April Planning Subcommittee meeting. In the meantime, he asked for more stakeholder comments by March 15.

MISO to Bring Minimum **Design Requirements Task Team Out of Retirement**

MISO will reconvene its Minimum Design Requirements Task Team in March to modify standards for competitive transmission projects under BPM 029. Tackett said the RTO will extend the task team through the end of next year. According to MISO, the task team may introduce a second version of the BPM in time for the next planning cycle. MISO completed the latest round of revisions to BPM 029 last month.

— Amanda Durish Cook



FERC Accepts NYISO Mitigation Measures on 'Unauthorized' Gas

By William Opalka

FERC last week approved NYISO's proposed market power mitigation measures prohibiting generators from labeling unauthorized natural gas costs and penalties as just and reasonable in "reference levels" intended to estimate their marginal costs (ER16-168).

"Allowing generators to recover costs and penalties associated with unauthorized natural gas consumption could jeopardize the reliability of natural gas pipeline and transmission systems and is therefore at odds with the reliability and costs benefits otherwise associated with allowing generators to recover actual fuel costs in reference levels," FERC wrote.

The filing was accepted subject to revisions that must be filed within 30 days.

The Long Island Power Authority protested the Tariff revisions, saying they do not account for the natural gas market's mechanics, particularly in its territory. LIPA also said the rules create uncertainty around the treatment of authorized balancing services, through which generators whose consumption exceeds their daily pipeline nomination can be offset by negative imbalances of other generators.

The ISO's proposal would perpetuate an ineffectual policy that distorts the natural gas market and treats market participants inconsistently, LIPA contended.

FERC said it did not "share LIPA's concerns."

"Interstate natural gas pipelines and [local distribution companies] are in the best position to determine what constitutes unauthorized natural gas and penalty natural gas on their respective systems," it

said.

The commission ordered NYISO to clarify a proposed exemption from the physical withholding evaluation for generators that cannot supply capacity in real time without the use of unauthorized natural gas.

NYISO had sought to exempt forced outages from the physical withholding evaluation subject to the ISO's verification. However, NYISO did not impose a similar verification requirement for "a generator that did not bid into the energy market where doing so would require it to consume unauthorized natural gas," FERC wrote.

"We find no reason for different verification requirements that could create an opportunity for market participants to exercise market power by engaging in physical withholding," the commission said.

Environmental Groups Press for Indian Point Shutdown

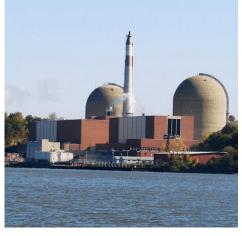
By William Opalka

Six environmental groups called Wednesday for the immediate closure of the Indian Point nuclear plant.

The Sierra Club, Riverkeeper, Hudson River Sloop Clearwater, the Indian Point Safe Energy Coalition, Scenic Hudson and Physicians for Social Responsibility asked the Nuclear Regulatory Commission to suspend plant operations until Indian Point's safety is reviewed by state and federal investigators.

The plant is under investigation following a series of mishaps in recent months, including radioactive water leaks and two unplanned outages. NRC is investigating the leakage of radioactive water into test wells. The New York departments of Health and Environmental Conservation are conducting their own investigation along with the Public Service Commission. (See NRC: No Further Leakage at Indian Point.)

"Currently Entergy is unable to properly access its aging labyrinth of more than 3 miles of pipes beneath the Indian Point site," said Sierra Club President Aaron Mair. "Entergy focuses on tritium, but the actual leak likely contains a collection of radioactive elements, including Strontium-



90, Cesium-137, Cobalt-60 and Nickel-63, that could migrate off the property."

Federal officials and plant owner Entergy say the incidents have not endangered the public.

Entergy dismissed the most recent criticism. "Some organizations who are longtime opponents of nuclear power will take opportunities to try and frighten the public. The fact is this issue cannot have any impact on public health or safety," spokesman Jerry Nappi told *RTO Insider* Friday.

U.S. Sen. Charles Schumer said he

understands critics' frustration and said he was among the plant's harshest critics. But he also told the *Mid-Hudson News Network* that the plant's continued operation is vital to keeping electricity affordable.

"I have told some of the environmental people, if you can show me a plan to figure out a way to replace that electricity, fine, but if you can't, it's going to raise electricity rates 30% or 40%, [rates] which are high enough on average people and that's not the way to go. In the meantime, I have emphasized very strong safety," Schumer said.

Gov. Andrew Cuomo has advocated the plant's closure due to its proximity to New York City.

"The NRC shouldn't ask the public to take its chances when so many questions are unanswered and the stakes are so high," said Riverkeeper President Paul Gallay. "Since May 2015, Indian Point has suffered seven major malfunctions, from pump failures to transformer explosions, to radiation leaks, power failures, fires and oil spills. ... Pending completion of the state and federal investigations, we must close Indian Point. These mishaps are happening on an accelerated pace. We shouldn't be asked to wait for the next one."



FERC Does 180 on Local Tx Cost Allocation in PJM

By Michael Brooks

Reversing a prior decision, FERC ruled last week that PJM transmission owners should pay all of the cost of projects that solely address a TO's local planning criteria (ER15-<u>1387</u>).

The commission accepted the proposal by PJM Transmission Owners, saying it had erred in its May 2015 order rejecting the Tariff change as contrary to Order 1000.

The commission also made its first application of the new rule, rejecting PJM's proposed cost allocation for Dominion Resources' Cunningham-Elmont rebuild project (b2582). The commission said that it was not eligible for regional cost allocation because it only addressed local needs (ER15-1344).

FERC based its original decision on a mistaken understanding that all projects in the RTO's Regional Transmission Expansion Plan are included for the purpose of regional cost allocation.

Based in part on a Nov. 12 technical conference and comments submitted afterward, the commission acknowledged that the RTEP lists some local projects that are included solely to ensure consistency with PJM's overall regional expansion plan.

"Based on the rehearing requests and comments on the technical conference, it has become clear ... that it is just and reasonable for the costs of projects with

these characteristics to be allocated entirely 50% based on a solution-based DFAX to the zone of the individual transmission owner whose Form 715 local planning criteria underlie each project," FERC said.

The commission said the rehearing order was consistent with its earlier finding approving MISO cost allocation provisions for baseline reliability projects (ER13-187, et al.).

Cunningham-Elmont

In the second order, FERC accepted PJM's proposed cost allocation for 60 low-voltage baseline reliability projects but told it to revise the cost assignments for the 500-kV Cunningham-Elmont project based on the revised cost allocation rule.

Dominion originally submitted the \$106 million rebuild as a supplemental project, meaning it alone would pay for it, but later revised its end-of-life criteria. PJM reclassified it as regional baseline project, determining a reliability violation would occur if it were taken out of the RTEP.

Dayton Power & Light protested the change, accusing Dominion of exploiting what it called a loophole to shift costs from its ratepayers to the entire RTO. It said the project was a replacement for an existing line "for which Dominion has always had 100% cost responsibility" but later recharacterized it as a "new" line eligible for regional cost allocation. Double-circuit 345kV and 500-kV and above projects are allocated 50% on a postage stamp basis and

analysis.

Dayton also said that as a project eligible for regional cost allocation, Cunningham-Elmont should have been subject to a competitive proposal window under Order 1000. (See DP&L Protests Dominion Project **Over New Cost Allocation.**)

PJM designated the project as an immediate need, meaning it was not required to open the project to competition.

While the commission found that PJM had correctly designated the project, it scolded the RTO for not providing enough transparency into the designation process. In filings and at the technical conference, PJM officials acknowledged there was no language in its governing documents detailing how a project is reclassified from supplemental to baseline.

FERC said that the RTO should post information regarding immediate-need projects more explicitly on its website, rather than relying on presentation materials at its Transmission Expansion Advisory Committee meetings. "We expect PJM will improve its processes to post information," FERC said.

LaFleur Dissents

Commissioner Cheryl LaFleur dissented in part on both orders, saying that highvoltage projects such as Cunningham-Elmont should be eligible for regional



LaFleur

cost sharing even if they were developed for local needs.

"I would condition acceptance of the PJM transmission owners' filing on the preservation of the current regional cost allocation method for certain high-voltage projects, even if those projects are selected solely to address local planning criteria," she

FERC has previously found that highvoltage projects have significant benefits for the entire PJM footprint, she noted. "I

Continued on page 20



Cunningham-Elmont route Source: Dominion



FERC: PSE&G Can Recover Costs if Artificial Island Project is Canceled

By Suzanne Herel

FERC on Thursday approved an incentive filing by PJM that will allow Public Service Electric and Gas to recoup all of its costs if the Artificial Island reliability project is canceled due to reasons beyond the company's control.

"PSE&G contends that the permitting, construction, coordination and procurement risks greatly increase the chance of delay and cost increases, thereby increasing the chance that the A.I. project could be canceled after PSE&G has invested time and money," the order said (ER16-619).

The project's crossing of the Delaware River alone will necessitate nearly 50 federal, state and local permits, it said.

