# RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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

ISSN 2377-8016 : Volume 2017/Issue 39 October 3, 2017


## Perry Orders FERC Rescue of Nukes, Coal

*By Rich Heidorn Jr.*

Energy Secretary Rick Perry on Friday ordered FERC to rescue at-risk nuclear and coal generation in deregulated states by ensuring they receive "full recovery" of their costs.

Perry's extraordinary Notice of Proposed Rulemaking, invoked under Section 403 of the Department of Energy Organization Act, requires FERC to complete a final rule within 60 days after publication of the NOPR in the *Federal Register*.

Separately, DOE announced it had condi-

Continued on page 38

## FERC's Independence to be Tested by DOE NOPR

*By Rich Heidorn Jr.*

**Analysis**

U.S. Energy Secretary Rick Perry acted within his legal authority in ordering FERC to consider his Notice of Proposed Rule-making to support struggling coal and nuclear plants. But he has no power to make FERC provide the relief he is seeking, legal experts said Monday.

As a result, the outcome of the baseload battle will come down to the commission's five members and how much they are willing to assert their independence from the Trump administration's pro-coal

Continued on page 41

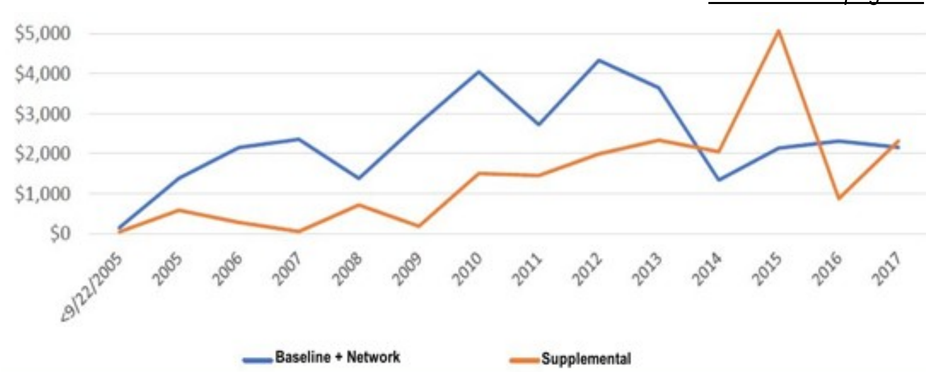
## Report Decries Rising Tx Costs in PJM; Seeks Transparency on TO Projects

*By Michael Brooks*

Softer Rhetoric as PJM TOs, Customers Seek Accord on Replacement Rules (p.26)

More than half of the $24.3 billion in transmission projects in PJM since 2012 were unneeded to comply with RTO or federal reliability requirements and were not subject to rigorous review, according to a report commissioned by American Municipal Power.

Continued on page 27




PJM transmission spending by type ($ millions) | *American Municipal Power*

## Money and Cooperation Drive New York REV

### *Protesters Raise Low-Income Concerns*


New York Energy Democracy Alliance interrupted New York Chairman of Energy and Finance Richard L. Kauffman speaking at Greentech Media's New York REV Future 2017 conference. | *The Indypendent*

*By Michael Kuser*

NEW YORK — New York's Reforming the Energy Vision initiative aims to fulfill a twofold objective, according to the state's top energy official: attract the capital needed to integrate renewable energy into the grid while simultaneously motivating utilities to work with clean energy startups instead of treating them like enemies.

"Everything has to change," New York State Chairman of Energy and Finance Richard L.

