RTO Insider
Your Eyes and Ears on the Organized Electric Markets
CAISO ■ ERCOT ■ ISO-NE ■ MISO ■ NYISO ■ PJM ■ SPP

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Pruitt Begins CPP Repeal as Perry NOPR Draws Heat

Limited Impact Seen from 'Inside-the-Fence' Regs

By Rich Heidorn Jr.

EPA will repeal the Clean Power Plan, saying the Obama administration's call for switching to more natural gas and renewable generation exceeded the agency's authority.

According to a draft rule leaked last week, EPA will contend that Section 111(d) of the Clean Air Act requires emission regulations be based on reductions that can be applied at a single source.

"Instead, the CPP encompassed measures that would generally require power generators to change their energy portfolios through generation-shifting (rather than better equipping or operating their existing plants), including through the creation or subsidization of significant amounts of generation from power sources entirely outside the regulated source categories, such as solar and wind energy," said the 43-page proposal, which numerous news sources obtained last week.

Continued on page 37

(From left to right) Interior Secretary Ryan Zinke, Vice President Mike Pence, President Trump, Energy Secretary Rick Perry and EPA Administrator Scott Pruitt at a press conference in late June.

Consumer Advocates Slam Perry NOPR, RTOs, FERC

By Rich Heidorn Jr.

Consumer advocates last Thursday urged Congress to pressure FERC to improve the RTO stakeholder process and reject Energy Secretary Rick Perry's directive to rescue at-risk coal and nuclear generation in competitive markets.

The House Energy and Commerce Committee hearing was called to consider consumers' ability to participate in RTO/ISO decision-making. But the witnesses — and some

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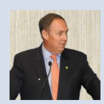
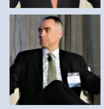
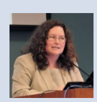
Reaction to Energy Department NOPR



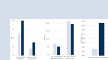
Powelson: FERC Won't Undermine Markets (p.23)



CEO Panel: NOPR Continues 'Cycle of Subsidies' (p.8)



MISO Ready to Define, Study 'Resiliency' (p.17)



ICF Analysis: NOPR Cost Could near $4B/Year (p.29)

Testifying before the House Energy and Commerce Committee on Thursday were (from left) PJM Independent Market Monitor Joe Bowring; Rebecca Tepper, Consumer Liaison Group for ISO-NE; Mark Vanderhelm, Walmart; John Hughes, Electricity Consumers Resource Council; Stefanie Brand, N.J. Division of Rate Counsel, and Tyson Slocum, Public Citizen.

First Shoe to Drop? Vistra to Retire 3 Texas Coal Units

By Tom Kleckner

AUSTIN, Texas — Appearing before the Gulf Coast Power Association's Fall Conference last week, Texas Public Utility Commissioner Brandy Marty Marquez was asked about the retirement decisions facing owners of out-of-market coal plants.

"Everyone's waiting for that shoe to drop," she responded.

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In this week's issue

Correction

An article in the Sept. 26 issue of *RTO Insider* misstated the agency that authorized Southern California Edison to sign a long-term resource adequacy contract with NRG Energy for the proposed Puente Power Project. That agency is the California Public Utilities Commission, not the California Energy Commission.

Counterflow
By Steve Huntoon

Anatomy of the New Cash for Clunkers

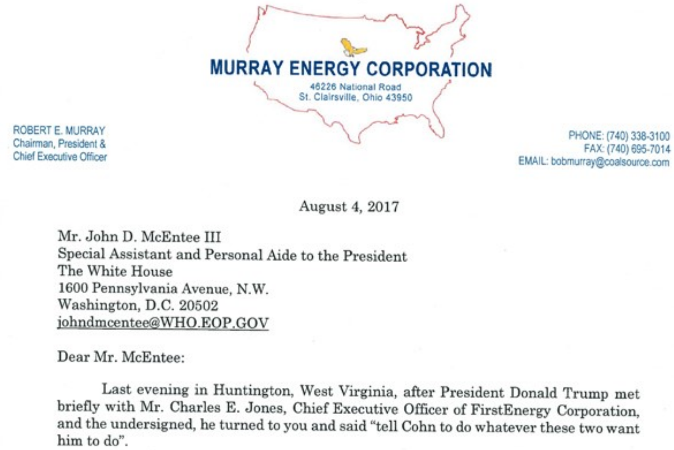
By Steve Huntoon

Huntoon

Those of us who dwell in the economic/regulatory/public policy realm wonder about the origins of atrocious public policy. Where did it come from? Whose awful idea was this?

In the case of the Department of Energy's Cash for Clunkers proposal, we pretty much know.

Robert Murray, owner of the coal mining company Murray Energy,[1] was a large fundraiser for candidate Donald Trump during the campaign.[2] After the election, Murray had a couple of meetings with President Trump at which the president promised Murray to do whatever he (and FirstEnergy) wanted Trump to do. I'm not making this up.[3] (See excerpt, right.)



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August 4, 2017

Mr. John D. McEntee III
Special Assistant and Personal Aide to the President
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20502
johndmcentee@WHO.EOP.GOV

Dear Mr. McEntee:

Last evening in Huntington, West Virginia, after President Donald Trump met briefly with Mr. Charles E. Jones, Chief Executive Officer of FirstEnergy Corporation, and the undersigned, he turned to you and said "tell Cohn to do whatever these two want him to do".

What Murray wanted was for Rick Perry, the secretary of energy, to declare an emergency on the electric grid so that FirstEnergy would keep buying a lot of coal from Murray's coal mining company. Again, I'm not making this up.

Now it seems that pesky government lawyers figured out that the supposed basis for such an action, Section 202(c) of the Federal Power Act, couldn't possibly justify that. "The White House and the Department of Energy are in agreement that the evidence does not warrant the use of this emergency action."[4]

At this point, a lot of us naively assumed it was safe to go back about our business. We were wrong.

Somebody came up with Plan B (or more like Plan 9) of using an even more obscure federal statute to tell FERC to have a rulemaking to subsidize the coal and nuclear clunkers in the country. So here we are.

It's as simple and sad as that.

[1] You may remember Robert Murray from the Crandall Canyon Mine collapse in which six miners and three rescuers perished, http://www.nytimes.com/2008/05/09/us/08cnd-mine.html; http://www.cnn.com/2008/US/07/24/mine.collapse/index.html.

[2] http://thehill.com/policy/energy-environment/284261-coal-executive-to-hold-fundraiser-for-trump; https://www.opensecrets.org/news/2017/02/murray-energy-record-giving-2016/.

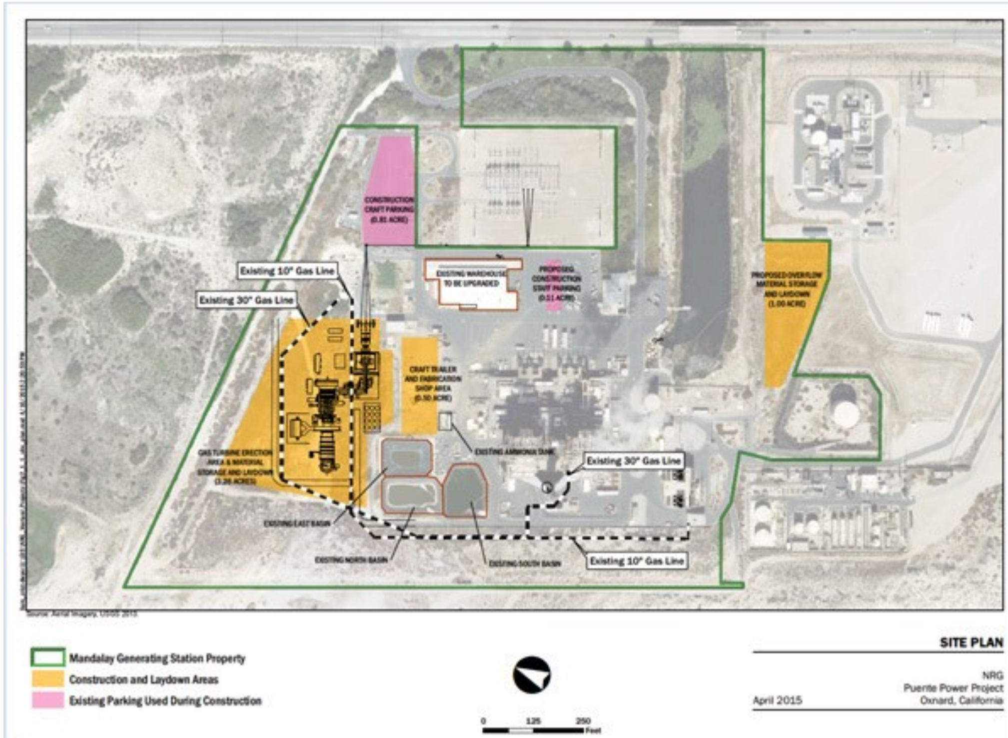
[3] https://assets.documentcloud.org/documents/3936141/Murray-s-letters-to-Trump-administration.pdf.

[4] https://www.eenews.net/stories/1060059081.

CAISO NEWS

CEC Members Recommend No-Go for Puente Plant

By Jason Fordney



Two California Energy Commissioners are recommending the agency deny a permit to construct NRG Energy's proposed Puente Power Project natural gas-fired plant in Oxnard, casting into doubt the chances that the facility will be built.

Commissioners Janea Scott and Karen Douglas, who are preparing a proposed decision on the 260-MW project, last week said they intend to issue a notice recommending denial of the project, which is opposed by some on environmental grounds.

"It is clear to us that the project will be inconsistent with several laws, ordinances, regulations or standards and will create significant unmitigable environmental effects," the commissioners said. This requires study of feasible alternatives, they said, referencing Sept. 29 comments filed by CAISO in which it said a new, expedited request for offer (RFO) process would need to be launched to ensure that current facilities slated for retirement are closed in accordance with environmental laws.

About 2,000 MW of generation in the area is due to retire by 2020 because of once-through-cooling regulations, and Puente is intended to replace NRG's retiring Mandalay and Ormond Beach plants.

After issuing the notice, the commission will take comments and hold a public hearing, and all five commissioners can accept, modify or reject the proposed decision.

"We acknowledge that this statement is unusual but observe that it in no way impairs the rights of the applicant or any other party," Scott and Douglas said. "All procedural requirements will continue to be honored." They said they made the decision early in the process because of timing considerations raised by CAISO regarding the RFO.

The CEC is reviewing the construction and operating permit for the facility. The California Public Utilities Commission has already authorized Southern California Edison to enter into a long-term resource adequacy contract with NRG for the plant's capacity.

NRG told *RTO Insider* on Friday that it is "very disappointed" with the decision. "We believe the record fully supports the approval of Puente. NRG favors California's move to a carbon-free electrical grid but remains concerned about local reliability during the transition."

On Aug. 16, CAISO issued a study on Puente saying it could not be affordably substituted with any alternatives. (See *Metcalf Reliability-Must-Run Draws Scrutiny*.) But in Sept. 29 comments to the CEC, CAISO led off with a different perspective: "The Moorpark [sub-area] study demonstrates that preferred resource alternatives are technologically feasible to meet local capacity requirements." Under California policy, "preferred" resources refer to non-emitting resources such as energy efficiency, demand response, distributed energy and storage.

CAISO noted that several parties had raised concerns over the resource portfolios it had examined in its study, which included three different combinations of distributed, reactive and storage resources. "But these concerns do not detract from the central finding that a combination of preferred resources and/or reactive power devices can meet the local capacity requirements for the Moorpark sub-area if procured and implemented in a timely manner."

In comments filed with CEC on Sept. 29, NRG said the project will not have significant environmental impacts, complies with laws and "will result in many reliability, environmental and economic benefits." It added that alternative resources examined by CAISO "do not exist in sufficient quantities to satisfy the sub-area's [local capacity requirement] need" and could not be deployed in time.

The City of Oxnard in its comments said the plant, proposed for a dune area near the open ocean, would be in a hazardous location and will lead to more pollution. "Puente remains the wrong project in the wrong location," the city said.

The next CEC Puente Power Project Committee conference is scheduled for Oct. 11 at the commission's headquarters in Sacramento.

CAISO NEWS

CAISO Participants Question Retirement Plan

By Jason Fordney

CAISO is facing criticism over fundamental aspects of an initiative meant to keep needed generating resources from retiring prematurely, with state regulators saying the program will fail to meet its goals and others questioning the ISO's rationale for the plan.

The ISO faces the challenge of aligning the risk-of-retirement program with resource adequacy (RA) contracting in order to prevent double-paying resources for reliability. Market participants have carefully analyzed the plan's two proposed windows in April and November of each year to apply for a Capacity Procurement Mechanism Risk-of-Retirement Enhancements (CPM ROR) designation. (See CAISO Finalizes Risk-of-Retirement Program Changes.)

In comments filed this week regarding CAISO's draft final proposal for the program, the California Public Utilities Commission and Office of Ratepayer Advocate (ORA) said they oppose the current version of the initiative, which the Board of Governors is due to vote on at its Nov. 1-2 meeting.

PUC staff in comments said that inclusion of the April window within the CPM ROR process gives resources undue insight into RA program price discovery. The process must also better align with the ISO's Reliability-Must-Run and Temporary Suspension of Resource Operations (TSRO) initiatives, the agency said.

The agency said it "remains concerned that moving a CPM ROR determination to a date prior to the conclusion of the year-ahead procurement process will result in front-running the RA bilateral procurement process."

CAISO has altered the cost threshold requirement for obtaining a "Type 2" designation during the April window, rolling back a previous stipulation that a resource may not submit an ROR request for April unless its costs exceed the CPM soft offer cap. Type 2 refers to a request by an RA or a non-RA resource for designation in the calendar year following the current RA compliance year.

The latest proposal would require that a resource attest that it "reasonably believes" its annual fixed costs meet or exceed certain price thresholds.

But the PUC said that "this change to the proposal does not further mitigate the issue of front running the RA procurement process. If anything, it does the opposite because a generator no longer must demonstrate that its costs are above the soft offer cap, but to only attest that its costs exceed the relevant thresholds." The agency said that resources could use market power to achieve the procurement vehicle that yields the most revenue.

'Other Flaws'

The ORA said it does not support the proposal "because it is unlikely to effectively address the issue of early retirement of resources and could significantly increase ratepayer costs." It said it believes that the program would allow resource owners to know if they are eligible for CPM payments before the RA contracting period begins. Because CPM generally pays more, that would unfairly tilt the bargaining process between load-serving entities and CPM resources.

"Other flaws of the draft final proposal include its failure to define resource retirement, its reliance on anecdotal information rather than a quantification of the currently known risks associated with resource retirements, and the proposal to provide capacity payments to resources before they are needed for reliability," the ORA said.

The Western Power Trading Forum (WPTF) criticized fundamental elements of the proposal, saying it is struggling to see how the current proposal was not RMR with more obligations on the retiring resource.

WPTF said CAISO should introduce two windows to submit offers for CPM ROR designation "with no obligation to prove costs are above an artificial, irrelevant dataset."

It said the proposal to compare a resource's costs with average RA contract prices is "ridiculous" since the average price has nothing to do with the current RA market in any one area.

Calpine said that while some resource owners may find the ISO's modifications workable, Calpine does not.

"The time-crunch imposed on resources is only exacerbated when one imposes a 'no front-running' ban on backstop procurement," Calpine said, calling it a "timing dissonance" that features in other CAISO retirement-related programs as well.

In March, the CAISO board approved the ISO's request to designate two Calpine natural gas-fired plants in Northern California as RMR despite criticism from several stakeholders. (See CAISO RMRs Win Board OK, Stakeholders Critical.)

While the company does not object to the plan, it does not think the program will be used in any meaningful way by resources making rational business planning decisions. Requests for compensation must be reviewed by FERC, so resources would not know their cost recovery until well into the CPM contract.

CAISO has also proposed that CPM designations become mandatory as RMR designations are, but Calpine opposes that change.

Some Support

The Six Cities group of Southern California municipal utilities said it generally supported the proposal but suggested some modifications, while CAISO's Department of Market Monitoring did not oppose it.

The department said the proposal allows resources to know earlier in the year whether they will receive a CPM designation, making it a more viable option for resources considering retirement.

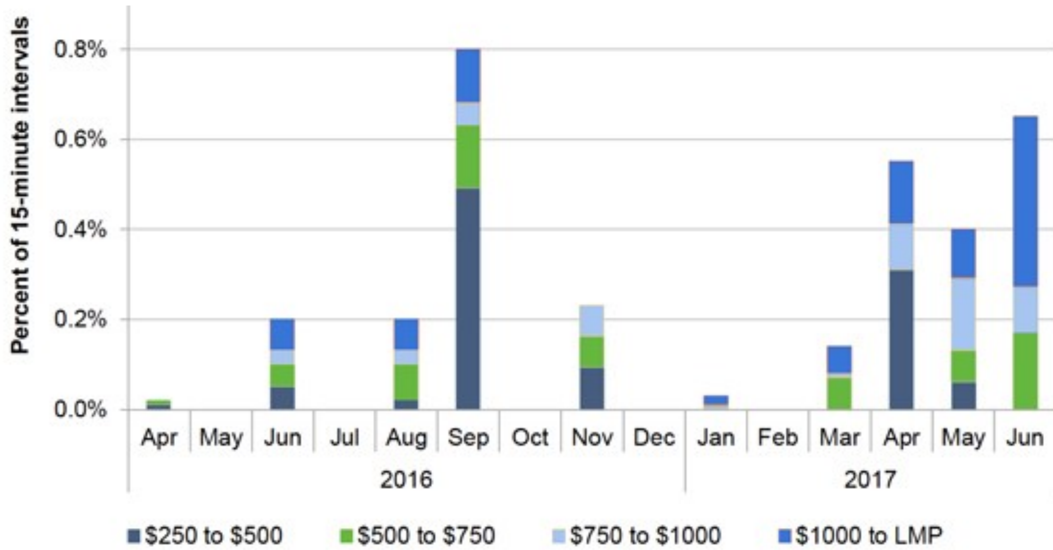
"This is an improvement over the current risk-of-retirement CPM process which occurs too late in the year to be of practical use," the department said. "Several aspects of the proposal reduce the likelihood that a resource will submit inefficient retirement requests."

Southern California Edison supported the proposal, while Pacific Gas and Electric said it has "not addressed the current CPM limitations that resulted in using the CAISO reliability-must-run tariff provisions for reliability procurement."

CAISO NEWS

CAISO Monitor Provides Details on Q2 Price Spikes

By Jason Fordney



Frequency of high 15-minute prices by month | *CAISO*

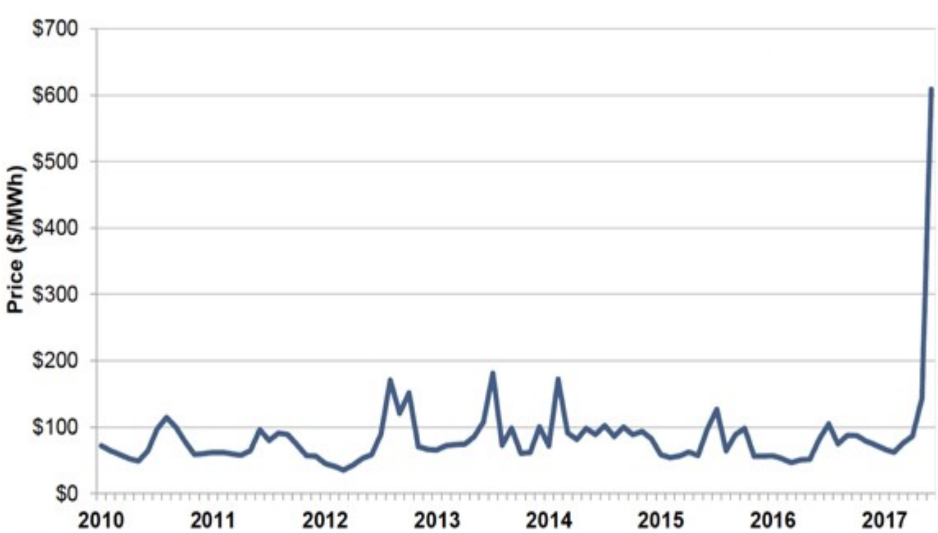
CAISO's internal Market Monitor last week provided more details about rising energy prices in the second quarter and extreme day-ahead price spikes occurring over a three-day period during a June heat wave in the West.