PSE&G called the proposed work "unique," requiring it to design and order materials and equipment that could not be used readily if the project is canceled.

The project consists of building a 230-kV transmission line from the New Jersey nuclear complex housing the Hope Creek and Salem reactors to Delaware to resolve stability issues. PSE&G competed to win the full project, but the bulk of the work was awarded to LS Power, with PSE&G and

Pepco Holdings Inc. assigned the necessary connection facilities. (See <u>PJM Staff Picks</u> <u>LS Power for Artificial Island</u> <u>Stability Fix; Dominion Loses</u> Out.)

PSE&G's portion of the project involves expanding the Salem substation and building a static VAR compensator (SVC) upgrade at New Freedom, estimated to cost \$31 million to \$38 million at the time PJM recommended the project.

The FERC order quotes a \$126 million estimate from PSE&G.

American Municipal Power asked FERC to require PSE&G to submit a filing detailing any costs sought to be recovered in customers' rates in the event the A.I. project is scuttled. FERC included the requirement in its ruling that PSE&G be able to fully recover "prudently incurred" expenses.

The Delaware Public Service Commission submitted comments saying PSE&G had not adequately justified the need for an abandonment incentive.

Separately, Delaware and Maryland regulators and consumer advocates have



Salem Nuclear Station

opposed the allocation of the project's cost, nearly all of which has been designated to customers on the Delmarva Peninsula. FERC accepted but suspended PJM's Tariff changes involving the project's cost assignment pending additional review (EL15-95).

At a Jan. 12 technical conference ordered by the commission, stakeholders debated cost allocation based on the solution-based distribution factor (DFAX) method. (See <u>DFAX: 'Poison Pill or 'Best Method' of Cost</u> Allocation?)

FERC last week set a March 9 <u>deadline</u> for filing post-technical conference comments.

FERC Does 180 on Local Tx Cost Allocation in PJM

Continued from page 19

continue to believe that these high-voltage projects in PJM, even if developed solely to address local planning criteria, provide regional benefits that warrant some regional cost allocation," LaFleur said.

Undermining Order 1000

LaFleur seemed sympathetic to complaints by ITC Mid-Atlantic Development and LSP Transmission Holdings that the TOs' proposal would undermine the competitive process set out in Order 1000.

The majority rejected the companies' arguments, citing data from the TOs that for 98% of the 303 projects included in the

RTEP solely to address local transmission owner planning criteria, costs have been allocated exclusively to the individual TO's zone.

It also noted that where PJM finds that a project is needed not only for local planning criteria but also regional needs, "costs may be allocated outside of the zone of the transmission owner that filed the criteria" and a nonincumbent transmission developer could be selected to build it.

But LaFleur pointed out the TOs' admission that "the overwhelming majority" of the 303 projects they cited were lower voltage facilities. "They therefore fail to demonstrate that this dataset is representative of high-voltage projects that the PJM Transmission Owners previously argued, and the commission previously

found, confer regional benefits."

"Order No. 1000 was intended to ensure just and reasonable transmission rates through the improvement and expansion of regional planning and the introduction of competition," LaFleur wrote. "Even if crafted within the letter of Order No. 1000 and the commission's compliance orders, proposals to limit access to existing regional cost allocation and competitive bidding processes are, in my view, inconsistent with the rule's underlying goals."

Other Issues Pending

The commission said it is still reviewing other issues discussed at the November technical conference. (See <u>PJM TOs Defend Jurisdiction at FERC Conference</u>.)



FERC OKs FirstEnergy's Tx Spin-off; NJ, Pa. Approval Still Needed

By Suzanne Herel

FERC on Thursday greenlit FirstEnergy's plan to spin off the transmission assets of Jersey Central Power & Light, Metropolitan Edison and Pennsylvania Electric into a new subsidiary, rejecting motions for a stay by New Jersey and Pennsylvania regulators, who also must approve the deal.

New Jersey regulators could vote on the transaction as early as this week.

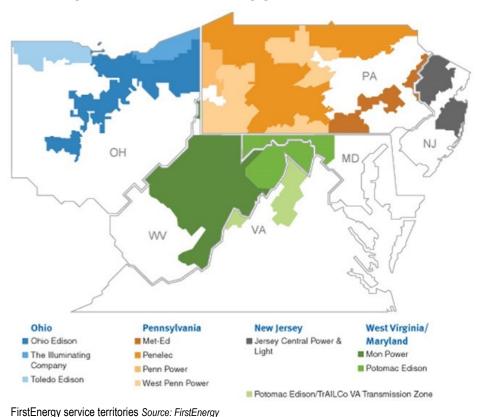
The proposal would form a new public utility, Mid-Atlantic Interstate Transmission (MAIT), which would manage all 24,000 miles of FirstEnergy's transmission system. (See <u>FirstEnergy to Spin off its Last Utility-Managed Tx Assets.</u>)

FirstEnergy said the stand-alone transmission company will have a better credit rating, enabling it to save money on grid-strengthening projects under its Energizing the Future program (EC15-157).

The company told the New Jersey Board of Public Utilities and the Pennsylvania Public Utility Commission it expects to save \$135 million over the 30-year life of \$1.5 billion in projects. It said total transmission spending over the next 10 years could reach \$3 billion in the two states.

State regulators had asked FERC not to rule on the deal until after they had rendered their decisions, saying that doing so would impair the states' proceedings. Both state boards took issue with the classification of the new transmission company as a public utility, raising "jurisdictional issues regarding the safety and reliability oversight of the transmission systems," according to the FERC order.

FERC determined that the transaction would not adversely affect state or federal regulation, and said that it is not the commission's policy to delay a decision because of parallel proceedings.



The commission also rejected LSD

The commission also rejected LSP Transmission's request that FERC prohibit the new company from claiming a right of first refusal in a broader area than the FirstEnergy operating companies could individually. FERC Order 1000, which opens up new projects to non-incumbent bidders, reserves to incumbents upgrades to existing facilities as well as "local" projects.

In Order No. 1000-A, LSP noted, the commission clarified that "a local transmission facility is one that is located within the geographical boundaries of a public utility transmission provider's retail distribution service territory, if it has one, otherwise the area is defined by the public utility transmission provider's footprint."

In rejecting the request, FERC cited as precedent a 2014 order in which it ruled that "the combined retail distribution service territories of the Entergy operating companies together constitute a single footprint for purposes of defining local transmission facilities."

In its comments, the Public Power Association of New Jersey recommended FERC accept FirstEnergy's offer to maintain a hypothetical capital structure of 50% debt and 50% equity for at least two years in order to not adversely affect rates.

FERC agreed and noted that the transaction includes a hold-harmless component preventing MAIT from passing on transaction-related costs to customers.

Connect with us on your favorite social media











MRC/MC Preview

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

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

Markets and Reliability Committee

2. PJM Manuals (9:10-9:20)

Members will be asked to endorse the following manual change:

A. Manual 18: <u>Capacity Market</u>. Changes conform with FERC's Dec. 22 order accepting for filing revisions to the Reliability Assurance Agreement (<u>ER16-333</u>). They address the circumstances under which fixed resource requirement (FRR) entities aren't mandated to meet the percentage of internal resource requirement, how such entities may terminate their five-year minimum commitment period and alternative election dates for new FRR entities. (See <u>IMEA Reaps Limited Relief from Capacity Rule Change</u>.)

3. End-of-Life Transmission Projects (9:20-9:35)

Ed Tatum of American Municipal Power will present a <u>problem</u> <u>statement</u> and <u>issue charge</u> that would develop uniform PJM-wide

<u>criteria</u> and guidelines for assessing end-of-life transmission facilities. The work is not intended to address any cost allocation issues and is expected to be completed by the end of the third quarter.

4. Governing Documents Enhancement & Clarification Subcommittee (GDECS) (9:35-9:45)

The committee will be asked to approve various cleanups, corrections and clarifications of <u>terms</u> included in the governing documents.

Members Committee

Consent Agenda (1:20-1:25)

- B. Members will be asked to approve Tariff <u>revisions</u> exempting some reliability projects below the 200-kV threshold from the proposal window process. (See <u>Low-Voltage Projects to be Exempted from Competitive Window Process.</u>)
- C. The committee will be asked to approve updated <u>definitions</u> and a cleanup of governing documents developed by the Governing Documents Enhancement & Clarification Subcommittee Group.

- Suzanne Herel

PJM Opens First Reliability Proposal Window of 2016

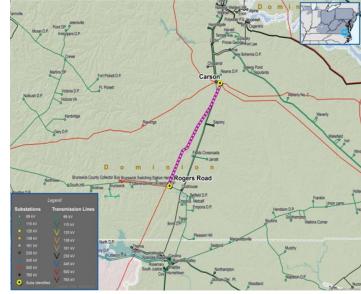
PJM's first 2016 proposal window for reliability projects opened Feb. 16 and will close March 17.

The RTO is looking to address problems on Dominion Resources' Carson-Rogers Rd 500-kV and Chesterfield-Messer Rd-Charles City Rd 230-kV lines and the replacement of facilities meeting the transmission owner's local criteria for end-of-life facilities.