Continued on page 23

### Also in this issue:





10837 Deborah Drive ▣ Potomac, MD 20854 ▣ (301) 299-0375 ▣ info@rtoinsider.com ▣ www.rtoinsider.com ▣

**RTO Insider**

CAISO ERCOT ISO-NE MISO NYISO PJM SPP

## Editorial

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

Deputy Editor / Senior Correspondent
Robert Mullin 503-715-6901

Production Editor
Michael Brooks 301-922-7687

Contributing Editors
Julie Gromer 215-869-6969
Peter Key

**CAISO/West** Correspondent
Jason Fordney 571-224-8960

**ISO-NE/NYISO** Correspondent
Michael Kuser 802-681-5581

**MISO** Correspondent
Amanda Durish Cook 810-288-1847

**PJM** Correspondent
Rory D. Sweeney 717-679-1638

**SPP/ERCOT** Correspondent
Tom Kleckner 501-590-4077

## Subscriptions and Advertising

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

Account Executive
Marge Gold 240-750-9423

Marketing Assistant
Ben Gardner

**RTO Insider LLC**
10837 Deborah Drive
Potomac, MD 20854
(301) 299-0375

Subscription Rates:

| Payment Frequency | PDF-Only | PDF & Web |
|---|---|---|
| Annually: | $1,350.00 | $1,650.00 |
| Quarterly: | 380.00 | 475.00 |
| Monthly: | 150.00 | 175.00 |

See details and Subscriber Agreement at rtoinsider.com.

# In This Week's Issue



**COUNTERFLOW**
**By Steve Huntoon**

# Cash for Clunkers Redux

*By Steve Huntoon*


Huntoon

Remember the Cash for Clunkers program? Inefficient cars paid to go away.

The Energy Department's directive to FERC last week is Cash for Clunkers with a twist: inefficient generators paid to stay.

The original Cash for Clunkers was an economic stimulus for new stuff to replace the old stuff. The DOE's Notice of Proposed Rulemaking subsidizes the old stuff to stop the new stuff: a sort of stimulus in reverse. (See related story, *Perry Orders FERC Rescue of Nukes, Coal*, p.1.)

So we might say the DOE version is a Twisted Sister sort of twist on the original.

### Bailing Out the Retiring, Retired and Canceled Clunkers, and then Everyone Else

We know with certainty that the DOE proposal subsidizes the inefficient because those are the plants that will opt for the federal rate guarantee instead of market-based rates. How will this play out?

DOE says there are 34 GW in projected retirements over the next five years. Under the DOE proposal, none of that would retire and instead would go on the federal dole.

And then there's the 71 GW that already retired over the last six years but will likely return, like "Night of the Living Dead," for that federal rate guarantee.[1]

And how about all those canceled nuclear projects?

So we'll have around 100+ GW of uneconomic clunkers crashing the markets, and of course crashing market prices. This will force all the economic plants that depend on legitimate market prices to join the federal dole.

Natural gas plants will do this by simply adding 90 days' worth of oil tanks.[2]

What will all this cost consumers? DOE doesn't even try to answer that question, but here's one way of looking at it. First, we can assume that FERC won't want thousands of individual rate cases for all the power plants in all the RTOs.[3]

So FERC would need some sort of standard compensation. Let's say it adopts a cost of new generation, maybe $400/MW-day.[4] Generation in the RTOs is around 530 GW; add the roughly 70 GW of retired clunkers that will return from the dead, for about 600 GW on the federal dole. That's about $88 billion annually.

So we are talking about tens of billions of dollars a year squandered first on what are, by definition, uneconomic resources, and then by paying economic resources that are rendered uneconomic by the clunkers and forced onto the same federal dole.

I can't help noting how Republicans blasted the original Cash for Clunkers,[5] which had a one-time cost of $3 billion. The DOE version is tens of billions of dollars every year, *forever*.

### Resiliency

DOE says that its proposal is about "resiliency" (the new buzzword for reliability). But the retiring plants really are clunkers, as this PJM slide excerpt illustrates (I'll translate the jargon after the slide):[6]

Drop in Weighted Average EFORd Projected for 2021 is due to:

- Large amount of deactivations with high EFORd (7,150 MW with 14.56% Weighted Average EFORd).