Day-ahead energy prices increased each month in the quarter because of high temperatures that drove up electricity demand, the ISO's Department of Monitoring said during a stakeholder call last week. The Monitor announced the second-quarter results last month. (See Monitor: CAISO Q2 Prices Hit Record Despite Mitigation.)

"We generally saw them increasing in terms of just seasonal conditions. It wasn't out of the ordinary," DMM Market Analyst Kyle Westendorf said. "With the higher temperatures, we saw the higher prices."

Westendorf did shine more light on events that occurred over several days leading up to June 21, when day-ahead prices hit $600/MWh. His presentation showed that each day over June 18-21 saw less generation bid into the market below $100/MWh, with June 21 wind energy supply coming in below average and down from the previous day. Traders also bid significantly fewer virtual supply offers below $100/MWh into the market between June 20 and 21.

"One of the things that was happening here, was participants engaging in convergence bidding were shifting away from virtual supply and more towards virtual demand positions in anticipation of higher real-time prices," Westendorf said.



Day-ahead market system marginal energy price, 2010 to June 2017 | *CAISO*

Convergence bidding refers to financial positions taken in the day-ahead market and liquidated with an opposite transaction in real time. It includes "virtual supply" that looks like a dispatchable energy resource to the market and "virtual demand" that looks like load.

Virtual demand, which is charged the day-ahead LMP, is considered a long position in the market, while virtual supply is paid the day-ahead LMP and is considered a short position. There is no physical transfer of energy in virtual bidding, which is a financial instrument.

Imports into CAISO also significantly declined between June 18 and 19, Westendorf said, and again between June 20 and 21.

"You start to see a pattern now," he said, adding that the lack of imports was because of extremely high temperatures across the West, creating tight supply conditions across the region, affecting intertie activity and driving some of CAISO's market results. The stress on the system of heat and high demand pushed the market software solution to a higher day-ahead price, he said.

The ISO and DMM are also investigating why energy prices increased on June 21 after mitigation was applied through computer software. The Monitor has said that, generally, prices should not rise after mitigation.

CAISO NEWS

California Microgrid Program Advances

By Jason Fordney

FOLSOM, Calif. — California agencies are finalizing a roadmap for commercializing microgrids in the state, aligning with a $45 million grant funding opportunity for the technology.

"We had a huge amount of questions and answers — in fact, the largest we have had for any solicitation," Mike Gravely of the California Energy Commission said at an Oct. 2 workshop to discuss the funding initiative. He cautioned that the roadmap is still preliminary and that his agency is "very much interested in the consensus of the industry."

Microgrids — independent, controllable energy systems with a single point of interconnection to the grid — are increasingly being studied as an option to help integrate renewables, not just in the U.S., but also in Europe and Asia, where solar development is on the rise.

The commission is taking comments through Oct. 28 on its draft roadmap for commercializing microgrids, issued late last month. The agency is offering grants for microgrid development in the state on military bases, ports and tribal lands; in low-income and rural areas; and at industrial complexes and local schools. (See *California Awarding $45 Million for Microgrids*.)

The funding opportunity is the second to be issued by the commission, and a third one is under review and due to be released by the end of the year. The first two solicitations provided more than $70 million for 18 to 20 microgrids.

"We will be a big player in this market," Gravely said, adding that a lot of the activities in the roadmap will be implemented through a CEC research process before going to the California Public Utilities Commission and CAISO, and some will be implemented through existing proceedings.

Some questions around microgrid implementation remain unanswered, including who carries the costs, who pays for interconnection and what fees will apply to microgrids. While there are no particular legislative or regulatory directives to develop microgrids, the issues around their implementation cross over other state proceedings on interconnection, energy storage and distributed energy. The PUC's "Distributed Resources Plans" proceeding has authorized development of two microgrids: one in Borrego Springs, in San Diego Gas & Electric territory, and another in Mono County, in Southern California Edison's area.

The services model for microgrids is still evolving, Adam Forni of Navigant Consulting said in a presentation on a recent global survey of the technology. Almost every microgrid in California uses solar in conjunction with energy storage, while overseas applications often utilize back-up diesel generation.

The projects examined in the Navigant study, which is meant to help the CEC shape the roadmap, had to be at least 50% privately funded and be already online or commencing operation within the next year. Navigant studied nine projects in California, 10 others on the North American continent and seven additional projects in China, Singapore, Hawaii, India, Japan and Mozambique. International and North American projects were built more for reliability, while California projects were designed mainly to meet environmental goals.

Facilities included commercial hosts, government entities, landfills, affordable housing, agriculture and food production, with most rated at 1 MW or above and three larger than 10 MW. Navigant recommended that the state focus research and development on technologies that enhance integration to reduce reliance on diesel generators, not to limit funding to just solar plus energy storage and to incorporate more diverse renewable sources. The consulting group also recommended considering the other benefits that microgrids can provide outside of electricity, including thermal energy, water and waste management solutions.

GCPA 2017 Fall Conference

CEO Panel: DOE NOPR Continues 'Cycle of Subsidies'

By Tom Kleckner

From left to right: Former FERC Chair Pat Wood III moderates GCPA's CEO panel, with NRG's Mauricio Gutierrez, Southern Power's Buzz Miller and Dynegy's Bob Flexon. | © *RTO Insider*

AUSTIN, Texas — A panel of CEOs from some of Texas' largest energy companies last week panned U.S. Energy Secretary Rick Perry's directive that FERC consider supporting struggling coal and nuclear plants.

Or, as former FERC Chairman Pat Wood III put it in setting up the discussion at the Gulf Coast Power Association's Fall Conference: "This lovely little Christmas turd that showed up on our desks."

Wood agreed with the consensus opinion that Perry was within his legal rights to issue his Sept. 29 Notice of Proposed Rulemaking to FERC, which suggests compensating baseload plants in deregulated states for preserving the grid's reliability and resilience. (See *FERC's Independence to be Tested by DOE NOPR*.)

Still, Wood, who also chaired the Texas Public Utility Commission during part of Perry's tenure as the state's governor, said he was caught off-guard by the NOPR.

"It was a pretty big deal for me. First thing, it was signed by the governor of this state, that made this room as big as it is," he said, motioning to a large ballroom filled with conference attendees.

"It was his regulatory approach that allowed this state to benefit tremendously from competitive markets. It also ran counter to some of the key provisions of his staff's grid study report, especially when talking about the unending cycle of subsidies," Wood said.

Asked whether Perry's letter was a "cannon" aimed at the RTOs or the natural gas industry, Dynegy CEO Bob Flexon said, "It's going to really impact PJM, where coal and nuclear plants are surrounded by Marcellus and Utica natural gas [plays], and in Illinois."

PJM stakeholders have questioned the RTO's focus on being cost-based and resource-neutral, while Illinois joined New York in issuing zero-emission credits to keep Exelon nuclear plants running. (See *PJM Stakeholders Offer Different Takes on Markets' Viability*.)

"I don't view it as negative to anyone," Southern Power CEO Buzz Miller said. "I think it really is just the best way they could find to really prop up coal and nuclear in the competitive markets."

"Certainly, the [Department of Energy] proposal tries to define resiliency in the form of fuel certainty," said NRG Energy CEO Mauricio Gutierrez. "The narrow definition in this proposal is coal and nuclear, the people with fuel certainty on site.

"To us, resiliency is more than that. It's the characteristics an asset brings to the grid; whether it can withstand that type of disaster or come back significantly quicker. That characteristic has to be fuel-neutral.

"We have to think about the power delivery," Gutierrez continued. "Are we recognizing, and pricing correctly, the resiliency value some of our power plants provide the system? If you have a generation unit that is required for reliability and resilience, then let that unit set the marginal price. There are ways to tackle this issue in a fuel-neutral way."

"We have a long history of disasters in the Southeast, and it's the distribution and transmission that usually goes down. … The vulnerability is the wire," Miller pointed out. "It looks like they tried to come up with a scenario that makes coal and nuclear stand out. The problem is, if an electromagnetic pulse happens, nuclear units have more digital parts. It's hard to cherry pick your disaster scenario and plan around that. … Generation can recover quickly, but it's the wires that take time."

Flexon, who manages a fleet with a 60/40 gas-to-coal ratio, said Perry's letter was a result of hard lobbying by two unnamed energy companies.

"The subsidy war is alive and well," Flexon said. "For years, we turned a blind eye to wind getting subsidies. Now, nuclear is getting subsidies and it's disrupting the markets. That letter is just a new subsidy entering the space. This is designed to counter the effectiveness of the marketplace and save assets that should be exiting the market.

"Even though we're a fairly large coal generator, we're not supportive of [Perry's memo]. We believe policy should be fuel-neutral. But if someone is going to pay us a return for our plants with 90 days' worth of fuel on site, we'll find a way to store 90 days of fuel at every one of our coal plants."

Flexon noted the DOE study this summer focused on price formation, but that the generation stack has changed in the last 20 years.

"Energy price formation needs to change too," he said. "You just can't ignore the fact the generation stack has changed dramatically. How you price energy has to keep up, so you have new investment coming in and you're getting the most efficient megawatts to the customer."

Gutierrez agreed, saying Perry's memo may have been aimed at energy markets, such as

Continued on page 9

GCPA 2017 Fall Conference

Overheard

By Tom Kleckner

AUSTIN, Texas — The Gulf Coast Power Association's 32nd Annual Fall Conference last week attracted several hundred attendees to the Texas state capital. A panel of CEOs discussed their reactions to the U.S. Department of Energy's recent Notice of Proposed Rulemaking to FERC, while other panels covered ERCOT market reforms, federal policy issues, industry changes affecting transmission and distribution companies, and the future of the state's energy markets

Lively Price-Formation Panel

Likening himself to the annoying brother "in possibly the industry's most dysfunctional family," NRG Energy Director of Regulatory Affairs **Bill Barnes** explained his company's push for ERCOT market reforms and the inclusion of marginal losses in LMPs.

Barnes participated in a lively panel discussion on marginal loss pricing, regional reserves and real-time co-optimization, where some attendees likened him to the "outnumbered" man on Fox News' show by the same name.

But Barnes was happy to discuss recommendations made in a report commissioned by NRG and Calpine entitled "Priorities for the Evolution of an Energy-Only Electricity Market Design in ERCOT." The report, written by Harvard University's William Hogan and FTI Consulting's Susan Pope, was the centerpiece of an August workshop at the Public Utility Commission of Texas. A second workshop is scheduled for Oct. 13. (See *ERCOT, Regulators Discuss Need for Pricing Rule Changes*.)

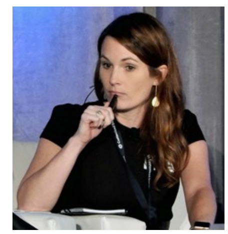
"Everything that [the report recommends] is in the spirit of maintaining a sustainable energy-only market," Barnes said. "You structure the market based on competitive principles, and let the market decide who the winners and losers are. We're not scrapping what we currently have, or throwing the whole thing out and starting over. But if we're going to be committed to an energy-only market design, you can't ignore some clear design deficiencies."

Barnes said the study's proposed changes are "all about pricing integrity" and must be "price-scarcity appropriate."

"We have to have the right price signals to reflect proper supply-and-demand decisions, [and] consumption and production decisions systemwide," he said. "Pricing integrity is what I would consider the first pillar of key energy-only market design."

The second pillar is marginal pricing, Barnes said.

"Certainty [in ERCOT] is based on marginal-cost pricing principles," he said. That … just doesn't work for congestion. There are too many physical properties that affect the value of electricity from one location to another. A megawatt of electricity that is injected 100 miles away from a load has a different value than a megawatt that is injected closer to load. That is an undebatable, economic principle. Why would we not have the locational marginal prices reflect that?"



"That's a lot to respond to," said Thompson & Knight's **Katie Coleman**, speaking for Texas Industrial Electric Consumers (TIEC), which represents the state's 50 largest electricity consumers. "Probably the most offensive aspect of the priorities for the energy-only market paper is the locational aspect. You want to send scarcity pricing signals to encourage new investment in ERCOT. Industrials have been very supportive of sending appropriate scarcity-pricing signals. … What we don't think is appropriate is creating sustained high prices in one area of the state [such as that created by

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CEO Panel: DOE NOPR Continues 'Cycle of Subsidies'

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ERCOT's.

"We need to improve the markets, and this may be the catalyst that does it," he said.

Energy Groups Seek Longer Response Deadline

In a related development, 14 energy trade groups asked FERC last week to extend the comment periods in the commission's consideration of the directive (RM18-1).

Perry's NOPR called for final action on the proposed rule within 60 days from its publication in the *Federal Register*. Last week, the commission issued a notice setting an Oct. 23 deadline on comments on the proposal, with reply comments due Nov. 7. (See *FERC's Independence to be Tested by DOE NOPR*.)

The trade groups' filing requests that FERC set a 90-day initial comment period and a 45-day reply comment deadline.

"The proposed reforms laid out in the NOPR, if finalized, would result in one of the most significant changes in decades to the energy industry and would unquestionably have significant ramifications for wholesale markets under the commission's jurisdiction," the groups said. "When agencies consider a proposed rule that could affect electricity prices paid by hundreds of millions of consumers and hundreds of thousands of businesses, as well as entire industries and their tens of thousands of workers, such as the proposal in question, it is customary for an agency to allow time for meaningful comments to be filed in the record so that the agency can make a reasoned decision thereon. In fact, agencies are under an obligation to allow a comment period of not less than 60 days for typical rulemaking proceedings, unless exceptional circumstances exist."

Signing the joint motion were: Advanced Energy Economy, American Biogas Council, American Council on Renewable Energy, American Petroleum Institute, American Public Power Association, American Wind Energy Association, Business Council for Sustainable Energy, Electric Power Supply Association, Electricity Consumers Resource Council, Energy Storage Association, Interstate Natural Gas Association of America, National Rural Electric Cooperative Association, Natural Gas Supply Association and the Solar Energy Industries Association.

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Overheard

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Houston congestion], irrespective of what's going on statewide.

"That's concerning to us because from a resource-adequacy standpoint … the minute you get a new transmission line, you've just exacerbated your oversupply capacity for the rest of the state, and you're also suppressing price signals in that area," Coleman said.

She said TIEC's other concern is that locational prices won't result in "very significant" construction of new generation. "Generators understand how to build just to the point where the pricing is maintained. They're never going to build to the point where pricing collapses, right? That's sort of self-defeating."

Amanda Frazier, Vistra Energy's vice president of regulatory policy, doubled down on the Hogan-Pope paper's focus on locational losses. She noted that losses only account for about 2.5% of the total LMP cost that loads pay on a load-ratio share.

"Ask yourself, why is NRG clamoring for marginal losses to reduce prices to consumers, create more efficiencies in the market and help the poor consumers who are overpaying for transmission losses? Consumers aren't clamoring for that," she said.

Any savings would come "at an incredible expense to generators who don't have the ability to change their siting decision," Frazier said, referring to wind farms.

"It's not just a renewable issue," she added. "All you're going to do is penalize those generators for taking advantage of the resources in the state and providing low-cost power to Texans. It just doesn't make sense to us. We think the fact it's more economic and efficient is not enough."

GCPA attendees disagreed, voting 77% in favor of implementing marginal losses in an online poll at the conference.

The Wind Coalition's Jean Ryall focused on subsidies and their effect on free markets. "One person's subsidy is another person's tax incentive, so where does that stop?" she asked, suggesting attendees visit stopthesubsidies.com and sign a pledge to stop the incentives.

"Nearly every type of generation on the ground today in ERCOT has been built with tax incentives or subsidies of some kind," Ryall said. "It was sited and built, based on the current rules of the market. It's not like we can change the rules and everybody rush out, pack up your iron and move it to the center of the load in Houston."

CEO Pans Proposal

Vistra CEO **Curt Morgan** cautioned against the market reforms being considered, saying the nodal market is working, but that it is "fundamentally overbuilt." He noted 21 GW of new generation has been built since 2011, the first full year of nodal operations.

"The proposals designed to raise prices inside a load pocket, when the market has sufficient generation, seem wrong-headed," he said, referring to congestion issues near Houston. "That is a temporary position that will be resolved with transmission buildout."

Indeed, ERCOT's $590 million Houston Import Project is designed to address the congestion in and around Houston. Morgan said Vistra thinks the NRG-Calpine proposal is a one-sided solution.

"The proposal helps a few generators in Houston and increases expenses to others in the market," he said. "It would threaten indispensable generation outside the Houston zone and perpetuates high prices in the Houston zone. It does nothing for renewables and sends the wrong message to those already invested in the current market structure."

Morgan agreed that subsidized renewable energy is creating price pressure in ERCOT. He suggested an adder be used for real-time pricing when thermal units are needed to serve load but do not set the price.

"Low prices are great when the result of market fundamentals, but distorted when they're not," he said. "They're happening even when traditional generation is needed to serve load. That ignores the real cost those units incur to stay online and serve load. Those resources are not receiving revenues needed to cover the short-term marginal cost."

Legal Experts: Environmental Rollback no Sure Thing

A panel of legal and regulatory experts agreed that the Trump administration will work to roll back environmental regulations, but it remains to be seen how far those efforts will go.

"It is too soon to predict what the Obama legacy on environmental issues will look like," said Kathleen Magruder, vice president of U.S. regulatory affairs for BP Energy. "On the one hand, several courts — including the Supreme Court — are reviewing Obama-era regulations, such as the Clean Power Plan. On the other hand, we have a number of states and cities saying they plan to adhere to the goals of the Paris Agreement, even if the United States does withdraw. It will take some time to see how this all lands."

"Whatever the legal challenge, however they turn out, I think the Obama legacy will have a lasting impact," said Chris Jones, a partner with Troutman Sanders. "The changes to the fleet nationwide are irreversible. If you have a new federal dictate that coal plants are reliable and resilient … how far does that go? Will investors feel comfortable putting capacity in these coal plants, based on that rule?"

Asked by panel moderator Jimmy Glotfelty, with Clean Line Energy Partners, whether a coal pile is the only way to have a resilient grid, Jones referred to problems caused by last winter's so-called "polar vortex," saying: "You need a diverse fleet to manage different challenges. I don't care how much coal you have on site, when it's frozen, it ain't no good."

Marquez: PUC Relies on Transmission Policies

Texas PUC Commissioner Brandy Marty Marquez sat down with the commission's director of wholesale market policy, Julia Harvey, for an informal discussion of issues facing the state's regulators.

Marquez told Harvey the commission may be over-reliant on transmission policy "because it's the one aspect of the market we can control."

"We have a really interesting market here in Texas," Marquez said. "We want it to be free, but boy, the lights better stay on. That's a tricky balance."

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Asked by an audience member what generation owners should do with their older, out-of-the-market plants, Marquez said that's a decision market participants need to make.

"It can be argued one of the challenges we have in Texas is that we have too much power," she said. "Everyone's waiting for that shoe to drop. If it were me, I'd probably want to hang on for as long as possible. We hear from [market participants] we're not seeing scarcity pricing, but when there's not a lot of scarcity, there's not a lot of scarcity problems. That's not a bad problem to have, because power is cheap."