The violations, which were identified in the 2020 generator deliverability and common mode outage analyses, were <u>presented</u> at the February meeting of the Transmission Expansion Advisory Committee.

The documentation necessary to participate is password-protected. Instructions on how to register for the proposal window are posted on PJM's <u>website</u>. Also posted are the <u>problem statement</u> and requirements.

This is the first window for which a new proposal fee will apply for upgrades and greenfield projects. There is no fee for proposed projects below \$20 million. A \$5,000 fee will be assessed for projects up to \$100 million. Proposals with a projected cost of more than \$100 million must be accompanied by a \$30,000 fee.



A PJM study found Dominion's Carson–Rogers Rd. 500-kV line (route pictured) will be overloaded if the Carson–Rawlings 500-kV circuit is lost. Source: PJM

– Suzanne Herel

SPP NEWS



Records Fall Again as SPP Convenes Wind Summit

By Rich Heidorn Jr.

LITTLE ROCK, Ark. — SPP conducted its second wind summit in as many years last week, delving into the technical details of a recent study that indicated the RTO could handle wind penetration levels of up to 60% with additional transmission and monitoring tools.

As if to underscore the point, SPP's balancing authority recorded new records for wind peaks and penetration levels during both nights of the summit.

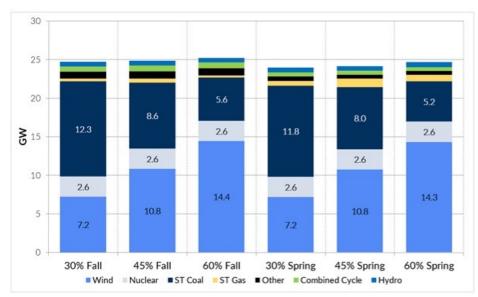
"I find it ironic that during this summit, we're predicting 43% wind penetration levels tonight and 48% tomorrow night," said Casey Cathey, SPP's manager of operations engineering analysis and support, as he kicked off the presentations and discussion.

SPP set new wind penetration levels of 43.3% Feb. 17 and then 43.9% after midnight on the early morning of the 19th. The penetration levels shattered the previous record of 39.1%, which lasted all of 18 days.

SPP also topped 10,000 MW of wind energy for the first time Feb. 17, recording a new wind peak of 10,439 MW. That eclipsed the old mark of 9,948 MW set in December. The Feb. 19 wind peak was 9,804.5 MW, when load was 22,332 MW.

The RTO began the year with 156 wind resources totaling 12,400 MW of installed capacity, accounting for almost 14% of its fuel mix. It expects to finish 2016 with 16,960 MW of wind generation and to add at least 2,035 MW more in 2017.

Because of the amount of wind generation being brought online in its 14-state footprint, SPP last year commissioned its first wind integration study since 2009. The analysis was presented to the Markets and Operations Policy Committee last month. (See <u>Study: 60% Wind Penetration Possible in SPP.</u>)



Generation by fuel type Source: SPP

"We're looking at [potentially] 12 [GW] of wind today," Cathey said. "We want to ensure we continue to operate reliably and economically with this wind."

The reliability-based <u>study</u> analyzed wind penetration at 30%, 45% and 60% of load during spring and fall seasons and compared them to current system conditions. SPP staff, with an assist from the Electric Power Research Institute, also performed steady-state thermal and voltage analyses, and voltage-stability, re-dispatch and ramping analyses.

Not surprisingly, staff said as wind penetrations increased, they saw "significant" transmission constraints, along with system overloads and wind farm curtailments. Cathey said SPP has sufficient ramping capabilities for today's wind penetration levels, but vast swings in wind's intermittency can cause problems.

"We can go from 1,000 MW to 9,000 MW and 9,000 MW to 50 MW over the course of hours," he said. "We're preparing for that and ensuring we're not too fat or too lean."

Cathey said the study showed the need for additional transmission beyond those projects identified by SPP's current planning process. The study also calls for expediting approved projects, monitoring ramping issues with real-time operations tools and providing additional flexibility for non-dispatchable variable energy resources.

Cathey said staff will next develop a costbenefit analysis comparing the cost of accelerating projects with the benefits of additional wind penetration. The analysis will be vetted by stakeholders, being first shared with SPP's Transmission Working Group during the next two months.

The cost-benefit analysis and a transient stability analysis are both likely to be part of the wind integration study's second phase. The scope has yet to be determined, with staff asking for stakeholder feedback.

"We're definitely looking into what else do we not know," Cathey said.

"This gives us a baseline to get the discussion off the ground," said SPP senior engineer Jason Tanner. "With this study, we can look farther into the future."

SPP wasn't the only RTO that set records for wind the night of Feb. 18-19. MISO hit a peak of 13,084 MW, surpassing the previous 12,720-MW record. Meanwhile, ERCOT topped out at 14,023 MW with a penetration level of 45%.

"I find it ironic that during this summit, we're predicting 43% wind penetration levels tonight ..."

Casey Cathey, SPP

FERC NEWS



FERC Streamlining Rehearing Orders Under New Unit

By Michael Brooks

WASHINGTON — FERC said last week it is streamlining its rehearing orders and creating a dedicated legal team within the Office of General Counsel to handle them.

The group, housed in OGC's Solicitor's Office, will produce shorter orders focusing on new arguments raised by petitioners, rather than chronicling the history of the case and reiterating the commission's positions on arguments addressed in the original rulings.

"We are hopeful that the creation of the rehearings group, coupled with the more streamlined approach to rehearing orders, will allow the commission to more efficiently process requests for rehearing, which in turn will further the public interest," Deputy Solicitor Robert Kennedy, who will head the new unit, said in a presentation at the commission's open meeting.

Previously, requests for rehearing were assigned to lawyers who drafted the original orders and who also handle other matters, some with legal deadlines, Kennedy said. The new group, consisting of attorneys not involved in the original orders, will partner with subject matter experts while providing a "fresh set of eyes" on its decisions, Kennedy said.

"We anticipate that the primary role of the rehearing group will be to make sure that the commission has ... fulfilled its legal obligation to articulate the connection between the facts found and the choice made, and to respond meaningfully to legitimate objections raised by the parties before it." Kennedy said.

Kennedy said the new group doesn't have any metrics regarding the backlog of rehearing requests and is still getting a sense of the workload and how much staffing will be needed. Chairman Norman Bay told reporters the group had just been staffed up the week prior.

"Ultimately ... our metric will be how we do in the Court of Appeals," Kennedy said.

Due Process

Bay, a former federal prosecutor, pointed to the appeals process in the courts as a model for the new process. "When there's a



Deputy Solicitor Robert Kennedy will head FERC's new rehearing unit.

petition for rehearing, virtually every single court in the country decides on a summary basis unless there's some new claim that has been raised," he told reporters. "And that certainly comports with due process. The commission, though, historically has not done this."

Even if the arguments raised in a rehearing request are the same as in the original filing, FERC has written a "fulsome" order responding to those claims. "I don't know how efficient that is from an administrative perspective," he said.

Bay wants FERC to focus on anything different that's been raised in a rehearing request. A claim can't be entirely new, as new evidence or information cannot be introduced in a rehearing request. "But if there's some variation of an argument that's already been raised, that truly has not been considered by the commission, then we ought to be focusing on that, as opposed to reiterating what might have been said earlier," Bay said.

The chairman said that the change was not prompted by any specific case or cases.

Complaints in federal court about the amount of time FERC takes in issuing orders on rehearing requests have never been successful, according to FERC.

"The commission always strives to examine what it's doing and, when appropriate, looks to build upon what it's doing and to improve what it's doing," Bay said. "And I think that this effort reflects this approach. We already do a good job, in my view, with respect to rehearings."

"I certainly expect that parties before the commission will appreciate the effort to get rehearing orders out more quickly," Commissioner Cheryl LaFleur said. "I'm certainly going to be paying particular attention to these orders especially in the first few months to ensure we properly balance clarity and efficiency."

A New Look

Kennedy presented the first two rehearing orders under the new process: one denying rehearing of FERC's decision to suspend for five months GenOn Energy Management's proposed reactive power tariffs (ER15-2571. et al.) and another denying rehearing of its decision to prohibit Alliance Pipeline from removing authorized overrun service from its rate schedule (RP15-1022).

As promised, the orders are much more concise than the usual rehearing order, omitting lengthy sections that explain the full procedural history of the case, including all the protests and comments filed by intervening parties. The Alliance order is a mere one page, simply reading: "Alliance's request raises no matter warranting any modification of [FERC's original November 2015 order]. Nor does it warrant any further comment on rehearing. Accordingly, the request for rehearing is denied."

The GenOn order, while longer, is still a brief six pages. "The format, rather than the substance, of the draft order is notable," Kennedy told the commission.

FERC accepted GenOn's revenue requirements for reactive power service from several of its power plants but suspended them until March 31. The company requested rehearing based on this provision, as well as the commission's decision to refer the matter to its Office of Enforcement.