Texas PUC Commissioner Brandy Marty Marquez discusses life on the commission with Julia Harvey, director of wholesale market policy. | © *RTO Insider*

Advanced Technologies: A Boon or a Challenge?

Wires company representatives discussed their learning experiences with advanced technologies such as smart meters, distributed energy resources and microgrids, and the challenges they pose.

"It's forced us to be more thoughtful about how we're stepping into the future," said CPS Energy's Rudy Garza, vice president of distribution services and operations. "We're still trying to figure out how we want to position ourselves."

With its New Energy Economy program, CPS is partnering with renewable developers and businesses that "share [its] vision for clean energy, innovation and energy efficiency." Garza said the utility has deployed 85% of its smart meters to residential customers.

"I don't think there's any utility out there that has figured it out. Those that are out there playing and trying to understand these technologies will get there a little quicker," Garza said. "Now we have all this information we didn't have before. We have to match [the data] to know where outages are happening or know where they might happen. That's the future. That helps save dollars, before the trucks start to roll or the trouble calls start to come."

Bob Bradish, American Electric Power vice president of grid development, said his company has installed one battery storage system in Texas, with the understanding from the PUC "that this was a one-and-done type of deal."

"When you look at those technologies as an alternative to transmission solutions, there is a difference to what they bring to table," Bradish said. "Transmission will bring additional capacity, it will bring permanence. It can be there for 90 to 100 years. How long is a battery, or a DER, going to be there? What is its reliability going to look like? You're going to have to get comfortable with that."

"Batteries are coming faster than maybe mankind can appreciate," CenterPoint Energy's Kenny Mercado said. "As that demand grows, we're going to be learning about its behavior. With our regulated responsibility, we have to think about [batteries] differently. We have to be more insightful about their functionality, their capability. Like the advanced meter, it's owned by the utility, but its [data] is used by the market. The market wins."

Mercado noted the advanced technologies do have their drawbacks, a point that was driven home when Hurricane Harvey submerged much of CenterPoint's system.

"When they're submerged in water, they don't work. They won't tell you if they're drowning," he said.

First Shoe to Drop? Vistra to Retire 3 Texas Coal Units

Continued from page 1

On Friday, the first pair hit the floor when Vistra Energy announced plans to retire three aging coal-fired units in East Texas. The Monticello units date back to the 1970s and have a capacity of 1,880 MW, rendered obsolete by ERCOT's record low prices.

Vistra CEO Curt Morgan blamed the market's "unprecedented low power price environment" as having "profoundly impacted" the plant's operating revenues. He said the market, flooded with cheap renewable energy and low-cost gas generation, "no longer supports continued investment."

Morgan alluded to the coming retirement announcement when he told the GCPA his company was "assessing the viability of our generation fleet."

"We are willing to lead in this area, although we believe we are not the only ones who need to undertake some hard decisions," he said.

Vistra's decision was not unexpected. Executives told financial analysts in August it was considering retiring some of its coal plants and would make a decision in the fourth quarter. (See *Analysts Debate Potential Vistra Coal Retirements*.)

Luminant, Vistra's generation arm, has two other 1970s-era coal-fired plants in Big Brown and Martin Lake. The plants, with 3.7 GW of capacity, have combined capacity factors of 59% and 52%, respectively. Luminant's 18 GW of capacity includes 8 GW of coal-fired generation and 7.5 GW of gas.

The Monticello units began life as a lignite mine mouth operation, but they switched to Powder River Basin coal in 2016.

Luminant filed a suspension-of-operations notice with ERCOT that triggered a reliability review. If the ISO determines the units are not needed for reliability reasons, Luminant expects to stop plant operations on Jan. 4, 2018.

Vistra estimates it will record one-time charges of approximately $20 million to $25 million in the third quarter of 2017 related to the retirement, including employee-related severance costs. Luminant has estimated the closure will affect about 200 employees.

ERCOT has also received suspension notifications for three smaller gas-fired units.

The City of Garland told ERCOT on Oct. 2 it plans to indefinitely suspend operations of two of its Spencer plant's units, totaling 118 MW of capacity, in January. The units went into service in 1966 and 1973.

On Sept. 27, Talen Energy said it plans to retire a 330-MW gas unit at its Barney Davis plant near Corpus Christi in December. The unit went into service in 1974.

New England Electricity Restructuring Roundtable

Transmission Developers Pitch Massachusetts Clean Energy Bids

By Michael Kuser

From left to right: William Hazelip, National Grid; Chris Huskilson, Emera; Sara Burns, Central Maine Power; Donald Jessome, TDI; Patrick Smith, Eversource; and Dr. Jonathan Raab. | © *RTO Insider*

BOSTON — The transmission projects proposed to bring renewable energy to New England all promise fixed-cost contracts, hundreds of jobs, big cuts in CO_2 emissions, and millions in consumers savings and tax revenues.

How to choose? That was the question Friday at Raab Associates' New England Electricity Restructuring Roundtable.

Representatives of five transmission projects proposed in July in response to the Massachusetts solicitation for 9.45 TWh/year of hydro and Class I renewables (wind, solar or energy storage) tried to explain why their projects should be among those selected in January. Contracts awarded under the MA 83D request for proposals are to be submitted in late April. (See *Hydro-Québec Dominates Mass. Clean Energy Bids*.)

The solicitation is a collaborative effort by the Massachusetts Department of Energy Resources and the state's distribution utilities: Eversource Energy, National Grid and Unitil. DOER Commissioner Judith Judson attended the session, as did Angela M. O'Connor, chair of the Massachusetts Department of Public Utilities, along with 225 others in person and more streaming the event online.

Key Goals

William Hazelip, National Grid vice president of business development, said only his company's projects meet the key goals set out in the state's Global Warming Solutions Act of 2008 and the 2016 Act to Promote Energy Diversity, namely to facilitate the financing of new clean energy resources and to minimize "leakage."

National Grid partnered with Citizens Energy on the Granite State Power Link, an HVDC transmission line from northern Vermont to New Hampshire to deliver 1,200 MW of new wind power from Canada, and the Northeast Renewable Link, a 23-mile AC line from Rensselaer County, N.Y., to Hinsdale, Mass., to deliver 600 MW of new wind, solar and small hydro into the New England grid.

"The intent of the Diversity Act is clear: It's about adding new resources to reduce emissions," Hazelip said. He said leakage — cutting the state's emissions while increasing them in neighboring regions — would be pronounced with the proposals that rely mostly on existing hydro resources in Quebec.

"Today, the existing hydro is being exported to New York and Ontario," Hazelip said. "That reduces the use of thermal units and reduces greenhouse gas emissions. Using the Mass. RFP to contract for those resources will only redirect the energy to Massachusetts and raise emissions in New York and Ontario."

Diversity is Primary

Chris Huskilson, CEO of Nova Scotia-based Emera, made a pitch for his company's proposed Atlantic Link project, a 375-mile submarine HVDC transmission line extending from New Brunswick to Plymouth, Mass., near the retiring Pilgrim nuclear plant and close to the Boston load center.

"For us, the primary word is 'diversity.' [Atlantic Link] provides diversity of supply and allows you to access wind in Maine, wind in the Maritimes, hydro from Newfoundland and potentially hydro from Quebec."

The project would become operational in December 2022 and deliver 5.69 TWh of clean energy per year to Massachusetts at a fixed price for 20 years.

At 5.7 TWh, Emera's project would fulfill only half of the RFP, leaving room for another project that can provide supply diversity, Huskilson said.

In addition, Atlantic Link terminating "in the southern part of Massachusetts means that it supports the system in the location that really needs that support," Huskilson said. "The loss of the Pilgrim nuclear plant is going to be something that the system will have to find ways to recover from and the opportunity to connect with this transmission project directly to that location ... is a very good opportunity."

Certainty is Best

Transmission Developers Inc. partnered with Hydro-Québec on the New England Clean Power Link, which includes a submarine cable under Lake Champlain and an overland section to a proposed converter station in Ludlow, Vt., to connect to the existing Coolidge substation. It would bring 1,000 MW of hydropower, solar and wind from Canada.

"The one word for us as we differentiate our project from other projects is 'certainty' — on price, on construction, on support, and the certainty of our ability to execute and execute with support, from the governor's office on down," TDI CEO Donald Jessome said.

In addition to having all the permits needed for the project, Jessome said TDI also has reserved slots at the manufacturing facilities for production of the cable, which will take a year to produce.

"We know exactly what our project costs and how long it will take and have mapped

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New England Electricity Restructuring Roundtable

Transmission Developers Pitch Massachusetts Clean Energy Bids

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out every step," Jessome said. "We know who's going to be maintaining our project, [Vermont Electric Power Co.] and ABB, once it's up and running. And of course, we have very good financial backing through the Blackstone Group."

Focus and Options

Avangrid subsidiary Central Maine Power partnered with Hydro-Québec on the New England Clean Energy Connect, a 145-mile, 320-kV HVDC line that would carry 1,200 MW of hydro and wind energy from Canada to Maine. The company also teamed with NextEra Energy on the Maine Clean Power Connection, a new 345-kV connection from western Maine to the New England grid with capacity options of 460 to 1,110 MW, allowing varying combinations of wind, solar and storage facilities in eastern Canada and far western Maine.

CEO Sara Burns said CMP "focused on the route, focused on the costs and focused on responding with a strong case that we can deliver. ... We focused on giving Massachusetts ratepayers a cafeteria plan to choose from."

Burns said the company is controlling costs by developing lines mostly on a route that the company controls.

"These cost conversations do not have to be too complicated," Burns said. "If you're on the route, it drops the prices. We have the route, have the team, have the support."

Patrick Smith, vice president for transmission business development at Eversource, said the RFP "did specifically contemplate the use of hydroelectric power as qualifying for participation."

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Eversource is partnered with Hydro-Québec on Northern Pass, a 192-mile line to bring 1,090 MW of hydropower to New England — up to 9.4 TWh/year for 20 years starting in December 2020. Hydro-Québec's proposals with TDI, Eversource and Avangrid all include two proposals each, one pure hydro and one with a wind energy component.

"Has the cost been compared to the current ISO clearing price for power plus transmission, and are these cost savings below that?" asked Steve Cowell, president of E4TheFuture, which advocates for "clean, efficient energy" for residential customers.

"There are additional benefits beyond the clearing price of the energy," Jessome responded. "There's the capacity benefit these projects are going to bring to the marketplace. There's diversity, there's the fact that you're now displacing gas during winter peak periods, so you've got a gas price benefit. So, you have to look at [it as] a basket. If you look at it in isolation, it's not as good a story as it is when you look at it terms of the totality of all these benefits."

Renewable Energy Vermont Conference

Vermont a Leader in Renewables, PUC Chair Says

State Officials, Advocates Gather at Renewable Energy Conference

By Michael Kuser

BURLINGTON, Vt. — Vermont isn't just moving in the right direction on renewable energy; it's helping to lead the country despite — or because of — its modest size, the state's top regulator told attendees at a recent conference.

"Unlike New York and California, which want to lead on energy, Vermont is not a battleship, we're a PT boat, so we can turn on a dime," Vermont Public Utility Commission Chair **Anthony Roisman** said Oct. 2 at the Renewable Energy Vermont (REV) Conference.

Gov. Phil Scott appointed the 79-year-old Roisman as chair in June.

Vermont is one of the top two states nationwide in terms of clean energy employment as a share of the workforce. The 13,000 jobs created in the state's sector since 2000 represent 6% of the state's workforce, REV Executive Director **Olivia Campbell Andersen** said at the conference.

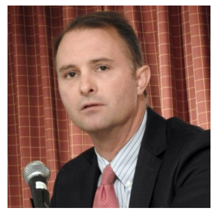
When Roisman served on the siting board for New Hampshire's Seabrook nuclear plant 40 years ago, the people interested in renewable energy wouldn't have filled one table, he noted. In contrast, the REV2017 Conference drew hundreds of people who not only promote renewable energy, but also work in the field.

Kerrick Johnson with Vermont Electric Power Co. asked Roisman how long he expects to serve in his current role, given his age.

"I have a six-year term and I can't predict who the governor will be in six years, but I don't see any finite limit to how long I will serve," Roisman said. He noted that Berkshire Hathaway CEO Warren Buffett is 87 and U.S. Supreme Court Justice Ruth Bader Ginsburg is 84. "I feel as though I'm a little young for the position, but I'm hoping to make up for that with my enthusiasm and energy."

Siege Mentality

During the conference, state officials described how they see Vermont, like the U.S., as standing at a critical crossroads in terms of both climate change and politics.



"When we have a federal government that abdicates its responsibility to protect its people and our environment, the attorney general's office will be the first line of defense and the last line of defense," said state Attorney General **T.J. Donovan**.

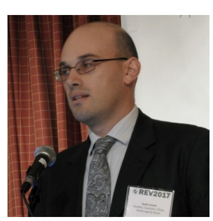
"Now we're realizing that democracy is not just on election day, but all the time," Lt. Gov. **David Zuckerman** said.

The growing season is going to be longer and both wetter and drier at the same time, he said.

"You say, 'How is that possible?' But we've seen it this year," said Zuckerman, who owns a farm in Hinesburg. "This summer was one of the worst growing seasons, at the beginning of the season, that any farmer I know has seen, with incredible rains for a long time. And now my pond is almost empty because for the last month and a half it's been very, very dry."

Project Siting and Policy

Conference panelists also discussed how a 2016 state law that calls for greater local government involvement in the generation siting process has exacerbated the NIMBY syndrome.



The law (Act 174) represents "a big change from the status quo," according to **Alex "Sash" Lewis**, a lawyer with Dunkiel Saunders Elliott Raubvogel & Hand. In the past, state officials had to give "due consideration" to local and regional planning standards when siting resources, but now they must give "substantial deference" to those requirements.

"The PUC is now going to be considering specific municipal plans," he said.

The law establishes a new set of energy planning standards that municipalities and regions can adopt on a voluntary basis, earning them the right of substantial deference in the siting process. Regions and municipalities that do not wish to update their plans will continue to receive due consideration in the process.

Jon Copans of the Vermont Council on Rural Development considers that holistic approach to energy planning to be a good thing: "You can't just look at the electric sector without considering many others."

Catherine Dimitruk of the Northwest Regional Planning Commission pointed to a correlation between prime wind areas and nature conservation areas. She said her commission has a goal of developing 19 MW of new wind generation in the northwestern part of the state, to be achieved only through small-scale wind, and is relying on evolving technology to make it possible.

Kimberly Hayden, a lawyer with Paul Frank + Collins, said that in the past five years "our CO_2 footprint has gone up 2.5% because, while we are retiring nuclear, we're replacing it with natural gas-fired generation." The New England Power Pool's Integrating Markets and Public Policy process "looks very promising ... but it's very political."

New York and Illinois are doing interesting work, but New York's Value of Distributed Energy Resources Phase II process "will be going on until the end of time, which scares me," said Nathan Phelps of advocacy group Vote Solar. "The market is really hurting in New York right now because of uncertainty, which scared off a lot of developers."

ISO-NE News

FERC Rejects New England Tx Owners on ROE

By Michael Kuser

FERC on Friday rejected a bid by New England transmission owners to increase their returns on equity to the levels enjoyed before they were lowered by a 2014 commission order that was vacated by an appellate court earlier this year.

The commission said it would address the actual rate in a later remand order (ER15-414, EL11-66).

The D.C. Circuit Court of Appeals ruled in April that the commission had "failed to provide any reasoned basis" for setting the base ROE for a group of New England TOs at 10.57%, adding that the commission failed to meet its burden of proof in declaring the existing 11.14% rate unjust and unreasonable. (See *Court Rejects FERC ROE Order for New England*.)

Led by Emera Maine, the TOs requested reinstatement of their previously allowed ROEs in June. Other parties included Central Maine Power, Eversource Energy, National Grid and Avangrid subsidiary United Illuminating.

The TOs claimed that the court's decision "automatically" restored the parties to the rate in effect prior to the vacated Opinion No. 531. Because the commission lacked a quorum at the time of the filing, the TOs asked to begin collecting at the higher rate 60 days after the commission regained a quorum, which it did on Aug. 9, when new Chairman Neil Chatterjee and Commissioner Robert Powelson joined the commission. (See *Quorum Restored, FERC Holds First Open Meeting Since January*.)

To reduce the administrative burden on the commission, the TOs said they would leave the question of surcharges for the period before the court's decision until FERC issued a remand order for Emera.

The commission disagreed that the D.C. Circuit decision returned TOs to their previous ROEs: "As the Supreme Court explained in *Burlington Northern Inc. v. United States*, which involved the substantively similar provisions of the Interstate Commerce Act, a 'federal court['s] authority to reject … rate orders for whatever reason extends to the orders alone, and not to the rates themselves.'"

The commission concluded that leaving the current ROEs in place would not make the TOs any worse off following a remand order for Emera because, on remand, the commission will exercise its "broad remedial authority" to make whatever ROE the commission determines to be just and reasonable effective for the refund period and the entire period."

In addition, the order said an immediate return to the previously allowed ROEs would "significantly complicate the process of implementing the commission's order on remand."

In 2014, FERC determined that a discounted cash flow (DCF) analysis of a proxy group of companies comparable to TOs produced a zone of reasonableness of 7.04 to 11.74%. The commission also concluded that TOs' new just and reasonable ROE should be set at the upper midpoint of the zone of reasonableness — i.e., halfway between the midpoint and the top of the zone of reasonableness.

The D.C. Circuit ruled that the commission had not adequately shown that the existing ROE was unjust and unreasonable. The court explained that the Federal Power Act's statutory "zone of reasonableness creates a broad range of potentially lawful ROEs rather than a single just and reasonable ROE."

Substation in Ayer, Mass.

FERC Approves ISO-NE CONE, Offer Trigger Updates

By Michael Kuser

FERC on Friday accepted ISO-NE's updated cost of new entry (CONE) and offer review trigger price (ORTP), effective March 15, 2017 (ER17-795).

The RTO, which is required to recalculate the values every three years, will apply the revisions in Forward Capacity Auction 12 in February 2018 for the June 2021–May 2022 capacity commitment period, as well as in FCAs 13 and 14.

In its Oct. 6 order, the commission agreed with ISO-NE on every point and refuted every protest filed by the New England Power Generators Association (NEPGA).

The RTO changed the reference resource on which it bases the CONE and net CONE values from the combined cycle gas turbine chosen in 2014 to a simple cycle generator, citing it as the most economically efficient, with a net CONE value of $8.04/kW-month. The grid operator cited the combined cycle turbine as the next most efficient resource type, with a net CONE of $10/kW-month.

NEPGA argued that zonal clearing prices in FCAs 7-9 were at or above $14.99/kW-month, which indicated that the actual CONE is higher than ISO-NE's proposed value. The commission disagreed, saying "NEPGA has not persuaded us that the proposed net CONE value will result in a starting price that will limit investment and competition in the FCA."

Regarding NEPGA's comment that ISO-NE's consultant on the Tariff revisions, Concentric Energy Advisors, listed a production tax credit value as 15 cents/kWh, rather than 1.5 cents/kWh, the commission noted that "this appears to be a typographical error that is not carried forward into Concentric's calculation of the actual ORTP value."

The commission also approved ORTP values of $7.856/kW-month for combined cycles, $6.503/kW-month for combustion turbines, $11.025/kW-month for onshore wind, $0/kW-month for energy efficiency, $1.008/kW-month for large demand response and $7.559/kW-month for mass-market DR. Offers below the technology-specific thresholds are subject to review by the RTO's Market Monitor for buyer-side market mitigation.