The order summarizes this background in two paragraphs before coming to the commission's determination, which focuses exclusively on these two issues. The commission explained its methodology for setting the five-month suspension period, as well as citing the broad discretion afforded to it by the courts to determine these periods. It also said that it referred the request to Enforcement because it found the company may have continued to receive payments for reactive service from plants no longer capable of providing it.

The order concludes bluntly, "As to the request for clarification, we see no need to further clarify our underlying order beyond what we have stated herein."

FERC NEWS



FERC Seeking Comments on Primary Frequency Response Reform

FERC issued a Notice of Inquiry last week, seeking comment on potential changes to its rules on the provision and compensation of primary frequency response (RM16-6).

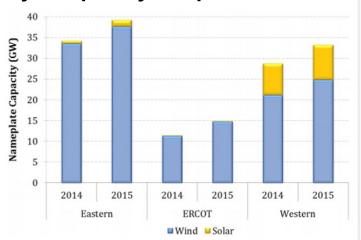
"In recent years, the nation's electric supply portfolio has transformed to a point where fewer resources may now be providing primary frequency response than when the commission considered this issue in other relevant proceedings," Jomo Richardson, of the Office of Electric Reliability, said in a presentation at the commission's open meeting.

Primary frequency response is the ability of generators to automatically change their output in five to 15 seconds when the grid's frequency strays above or below 60 Hz. It, along with slower-responding secondary frequency response and system inertia — the release or absorption of kinetic energy by the rotating masses of online generation and load within — are crucial to reliability.

FERC is concerned that the growing integration of wind and solar resources, and the retirement of coal generators and other synchronous units, "have the potential to reduce system inertia," making the system more susceptible to frequency changes in response to the loss of generation and reduction of load.

The NOI asks whether the *pro forma* interconnection agreements should be revised to require that all new generation resources have frequency response capabilities.

It also asks whether the commission should implement frequency response requirements for existing generators, and whether it should establish procurement and compensation mechanisms for



Wind and solar capacity by interconnection Source: FERC

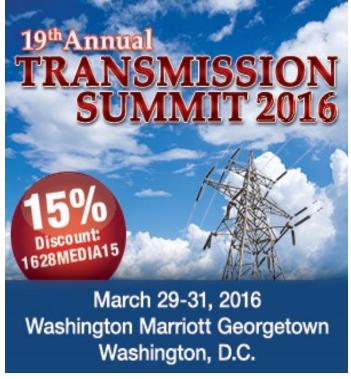
the service.

"In my view, the questions posed are thoughtful and set a framework to explore a broad range of possible solutions," Chairman Norman Bay said.

FERC has previously approved frequency response obligations for balancing authorities and permitted the sale of the service at market-based rates by generators. (See <u>FERC to OK 3rd Party Sales of Frequency Response</u>.)

— Michael Brooks





NiSource's Income Down

NiSource earned \$64.4 million (\$0.20/share)

from continuing operations in the fourth guarter of 2015, below the \$79.5 million (\$0.25/share) reported for the last three months of 2014. NiSource's full-year earnings totaled \$198.6 million (\$0.63/ share), compared with \$256.2 million (\$0.81/share) during 2014.

The company split from Columbia Pipeline Group through a distribution of its stock to its shareholders during the third quarter of 2015.

"Now in our first full year as a pure utility company, we're deeply committed to leadership in safety and service to our customers and communities as core drivers of sustained and growing value," CEO Joseph Hamrock told shareholders.

The Merrillville, Ind., company invested a record \$1.37 billion in 2015 in its gas and electric utilities in the seven states it serves. NiSource pledged to spend another \$1.4 billion on system upgrades in 2016. Hamrock said NiSource replaced 361 miles of pipeline in 2015 and continued or began modernization programs at its subsidiaries in Virginia, Massachusetts and Ohio. The company also installed automated meter reading devices for 4 million customers.

NiSource pointed to successful rate settlements last year in Massachusetts, Pennsylvania and Virginia, along with the Indiana Utility Regulatory Commission's approval of a settlement between Northern Indiana Public Service Co., its large industrial customers and the Indiana Office of Utility Consumer Counselor over NIPSCO's seven-year electric infrastructure modernization plan. Under the settlement, NIPSCO had to refund just under \$1 million. The company refiled the plan request, asking for \$1.33 billion and rate hikes over the next seven years to improve its infrastructure.

In a separate case, NIPSCO is seeking the IURC's approval to increase monthly residential charge from \$11 to \$20. NiSource said the increase would "update rates to reflect the current costs of generating and distributing power, plus ongoing investments which are delivering substantial benefits to customers, including programs that have reduced the duration of power outages by 40%."

- Amanda Durish Cook

PSEG's Q4 Earnings Wilt amid Mild Weather

PSEG Public Service Enterprise Group on Friday reported

that fourth-quarter earnings dropped to \$309 million (\$0.60/share) from \$476 million (\$0.94/share) for the same period in 2014, as the company dealt with unseasonably mild weather.

Operating earnings for the period — which exclude one-time costs - rose to \$255 million (\$0.50/share), from \$247 million (\$0.49/share) the previous year.

Earnings for all of 2015 were \$1.7 billion (\$3.30/share), up from \$1.5 billion (\$2.99/ share) a year earlier.

Operating earnings for the year were \$1.5 billion (\$2.91/share), compared with \$1.4 billion (\$2.76/share) in 2014.

"Our results reflect the benefits of excellent performance and robust organic growth, which offset the impact of low energy prices on earnings," CEO Ralph Izzo said on a call with analysts.

Izzo noted that in 2015, Public Service Electric & Gas invested about \$2.7 billion in enhancing the system's resiliency and its reliability. It placed into service key transmission upgrades, including the Susquehanna-Roseland line and the Mickleton-Gloucester-Camden line.

Meanwhile, PSEG Power plans to invest \$2 billion over the next three to four years to add an estimated 1,800 MW of combined cycle, gas-fired turbine capacity, he said.

"And, after clearing the most recent capacity auction in New England, Power will construct a new 485-MW combined cycle unit at its existing Bridgeport Harbor station site, giving us an enviable and growing position in both energy and capacity markets in Southwestern Connecticut," Izzo said.

- Suzanne Herel

Warm Winter Drives Down Ameren Quarterly Earnings

Ameren last week reported fourth-quarter earnings of \$29 million (\$0.12/share), down from \$48 million (\$0.20/share) in the same period of 2014. Ameren's 2015 net income totaled \$630 million (\$2.59/share) compared with 2014's \$586 million (\$2.40/ share).

Operating revenues for the fourth quarter came to about \$1.3 billion, compared with almost \$1.4 billion in the same period a year earlier. For the full year, operating revenues were up about \$45 million to \$6 billion.

The St. Louis-based utility said earnings fell in the guarter because of mild winter temperatures, which lowered retail electric and natural gas sales. The earnings drop was partially offset by the company's large investments in electric transmission and delivery, Ameren said. Earnings were also helped by the 18-month staggering of nuclear refueling and maintenance outages at the Callaway Energy Center, which kept the center running through 2015, the company said.

"We delivered strong earnings growth in 2015," Ameren CEO Warner Baxter said in a statement. "Despite some challenges, including very mild fourth-quarter weather, we were able to achieve this growth

through the continued execution of our strategy, which includes allocating capital to jurisdictions with modern, constructive regulatory frameworks and managing costs in a disciplined manner."

In 2016, Baxter said, the company would work with key stakeholders to "modernize" Missouri's regulatory framework to better support investment in that state's aging energy infrastructure for the long-term benefit of our customers and the state of Missouri."

Ameren offered a less sunny outlook for 2016 diluted earnings per share, projecting between \$2.40 and \$2.60, and the company cautioned that decreased sales to Noranda Aluminum, Ameren Missouri's largest customer, could cut shares by 13 cents this year. Ameren is currently working with lawmakers to save the Southeast Missouri smelter from closure while it seeks near-automatic rate increases for itself. Looking beyond the year, however, Ameren expects diluted earnings per share to grow 5 to 8% annually to 2020. Earlier in February, Ameren's board of directors declared a quarterly cash dividend of about \$0.43/ share.

— Amanda Durish Cook

FirstEnergy Q4 Earnings down, Company Awaits PUCO Decision

By Suzanne Herel



FirstEnergy last fourth-quarter

operating earnings of \$0.58/share, compared with \$0.80/share for the same period in 2014, citing greater planned operating expenses, higher tax rates and lower distribution deliveries.

Those factors were tempered by increased transmission revenue, a greater commodity margin for its competitive business and resolved rate cases in West Virginia, New Jersey and Pennsylvania, the company said.

"This year, we will continue to focus on regulated growth through our Energizing the Future transmission initiative, while strengthening our utilities business and managing risk across the company," CEO Charles Jones said. "We also look forward to resolving our Ohio Electric Security Plan, which will shape our longer-term strategic outlook."

On a non-adjusted basis, the Akron, Ohio,

company reported a net loss for the quarter of \$226 million (\$0.53/share) on revenue of \$3.5 billion, compared with a net loss of \$306 million (\$0.73/share) on equal revenue for the same quarter in 2014.

Operating earnings for the full year were \$2.71/share, compared with \$2.56/share for 2014.