MISO News

MISO Capacity Easily Exceeds Predicted Winter Peak

By Amanda Durish Cook

MISO last week said it expects to have plenty of reserve capacity to cover upcoming winter operations, even as it announced a review of an emergency declaration made on the first day of fall when a heat wave pushed reserves to their acceptable limits.

The RTO's preliminary forecast predicts a 28.3 to 37.3% reserve margin this winter, with about 142 GW of capacity on hand to meet an anticipated peak load of 103.4 GW, according to Rob Benbow, MISO senior director of systemwide operations.

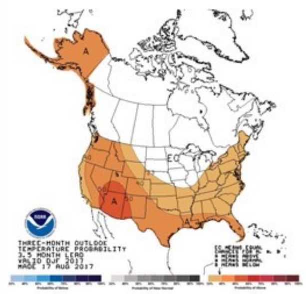
"I would say this is a little colder-than-normal winter, but not by much. This is pretty typical of the last few years," Benbow said during an Oct. 5 Reliability Subcommittee meeting.

MISO's all-time winter peak of 109.3 GW occurred Jan. 6, 2014, during the so-called "polar vortex."

Final values for forecasted winter capacity will be presented Nov. 6 at a MISO Winter Readiness Workshop.

Benbow reminded stakeholders that MISO's gas usage profile-sharing program will begin in December. Under the pilot program aimed at improving gas-electric coordination, the RTO will share hourly day-ahead gas usage profiles with a trio of selected gas system operators. (See *FERC Approves MISO Plan to Share Generator Gas Data*.)

Mark Thomas, electric-gas operations coordinator, said MISO is collecting data for its fourth annual gas-fired generation winter fuel survey, which focuses on generators' winter preparedness efforts. Thomas said 87% of MISO's gas-fired capacity participated in last year's survey.



MISO Preliminary 2017 Winter Forecast	
Projected Reserve Margin	28.3% to 37.3%
Winter Peak Forecast	103.4 GW
Total Projected Available Capacity	142.0 GW

All-time Winter Peak: 109.3 GW January 6, 2014

| *MISO*

September Emergency

But even as MISO transitions to colder weather, it plans to review emergency operations spurred by an unexpected late summer/early fall heat wave.

MISO staff will offer a more detailed report on a late September maximum generation event during its Oct. 12 Market Subcommittee meeting, Benbow said.

The event began to unfold 11 a.m. on Sept. 21 when the RTO initiated conservative operations measures in response to average temperatures reaching nearly 90 F, which produced a peak load approaching 109 GW. Peak load hit 114.7 GW the following day when temperatures climbed to 92 F, prompting MISO to declare a maximum generation event between 2 p.m. and 6:15 p.m. ET. The RTO declared another emergency warning Sept. 23 and finally lifted conservative operations at 8 p.m. on Sept. 26.

Benbow said a mixture of record temperatures, high load, and seasonal and forced generation outages contributed to the "challenging conditions."

"Typical load this time of year might be 80 GW and even lower on the weekend," Benbow said. "This heat dome was really caused by hurricanes stalling the [weather] system in our footprint."

Benbow said the planning model did not forecast such extreme temperatures, and MISO staff are reviewing the RTO's actions — along with the outages — leading up to the event. MISO has considered a possible expanded role in outage coordination since its Independent Market Monitor earlier this year recommended the RTO have a greater say in approving outages to reduced costs and instances of emergency situations. (See *MISO in Harmony with IMM State of the Market Report*.)

Some stakeholders last month also voiced support for more sophisticated outage planning between generators and transmission owners.

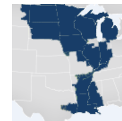
"I don't believe that anyone had to shed load at any time. … Congratulations for keeping it together," Indianapolis Power and Light's Lin Franks said of MISO's latest emergency declaration.

Benbow confirmed that no load shedding occurred during the five-day event.

Operating Day	9/21/2017 88°F	9/22/2017 92°F	9/23/2017 90°F	9/24/2017 90°F	9/25/2017 85°F
Peak Load	108.8 GW	114.7 GW	106.7 GW	103.6 GW	106.5 GW
Wind at Peak	8.8 GW	9.2 GW	4.8 GW	5.4 GW	1.9 GW
NSI at Peak (Imports)	9.7 GW	11.8 GW	9.5 GW	7.2 GW	7.2 GW
Cons Ops	11:00 EST	----------	----------	----------	Terminated 9/26 20:00 EST
Max Gen Alert	12:00 – 20:00 EST	12:30 – 18:15 EST	13:00 – 17:15 EST	----------	13:00 – 19:00 EST
Max Gen Warning			14:00 – 17:15 EST		
Max Gen Event 1a		14:00 – 18:15 EST			
Max Gen Event 1bc		14:30 – 18:15 EST			

| *MISO*

MISO NEWS



MISO Ready to Define, Study 'Resiliency' for Energy Department

By Amanda Durish Cook

While MISO is no closer to establishing its version of what constitutes grid "resilience," the RTO last week said it stands ready to study certain ancillary services to help the U.S. Department of Energy develop its understanding of a concept that is getting increasing industry play through Secretary Rick Perry's efforts.

"It's a term I hadn't heard before," MISO Director of Market Engineering Kim Sperry said at an Oct. 5 Reliability Subcommittee meeting.

Sperry said that when baseload generators were built, industry officials could not have predicted that natural gas prices would drop so low and that wind and other renewables would receive such heavy investment. From MISO's perspective, the recent DOE grid study focuses particularly on "premature retirements," she said. (See *Perry Grid Study Seeks to Aid Coal, Nuclear Generation*.)

In response to the report, MISO is willing to embark on new studies focusing on frequency control, ramping, voltage support, inertia and inertial response — all to better identify the features of a "resilient" generator,

Kim Sperry | © *RTO Insider*

Sperry said.

"There is going to be opportunities for more research, and MISO is willing to assist in that research," she said.

RSC Chair Tony Jankowski said the subcommittee and MISO should spend more time defining resiliency before attempting to study its aspects.

"We need to make sure when they say 'resiliency' that we understand what is meant," Jankowski said, referring to the Energy Department. "If not, we'll have to pay for a coal pile or a fuel rod, and that isn't the end-all of resiliency."

Gabel Associates attorney Travis Stewart echoed Jankowski's thoughts. "As we're walking down the pathway of defining this concept, could we also spend time differentiating between resilience and reliability? While it appears that they're intrinsically linked items, they're also distinct," he said.

"Lights are on today — that's reliable, but it doesn't mean it's resilient," Jankowski added.

Sperry took down all points to include in future discussions on MISO's exploration of the topic.

Patrick Clarey, FERC's liaison to MISO, said stakeholders have until Oct. 23 to comment on Perry's Notice of Proposed Rulemaking, which asks FERC to ensure that generators with 90 days of on-site fuel supply receive "full recovery" of their costs (RM18-1). (See *FERC's Independence to be Tested by DOE NOPR*.)

Some MISO stakeholders said the proposed rulemaking sounded like a measure to guarantee returns for some independent power producers.

Clarey declined to further explain the NOPR, instead saying he would let it "speak for itself."

"I'm not going to speculate on what's behind it. I will say it is unusual. It's only happened a handful of times," he said.

2nd Deficiency Notice Issued for MISO-PJM Pseudo-Tie Effort

By Amanda Durish Cook

MISO and PJM will submit new filings with FERC in response to a second deficiency letter regarding their pseudo-tie coordination efforts.

The commission's deficiency letter seeks clarification on a proposed joint operating agreement revision that would allow the RTOs to terminate or suspend pseudo-ties that don't acquire transmission service or follow modeling rules (ER17-2220). The language gives a native balancing authority the ability to redirect pseudo-tie output to avoid exceeding NERC operating limits. (See *MISO, PJM Float Pseudo-Tie Coordination Plan*.) PJM's matching proposal triggered an identical deficiency letter (ER17-2218).

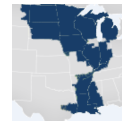
FERC's lingering questions include how and under what circumstances a native reliability coordinator would commit, de-commit or redispatch pseudo-tied generation to avoid exceeding system operating limits or interconnection reliability operating limits, features both RTOs say would be beneficial for maintaining reliability. The commission also asked the RTOs to clarify what constitutes a pseudo-tie suspension and delineate the grounds for such suspensions. It also seeks clarity on the rationale behind the 42-month notice to terminate a PJM pseudo-tie, all the possible grounds for termination and what process will be in place to handle contested terminations. The RTOs have until Oct. 28 to respond.

MISO will be working internally and with PJM to draft a response to the deficiency letter, MISO Director of Market Engineering Kim Sperry said at an Oct. 5 Reliability Subcommittee meeting. She provided no other details. MISO and PJM introduced the coordination efforts in early July.

The most recent letter comes five months after the RTOs received a deficiency notice on their pseudo-tie *pro forma* agreement. The *pro forma* has since been approved by FERC staff, but the commission — which has since gained a quorum — could overturn that approval. (See *FERC Conditionally OKs MISO's Pseudo-tie Pro Forma*.)

MISO's Independent Market Monitor has protested the new JOA language, saying "nothing in the filing ameliorates the myriad significant problems caused by the pseudo ties." For more than a year, Monitor David Patton has called for the complete elimination of pseudo-ties, arguing that the process produces dispatch and reliability risks along with expensive congestion that is difficult to manage.

MISO NEWS



FERC Conditionally OKs MISO-PJM Targeted Project Plan

RTOs' Coordinated System Plan Identifies Single Project

By Amanda Durish Cook

FERC last week approved a joint MISO-PJM proposal to create a new category of small interregional transmission projects intended to address historical congestion along the RTOs' seams.

But the commission's decision, which clears a path for developing five proposed interregional projects, was conditioned on the RTOs providing their stakeholders with more details about the decisions behind selecting so-called target market efficiency projects (TMEPs) (ER17-718).

In a related order, the commission also approved MISO's plan for allocating TMEP costs within its footprint (ER17-2246).

'Meaningful Role'

FERC staff, in absence of a commission quorum, tentatively approved the TMEP project type in late June. (See *FERC Tentatively OKs New MISO-PJM Project Type*.) While the commission last week found the RTOs' joint operating agreement language creating TMEPs to be mostly consistent with transparency principles in FERC Order 890, their ruling pointed to one missing detail: It did not spell out that stakeholders would "receive a sufficient explanation" about why the RTOs would recommend — or not recommend — a proposed TMEP to their respective boards.

"We find that stakeholders must have this information in order to play a meaningful role in the TMEP planning process and to allow them to monitor and provide feedback on how MISO and PJM are planning transmission projects to alleviate the congestion that is the subject of a TMEP study," the commission wrote. "Failure to present this information to stakeholders may lead to more frequent after-the-fact disputes regarding the TMEP planning process."

The commission ordered both RTOs to revise the JOA to show they will provide their Interregional Planning Stakeholder

Continued on page 21

FERC Grants Developer Incentive Rates for Duff-Coleman Project

By Amanda Durish Cook

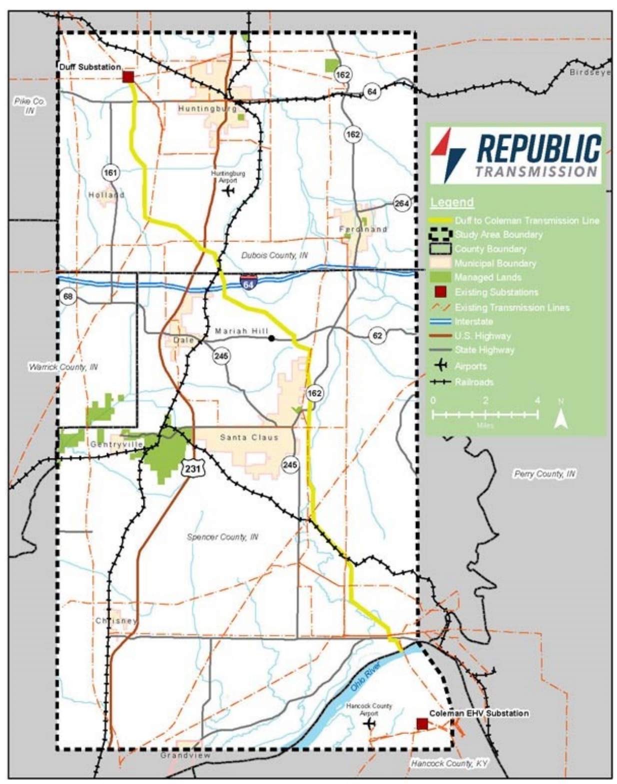
LS Power's Republic Transmission last week won FERC approval for incentives to construct MISO's first competitively bid transmission project.

FERC granted Republic's requests for a return on equity adder of 50 basis points for participating in an RTO for the Duff-Coleman transmission project. The commission also approved the company's request for recovery of prudently incurred costs if the project is abandoned for reasons beyond Republic's control and use of a hypothetical 55% debt/45% equity capital structure until commercial operation (EL17-52).

FERC noted that its approval of the adder is subject to the overall 9.8% on ROE cap Republic promised in its project proposal.

MISO selected Republic's $49.8 million proposal for the 30-mile, 345-kV line in Southern Indiana and Western Kentucky in December. (See *LS Power Unit Wins MISO's First Competitive Project*.)

FERC backdated the rate approval to May 15. While FERC was without a quorum for six months, Republic began developing the Duff-Coleman project under the assumption that it would receive all requested incentive rates.



"Republic's investors entered into the selected developer agreement and agreed to rate concessions with an expectation that the project would qualify for, and receive, the limited incentive rates requested prior to the expenditure of significant funds," FERC said. The commission also found that MISO's 2015 Transmission Expansion Plan established that the project will deliver cost benefits by relieving congestion and improving reliability, a requirement of incentivized rates under Order 679, which established incentive-based rates for transmission development over a decade ago.

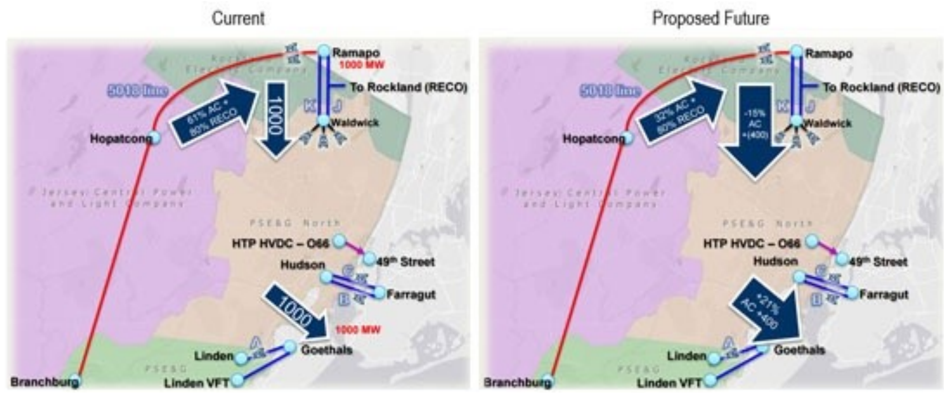
For the remainder of 2017 and most of 2018, Republic will work on project design, environmental permitting and securing rights of way. Construction is slated to begin the fourth quarter of 2018.

Republic said it expects to encounter "construction risks and challenges," most notably acquiring federal permitting to cross the Ohio River.

NYISO NEWS

Rejecting PJM 'Wheel'-related Requests, FERC Sets Inquiry

By Rory D. Sweeney and Rich Heidorn Jr.



PJM/NYISO wheel protocol comparison | *PJM*

FERC on Thursday rejected a request by PJM to allow Linden VFT to convert the 330 MW of firm transmission on its lines between PJM and NYISO to non-firm, but the commission acknowledged it is moving forward with an investigation of the rules that required it to deny the request (ER17-2267).

The ruling mirrors one the commission made Sept. 8 in response to a similar request by Hudson Transmission Partners, which owns lines that carry 673 MW across the PJM-NYISO border (ER17-2073).

Those lines were part of a decades-old service agreement between Public Service Electric and Gas and Consolidated Edison that the latter company terminated in April. The service "wheeled" 1,000 MW from Upstate New York through PSE&G's facilities in northern New Jersey and into New York City on the lines owned by Linden and Hudson.

A joint engineering analysis by PJM and NYISO found that continuing to wheel a 400-MW operational base flow (OBF) was the best option for maintaining system reliability. The OBF was implemented despite strong opposition from PJM stakeholders but is expected to be reduced to zero by 2021. (See *NYISO Members OK End to Con Ed-PSEG Wheel*.)

In a separate order Friday, the commission approved changes to the PJM-NYISO joint operating agreement reflecting the new operational plan for the ABC and JK interfaces between New York and New Jersey, effective May 1, 2017 (ER17-905).

Linden and Hudson attempted to convert their firm transmission withdrawal rights to non-firm rights, but FERC denied both companies after PSE&G refused to accept the changes. Under the current rules, PSE&G has the right, as a party to the original interconnection service agreements (ISAs), to refuse them.

'Preferential' Rate

The New Jersey Board of Public Utilities, which supported PSE&G's refusal, argued the requests are "an attempt to obtain a preferential rate for New York customers to the detriment of New Jersey ratepayers … because New York customers will continue to receive the same benefits … without any cost responsibility." It also said the filings constitute "a collateral attack on PJM's pending [Regional Transmission Expansion Plan] cost allocation methodology and its results in pending cost allocation proceedings" because the firm withdrawal rights are used in determining cost allocations. The changes would establish an alternative cost-allocation methodology "that would yield arbitrary results" compared to PJM's current solution-based distribution factor (DFAX) method, the BPU said.

Following termination of the "wheel," PJM asked FERC to reassign $533 million in costs related to the Bergen-Linden Corridor (BLC) project to Hudson, which the commission approved on April 25. The project

Continued on page 20

FERC Approves NY Black Start Rule Change

FERC on Friday approved NYISO's more stringent testing requirements for generators providing black start and system restoration services (ER17-2271). The changes, effective Oct. 8, require that generators participating in the Consolidated Edison local system restoration plan comply with all applicable testing requirements imposed by mandatory reliability standards.

The New York State Reliability Council (NYSRC) last November approved proposed reliability rule 133, which requires that all generators providing restoration services annually test their ability to energize a dead bus without support from the transmission system. NYSRC coordinates its reliability rules with NERC and the Northeast Power Coordinating Council.

Con Ed in 2016 became a NERC-registered transmission operator and must comply with NERC reliability standard EOP-005-2.3.

The commission's Oct. 6 order dismissed a protest from NRG Energy that the proposed change would give Con Ed "sole discretion to change black start testing rules at any time, without NYISO stakeholder or commission review, or adequate notice to affected generators." NYISO had responded to NRG that any changes to its System Restoration Manual are subject to review by stakeholders, posted for review at least 15 days prior to a scheduled committee approval and must be approved by 58% of voting members of the applicable committee.

FERC agreed: "Of note, in this case, NYISO stakeholders have already reviewed and unanimously approved revisions to the System Restoration Manual that include specific black start testing requirements in the Con Edison plan."

— Michael Kuser

PJM NEWS

Rejecting PJM 'Wheel'-related Requests, FERC Sets Inquiry

Continued from page 19

upgrades facilities needed for the wheel. The New York Power Authority, which is contracted to use Hudson's lines until 2033 and has taken control of the lines' firm withdrawal rights, said the reassignment increased its allocation for the project to $645.42 million. It is seeking rehearing on the reassignment order (ER17-950).

FERC sided with PSE&G in both cases but acknowledged that the merchant transmission companies' ISAs "may be unjust and unreasonable and unduly discriminatory" in not allowing the companies to unilaterally convert their firm transmission rights. The fact that the changes may impact PJM's RTEP cost allocation "is a challenge to the justness and reasonableness of PJM's RTEP cost allocation, not whether [the companies] should be able to relinquish [their firm transmission rights]."