Jones provided first-quarter 2016 guidance of 75 to 85 cents/share. He said in a call with analysts that he would not provide guidance for the full year until the Public Utilities Commission of Ohio rules on a proposed power purchase agreement proposal designed to shore up FirstEnergy's Davis-Besse Nuclear Power Station and the Sammis Plant. He expects a decision in March. (See Next up in Ohio PPA Battle: Dynegy Weighs in.)

Peppered with questions from analysts regarding the potential effects on the company if PUCO denies the agreement, Jones and Chief Legal Officer Leila Vespoli said they were optimistic and declined to prognosticate.

"What I've said is we will deal with that outcome when we have it, and we will communicate at that time what our earnings guidance for 2016 is, what our future growth plans for the utilities are, what our future equity needs might be, if anything, to support that growth." Jones said. "I've consistently said I think that generation, transmission and distribution are all critical assets in terms of serving customers, and right now I don't see any strategic change there for us."

Opponent of the plan have asked FERC to weigh in, and Vespoli said she expects the commission to do so before PJM's Base Residual Auction in May.

FERC last week approved a separate initiative in which FirstEnergy plans to spin off the transmission assets of Jersey Central Power & Light, Metropolitan Edison and Pennsylvania Electric into a new subsidiary. (See FERC OKs FirstEnergy's Tx Spin-off; N.J., Pa. Approval Still Needed.) The deal also needs the approval of regulators in Pennsylvania and New Jersey, which Jones said he expects by mid-year.

Duke to Sell International Business

By Suzanne Herel

Duke Energy last week confirmed it plans to sell its international business, which has been bedeviled by drought and weak currency exchange rates, the company said as it announced its fourth-quarter earnings.

"The returns over the last two years are inconsistent with our commitment to investors to provide predictable, stable earnings and cash flows. We believe there will be demand for this international portfolio at a reasonable valuation. The proceeds will be used to strengthen our balance sheet and help fund growth in our core businesses," CEO Lynn Good said on a call with analysts.

"We expect that a sale will be dilutive," she said. "Nonetheless, the strategic exit significantly improves our risk profile and enhances our ability to generate more consistent earnings and cash flows over

Good said it was too early to provide a

timeline for the transaction, which involves facilities in Brazil, Chile and Central America. Year over year, the international business saw adjusted income of \$225 million, down from \$428 million in 2014. In reporting Duke's third-quarter 2015 earnings in November, CFO Steve Young had predicted the division's earnings to stabilize by the end of the year and show modest growth in 2016.

Net income for Duke for the fourth quarter was \$477 million, compared with \$97 million for the same quarter in 2014. For the full year, the company reported earnings of \$2.8 billion, compared with \$1.9 billion in 2014.

Earnings per share for the fourth quarter were 87 cents, up slightly from a year earlier. For 2015, earnings per share were \$4.05, compared with \$2.66 the previous

"Fourth-quarter adjusted results were supported by increased retail pricing and wholesale margins in the regulated business, helping to offset the impact of

record mild December weather in the Carolinas," the company said in a release.

Discussing the company's overall strategy, Good said, "Our industry is undergoing transformation with new technologies, evolving customer expectations, increasingly impactful public policies and abundant low-cost natural gas. These factors will have a profound impact on our business in the years ahead and are informing our strategic investments. We are focusing our long-term strategy on our core domestic regulated businesses and our highly contracted renewables portfolio."

She also noted that Duke has "taken what we learned from the Dan River spill in early 2014 and applied it throughout our organization to strengthen operational discipline and results."

A near-term focus has been working through closing the company's coal ash

"Our intent would be to seek recovery in connection with a general base rate increase, which ... would be toward the latter part of this planning period," she added.

Avangrid Posts Profit in First Earnings Results

By William Opalka



Avangrid, the result of the U.S. arm of Spanish conglomerate Iberdrola acquiring UIL Holdings, released its

first-ever earnings <u>results</u> Monday, showing net income of \$267 million for 2015.

The company, which was created on Dec. 17 when regulators approved the \$3 billion acquisition, said that with only two weeks of UIL units included, there was no meaningful comparison to the prior year's results. (See Divided PURA Approves Utility Takeover.)

But Avangrid said the combined net income of Iberdrola USA and UIL for the full year — excluding \$71 million in merger costs and UIL's \$130 million in earnings prior to the acquisition — was \$468 million, compared with \$538 million in 2014. Iberdrola's wind assets reported lower income due to the effects of El Nino and warm winter weather impacted electricity sales.

The company had not posted a full earnings report showing operating revenue, expenses and fourth-quarter results as of press time.

"In 2015, we successfully completed our merger transaction on target, obtaining all regulatory approvals and closing within 10 months of our announcement," CEO James P. Torgerson said in a statement. "In 2016, we will rapidly conclude our transition planning within the first quarter, focus on executing our capital expenditure plan in all of the businesses and proceed with our important initiatives."

Avangrid includes eight gas and electric distribution utilities in New York and New England, and renewable energy operations in 25 states coast-to-coast, primarily wind farms. The company is the second-largest operator of wind facilities in the U.S.

In a <u>presentation</u> to Wall Street analysts on Monday, Torgerson said, "We are now a large energy company with regulated businesses and investments in clean energy. Ninety percent of our generation is totally emissions-free, so we can focus very much on the renewable business." The CEO said about two-thirds of its assets are in fixed, long-term power purchase agreements that create predictable earnings.

Avangrid projects earnings of \$1.65/share for its distribution business, 40 cents/share for its renewables business and a 5-cent loss from corporate operations and its gas storage and transportation business.

For comparison going forward, the company is using the combined operations of Iberdrola USA and UIL from 2014 as the base in projecting future earnings of 8 to

10% per year. It gave an estimate of consolidated earnings of \$2/share for 2016. The company's board of directors declared a quarterly dividend of \$0.432/share on its common stock.

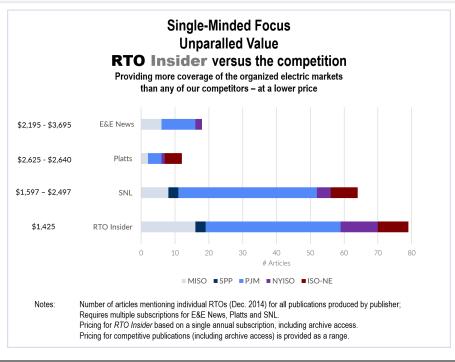
New York Rate Case

Company officials announced that a settlement had been reached in New York for its two electric and gas distribution utilities, New York State Electric and Gas and Rochester Gas & Electric.

A joint proposal with numerous stakeholders — including regulatory staff, large commercial and industrial customers, and consumer and environmental representatives — was filed with the New York Public Service Commission on Friday (15-E-0283).

Depending on the year and segment of the three-year proposed settlement, the increases range from 1 to 7%. In aggregate, the total in incremental revenue is \$390 million. Also included in the settlement is the recovery of \$262 million over about seven years for storm-related costs in the NYSEG territory, primarily related to Superstorm Sandy.

The company expects public hearings to begin in April, PSC consideration in May and rates effective on June 1.



COMPANY NEWS

Entergy Reports 2015 Loss off of Nuke Closures

Fourth-quarter profits of \$99.6 million (\$0.56/share) weren't enough to offset Energy's losses for the year, the company reported last week.

Entergy lost \$176.6 million (-\$0.99/share) in 2015, compared to \$940.7 million in earnings in 2014. Much of the loss was driven by its wholesale electricity business, Entergy Wholesale Commodities (EWC), which experienced a 46% drop in operational earnings.

Entergy CEO Leo Denault noted that the company's results are "reflecting the changes in strategic direction for the EWC business." Those changes included deciding to shut down the Vermont Yankee, Pilgrim and FitzPatrick nuclear stations. Vermont Yankee closed at the end of 2014, while the company announced late last year it would close the other two.

"The most significant factor was lower wholesale prices," CFO Drew Marsh said. "The nuclear fleet revenue was \$44/MWh this quarter, down from \$54 in 2014,

excluding Vermont Yankee. Closure of VY contributed 5 cents to the decline."

"We took steps to reduce volatility and gain clarity on the future of the business. Closing Pilgrim and FitzPatrick was not the path we wanted to take," Denault said. "After pursuing many alternatives, they ultimately were the only options remaining for us. We know they are tough decisions for those involved and we are committed to supporting our employees who work at these plants and their communities throughout this difficult transition."

Denault said the company has yet to commit to a mid-year refueling at Pilgrim, which will have a large effect on future costs and generation output there, and possibly the closing date.

He also said the company is committed to building new natural gas-fired generation, including a 980-MW plant in Montz, La., as well as the purchase of the Union Power Station, a 1,980-MW near El Dorado, Ark.

- Ted Caddell

Con Ed Reports Higher Earnings



Consolidated Edison on Thursday reported 2015 net income of \$1.19 billion conEdison (\$4.07/share) compared with \$1.09 billion (\$3.73/

share) in 2014.

Excluding the impairment of certain assets held for sale, the gain on sales of solar electric production projects, the impact of lease in/lease out transactions and the net mark-to-market effects of the competitive energy businesses, the company earned \$1.2 billion (\$4.08/ share) in 2015, compared with \$1.14 billion (\$3.89/share) the year before.

For the fourth quarter of 2015, unadjusted net income totaled \$176 million (\$0.60/share) compared with \$81 million (\$0.28/share) in the fourth quarter of 2014. Adjusted, earnings were \$178 million (\$0.61/share) in 2015 compared with \$171 million (\$0.58/ share) in fourth quarter 2014.

The company expects adjusted earnings of \$3.85 to \$4.05/share for 2016. The forecast reflects capital investments of \$4.15 billion, which includes \$985 million for the competitive energy businesses' renewable and energy infrastructure projects.

"We embrace new technologies that are changing the energy industry and use them to partner with our customers, CEO John McAvoy said in a statement. "Customers want more options, including the ability to generate power in their own homes or businesses and greater access to cleaner energy. We see potential throughout our businesses, and are confident that our experience and expertise make us a leader in our field."

Con Ed said it will meet its 2016 capital requirements from cash flow and by issuing \$1 billion to \$1.5 billion in longterm debt at its utility subsidiaries. Additional debt will be secured by its renewable electric production projects. Con Ed also plans to issue up to \$200 million in new common equity, in addition to equity created through its dividend reinvestment, employee stock purchase and long-term incentive plans.

— William Opalka

COMPANY BRIEFS

Utilities Looking for Proposals On Shuttered Wis. Power Plants

DTE Energy and Wisconsin Power and Light are looking for buyers of their closed power plants near Cassville in southwest Wisconsin.

DTE Energy is selling its Stoneman biomass plant, which closed in November, while WPL is listening to proposals for its shuttered coal-fired Nelson Dewey Generating Station, which closed at the end of 2015. The closures eliminated about 85 jobs in the area.

A DTE spokesperson said the company plans to demolish Stoneman in 2017. A local commerce group wants the WPL plant, located on 130 acres of Mississippi River waterfront, developed into a port facility. WPL's parent company, Alliant Energy, has hired a consulting firm to come up with a marketing plan for future uses. The site will require environmental cleanup before it is redeveloped.

More: <u>Dubuque Telegraph Herald</u>

Talen Energy Sells Crane Plant in Md.

Talen Energy has sold the 399-MW C.P. Crane power plant in Maryland to an affiliate of investment firm Avenue Capital Group. Terms of the sale were not released.

The coal-fired plant, near Baltimore, is the second plant sold by Talen recently to satisfy a FERC-mandated plan to mitigate the market effects of the company's creation from PPL and Riverstone Holdings last year.

Talen says it plans to sell two Pennsylvania hydro plants before the end of the first quarter to satisfy the FERC divestiture requirements: Holtwood, on the Susquehanna River in Lancaster County, and Lake Wallenpaupack in Wayne County.

More: The Morning Call

COMPANY BRIEFS

Continued from page 29

Hawaiian Electric Cancels Contracts With Troubled SunEdison



SunEdison, once a SunEdison high-flying solar developer, absorbed

another blow when Hawaiian Electric canceled a contract to purchase 148 MW of output because of construction delays.

In a regulatory filing about the contract cancellation, Hawaiian cited SunEdison's "apparently precarious financial condition" as a cause for numerous missed deadlines. The company's stock has fallen 92% in the past year.

"SunEdison missed multiple deadlines throughout the process, did not provide adequate assurances that it could secure financing to develop these projects and did not propose viable options to address the significant risks to our customers of not securing lower cost renewable energy," a Hawaiian Electric spokesman said.

More: Bloomberg

Duke Nuke Fleet Beats National Capacity Average



Duke Energy's nuclear fleet ran at last year, the

company reported, noting that its Oconee Nuclear Station in South Carolina turned in a 98% capacity factor for 2015. The national average for 2015 was 91.2%.

Duke, like Exelon, continues to tout nuclear generation as a carbon-free power source, an important consideration as federal emissions mandates get stiffer. In addition to having plans to build the new, \$12 billion Lee Nuclear Station in Gaffney. S.C., Duke intends to seek license extensions ranging from 20 to 40 years for its other plants.

Duke operates 11 nuclear generating stations. Its fleet has operated at better than 90% capacity for 17 consecutive years.

More: Charlotte Business Journal

Oncor Bidders Defend Their Plan From Critics Who Fear a Windfall



The group trying to buy Oncor said its plan to restructure Texas' largest utility could save electricity customers

hundreds of millions of dollars, but critics of the plan say it doesn't take into account a tax-related windfall that could send \$250 million a year to the buyers.

Dallas billionaire Ray L. Hunt leads the group that is seeking to buy Oncor and help take it out of bankruptcy. The group filed a detailed response to the Public Utility Commission of Texas on Feb. 19 that addresses objections raised by several parties, including PUCT staff, former Gov. Rick Perry, the current Oncor chief executive and AARP.

The commission is expected to indicate whether it will approve the Hunt group's plan at its March 3 meeting.

The group wants to put up \$18 billion for

the business and split it into two new companies.

More: The Dallas Morning News

Sierra Club Files Suit Against 3 Companies over Earthquakes



The Sierra Club filed SIERRA suit in U.S. District CLUB Court against three oil and gas exploration companies, charging

that their wastewater disposal in deep injection wells is triggering earthquakes in Oklahoma and Kansas. The suit names Chesapeake Energy, New Dominion and Devon Energy for contributing to a staggering increase of seismic activity.

The suit says the companies "contributed and continue to contribute to the increased seismicity triggered by the waste handling, transport and disposal activities at the injection wells owned or operated by the defendants throughout the state of Oklahoma and southern Kansas."

The suit asks a judge to curtail the number of gallons of drilling waste being injected into deep rock layers and that the companies pay to protect buildings from earthquake damage.

"The oil industry is on its knees, the business models are busted," said Bloomberg Intelligence Analyst Peter Pulikkan. "And now you have this threat of disposal wells being linked to earthquakes that could put companies with material exposure permanently out to pasture."

More: Bloomberg

FEDERAL BRIEFS

Traders to Seek De Novo Review In CAISO Manipulation Case



ETRACOM and its Michael Rosenberg

said last week they will seek a de novo review of FERC's allegations that they manipulated the CAISO energy market in a scheme that allegedly netted \$315,000 in profits. That would mean a federal court would decide all issues of fact and law in the beginning of the case, rather than the company potentially appealing an unfavorable FERC ruling afterward.

The company announced its decision in its

response to FERC's Dec. 16 Order to Show Cause (IN16-2), which accused the company of submitting uneconomic virtual supply transactions at the New Melones intertie at the CAISO border in order to affect power prices and benefit its congestion revenue rights there. (See FERC Seeks \$2.5M Fine in CAISO Market Manipulation.) The company said its bidding was proper and that FERC "cherry-picked facts" to show manipulation, ignoring CAISO's market design flaws and modeling errors. Its response includes statements from former FERC attorney and economist Shaun Ledgerwood, of The Brattle Group, and Harvard University professor William Hogan in support.

"This proceeding is significant as it is the first public enforcement action by FERC where every document, email and instant message, as well as witness testimony, supports legitimate trading activity; significant undisclosed and unknowable market design flaws and software pricing/ modeling errors caused the alleged harms and substantially influenced the underlying trading activity; and a grid operator violated its own tariff," the company's attorney, Robert Fleishman, said in a statement.

More: ETRACOM Answer to Order to Show <u>Cause</u>

FEDERAL BRIEFS

Continued from page 30

NRC's Ostendorff Leaving After Term Ends in June

Nuclear Regulatory Commissioner William Ostendorff said he will not seek another term at the agency and will leave when his current term expires June 30.

Ostendorff has been on



Ostendorff

the commission six years. He said he will return to a teaching position at the U.S. Naval Academy.

Ostendorff, a Republican, is one of two remaining commissioners from the post-Fukushima period, when the commission came under fire for its response following the meltdown in Japan.

More: The Hill

EPA Says Luminant Coal Plants Violate Federal Standards



EPA has tentatively determined that sulfur dioxide in the air around Luminant's coal-fired Big Brown, Martin Lake and

Monticello plants violates federal standards.

The agency announced a plan in December requiring reductions in SO₂ emissions at those plants and four others in Texas. The test results released Feb. 17 target the same pollutant, but are triggered by a different part of the Clean Air Act.

Luminant questioned EPA's latest testing. "The proposed SO₂ designations by the EPA are based on computer modeling funded by environmental groups," spokesman Brad Watson said. "We firmly believe these models do not accurately predict actual emissions measurements and that these designations should be determined by realworld emissions data from air quality monitors."

More: The Dallas Morning News

NRC Info Officer Moving to **USDA Farm Service Agency**

Darren Ash, chief information officer for the Nuclear Regulatory Commission for the past nine years, is leaving to take a similar position with the Department of Agriculture's Farm Service Agency.



Ash

While at NRC, Ash prepared the agency for what was expected to be a flood of permit applications for new nuclear plants. But when that didn't happen, he turned his attention to transitioning the agency to cloud computing and mobile applications.