In the Hudson case, FERC opened a separate docket (EL17-84). Linden, however, has already filed a complaint where FERC said it will address the issue (EL17-90).

Commissioner Cheryl LaFleur noted as part of the order rejecting Hudson's request to convert its firm rights that she dissented in the order that applied the solution-based DFAX to the BLC. In certain situations, such as the short-circuit violations addressed in the BLC upgrades or the stability violations addressed by the Artificial Island project, "entities that use the lines may grossly overpay, while entities that benefit from resolution of the underlying violation underpay," she said. (See *Board Restarts Artificial Island Tx Project; Seeks Cost Allocation Fix*.)

JOA Changes

In its order Friday, the commission approved revisions to interchange scheduling and market-to-market (M2M) coordination for the PJM-NYISO interfaces, finalizing a delegated order by FERC staff on March 31, when the commission lacked a quorum. The commission also rejected requests by PSE&G, the BPU and Linden to rehear the March 31 order.

The revised JOA combines the ABC and JK Interfaces with the 5018 line and the RTO's Western ties into an aggregate PJM-NY AC proxy bus. The grid operators said the changes would make use of existing interchange scheduling constructs and support the phase angle regulators (PARs) on the interfaces. Pricing will reflect the impacts of imports and exports on the NYISO and PJM transmission systems, weighted by power flow distribution percentages.

In approving the changes, the commission:

- Rejected complaints by PSE&G that there is no reliability need for the OBF and that the changes infringe on transmission owners' rights;
- Said Con Ed should not be charged for PJM RTEP projects, including the BLC project; and
- Rejected NRG Energy's protest over establishing a single price for the PJM-NY AC proxy bus and its complaint that the OBF is a barrier to open access under FERC Order 888.

PJM NEWS

FERC Conditionally OKs MISO-PJM Targeted Project Plan

Continued from page 18

Advisory Committee with supporting explanations behind decisions whether or not to: (1) evaluate a potential TMEP that could economically relieve congestion at a particular flowgate; and (2) recommend an evaluated TMEP to their respective boards. The revision also must include a promise to disclose to stakeholders "any additional criteria used to evaluate potential TMEP solutions."

MISO TMEP Cost Allocation Approved

The commission last week also approved MISO's plan to internally allocate its share of TMEP costs to transmission pricing zones based on their historical contribution to the market-to-market congestion relieved by the project. MISO's cost allocation also establishes minimum benefit thresholds guaranteeing that no zone will be charged for benefits estimated to be either $5,000 or less, or less than 1% of MISO's share of the project's cost.

FERC also accepted a provision stating that, during the Entergy transition period of integrating into MISO, transmission pricing zones within MISO South will not be allocated costs for TMEPs that terminate in other MISO areas or wholly outside the RTO.

"We find that this proposed limitation is generally consistent with the proposal the commission accepted for allocating the costs of new transmission facilities within MISO during [MISO South's] transition period," the commission said. "Given the limited duration of the transition period, we conclude that [the] proposal will not prevent MISO's share of the costs of TMEPs from being allocated in a manner that is at least roughly commensurate with the benefits."

FERC has not yet ruled on PJM's regional cost allocation plan submitted in April (ER17-1406).

TMEPs at the Ready

TMEPs are designed to address cost-effective and congestion-relieving seams projects that might otherwise be overlooked because of their low cost and small size. To qualify, projects must cost less than $20 million, be in-service within three years of approval and provide historical congestion relief that is equal to or greater than construction costs within the first four years of operation. Construction costs will be divided among MISO and PJM based on the percentage of congestion relief benefits.

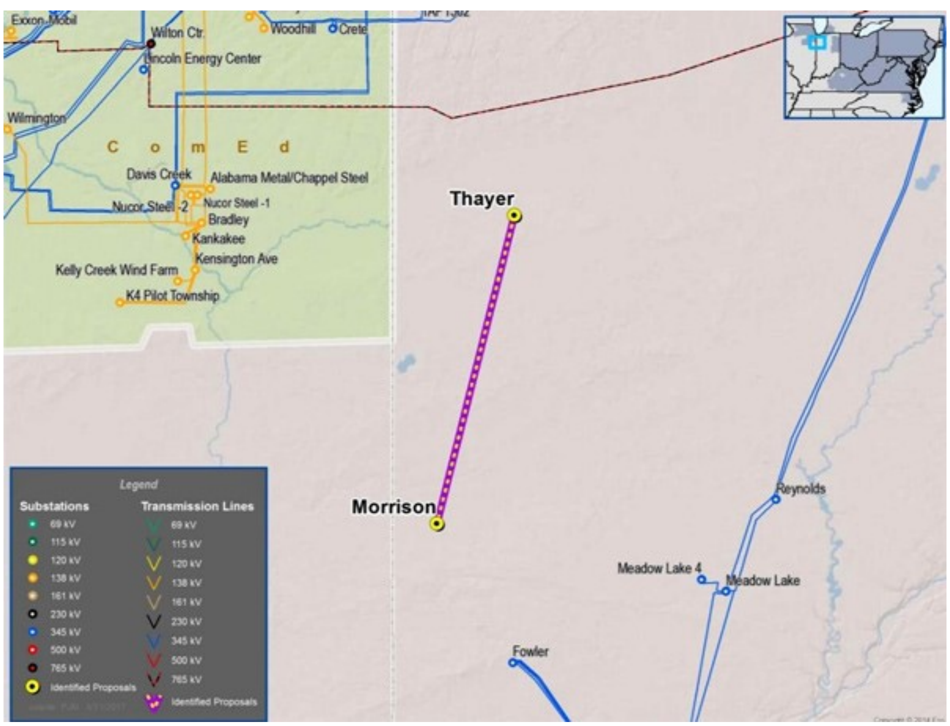
Five such TMEPs have been sitting in the pipeline for the better part of a year, representing $17.25 million worth of upgrades. They expect the projects to deliver a 5.8:1 benefit-cost ratio and realize $100 million in benefits within four years of going into service. (See MISO-PJM TMEP Projects Drop to Five.) Both MISO and PJM plan to ask for respective board approval of TMEP candidates by the end of the year.

MISO-PJM Coordinated System Plan Produces 1 Project

Meanwhile, MISO and PJM will this month wrap up their two-year coordinated system plan, and they see potential for one interregional project under the more expensive traditional market efficiency project type.

Using their regional benefit criteria, the RTOs point to a new 30-mile, 138-kV line between Northern Indiana Public Service Co.'s Thayer and Morrison substations near the northern Indiana-Illinois border as the only potential interregional project to emerge from the study. NIPSCO expects the line to cost $42.5 million and be in-service by December 2022. If approved, MISO and PJM will split interregional costs based on each RTO's benefit share and determine a regional allocation.

MISO is eyeing a June 2018 board recommendation for its portion of the project, as it doesn't yet have in place a cost allocation method for sub-345-kV interregional projects. The RTO said it is "open to additional cost allocation methodologies" and is close to completing a study on a preferred regional cost allocation approach for the projects. For now, MISO has suggested allocating 100% of regional project costs to benefiting local resource zones or transmission pricing zones. MISO hopes to make a regional cost allocation filing with FERC in March 2018.



Thayer-Morrison transmission project | *MISO, PJM*

Organization of PJM States Inc. Annual Meeting

Integration of Public Policy, Markets Top OPSI Discussions

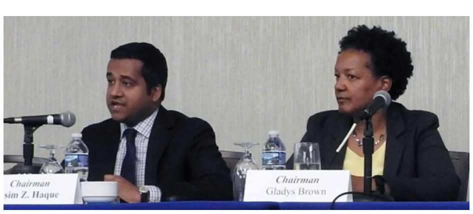
By Rory D. Sweenety

ARLINGTON, Va. — The panels at the Organization of PJM States Inc.'s annual meeting last week took on a wide variety of topics, but two themes rose to the top: cheap natural gas from local shale deposits has undoubtedly upended the electricity industry; and no matter how pure a market is, nothing will prevent the taint of politics.

"Politics sort of have everything to do right now in the energy market space," said **Susan Bruce**, who represents the PJM Industrial Customers Coalition. "Low natural gas prices may have an adverse effect on certain PJM market participants, but as a general matter, the shale gas revolution should be viewed as a real positive for our region. Businesses make decisions to site here because of that. If we mute that in some fashion to give competitive advantage to others, I think we, looking at the issues as a whole, have done ourselves a disservice from an economic perspective."

State regulators agreed. In the meeting's opening panel, regulators of several PJM states tracked the current debate over providing subsidies to nuclear units — most notably through Illinois' zero-emissions credit program — back to the low gas prices suppressing auction results so that "generation owners are not making enough money in the marketplace," said Asim Haque, chair of the Public Utilities Commission of Ohio.

"If the power markets are just going to now be about state and federal politics, I think we've got a problem," Haque said. "I worry where our collective heads are at. I worry that we're all going to continue to be entrenched in our state policy and political objectives. … I do have fears of a full-on accommodation of all state subsidies."



Haque (left) and Brown | © *RTO Insider*

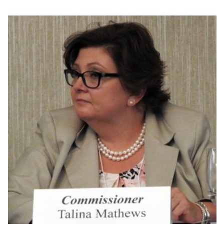
| © *RTO Insider*

Catch-22

Pennsylvania Public Utility Commission Chair Gladys Brown noted her commission traditionally protests efforts to introduce unit-specific subsidies. The Pennsylvania legislature has developed a large pro-nuclear caucus and held two hearings on developing financial support for the state's nine nuclear units, she said, but "we as a commission still have not been called over to provide any type of testimony."

"It's a catch-22 because we want access to that cheap natural gas, but they also know we're a diverse state and we have so many other things that we could offer in terms of generation," she said.

Illinois Commerce Commissioner **John Rosales** said he was "proud" of his state's ability to coalesce around the issue and decide to support nuclear generators. "It was the right decision," he said. "I realize there's always going to be some political attributes that come into play."



Kentucky Public Service Commissioner **Talina Mathews** noted that her state "loves to say how different it is" as one of the few in PJM that is fully regulated, has no renewable energy portfolio, energy efficiency standards or carbon emission goals, and remains a staunch advocate for coal use.

Still, she joined other regulators in defending states' abilities to make decisions for their residents.

Differing Priorities

When asked what changes to the capacity market they endorse, only New Jersey Board of Public Utilities President Richard Mroz would say he favors a redesign that supports nuclear, saying "there are other attributes that are not being valued that should be valued."

Haque was far less committal.

"I do not know who to trust anymore," he said. "On the state side, you've just got different priorities developing. You've got different priorities developing in different states," he said. "This is the sort of implicit cooperation that's supposed to exist between the states when we're all in this marketplace together, and Ohio unequivocally — when we made our [power purchase agreement] decisions [to subsidize some in-state generation units] — was a violator of that implicit cooperation."

He said that Ohio is taking a different position now.

"The decision that I made when I was sworn in as the chair in 2016 was that the PUCO was out of the generation business," he said.

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Organization of PJM States Inc. Annual Meeting

Powelson: FERC Won't Undermine Markets

By Rory D. Sweeney

Robert Powelson | © RTO Insider

ARLINGTON, Va. — Newly appointed FERC Commissioner Robert Powelson, a former Pennsylvania Public Utility Commissioner, seemed at ease last week as he addressed the annual meeting of the Organization of PJM States Inc. He cracked jokes and shared memories with fellow regulators, RTO officials and stakeholders.

But when the subject turned to the Department of Energy's recent proposal that FERC promulgate rules to support generators that can stockpile 90 days of fuel in deregulated states, he became emphatic.

"I will not support anything that undoes the value of the market," he said Wednesday. "I remind everybody in this room, we are an independent agency. … FERC does not do politics.

"I give Energy Secretary [Rick] Perry credit. He's trying to be thoughtful in the approach, but there's many different approaches to how we can tackle this issue. I did not sign up for blowing up the markets," he said to a round of applause. "We will not destroy the marketplace."

The comments were in response to concerns that DOE's Notice of Proposed Rulemaking would drive large subsidies to nuclear and coal units that would make competition untenable. (See Consumer Advocates Slam Perry NOPR, RTOs, FERC.)

Commissioner Cheryl LaFleur seconded Powelson's vow "not to destroy" the markets, tweeting, "Great message!"

Perry Defends NOPR

On Friday, Perry defended the NOPR, saying it was not an order to the independent commission, but an effort to begin a "conversation" on the loss of baseload generation.

"I think it's really important for people to understand, in general terms, there is no free market in the energy industry," he told a meeting of the group Veterans for Energy, according to an account in *The Hill*. "And anybody that gets up and says that is lying — is not, with all due respect, educated as to what the reality of the market is."

Perry said he was attempting to reverse the policies of the Obama administration, which he said, "had their thumb on the scale" to help out renewables to the "detriment … of reliable, baseload industries that are really important for the future security of this country."

The commission last week issued a notice inviting comments on the NOPR (RM18-1). Comments are due by Oct. 23, with reply comments due Nov. 7.

Other Controversies

In his speech to OPSI, Powelson also referenced several other controversial issues before the commission, without explicitly identifying them.

"Dallas Winslow, do you have a question for me?" he asked the chairman of the Delaware Public Service Commission.

Delaware has been fighting use of the solution-based distribution factor (DFAX) cost-allocation method for Artificial Island upgrades, PJM's first competitively bid project under FERC Order 1000. The original allocation left the Delmarva Peninsula on the hook for much of the project's $280 million cost, but PJM has proposed alternative allocations that would shift much of the bill to New Jersey and Pennsylvania. (See PJM: AI Costs Would Shift to NJ, PA Under New Allocations.)

Winslow laughed but did not ask a question.

Powelson also hinted at action on natural gas pipelines, saying, "We love infrastructure, so we're going to work on infrastructure — New Jersey included."

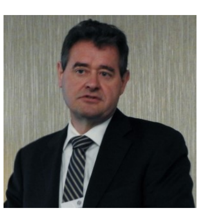
The proposed 120-mile PennEast Pipeline — which would transport Marcellus Shale gas from northeast Pennsylvania to central New Jersey — is facing opposition from landowners in both states. In April, FERC staff filed their environmental impact statement on the project, concluding that it would have "less than significant" environmental effects (CP15-558).

Integration of Public Policy, Markets Top OPSI Discussions

Continued from page 22

"Our advocacy now going forward will very much be tailored around trying to be constructive with that cooperation the best we can until we get to a breaking point where I think I've got to protect Ohioans. … We will start to become very active if I think that my residents and my businesses are going to be asked to stand on the Titanic."

Pricing Politics



In a lunchtime address, PJM CEO **Andy Ott** explained that gas-fired units used to be on the margins of receiving enough revenue to cover their costs. However, they were small and flexible enough to turn on and off quickly as prices dictated. Cheap gas has allowed those units to offer into the market so low that they can always run and don't have to respond to price signals. That has pushed large, inflexible units to the margin, where they can't respond to price changes quickly, or at all. So that attribute of flexibility, which was previously inherent to the system, now needs to be valued in the market, he said.

"Hopefully, we're not trying to solve a political problem," he said.

Market participants filled a second panel on the issue later in the day, and their perspectives reflected their positions in the market.

Kathleen Barron, Exelon's senior vice president for government and regulatory affairs, said markets are adjusting to state preferences. Her comments seemed to echo those made by James Wilson of Wilson Energy Economics, who consults for several state commissions and has argued at PJM stakeholder meetings that markets can absorb state actions given enough time and information. **Tonja Wicks**, who oversees FERC and RTO affairs for Duquesne Light,

Continued on page 24

Organization of PJM States Inc. Annual Meeting

Integration of Public Policy, Markets Top OPSI Discussions

Continued from page 23

said her company has concluded the existing capacity design is the right one for now.

It wasn't a surprise that Barron supported her own company's proposed revisions, but she acknowledged, "I think we have a ways to go to make sure that what we actually adopt is fair to customers."

Part of that may be because "we're talking about different kinds of subsidies" that forestall exit from the market rather than incentivize entry as other state policies have done, said Marji Philips, Direct Energy's director of RTO and federal services. They're also targeted at a few very large units rather than many smaller ones.

"It's about politics, and it's really hard to price politics," Philips said.

"What it really gets down to is investor confidence," said Steve Schleimer, Calpine's senior vice president for government and regulatory affairs.

There are trusted ways to secure a return on investments in competitive and regulated environments, but "where it's part-competitive and part-regulated … that's not stable."

Split over Cost Containment

In a separate session, stakeholders split on whether to factor cost-containment guarantees into proposals for transmission development.

PJM's Craig Glazer said the RTO could consider caps on construction costs but isn't prepared to determine whether other guarantees are suitable. He said PJM should "stay in our lane." Gloria Godson, vice president of federal and PJM policy for Exelon's Pepco Holdings Inc., agreed.

However, Sharon Segner, vice president of power development for LS Power, disagreed.

"We have a lot of reservations about that policy. If PJM is going to take [the opposite perspective of] every other RTO on cost containment, that's a discussion that should go on with FERC," she said.

She and West Virginia Consumer Advocate Director Jackie Roberts said they were willing to pay extra to develop a "robust" independently administered evaluation process. Roberts suggested a plan in which proposals would be requested during a certain time frame and submitted using the same form so they could create "an apples-to-apples" comparison. The current system allows developers to submit proposals in any form they wish.

"If my money's being spent, I want to know that the most creative solution is being proposed and that everybody is on a level playing field to fix that solution. This is what all businesses do, and the fact that it has not come to transmission planning is because PJM has been trying very hard to fix its time constraints," Roberts said. "You just don't have time for that, but others do. … I'm convinced that consumers will be better served by a real bid process that puts the risk of the business on the people making the bids, who are the people who know what the risks are and should bear them. That's something that I'm willing to get my checkbook out for."

SPP NEWS

FERC Rejects Cost Allocation for SPP-AECI Seams Project

By Tom Kleckner

FERC on Friday rejected SPP's proposed cost allocation for its seams project with Associated Electric Cooperative Inc. (AECI), a Missouri-based collection of six generation and transmission cooperatives.

The commission ruled SPP had not shown that the proposed allocation on a regionwide, load-ratio share basis was "roughly commensurate" with the project's benefits (ER17-2256, ER17-2257).

The project includes a new 345/161-kV transformer at AECI's Morgan substation and uprating a related 161-kV line, both near Springfield, Mo. SPP estimated the project, intended to address persistent thermal and voltage problems, would cost $18.75 million. SPP asked FERC to approve a cost-sharing and usage agreement among the RTO, AECI and City Utilities of Springfield — along with Tariff revisions incorporating SPP's negotiated share of the revenue requirements — in August.

SPP General Counsel Paul Suskie said that although the RTO is disappointed, "we're undeterred and confident we'll be able to continue to work … with members to develop an appropriate cost allocation for this and future seams projects."

"The ability to develop necessary and beneficial transmission improvements along our seams remains a high priority for SPP and its members," Suskie added.

SPP had proposed to regionally fund the projects, as they solved congestion issues on its side of the seam. The RTO agreed to cover 89.1% of the $13.75 million transformer and 97% of the $5 million uprate, with AECI covering the remainder and being responsible for the projects' construction, operations and maintenance.