More: Federal News Radio

NRC Increasing Oversight At Entergy's Pilgrim Plant



Entergy's Pilgrim nuclear station is coming under increased oversight from Nuclear **Regulatory Commission inspectors** following a performance review of the Massachusetts station. The commission said the scrutiny is a result of reviews of issues the plant has had with safety relief valves.

The inspection took place in September. The 728-MW plant experienced difficulty during a harsh snow storm last year when it lost offsite power, triggering an automatic shutdown. Entergy took the plant offline earlier this year as a blizzard approached.

Entergy has said it will permanently close the plant by 2019.

More: Reuters; The Patriot Ledger

NRC Finds Five Safety Violations At PSEG's Salem-Hope Creek

The Nuclear Regulatory Commission said it found five safety violations at the Salem and Hope Creek nuclear plants but characterized the violations as low significance. The three-reactor complex is operated by PSEG Nuclear.

Four of the violations were found at Salem Units 1 and 2: failing to keep appropriate maintenance records for containment cooling fans, failure to conduct proper equipment tests, improper removal of a

radiation barrier and failure to properly maintain a radiation monitor. The fifth violation, also ranked "low" by NRC, related to Hope Creek employees' failure to document and correct a loss of heat and air conditioning in the station's main control room during a station blackout.

A PSEG spokesman said the violations are being corrected.

More: The News Journal

TVA Considers Sale of Mothballed Ala. Nuke



Citing a lower-than-expected load-growth forecast, the Tennessee Valley Authority has decided against building two new units at its Bellefonte nuclear plant and is considering selling the two incomplete units, where construction halted in the 1980s.

In filings with the Nuclear Regulatory Commission, the federally owned company withdrew its combined operating licenses for the proposed Units 3 and 4 at the site, a 1,600-acre peninsula on the Tennessee River near Hollywood, Ala. TVA CEO Bill Johnson later said the authority would consider selling the entire site, if it made sense for shareholders.

"It's time we answer the question of whether TVA is serving the public well by retaining control of the Bellefonte site, or if others could make more beneficial use of it," Johnson said. "And with economic development as a cornerstone of our mission, TVA wants to know if there is an entity interested in investing and creating jobs at this location."

More: GenerationHub

REGIONAL

Md. Enters Fray over Dominion's Coal Ash Water Release Plan



Maryland Gov. Larry Hogan's administration said it intends to appeal a permit approved by Virginia regulators that would allow Dominion Virginia Power to release 215 million gallons of treated coal ash water into Quantico Creek, which empties into the Potomac River.

Dominion wants to seal five coal ash residue ponds at the Possum Point plant, where ash has been stored since the plant last burned coal in 2003. A company spokesman said its disposal proposal meets stringent limits imposed by the Virginia's Department of Environmental Quality.

But Hogan isn't so sure. "The fact is, Virginia's decision to dump millions of gallons of polluted wastewater into the Potomac River could adversely impact both human and aquatic life," chief Hogan spokesman Matthew Clark said. "Ignoring the risk simply isn't an option."

More: The Washington Post

ARKANSAS

Entergy Says Fuel-Cost Savings Will Offset 8% Rate Increase



Entergy Arkansas says a projected decrease Entergy in fuel costs would help offset the

customer impact of a requested 8% baserate increase before the Public Service Commission.

The utility met with the PSC last month to discuss a settlement rate proposal for a \$133.6 million rate increase. If approved, a customer with a \$100 monthly bill would see it increase to \$108.30/month.

More: The Associated Press

CONNECTICUT

United Illuminating, Eversource Propose Integrating Renewables



The United Illuminating Co. and

Eversource Energy have submitted proposals to the Department of Energy and Environmental Protection for pilot projects to better integrate renewable energy into the electric distribution system.

Both utilities propose to install battery storage systems to help integrate the growing number of distributed energy sources on the grid. Another proposal is an online mapping tool that would allow the utilities to view existing power generators and proposed projects at the substation and circuit levels. "It would indicate where our distribution network has capacity to support in a neighborhood or whether that area has more solar generation feeding into it than the system can really handle," said Camilo Serna, vice president strategic planning and policy for Eversource.

DEEP has until January 2017 to report to the legislature about the proposals, which were mandated last year.

More: New Haven Register

ILLINOIS

Madigan Accuses Utility Execs Of Misleading Regulators

In a filing with the Commerce Commission, Attorney General Lisa Madigan said the chief executives of Peoples Gas and previous parent Integrys Energy Group violated state law last year when they withheld information from regulators on the soaring costs of the



Madigan

utility's program to replace 2,000 miles of aging gas mains in Chicago.

Madigan said former Peoples President John Kleczynski and former Integrys CEO Charles Schrock knew the program's costs had nearly doubled, from \$4.6 billion to \$8 billion, when they testified last year before the ICC on the proposed acquisition of Integrys by Wisconsin Energy Corp. The commission, which approved the \$5.7 billion merger, is now investigating whether it should impose fines on company executives for misrepresenting material facts.

Madigan's office, in seeking more information from the ICC, said the merger could have been impacted by the disclosure and raised questions of whether finalizing the transaction "was the primary concern of Integrys executives given the tremendous financial incentives that were conditioned upon the completion of the merger."

More: Crain's Chicago Business

INDIANA

Couple Challenge Recent **Edwardsport Settlement**



A local attorney and his wife are challenging a recent settlement between Duke Energy and several parties concerning the Edwardsport coal gasification project. The agreement with the state's Office of Utility Consumer Counsel and industrial customers would limit rates and provide money for solar projects and low-income customers.

Michael Mullett, co-founder of an advocacy group that was granted intervenor status by the Utility Regulatory Commission, says the settlement doesn't protect residential ratepayers. He said that ratepayers should not be asked to finance any of the project's \$145 million in start-up costs. The settlement allows the utility to recover about \$80 million of startup costs from customers.

More: Midwest Energy News

IOWA

Lawmakers Try to Boost Popular Solar Credit

Legislators are proposing to boost funding for a popular solar credit from \$5 million to \$7.5 million in an effort to maintain

Continued from page 32

momentum for the solar industry. State Sen. Joe Bolkcom, the bill's sponsor, said the Solar **Energy System Tax Credit** has been "hugely important" in convincing homeowners and business owners to install solar panels.



Bolkcom

"There's been \$90 million in private investment for \$11 million in tax credits," said Bolkcom, a Democrat from Iowa City. "It's created jobs in almost every county. It's made a huge difference here."

The solar tax credit was launched in 2012 with a budget of \$1.5 million and funding has since been twice increased. The credit works out to about 18% of the cost of a typical solar installation.

More: Midwest Energy News

KANSAS

Senate Moves to Block State's Clean Power Plan Study

The state Senate has advanced a bill that would block the Corporation Commission from spending any money to study how to comply with the federal Clean Power Plan until a pending legal challenge is resolved.



Olson

Sen. Rob Olson (R-Olathe) added the amendment onto a bill that calls for disbanding the Kansas Electric Transmission Authority, an agency that was established to coordinate construction of new transmission lines to move wind energy to urban markets.

Lawmakers last year authorized the KCC and the Department of Health and Environment to develop a response to the Clean Power Plan, but only after review by a legislative oversight committee. The KCC is searching for a consulting firm to work on the state's study.

More: Lawrence Journal-World

Utilities Square off over Tx Right of First Refusal Bill

A bill that would allow existing state transmission owners first crack at building new local power lines attracted a standingroom-only crowd of rival industry advocates to a hearing in the House of Representatives.

The legislation was prompted by FERC's decision to eliminate the federal right of first refusal on new transmission facilities ranging from 100 to 200 kV. FERC Order 1000 allows states to maintain transmission owners' rights of first refusal for projects on their existing networks.

Supporters said the bill would ensure a reliable electric grid. But skeptics, including Bill Riggins, senior vice president for Kansas Electric Power Cooperative, said it would concentrate the transmission market. "The bill would eliminate open competition for transmission ownership, thus allowing current transmission owners, and their chosen affiliates, to monopolize future transmission in Kansas," he said.

More: The Topeka Capital-Journal

LOUISIANA

ALJ Says Cleco Sale not Beneficial to Customers



An administrative law judge questioned regulators should allow

the \$4.9 billion sale of Cleco Power to a consortium of Canadian and Australian investors, citing a provision that allows buyers to pocket about \$30 million in taxes collected from the utility's customers.

Chief Administrative Law Judge Valerie Seal Meiners said the deal may be good for Cleco shareholders but not for the utility's 286.000 customers in the state. Meiners has been reviewing the deal behind closed doors for the past 18 months.

The Public Service Commission has scheduled a vote Wednesday to decide whether the sale goes through. Cleco shareholders would sell their stock at a 15% premium, about \$55.37/share, to a consortium of investors led by Macquarie Infrastructure and Real Assets, based in Sydney, Australia.

More: The Advocate

MAINE

Bill Would Endorse Natural Gas Storage



A legislative panel supports the idea of giving utilities the ability to reserve storage space in a

proposed LNG facility, which would hold the equivalent of 1 billion cubic feet of gas for customers during peak winter heating months.