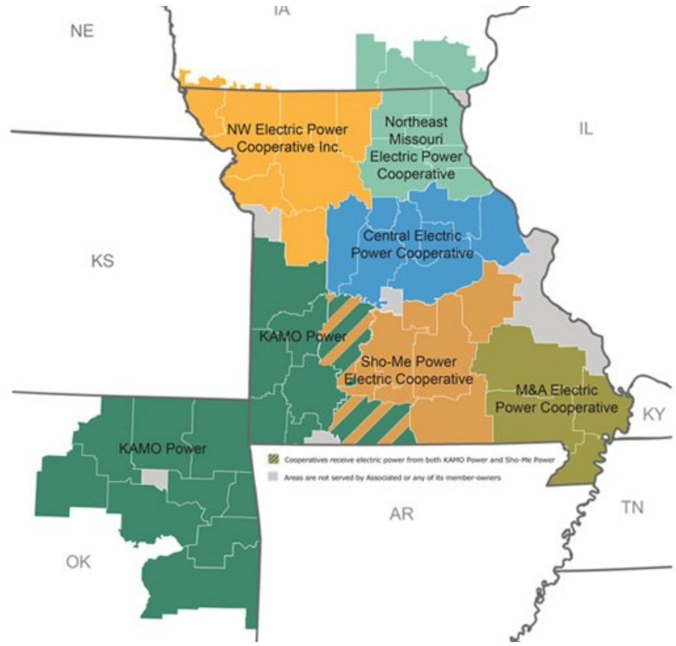
The RTO said it planned to allocate its share of the two projects by inserting their revenue requirements into the annual transmission revenue requirement of its highway/byway regional cost allocation methodology. Highway/byway funding considers facilities of 300 kV or above as highway facilities, with their costs allocated on a regionwide, postage-stamp basis; facilities between 100 and 300 kV are categorized as byway facilities, with two-thirds of the costs assigned to the host zone and one-third allocated regionwide.

Projects below 100 kV are allocated entirely to the host zone, while upgrades that operate at two difference levels — such as transformers — are allocated based on the facilities' lower operating voltage.

Xcel Energy and Westar Energy protested the RTO's filing.

Xcel opposed the Morgan transformer's cost allocation, contending that SPP provided insufficient evidence that the proposed cost allocation reflects its benefits. The company said there is no "default rule" that customers in SPP's 19 transmission zones "should bear the costs of a transmission facility in cases where the owner of the facility is located outside [the footprint]."

The company also said SPP failed to provide information on the project's benefits to transmission owners or loads in the Southeastern Regional Transmission Planning (SERTP) region that would justify a broader cost allocation to AECI's fellow SERTP members.



AECI service territory | *AECI*

FERC sided with Xcel's argument that SPP had not provided specific information on the transformer project's regionwide benefits and had not offered "sufficient evidence to demonstrate that these claimed economic benefits accrue throughout the SPP footprint." The commission said the RTO's own analysis indicated the project does not provide economic benefits to at least 11 of the 19 transmission zones.

Because SPP failed to support its cost allocation, FERC said it did not need to address Westar's allegation of a lack of transparency regarding SPP's negotiations with AECI. The utility had argued all affected parties have a right "to analyze the methodology and rationale by which SPP and AECI negotiated and substantiated the cost allocation ratios proposed in the filings."

The commission said its rejection does not preclude the RTO from proposing an alternative allocation or making another filing that demonstrates the project provides regional benefits.

SPP stakeholders in July reiterated their support of the project, despite a nearly 50% cost increase due to additional work to upgrade the 161-kV line. (See "Board Reaffirms Seams Project with AECI," *SPP Board of Directors/Members Committee Briefs: July 25, 2017*.)

The commission in 2015 rejected SPP's attempt to create a new class of seams transmission projects, saying its plan to identify projects outside the Order 1000 interregional planning process was "too broadly drawn" (ER15-2705). FERC did allow SPP to make filings on a project-by-project basis for non-Order 1000 facilities. (See *FERC Rejects SPP Proposal for Seams Transmission Projects*.)

SPP NEWS

Seams Steering Committee Briefs

Stakeholders Discuss 1st Overlapping Congestion Complaint

SPP stakeholders last week briefly discussed a recent American Electric Power complaint filed at FERC against the RTO and MISO related to overlapping congestion charges for pseudo-ties.

The Section 206 complaint (EL17-89) alleges that MISO violated its joint operating agreement with SPP by assessing congestion charges to AEP subsidiary Southwestern Electric Power Co. load that is pseudo-tied out of MISO and into SPP.

In its complaint, AEP said the MISO Tariff and Business Practices Manual are unjust and unreasonable in how they assess the congestion charges.

SPP and MISO have negotiated a memorandum of understanding to address the overlapping charges. The RTOs have said the MOU borrows elements from MISO's coordination efforts with PJM but won't result in major changes in coordination. (See *MISO Interregional Plans with SPP Echo PJM Efforts*.)

The overlapping congestion complaint is the first against SPP; stakeholders have filed five similar complaints against MISO and PJM. (See *MISO, PJM to Try Again on FERC Pseudo-Tie Filings*.)

Staff said Friday it will file a response at FERC but won't comment until then.

Light M2M Activity Results in $161K in Payments to SPP

In what staff described as a light month for market-to-market activity between SPP and MISO, the latter paid SPP more than $161,000 in August, reversing two months of payments in the opposite direction.

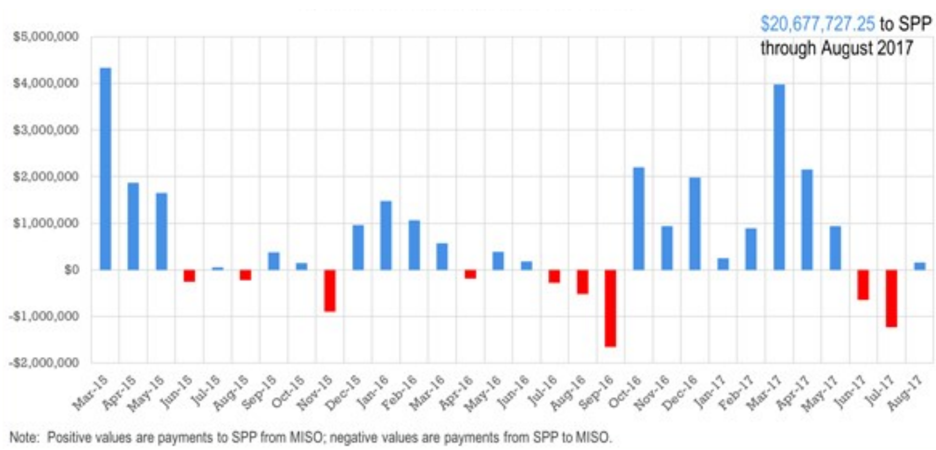
Permanent flowgates accounted for most of the congestion, binding for 37 hours and resulting in $148,794 in M2M settlement charges to MISO. Temporary flowgates were binding for 83 hours, 131 hours less than the month before, giving SPP an additional $12,495.

SPP has collected $20.7 million in payments from MISO as of August. The M2M process between the two RTOs began in March 2015.

AEP's Jacoby Continues as Chair

The committee approved its recommendation for AEP's Jim Jacoby to serve a full two-year stint as chairman, effective Jan. 1. Jacoby's term will expire Dec. 31, 2019.

— Tom Kleckner



M2M settlements since go-live | *SPP*

FERC Approves 6-Year Cycle for SPP RCAR Review

FERC has approved SPP's request to change the frequency of its regional cost allocation review (RCAR) from every three years to every six, overruling member objections. The change became effective Oct. 1.

Sunflower Electric Power and Mid-Kansas Electric protested the tariff change, saying problems with the RCAR's study assumptions, analysis and results made it unreasonable to decrease its frequency. The commission ruled their concerns as being out of scope (ER17-2229).

In their Sept. 29 order, commissioners said that while Sunflower and Mid-Kansas "may be correct that a relatively small change in transmission investment could have a large effect, that does not persuade us that conducting a mandatory review of the entire cost allocation methodology every six years instead of every three years is unjust and unreasonable."

SPP and the commission both noted that any member that believes it has an imbalanced cost allocation can request relief through the RTO's Markets and Operations Policy Committee. The RTO has also said it is trying to improve the review process by using more accurate information.

Stakeholders approved the Regional Allocation Review Task Force's revision request in April, based on its recommendation that the change would save SPP manpower and consulting costs. (See "RSC Approves Six-Year Cost Allocation Review," *SPP Regional State Committee Briefs*.)

The most recent regional cost review (RCAR II) showed more positive benefit-to-cost ratios and only one deficient transmission zone, which already has a project in the 2017 Integrated Transmission Planning assessment.

SPP said it took about 2,100 employee hours and more than $417,000 in payments to outside consultants to complete that review. The two RCARs have cost more than $1.5 million in outside consulting just to conduct the analysis, and each study has taken at least six months to complete, according to the RTO.

— Tom Kleckner

FERC NEWS

Waiver Request Lands Lee Plant a FERC Inquiry

By Rory D. Sweeney

Dynegy attorneys undoubtedly thought they were helping their case with FERC by volunteering rate information to expedite the sale of its gas-fired Lee Energy Facility, but the filing instead raised questions that last week prompted the commission to initiate an inquiry into the plant's reactive service rate schedule.

The company had asked FERC to waive a requirement to provide 90 days' notice of a change in ownership of the 692-MW, eight-turbine facility in Dixon, Ill. (ER17-2321). According to records, Dynegy struck a deal on July 10 to sell the facility to Bruce Power "as soon as possible" (EC17-162). The plant required commission approval to transfer ownership, which it received last Tuesday, but Dynegy had only filed for the approval on Aug. 16. The 90-day period would have lasted until Nov. 14.

Dynegy filed the waiver request the same day it filed for approval of the sale. In support of the request, the company made an informational filing that outlined its commission-approved reactive power revenue requirements, which PJM must pay the facility for providing reactive service.


Dynegy CEO Robert Flexon at FERC in May | © *RTO Insider*

FERC approved the waiver, but it noticed the revenue requirements were incomplete, including the absence of any leading reactive power test data and only some lagging test data, which the commission said "appear to show that there is degradation of the MVAR output of all eight generator units." Dynegy's filing noted that each of the eight units has a nameplate rating of 53.63 MVAR, but that test data supported site-rated gross capabilities ranging from 28.42 to 32.68 MVAR. As a result, the commission established a proceeding to examine the justness and reasonableness of Lee's reactive power rates (EL17-91).

A settlement judge will be assigned to the proceeding by Oct. 29 and have 30 days to agree on a settlement. Failing that, FERC will assign a presiding judge who must make an initial decision within 180 days of last week's order being published in the *Federal Register*. The commission expects it would then take up to eight months to issue a final decision but would set the refund date to the date of publication.

Houston-based Dynegy operates about 31,400 MW of generation in the Northeast, Mid-Atlantic and Midwest (including almost 1,800 MW from plants in which it shares ownership). The company has been fighting to save its coal-fired generation and was approached in May about a potential takeover. (See *Report: Vistra Energy Suggests Takeover of Dynegy*.)

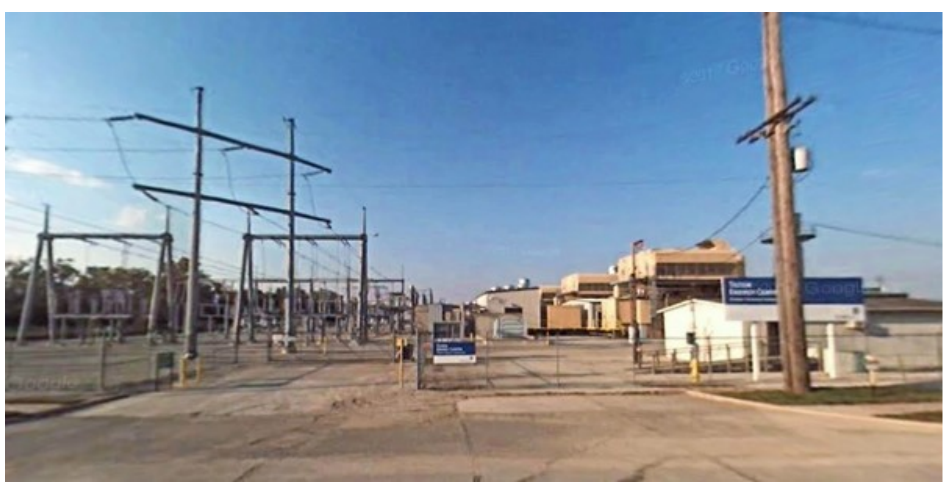
Bruce Power is owned by Rockland Capital, based in The Woodlands, Texas. Rockland also owns about 10,000 MW of generation in the U.S. and England, along with the New Jersey-based Vineland Energy power marketer.

FERC to Review Illinois Plant's Reactive Rates

FERC last week opened hearing procedures to determine the fairness of reactive power rates for an east central Illinois gas-fired generating plant.

The 195-MW Tilton Energy plant made an informational and rate schedule filing in April, spurred by a change in upstream ownership. The company did not propose a change to its current rate schedule, explaining that the plant "is being transferred completely intact" with no interruption of its reactive service. In the last decade, Tilton has changed hands from Dynegy to LS Power to current parent Rockland Capital.

While the commission accepted Tilton's informational filing and unchanged rate schedule, it instigated settlement proceedings and set an Oct. 5 refund date, explaining that Tilton's current reactive power capability may have degraded since FERC approved a $781,383 annual revenue requirement for the plant in 2010 (ER17-1428, EL17-79).


Tilton Energy Center | *Google*

— Amanda Durish Cook

FERC News

FERC: FPA Change may not Solve Catch-22 on Vote Deadlocks

By Rich Heidorn Jr.

FERC said last week that a proposed revision to the Federal Power Act that would increase the right to appeal rate changes may have only limited effectiveness.

General Counsel James Danly told the Senate Energy and Natural Resources Committee's Energy Subcommittee last week that S. 186, which would allow parties to seek judicial review of rate changes in the case of commission inaction, "only partially advances the interests of an exceedingly narrow category of aggrieved parties in very rare occasions of commission inaction."

The bill, sponsored by Sen. Ed Markey (D-Mass.), was prompted by the commission's 2-2 deadlock in September 2014 over whether it should reject the results of ISO-NE's eighth Forward Capacity Auction because of unchecked market power. The 2017-18 auction results became "effective by operation of law" (ER14-1409). Under the FPA, rates take effect 60 days after they are filed with FERC, absent a commission order to the contrary. (See *FERC Commissioners at Odds over ISO-NE Capacity Auction*.)

Catch-22

Under Section 313 of the FPA, parties must seek rehearing of FERC orders before filing an appeal in federal court. But in the case of FCA 8, because the commission never issued an order, challengers were blocked from seeking rehearing or challenging the auction results in court — a catch-22 that the legislation intends to address.

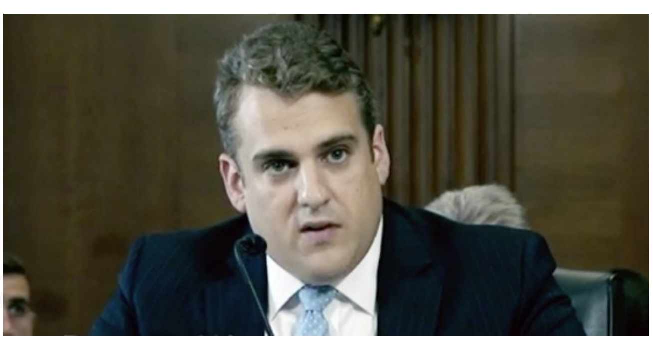
Last October, the D.C. Circuit Court of Appeals rejected an effort by Public Citizen and Connecticut officials to force FERC to rule on the legality of the auction. It agreed with the commission that there can be no rehearing or appellate review when there is no order in a Section 205 proceeding. (See *Court Asked to Force FERC Action on Disputed ISO-NE Capacity Auction*.)

Danly told the subcommittee he knew of only five other instances in which a utility's filing has taken effect by operation of law under the FPA or the Natural Gas Act without a commission order.

Under S. 186, the *absence* of commission action that results in a filing taking effect would be considered an order, allowing rehearings and appeals.

"The proposed legislation offers the possibility for aggrieved parties to pursue further administrative and judicial process when a disputed rate goes into effect even though half of the seated commission would not have accepted the rate in an order," Danly observed. "Oddly, under the current statutory framework, a party who manages to persuade only one of four commissioners, and loses on a 3-1 vote, may request rehearing at the commission and seek redress at a court of appeals. However, a party that is perhaps more persuasive and manages to convince two of four commissioners, resulting in a 2-2 split — and thus no commission order — is currently barred from seeking rehearing and appellate review."

Danly noted that any party can file a Section 206 challenge alleging rates are unjust and unreasonable — albeit at increased cost and a higher burden of proof than Section 205 filings.



FERC General Counsel James Danly

But he said the legislation may not provide the relief its sponsors intend.

"Should the commission's inaction be the result, as in the ISO-NE case, of a 2-2 split, a similar result could obtain for a later order on rehearing," Danly said. "In that case, there would be another 2-2 split and no order on rehearing would issue. In such a case, it would be exceedingly unlikely that a court of appeals would entertain a petition for review.

"Moreover, even if a court of appeals accepted the petition, the court would almost certainly remand the case back to the commission for further adjudication. When sitting in review of agency action, courts of appeals review the evidentiary record compiled below and the reasoning the agency employed — as reflected in its orders — to support its decision based on that record. In the case of a serial 2-2 split, no orders would issue and such a review would be impossible. Remand would appear to be the court's only option."

FERC Supports $10M Threshold on Merger Approvals

Danly told the committee FERC supports two other bills that would modify FPA Section 203 to set a minimum value threshold of $10 million for mergers of jurisdictional facilities subject to commission approval (H.R. 1109 and S. 1860).

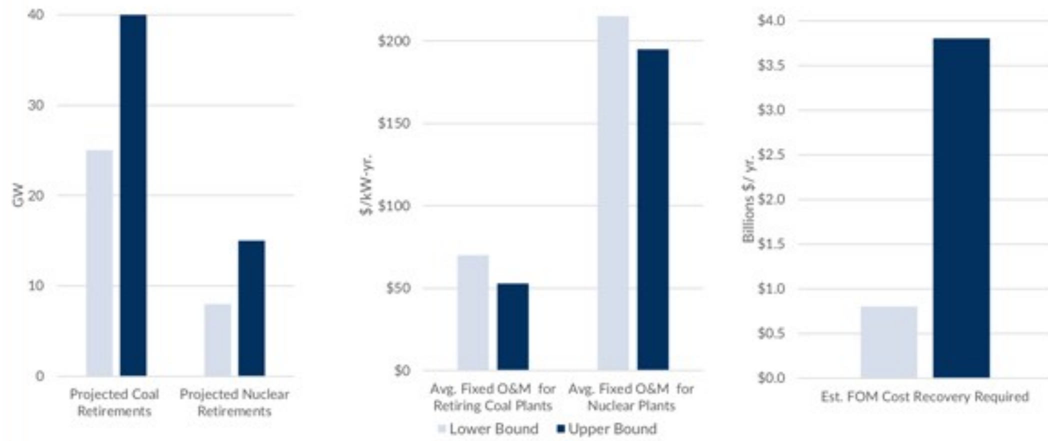
The change would align this provision of the FPA, which currently has a $50,000 threshold, with other sections of the act that already set $10 million as the trigger, he said.

It would also "ease the regulatory burden on industry without impeding the commission's regulatory responsibilities," Danly said. "Transactions below the proposed threshold are unlikely to impose a significant negative impact on competition or the rates of utility customers."

He said the commission has other tools to address market power concerns that could arise from mergers. "For example, if an entity with market-based rates obtained the opportunity to exercise market power as a result of such transactions, the commission could limit or eliminate its ability to engage in transactions at market-based rates. Additionally, the commission has a range of market power mitigation measures that limit market power within the organized wholesale electric markets. Finally, if the exercise of market power involves market manipulation or violation of a commission rule, regulation, order or tariff provision, the commission can bring an enforcement action."

ICF Analysis: DOE NOPR Cost Could near $4B/Year

By Rich Heidorn Jr.



Potential impact of DOE NOPR, 2018-2030 | *ICF*

The U.S. Department of Energy's proposed rescue plan for at-risk coal and nuclear plants could cost ratepayers $800 million to $3.8 billion annually through 2030, ICF analysts said Wednesday.