Northern LNG, which has proposed building the facility, has been pushing the bill, which the Legislature's Energy, Utilities and Technology Committee is expected to endorse next week after working on final language.

One potential roadblock: The Legislature in 2013 gave utilities the authority to sign long-term supply contracts to finance an expansion of natural gas pipeline capacity. Lawmakers say pipeline expansion is a priority and they don't want the LNG proposal to interfere.

More: Portland Press Herald

MICHIGAN

PSC: Utilities Exceeded 10% Renewable Mandate

Utilities in 2015 surpassed the state's 10% renewable energy mandate, the Public Service Commission said in its sixth annual report, prompting conservationists to call for the state to set a higher target.

The PSC said all 75 power producers in the state met the target by Dec. 31. Under a 2008 energy law, they are required to maintain the same amount of renewable energy credits in the future.

Jack Schmitt, deputy director of the Michigan League of Conservation Voters, said the renewable energy standard now needs to expand beyond the 10% level. Schmitt said investment in renewable sources has leveled off at around \$2.9 billion.

More: Crain's Detroit Business

Continued from page 33

MISSOURI

Ameren may be Forced to **Install More Pollution Controls**



EPA's recent designation of St. **TETEN** Charles and Franklin counties as areas where sulfur dioxide

levels are too high could force Ameren Missouri to install more pollution control equipment on its Labadie Plant on the Missouri River.

The state Department of Natural Resources also showed SO₂ exceeding limits, but it recommended deferring action until the federal agency weighed in.

The SO₂ levels have declined since Ameren switched to low-sulfur coal from the Western Powder River basin, but it has not been enough to comply with the law, according to EPA.

More: St. Louis Post-Dispatch

NEW HAMPSHIRE

Pipeline Restrictions Fail to Gain Traction



Six of the 10 bills legislature that

would have complicated Kinder Morgan's controversial Northeast Energy Direct pipeline project are already dead, and the other four also seem imperiled.

Lawmakers are still considering a bill that would force pipeline operators like Kinder Morgan to pay reluctant landowners three times market value for any property taken under eminent domain. Another bill would require utilities using eminent domain to buy an entire property, not just the right of

Kinder Morgan's Tennessee Gas Pipeline is pushing the \$5 billion natural gas transmission project that would deliver Marcellus Shale gas to New England markets. The pipeline has aroused intense public opposition.

More: New Hampshire Union Leader

NEW MEXICO

House Panel Ends Bid to **Appoint PRC Members**

Voters will continue to choose members of the **Public Regulation** Commission.

The House Judiciary Committee voted Feb. 11 to table a proposed constitutional amendment to change the commission from an elected body to one



Trujillo

appointed by the governor, effectively killing the bill. The 8-3 vote came after three of the five members of the commission spoke in opposition to the measure.

State Rep. Carl Trujillo said 40 states and U.S. territories have regulatory bodies whose commissioners are appointed and said he wanted to make sure that the commission's decisions "are not changed by political winds."

More: The Santa Fe New Mexican

NEW YORK

State Joins 17-State **Energy Accord Coalition**

The state has joined the 17-state, bipartisan Governors' **Energy Accord** Coalition, which develops energy policies and initiatives that expand clean energy sources, modernize energy infrastructure and build a clean energy economy.



Cuomo

"From the creation of a \$5 billion Clean Energy Fund to implementing our ambitious Clean Energy Standard, New York is fully committed to our role as a national leader in growing the clean tech economy," said Gov. Andrew Cuomo.

The governors of California, Connecticut, Delaware, Hawaii, Iowa, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia and Washington have also joined the effort.

More: Gov. Andrew Cuomo

NORTH CAROLINA

Duke Energy Progress' Third Gas Plant Rejected



The staff of the **Utilities Commission** ENERGY® appears poised to recommend approval of Duke Energy

Progress' plan to replace a coal-fired plant at Lake Julian in Asheville with two natural gas units.

But staff said the company's request for permission to build a third contingency plant if needed by 2024 was unwarranted.

If the project is rejected, the deadline for Duke to clean up coal ash at Lake Julian generation complex will be advanced.

More: Carolina Public Press

OHIO

Dynegy Presses Opposition to FirstEnergy, AEP PPAs

Opponents of the proposed power purchase agreements that would give FirstEnergy and American Electric Power guaranteed rates in the state are ratcheting up the rhetoric.

"The middle class is getting screwed," Dynegy CEO Robert Flexon said at an energy forum in the state. "And quite honestly, folks, that's how I feel about these PPAs. These only exist for Wall Street." The Alliance for Energy Choice says nearly 55,000 emails protesting the proposed PPAs have been sent to elected officials and the Public Utilities Commission.

The agreements would guarantee the companies eight-year returns on power generated by some of the plants in their fleets. The companies have argued the PPAs are necessary to keep the plants operating in the competitive market.

More: Columbus Business First; The Blade

PENNSYLVANIA

Will Cap on Net Metering Stifle Alternative Energy Growth?

Solar energy advocates worry that a recent decision by the Public Utility Commission to limit the amount of energy residents can sell back to utilities might curtail alternative

Continued from page 34

energy growth.

Under the ruling, residents who install new rooftop solar panels would be limited to 200% of a building's historical usage or 50 kW.

Utilities had asked for even stricter caps, saying that the expense of paying residential providers the retail cost of their power was being passed down to consumers.

More: State Impact; The Philadelphia Inquirer

TEXAS

SPS Asks for \$71.9M Increase To Cover Infrastructure Costs

Southwestern Public Service has filed for a \$71.9 million rate increase for its Texas customers, just two months after the Public Utilities Commission of Texas denied the utility's \$42 million rate request and actually ordered a \$4 million cut in revenue.

SPS said the increase in base rates is necessary because a significant amount of investment was not included in them, which are based on costs from a historical test period. The new request

would increase a typical 1,000-kWh residential bill by \$9.56/ month, or 9.2%.

The PUCT in December answered the utility's rate-increase request with a \$4 million cut in revenue, but reallocated revenue among various customer classes so that the rate for residential customers actually went up \$1.11/month on Feb. 1. SPS, however, says that reductions for fuel and purchased power costs over the past year have reduced a typical residential bill by more than \$9/ month.

More: Amarillo Globe-News

VIRGINIA

Assembly Moves to Take Control Of Clean Power Plan Compliance

The State Assembly is advancing bills that would require its approval of any proposal to comply with EPA's Clean Power Plan, which has been stayed by the U.S. Supreme Court.

The bills were approved last week by House and Senate panels in the Republican-controlled legislature. Republicans contend that the federal mandates will raise energy costs and hurt businesses.

More: WVIR

FERC Likely to Eliminate Must-Offer Rule for West

Continued from page 1

In last week's order, FERC said the rule no longer was necessary and that the posting requirement "may have become burdensome."

The commission said California has met the standard for long-term solutions, spelling out "significant changes" implemented in the CAISO balancing area since the must-offer requirement was instituted. Those changes include LMP-based day-ahead and real-time energy markets, ancillary services markets,

a day-ahead residual unit commitment process and local market power mitigation measures.

The order also notes that California's ambitious renewable portfolio standard (RPS) and resource adequacy program have reduced the state's reliance on spot markets, ameliorating a flaw in the previous market that left the state's load-serving entities exposed to short-term price spikes. FERC credited the RPS and CAISO's improved generation interconnection process for producing "robust" reserve margins, and said that a recent build-out in

WECC has been adequate for all western subregions to meet reserve margin targets for the 2014-2024 period.

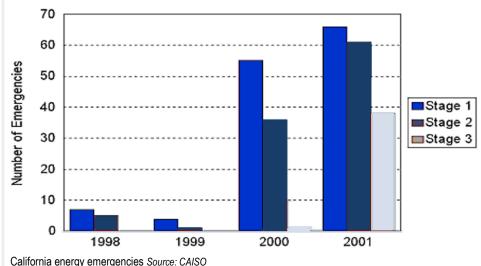
"[G]iven the significant improvements in CAISO's market design and infrastructure outlook in the West, we believe that it may be appropriate at this time to eliminate the West-wide must-offer requirement and the related requirement to post available capacity on the WSPP website or on the utilities' own websites," FERC wrote.

A CAISO spokesperson said Friday the grid operator was still reviewing the FERC order. The California Public Utilities Commission did not respond to a request for comment. Broad must-offer requirements have already been eliminated from the CAISO tariff with the adoption of longer-term resource adequacy provisions.

One Pacific Northwest utility analyst familiar with regional compliance issues said the rule's termination should have little effect on operations at her company.

"It won't change anything except a requirement to post a number on OASIS every day that nobody looks at," said the analyst. "So it's good news."

FERC asked interested parties to submit comments on the termination of the mustoffer requirement within 30 days. The commission expects to render a decision on the issue by June 18.



Keep your eyes and ears on the organized electric markets — and the real-time policies that drive them. RTO Insider is now integrated within the EnerKnol platform.



Advertisement