The analysts said the wide range is the result of considerable uncertainty about how FERC might implement the Notice of Proposed Rulemaking issued by Energy Secretary Rick Perry last month. The NOPR directed FERC to ensure that nuclear and coal generation in deregulated states with 90-days on-site fuel supply receive "full recovery" of their costs.

Legal analysts have said FERC could reject Perry's directive. (See *FERC's Independence to be Tested by DOE NOPR*.)

But ICF senior vice president Judah Rose said during a webinar Wednesday that he sees "a significant possibility" that FERC will take some action to address the secretary's "resilience" concerns, especially in the wake of Hurricanes Harvey, Maria and Irma.

"DOE has rarely, if ever, exercised its authority vis-a-vis FERC in this manner. It is even more rare to act with such very tight deadlines — i.e. 60 days, and with such broad regional coverage — it applies to any ISO or RTO with an energy market (day-ahead and real-time) and any plant not subject to state rate of return regulation," Rose and ICF principal George Katsigiannakis wrote in a blog post. "In the past, most NOPRs originated from FERC directly. Thus, past experience is not necessarily a good guide regarding handicapping the likelihood of implementation. Also, the political environment is without obvious precedent."

The "lower bound" annual cost of $800 million ($6.6 billion net present value (NPV) at a 7% discount rate) assumes high natural gas prices, normal energy demand, and that units' fixed operations and maintenance costs are partially recovered in the market.

The "upper bound" cost of $3.8 billion ($31 billion NPV) is based on an expectation of low gas prices and low energy demand with a minimum offer price rule for all regulated units.

Among the uncertainties, Rose said, is whether FERC seeks to provide cost recovery through energy prices, as proposed in the NOPR, or through capacity prices "because the service is to some degree more akin to a capacity service."

One particularly important question is whether the rules will include mitigation of buy-side or sell-side market power, an issue not mentioned in the NOPR. If a large share of the generation fleet is subject to rate of service regulation, the analysts said, it could delay retirements and lower supply bids, reducing energy and capacity revenues for remaining units.

If coal plants have bid below costs in the past, prices could increase, but if mitigation is not pursued vigorously, market prices could decrease.

Impact on Gas, Renewables

By reducing coal and nuclear retirements, said ICF Managing Director Michael Sloan, the rule would likely reduce the development of new natural gas-fired capacity by 20 to 40 GW, leading to a reduction of gas demand of as much as 5 Bcfd by 2030, causing gas prices to drop by 4 to 7%.

One uncertainty: whether gas plants with firm pipeline contracts or access to underground storage or local production could qualify for cost recovery.

Renewable generation would be less impacted by the capacity market but could be affected by other FERC actions on price formation, such as restrictions on negative pricing.

The analysts said the NOPR also raised these questions:

- Will the rules permit expansions at existing units or reopening of mothballed units? If expansions are allowed, how many megawatts?
- Who will set the rate of return and what will be the amortization period?
- Why is the NOPR restricted to RTOs and merchant plants? Given FERC's role in ensuring reliability, "What showing, if any, do rate-of-return states have to show that they have the correct procedures in place to achieve resilience? Will this ultimately apply to all jurisdictional transmission providers?"

"This NOPR could have a major impact on the industry and markets, and could be a huge game changer for baseload plants. Timing is unclear along with most of the details. The only certainty is the uncertainty that this will create in the marketplace as the rule is developed and the details debated," said the analysts, who questioned whether upcoming capacity auctions in ISO-NE (January 2018) and PJM (May 2018) and monthly auctions in NYISO will be delayed.

FERC NEWS

FERC Sidesteps Michigan Transmission Ownership Dispute

By Amanda Durish Cook

FERC has declined to involve itself in a dispute over whether Consumers Energy must transfer ownership of transmission assets to its former subsidiary.

The commission said last week it does not have "exclusive jurisdiction" over whether Consumers Energy must transfer reclassified transmission assets to Michigan Electric Transmission Co. (EL17-48). METC argued that under a 15-year-old Distribution-Transmission Interconnection Agreement with Consumers, it had the ownership rights on several of Consumers' distribution facilities reclassified as transmission facilities by NERC in 2012.

Consumers transferred its then-existing transmission facilities to subsidiary METC in 2001, then sold METC to Michigan Transco Holdings in 2002. As part of the sale, Consumers and METC signed the Distribution-Transmission Interconnection Agreement, which stipulates that "should future system modifications result in the reclassification of assets, the parties agree to convey ownership of those assets to the appropriate party." Consumers argued that it should keep possession of the disputed assets because the reclassification was not caused by a "physical system modification." METC was acquired by ITC Holdings in 2006.

FERC said the transmission ownership issue was a matter of contract interpretation that should be left to the courts. The commission also said there was no merit to Consumers' argument that FERC is uniquely positioned to decide whether the assets should be transferred in because of its expertise in NERC reliability issues, the Federal Power Act and promoting competition in transmission development.

"The outcome of this matter appears to turn on interpretation of the parties' intentions and construction of the [agreement] rather than any determination requiring the commission's special expertise," FERC said.

The commission also said the disagreement was a one-off situation that would be unlikely to create precedent because the company's agreement was uncommon. "The [agreement] is a unique, bilateral, interconnection agreement covering a transaction in which a generation and distribution company sold its transmission assets to a third party. … [It] is not a standard or common provision in interconnection agreements. Thus, the outcome of this proceeding would not determine a general policy … and the resolution of the contractual dispute here likely will have little effect beyond the parties involved."

Consumer Advocates Slam Perry NOPR, RTOs, FERC

Continued from page 1

Democratic committee members — also used the opportunity to tee off on Perry's Sept. 29 Notice of Proposed Rulemaking, which would require RTOs to provide "full recovery of costs" for generators with a 90-day on-site fuel supply that are not subject to state or local cost-of-service rate regulation. (See *FERC's Independence to be Tested by DOE NOPR*.)

No one at the Energy Subcommittee hearing spoke in favor of Perry's proposal, which called on FERC to develop a final rule providing RTOs with direction within 60 days. (Perry will be testifying before the committee this Thursday.)

Consumer advocates from New Jersey and Massachusetts and representatives for Public Citizen and industrial consumers testified along with PJM's Independent Market Monitor.

Slocum

Tyson Slocum, director of Public Citizen's Energy Program, was the most critical witness, citing a "triple threat" to consumers posed by "political efforts by owners of mismanaged and uneconomic generation seeking subsidies; regional transmission organizations constructed to serve transmission and generator interests at the expense of the public interest; and a FERC that fails to uphold just and reasonable rate design, oversight and enforcement."

No to Coal, Nuclear Subsidies

Slocum said Perry's proposal "reads more like a President Trump tweet than a reasoned, serious policy proposal," joining other witnesses in rejecting Perry's claim of a resiliency "crisis."

"Even more shocking than the Department of Energy's proposal is FERC's response to fast-track its consideration, with its order giving the public only 21 days to provide initial comments on the DOE rulemaking," Slocum said.

PJM Monitor Joe Bowring said the RTO's market "has resulted in a reliable system despite significant changes in underlying market forces … [working] flexibly to address both market exit and entry without preferences for any technologies."

Bowring

He dismissed concerns over fuel diversity, saying PJM's is higher than ever.

"There is no reason to intervene in the markets in order to provide reliability and resilience," he said. Concerns over natural gas supply interruptions would be better addressed through "a careful evaluation [of] the reliability of gas pipelines, the compatibility of the gas pipeline regulated business model with the merchant generator market business model, the degree to which electric generators have truly firm gas service and the need for a gas RTO to help ensure reliability," he said.

Hughes

John P. Hughes, CEO of the Electricity Consumers Resource Council, which represents industrial consumers, said the NOPR would result in "the destruction of the competitive wholesale electric

Continued on page 31

FERC NEWS

Consumer Advocates Slam Perry NOPR, RTOs, FERC

Continued from page 30

markets."

By proposing out-of-market payments to prevent plant retirements, he said, "DOE is saying manufacturing jobs are not as important as the jobs at economically obsolete coal-fired and nuclear power plants — plants for which the market has already provided much more economic alternatives.

"We know that coal-fired and nuclear plants are not immune from so-called Black Swan events such as hurricanes, tornadoes, earthquakes and tsunamis," he added.

Hughes said grid operators can ensure sufficient supplies of "essential reliability services" such as frequency response through markets and without subsidies.

He criticized FERC, saying it "backtracked from its policy to favor market-based solutions over command-and-control" when it issued a proposed rulemaking in November 2016 requiring all new generators to provide primary frequency response. (See *FERC: Renewables Must Provide Frequency Response*.)

A FERC spokeswoman said the commission had no response to the criticism at the hearing.

Vanderhelm

Mark Vanderhelm, Walmart vice president of energy, also made a plug for markets. "When we compare our cost per kilowatt-hour in 2016 to our cost per kilowatt-hour in 2007, we find that our cost in customer-choice jurisdictions decreased by almost 7% on average. In contrast, our cost in jurisdictions without customer choice increased by 14%," he said.

'Arbitrary' Fuel Requirement

Slocum said DOE's call for 90 days of on-site fuel was "arbitrary." He noted that during Hurricane Harvey, the coal piles at NRG Energy's W.A. Parish plant in Texas were so soaked with water that the plant switched two units to natural gas for the first time since 2009, and that Florida lost much of its nuclear generation during Hurricane Irma because of precautionary shutdowns and mechanical problems.

Green

Rep. Gene Green (D-Texas) noted that NRG's San Jacinto natural gas plant kept operating despite receiving 47 inches of rain. "Natural gas was by far the largest [electric] provider during the storm, although I can also say our nuclear power plant in Southeast Texas continued to function very well," Green said. "It's frankly just not the case that increasing natural gas-fired plants is threatening reliability of the grid."

Pallone

Rep. Frank Pallone (D-N.J.) criticized what he called Perry's "ill-conceived and wholly unjustified effort to commandeer" the FERC rulemaking process.

"Subsidizing noncompetitive generation for a small, if any, grid benefit at massive expense to consumers is wrong," Rep. Paul Tonko (D-N.Y.) said. "And it definitely should not be done through a rushed process."


Olson

Energy Subcommittee Vice Chairman Pete Olson (R-Texas) also indicated concern over the proposal, citing FERC Commissioner Robert Powelson's speech to the Organization of PJM States Inc. (OPSI) annual meeting Wednesday, at which he stressed FERC's independence and sought to reassure those who fear the rule would destroy competitive markets.

"[Powelson] said regarding concerns if the rule does undo competitive markets, quote, 'When that happens, we're done. I'm done,'" Olson recounted.

"Wow!" Olson added. "That is pretty strong."

Commissioner Cheryl LaFleur seconded Powelson's vow "not to destroy" the markets, tweeting, "Great message!"

Consumers' Voice in Stakeholder Process

The witnesses were also critical of FERC's and RTOs' efforts on behalf of consumers.

Brand

Stefanie Brand, director of the New Jersey Division of Rate Counsel, and Rebecca Tepper, chairman of ISO-NE's Consumer Liaison Group, said RTOs should explicitly consider consumer costs in their policymaking and transmission planning, noting that generation and transmission costs account for 60% of customers' bills in their states.

They said RTOs should provide dedicated funding to ensure consumer advocates can attend stakeholder meetings — as enjoyed by the Consumer Advocates of PJM States and the New England States Committee on Electricity.

Tepper

Tepper, chief of the Massachusetts attorney general's energy and telecommunications division, said RTOs should provide cost impact analyses on all major proposals and require that at least one RTO board member has "experience in consumer issues" or serves as a consumer liaison.

Slocum, who criticized RTOs as "political entities designed to serve entrenched economic interests," called for increased transparency, saying stakeholder meetings should be recorded and transcribed and that RTOs be subject to the Freedom of Information Act.

He also called for splitting RTO functions to limit management's role in stakeholder

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FERC News

Consumer Advocates Slam Perry NOPR, RTOs, FERC

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meetings; establishing a two-year "revolving door" prohibition on state regulators and utility executives going to work for an RTO; and barring entities under RTO jurisdiction from serving as financial sponsors of RTO special events.

He had specific criticism for PJM's sector-weighted voting process, which he said appears "to be designed for the primary purpose of expanding the voting power of transmission owners and generators, and diminishing the voting power of end users."

"End users actually represent half of the energy system, and should therefore represent half of the weighted sector voting rights," he said. PJM's consumers are grouped in the End Users sector, and receive a 20% weighting like the four other sectors: Transmission Owners, Generation Owners, Other Suppliers and Electric Distributors.

Asked to respond to the criticism, PJM spokesman Ray Dotter said the RTO saves consumers $3 billion annually and runs an "open and inclusive" stakeholder process.

"PJM's governance is designed to ensure that no membership sectors have undue influence and has been approved by the FERC. At the same time, our independent board is empowered to act without the consent of members when it determines that market rule changes are necessary — and it has done so," Dotter said in a statement. "Nevertheless, such rule changes must be considered and approved by the FERC."

Transmission Spending

Rep. Pallone asked Brand about a report released Sept. 29 by American Municipal Power that found more than half of the $24.3 billion in transmission projects in PJM since 2012 were supplemental projects initiated by TOs and not required to comply with RTO or federal reliability requirements. (See *Report Decries Rising PJM Tx Costs; Seeks Project Transparency*.)

Brand said the TOs propose supplemental projects "because they're incredibly lucrative."

"Returns on transmission are huge, so everyone wants to build whatever they can," she said. "The need for the projects is not adequately reviewed at PJM. … The returns that are granted by FERC for transmission are completely off the charts. Some utilities are getting close to a 12% return on these projects, which in this economy is a bit crazy."

FERC

Brand, speaking on behalf of the National Association of State Utility Consumer Advocates, said FERC also needs to do more to create "consumer friendly" proceedings. "Nearly all proceedings are conducted on paper, with limited opportunity for public input. Evidentiary and public hearings are rare. … There is no opportunity for cross-examination if factual certifications are submitted, and there is no oral argument on the legal or policy issues."

Slocum repeated his call for FERC to provide funding for intervenors representing the public before the commission so that they can afford attorneys and expert witnesses.

Sempra Reworks Oncor Bid to Erase EFH Debt

By Tom Kleckner

Sempra Energy said Wednesday that it has reworked its proposed $9.45 billion acquisition of Oncor with a new financing structure that wipes out the debt of the utility's parent company, Energy Future Holdings.

Sempra on Thursday submitted a change-in-control filing with the Public Utility Commission of Texas (Docket 47675) that adds the new financial provisions and offers 47 regulatory commitments, possibly clearing the way for a regulatory approval that eluded previous Oncor suitors.

The California-based company's top executives told financial analysts Wednesday that the joint application with Oncor stems from discussions with key Texas stakeholder groups and guidance from Oncor CEO Bob Shapard and General Counsel Allen Nye.


Reed

"We've learned a lot from meetings in Austin and working with Oncor's senior leadership," CEO Debra Reed said. "We believe the revised financial structure addresses concerns made by certain stakeholders ... and substantially addresses many of their key issues." (See *Sempra Begins 'Listening Tour' of Key Stakeholders*.)

Reed said stakeholder groups likely to participate in the case — PUC staff, Texas Industrial Energy Consumers, a coalition of cities served by Oncor and the Office of the Public Utility Counsel — have agreed to continue working on regulatory settlement discussions with Sempra and Oncor representatives.

"We do feel this improves our likelihood of being able to reach regulatory resolution," she said. "We made a conscientious decision to make this change after we got a lot of stakeholder input. One of their greatest concerns was the holding company debt. We thought addressing those issues up front would help us get regulatory approval."

The previous financing arrangement would have added $3 billion in new debt to Oncor, but Sempra's revisions essentially match a previous deal intervenors agreed to with Berkshire Hathaway Energy. Sempra outbid Berkshire in August. (See *Sempra Outmuscles Berkshire for Oncor*.)

Sempra expects to fund approximately 65% of the EFH purchase with equity and 35% with company-issued debt, eliminating the need to rely on third-party investors. CFO Jeff Martin said the "simpler and more conservative financing approach" will erase the EFH debt. Sempra's original proposal would have given the company 60% of EFH, with the goal of acquiring 100% over a period of time.

"Our revised financing structure for the transaction is both clear and simple. This eliminates the need to take future additional steps to achieve full control of EFH," said Martin, noting it will allow Sempra "to fund additional growth initiatives."

Wall Street was cool to Sempra's revised financing proposal. The company's stock lost $2.63 off Wednesday's close of $114.57/share, a 2.30% drop. It finished the week at $111.95/share.

Florida-based NextEra Energy has its own application for a share of Oncor before the PUC (Docket 47453), seeking the remaining 19.75% interest owned by a collection of private-equity funds operating under the name Texas Transmission Holdings Corp. (See *Texas PUC Resistant to NextEra's Minority Interest in Oncor*.)

Asked about acquiring the minority interest, Reed reminded analysts, "We have said over time we would like to own the entirety" of Oncor.

Sempra's regulatory commitments "are intended to preserve the independence of Oncor and help ensure that Oncor is protected for the customers it serves in Texas ... and able to continue to perform in accordance with its financial plans for its customers and shareholders," Reed said.

The regulatory commitments include:

- Preserving Oncor's board independence;
- Maintaining the utility's current management team, workforce and Dallas-based headquarters;
- Not incurring any debt at EFH as part of the transaction or in the future;
- Keeping strong ring-fence provisions to maintain both legal and financial separation among Oncor, Sempra and their affiliates;
- Ensuring Oncor's customers don't bear any of the transaction costs; and
- Supporting Oncor's five-year, $7.5 billion capital investment plan.

NextEra's inability to abide by similar ring-fencing measures imposed by the PUC sank its own bid to acquire Oncor earlier this year. The commission also rejected Dallas-based Hunt Consolidated's attempted acquisition over concerns that taxing savings wouldn't be shared with Texas ratepayers.

With the filing, the PUC now has 180 days to render a decision. The 2017 state legislature approved a bill that was recently signed into law giving the commissioners an extra 60 days if they find "good cause."

Sempra and Oncor already cleared one regulatory hurdle after a U.S. Bankruptcy Court in Delaware approved the merger agreement in September. (See *Bankruptcy Court Advances Sempra Bid for Oncor*.)

The agreement remains subject to customary closing conditions, including further approvals by the PUC, Bankruptcy Court, FERC and the U.S. Department of Justice.

COMPANY BRIEFS

Doubling of Global Renewable Energy Could Reduce Storage Costs

The doubling of global renewable energy capacity by 2030 could reduce storage costs by 66%, according to a new report by the International Renewable Energy Agency.

"Electricity Storage and Renewables: Costs and Markets to 2030" also found that the installed base of global storage capacity could triple by 2030 if renewable growth maintains its trajectory, while battery-specific storage could see a 17-fold increase.

The report also forecasts a growing role in the stationary storage space for lithium-ion and flow batteries, as growth in solar and wind continues. Pumped hydro presently makes up 96% of stationary electricity storage worldwide.

More: *pv magazine*

Solar Industry Sending Equipment to Puerto Rico

Puerto Rican homes lie in ruin in the aftermath of Hurricane Maria. | *U.S. Customs and Border Patrol*

The U.S. solar industry is airlifting $1 million in donated solar equipment to Puerto Rico, where 90% of homes and businesses remain without electricity in the wake of Hurricane Maria.

The Solar Energy Industries Association said the effort is primarily humanitarian, but it also allows the industry to showcase how solar can weather natural disasters when conventional power plants and grids couldn't do so.

Tesla CEO Elon Musk tweeted Thursday that his company is capable of rebuilding Puerto Rico's power grid to run on solar power and batteries.

More: *Bloomberg Technology; HuffPost*

FERC Denies APS Rehearing Request

FERC denied a request by Arizona Public Service to rehear its July 1 decision rejecting the terms that APS and Southern California Edison negotiated to end a transmission service agreement.

APS argued that FERC ignored language binding the commission to approve a negotiated reimbursement and substituted a different amount regarding service on the Four Corners-El Dorado line.

In its order, FERC clarified that it did not prohibit APS from paying SCE $18 million under their expiration agreement, and directed APS to provide accounting for the payment.

More: *ER16-1342*

Dominion to Power New Facebook Data Center with Solar

Dominion Energy Virginia plans to add solar generation to power a new data center that Facebook plans to build in Richmond, Va.

The center, which will total nearly one million square feet, will be served under a new renewable rate option called Schedule RF (renewable facility), which the utility plans to file with the Virginia State Corporation Commission later this month. If approved, Schedule RF would allow Facebook to offset its annual energy needs with renewable energy delivered to the grid.

The new renewable rate option also would be made available to other businesses.

More: *Dominion Energy Virginia*

Amazon Patents Way for Drones to Recharge EVs

Amazon has patented a way for drones to deliver energy to vehicles, both at rest and moving, which might help resolve the challenges of electric vehicle infrastructure.

The drones would refuel vehicles, much like a fighter jet refueling large aircraft in flight.

Patent 9778653 details how Amazon could deploy its drone fleet to locate energy-deficient vehicles, dock with them and transfer energy.

More: *CB Insights*

Xcel Solar Garden Program Hits 40-Project Mark

Xcel Energy announced Wednesday that its community solar garden program has put 40 projects online, passing the 100-MW threshold for electricity production.

The program was created by the legislature and launched in 2014 to bring solar energy to residents and businesses who didn't want to build their own arrays. It is exclusive to Xcel's Minnesota territory and is the largest of its kind in the country.

Nearly 180 community solar garden projects are in the design and construction phase, according to Xcel, and will continue rolling out in 2018.

More: *Star Tribune*

CMS Purchasing Michigan's 2nd Largest Solar Project

CMS Energy last week announced that its subsidiary, CMS Enterprises, is purchasing a 24-MW, two-part solar power project under construction in Delta Township, Mich.

Delta Solar, which will be Michigan's second-largest solar power plant, is being built by EDF Renewable Energy subsidiary groSolar.

The plant will be operational by the summer of 2018. It will provide energy to the Lansing Board of Water & Light through a power purchase agreement.

More: *CMS Energy*

Alliant Plans 300-MW Wind Farm in Iowa

Alliant Energy has announced plans to begin construction on a 300-MW wind farm in Clay and Dickinson counties, Iowa.

Interstate Power and Light, a subsidiary of Alliant, purchased the Upland Prairie Wind project from Apex Clean Energy.

The project will consist of 100 to 150 turbines situated on 30,000 acres. It is slated for completion in 2018.

More: *Sioux City Journal; Commercial Property Executive*

Federal Briefs

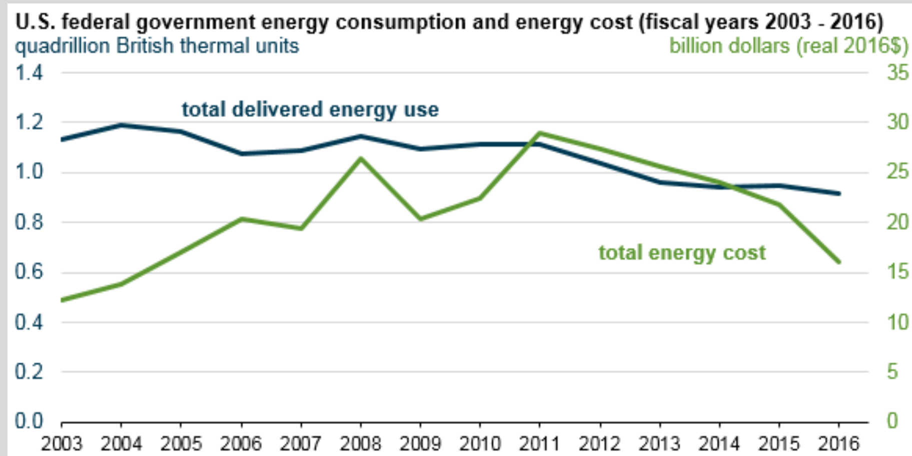
Study: Oil Subsidies Could Undermine Paris Agreement

Government subsidies to American energy companies could increase domestic oil production by 17 billion barrels "over the next few decades" and undermine the Paris Agreement, according to a recent study published in *Nature Energy*.

The study, written by scientists and economists from the Stockholm Environment Institute and Earth Track, found using that oil would put the equivalent of 6 billion metric tons of carbon dioxide into the atmosphere.

The authors found that many not-yet-developed projects in the largest U.S. oil fields would only be economically feasible if they receive subsidies.

More: *InsideClimate News*



Federal Gov's Energy Costs Fall to Lowest Level Since 2004

The federal government's total real energy costs for fiscal year 2016 fell to $16.1 billion, which is the lowest level since fiscal year 2004, according to the Federal Energy Management Program.

Total site-delivered energy consumption by the federal government fell slightly in fiscal year 2016 to 0.92 quadrillion Btu, which sets a record low since data collection began in fiscal year 1975.

In fiscal year 2016, real per-unit energy costs were $17.56/MMBtu, down 23% from 2015 and at their lowest level since fiscal year 2007.

More: *Energy Information Administration*

UTC, EEI Oppose Expanded Use of 6-GHz Spectrum Band

The Utilities Technology Council and Edison Electric Institute have told federal regulators that expanded use of mid-band spectrum by new wireless broadband services could interfere with critical utility networks used for reliable operation of the U.S. electric grid.

Allowing these services into the 6-GHz spectrum bands might also inhibit the use of "smart" electricity technologies, UTC and EEI said in comments to the Federal Communications Commission.

The commission is inquiring whether it should expand use of the 5.925-6.425 and 6.425-7.125 bands — collectively referred to as the "6-GHz bands" — to new entrants and devices.

More: *Utilities Technology Council*

Survey: 61% of Americans Think Climate Change is a Problem

Sixty-one percent of Americans — including 43% of Republicans and 80% of Democrats — think climate change is a problem that the government needs to address, according to a new survey.

The survey from the Energy Policy Institute at the University of Chicago and The Associated Press-NORC Center for Public Affairs Research also found that when only Americans who believe in climate change are asked, seven in 10 Republicans and nearly all Democrats think the government must act.

Forty percent of Americans oppose repealing the Clean Power Plan, which the Trump administration is presently considering. Thirty-seven percent lack an opinion, while 20% favor repeal.

More: *EPIC*

TVA Appeals Order to Remove Coal Ash from Gallatin

The Tennessee Valley Authority last week appealed a federal judge's order that it excavate and move coal ash at its Gallatin Fossil Plant.

In August, Judge Waverly Crenshaw of Tennessee's Middle District in Nashville ruled that TVA must clean up coal ash that it stored in an unlined storage pond at the plant because it violated the Clean Water Act.

TVA says the court-ordered clean-up method would take up to 24 years and cost $550 million using a lined landfill onsite or up to $2 billion for moving the ash to an off-site landfill.

More: *The Associated Press*; *Knoxville News Sentinel*

Lawmakers Want to Pay Communities Storing Nuclear Waste

A senator and congressman from Illinois plan to introduce a bicameral bill that would pay communities storing nuclear waste $15/kg annually.

The Sensible, Timely Relief for America's Nuclear Districts' Economic Development Act was developed by Sen. Tammy Duckworth and Rep. Brad Schneider with help from Zion Mayor Al Hill. The city has 1,020 metric tons of waste stored on its lakefront from the Commonwealth Edison nuclear plant that operated from 1973 to 1998.

The bill also would commission a Department of Energy study to consider options for land with stored nuclear waste, a task force to help affected communities find grants, tax credits for new homebuyers in affected communities and business incentives for new companies to open in those communities.

More: *Lake County News-Sun*

State Briefs

Western Governors Agree to Create Regional EV Plan

The governors of seven Western states agreed Wednesday to create a network of recharging stations that will allow electric vehicles to travel along 5,000 miles of freeways in their region.

The governors of Utah, Colorado, Idaho, Montana, Nevada, New Mexico and Wyoming signed a memorandum of understanding at the Energy Innovation Summit hosted by the National Governors Association.

The steps they agreed to take include reducing "range anxiety," creating voluntary minimum standards for charging stations, identifying and developing opportunities to incorporate charging stations into planning and development processes, and encouraging electric vehicle manufacturers to stock and market a wide variety of the cars within their states.

More: *The Salt Lake Tribune*

MASSACHUSETTS

Tidal Turbine Test Site Approved for Cape Cod Canal

The Marine Renewable Energy Collaborative received approval Wednesday to install a first-of-its-kind tidal turbine test site on the Cape Cod Canal.

The site, which was approved by the U.S. Army Corps of Engineers, will have a platform that can be raised and lowered from the canal, which will enable hydrokinetic turbine developers to test their equipment before going into full production. Within a day of the approval, two companies already contacted the collaborative about the site, Executive Director John Miller said.

It must be removed by Sept. 29, 2018, unless the collaborative contacts the Army Corps four months in advance regarding keeping it in place.

More: *Cape Cod Times*

Boston City Council Votes in Favor of Community Choice Energy

The Boston City Council voted unanimously last week in support of a resolution to authorize the adoption of a Community Choice Energy program in the city.

Although the municipal aggregation program should not raise costs to residents or small businesses, they would be able to opt out at any time and return to their original Eversource rate.

Cities and towns including Melrose, Dedham and Brookline have already implemented municipal aggregation.

More: *Sierra Club*

State Awards $661K in Clean-Energy Grants

The state has awarded grants totaling $661,000 to 56 cities and towns to research, develop and implement clean energy projects.

The Municipal Energy Technical Assistance grants are a function of the Department of Energy Resources' Green Communities Division and support clean energy decision-making through localized studies and data analysis in designated "Green Communities." The proceeds come from alternative compliance payments under the state's renewable portfolio standard.

Funding will go to projects and studies including solar photovoltaic site evaluation, heating system replacements, ASHRAE Level II audits, technical analysis of energy use at drinking water and wastewater facilities, and technical assistance with Green Community reporting and application.

More: *The National Law Review*

MICHIGAN

Ann Arbor Extends Moratorium on Ground-Mounted Solar Arrays

The Ann Arbor City Council voted unanimously last week to extend a moratorium on ground-mounted solar arrays in front yards and parking areas for up to 180 days.

The council enacted the original moratorium in April, and it was set to expire on Oct. 14, before the council could consider staff-recommended regulations for ground-mounted solar arrays.

On Aug. 15, the city's Planning Commission voted to recommend the council approve zoning changes expressly permitting ground-mounted arrays on residential properties as long as they meet new height, setback and screening standards.

More: *MLive*

NEW JERSEY

Oyster Creek Plant may Shut down Ahead of Schedule

The Oyster Creek nuclear power plant in Ocean County may shut down ahead of schedule, Gov. Chris Christie said Wednesday.

The plant, which is the oldest operating nuclear plant in the nation, was scheduled to close at the end of 2019. Christie described the plans for shutdown as "not only on track and on time, but a little bit ahead of schedule."

Oyster Creek provides about 9% of the state's electricity. The state's master plan for energy has sought to increase the number of natural gas plants, Christie said.

More: *Philadelphia Business Journal*

NEW YORK

State Asks BOEM to Review Potential Offshore Wind Sites

The state has proposed four new sites in the Atlantic Ocean for offshore wind generation and is asking the U.S. Bureau of Ocean Energy Management to expedite the review necessary to issue long-term leases for their use.

The proposed sites announced last week are in areas south of Long Island and closer to New Jersey. Each site can accommodate at least 800 MW of offshore wind generation.

More: *NYSERDA*; *Newsday*; *The Associated Press*

OHIO

Regulators OK Plans for 2 New Natural Gas Plants

State regulators on Thursday approved

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STATE BRIEFS

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plans for construction of two new natural gas plants that are targeted to begin operations in 2020.

The Power Siting Board approved plans for the plants, which will be in Guernsey and Trumbull counties. The Guernsey plant will produce 1,100 MW, and the Trumbull plant will produce 940 MW.

More: *The Associated Press*

PENNSYLVANIA

Judge Rules Seneca Can Inject Fracking Wastewater

A state judge has sided with natural gas company Seneca Resources, ruling it can inject fracking wastewater back into the ground.

The judge's ruling effectively invalidates a home rule charter passed by residents of Highland Township last year in which they banned the wastewater operation. The ruling also prohibits intervention from the municipal water authority and environmental advocacy groups.

More: *The Associated Press*

VIRGINIA

Regulators Shut Down Hydroelectric Plant That Was Draining Creek

The Department of Environmental Quality shut down a small hydroelectric plant in Alleghany County that was draining parts of Falling Spring Creek dry, killing aquatic life.

During an unannounced inspection in May, regulators found Hydro-FS was exceeding state guidelines by temporarily withdrawing

Falling Spring Falls, from which the Hydro-FS plant is downstream | *Virginia*

5 million gallons of water a day from the creek. After another inspection in July, Hydro-FS agreed to stop taking water from the creek and will shut down the plant as part of an agreement reached with the state.

Company Chairman Armand Thieblot said he will likely attempt to sell the operation.

More: *The Roanoke Times*

EPA Begins Repeal of Clean Power Plan

Continued from page 1

That is the same interpretation of Section 111(d) that EPA Administrator Scott Pruitt espoused as Oklahoma attorney general, when his state and more than two dozen others challenged the CPP in court. In August, after President Trump issued an executive order directing EPA to review the CPP, the D.C. Circuit Court of Appeals agreed to hold the challenges in abeyance. (See *Trump Order Begins Perilous Attempt to Undo Clean Power Plan*.)

Pruitt told a gathering in Hazard, Ky., on Monday that he would sign the proposed rule today. "Here's the president's message: The war on coal is over," Pruitt said.

"Regulatory power should not be used by any regulatory body to pick winners and losers," Reuters quoted Pruitt. "The past administration was unapologetic. They were using every bit of power, every bit of authority to use the EPA to pick winners and losers on how we generate electricity in this country. And that's wrong."

An EPA spokeswoman last week declined to comment on the authenticity of the leaked draft but issued a statement saying, "Any replacement rule that the Trump administration proposes will be done carefully and properly within the confines of the law."

The Natural Resources Defense Council and New York Attorney General Eric Schneiderman responded to Pruitt's announcement by saying they will sue to prevent the rollback.

Building Blocks

EPA said it will seek to repeal the rule because two of the three "building blocks" in the CPP — switching from coal to natural gas and to renewables from fossil fuel plants — exceed the agency's authority. The third building block, improving the heat rate of coal-fired plants, "could not stand on its own," EPA said.

"Regulatory power should not be used by any regulatory body to pick winners and losers. The past administration was ... using every bit of power, every bit of authority to use the EPA to pick winners and losers on how we generate electricity in this country. And that's wrong."

EPA Administrator Scott Pruitt

"Any potential future rule that regulates [greenhouse gas] emissions from existing EGUs [electricity utility generating units] under CAA Section 111(d) must begin with a fundamental re-evaluation of appropriate and authorized control measures and recalculation of performance standards," it said.

Going forward, EPA said it will interpret the CAA's "best system of emission reduction" as referring to measures "that can be *applied to or at* an individual stationary source. That is, such measures must be based on a physical or operational change to a building, structure, facility or installation at that source, rather than measures that the source's owner or operator *can implement on behalf of* the source at another location."

Repeal and *what*?

Now that Pruitt has decided on his legal strategy for undoing the CPP, he must develop an alternative response to the Supreme Court's 2007 ruling that carbon dioxide is a pollutant that EPA must regulate. The draft indicated EPA will not seek to reverse the agency's 2009 finding that GHGs endanger public health. "The substance of the 2009 endangerment finding is not at issue in this proposed rulemaking, and we are not soliciting comment on the EPA's assessment of the impacts of greenhouse gases with this proposal," the draft said.

The agency said it will solicit comments in an

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EPA Begins Repeal of Clean Power Plan

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Advanced Notice of Proposed Rulemaking "in the near future" on systems of emission reduction applicable at individual sources. Developing a replacement regulation could take years.

The new interpretation will "substantially [diminish] the potential economic and political consequences of any future regulation of CO_2 emissions from existing fossil fuel-fired EGUs," the agency said.

EPA's new regulatory impact analysis projects the repeal will save $3.7 billion in compliance costs in 2020, rising to $33.3 billion in 2030, while forgoing pollutant benefits of $1.6 billion to $21.5 billion over the same period. The analysis, which is based on a 3% discount rate, includes only the benefits of reducing CO_2, unlike the Obama administration's estimate, which also included the co-benefits of reduced SO_2 and NO_X emission reductions.

The Obama EPA said the CPP would produce net benefits of $26 billion to $45 billion in 2030.

The CPP would have required a 32% cut in emissions below 2005 levels by 2030. EPA previously estimated that "inside-the-fence-line" plant modifications, such as equipment upgrades and adoption of best practices, would improve average coal plant heat rates by 4%.

'Wholesale Retreat'

Former EPA Administrator Gina McCarthy, who shepherded the CPP during the Obama administration, blasted her successor's proposal.

"A proposal to repeal the Clean Power Plan without any timeline or even commitment to propose a rule to reduce carbon pollution isn't a step forward; it's a wholesale retreat from EPA's legal, scientific and moral obligation to address the threats of climate change," she said in a statement.

McCarthy also made an apparent reference to Energy Secretary Rick Perry's Sept. 28 directive to FERC urging it to ensure that nuclear and coal generation in deregulated states with 90-days on-site fuel supply receive "full recovery" of their costs. (See related story, *ICF Analysis: DOE NOPR Cost Could near $4B/Year*, p.29.)

McCarthy said the administration "is using contrived problems with our energy system to take money out of consumers' pockets and giving it to fossil fuel companies, so they can force a shift away from clean energy and back to dirty fossil fuel. That not 'back to basics,' that's just plain backwards."

Clean Energy 'Accelerating'

Some environmentalists have said a plant-specific approach could make a significant dent if it went beyond efficiency improvements to include switching to natural gas or installing carbon capture — though it would be more expensive.

Despite the repeal, "the transition to a clean energy future is accelerating," insisted Charlie Jiang, a climate and energy associate for the Environmental Defense Fund, wrote in a blog post.

He cited carbon-reduction pledges announced by states and cities in response to Trump's decision to withdraw from the Paris Agreement, and utilities' move to renewables from coal. Wind and solar comprised more than 60% of utility-scale generating capacity added in 2016; in March, wind and solar totaled more than 10% of U.S. electricity generation for the first time ever.

As of the end of 2016, CO_2 emissions from U.S. generators was already 25% below 2005 levels, "meaning the power sector is already almost 80% of the way to achieving the Clean Power Plan's 2030 targets," Jiang said.

Industry also is making the switch. At a House Energy and Commerce Committee hearing last week, a Walmart executive said the company seeks to obtain half of its energy from renewable sources by 2025 — up from 25% in 2015. "It is a win-win," said Mark Vanderhelm, Walmart's vice president of energy. "Green power is more cost effective than brown power." (See related story, *Consumer Advocates Slam Perry NOPR, RTOs, FERC*, p.1.)

In addition, the Trump administration's efforts to reverse Obama's environmental rules have run into opposition in the courts. Last week, a federal magistrate in California vacated the Interior Department's plan to delay implementation of rules curbing flaring of methane — the third time in three months that environmental rollbacks have been rejected by courts, according to a report in *The New York Times*.

The administration also has withdrawn three rule changes in the face of legal challenges, the *Times* reported.