- Large amount of additions with low EFORd (16,980 MW with 4.42% Weighted Average EFORd). Additions include only those queue projects that have executed an Interconnection Service Agreement.

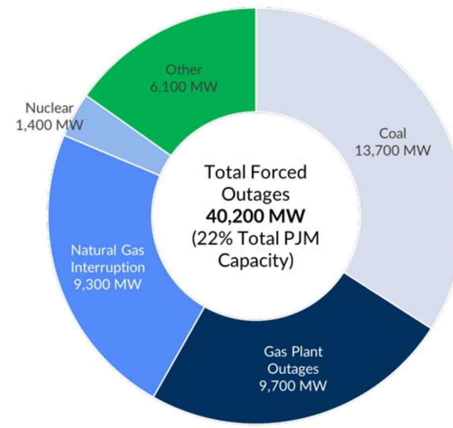
| *PJM*

The deactivating (retiring) stuff has an outage rate — equivalent forced outage rate–demand (EFORd) — that is three times the new stuff (14.56% versus 4.42%). Yet DOE wants to subsidize these clunkers so they won't retire.

And that somehow is going to improve resiliency, again in a Twisted Sister sort of way.

### 90 Days of Fuel Supply on Site

A few words about the fuel supply requirement. DOE relies heavily on PJM's experience in the polar vortex of 2014 and claims that natural gas supply was the major problem. It was not. As this PJM chart plainly shows, natural gas interruptions affected 9,300 MW, accounting for less than 25% of total forced outages of 40,200 MW:[7]




| *PJM*

The FERC testimony of Mike Kormos, PJM's executive vice president at the time, directly contradicts DOE's main claim: "Natural gas interruptions removed less than 5% of the total capacity required to meet demand on Jan. 7, [2014], while *equipment issues associated with both coal and natural gas units made up the far greater proportion of forced outages*."[8] (Emphasis added.)

Beyond equipment issues, another basic flaw in a metric like fuel supply on site is that coal piles freeze, as some did in the polar vortex. *Years* of coal supply on site would be worthless if frozen. And of course, nuclear plants can't run during refueling and other outages. *Years* of nuclear fuel on site would be worthless during those outages.

Here's a fun fact you won't find in the DOE NOPR: Baseload (combined cycle) natural gas plants average lower forced outage rates (4.29%) than baseload coal plants (7.71%), and have about the same as nuclear plants (3.51%).[9] It's these *overall* forced outage rates that matter — not a single metric like fuel supply on site.

As for 90 days specifically, DOE provides zero rationale for that. In the polar vortex, the generation emergencies in PJM aggregated 20 *hours*.[10] What is magic about 90 days (other than being tailored to the average coal plant stockpile)?

Continued on page 4

## COUNTERFLOW

**BY STEVE HUNTOON**

# Cash for Clunkers Redux

*Continued from page 3*

FERC and RTOs like PJM have learned from the polar vortex to reward performance and penalize nonperformance, instead of using a meaningless metric like days of fuel supply on site.

PJM hasn't had a single system generation emergency in more than three years — that's more than 26,280 hours of reliable operation. And PJM locks down adequate, reliable generation resources years in advance.

Bottom line: DOE proposes to take a system that is incredibly reliable and squander tens of billions of dollars on uneconomic resources to make it less reliable.

### J&R Gone Missing

Absent from the DOE NOPR is an explanation of how its proposal would satisfy the lodestar requirement of the Federal Power Act that all rates be just and reasonable.[11]

Subsidizing uneconomic clunkers in organized markets is the antithesis of just and reasonable rates. It would be a repudiation of everything that FERC has sought to accomplish over the last 25 years.

Maybe Rick Perry was right along: DOE should be abolished.

*Steve Huntoon is a former president of the Energy Bar Association, with 30 years of experience advising and representing energy companies and institutions. He received a B.A. in economics and a J.D. from the University of Virginia. He is the principal in Energy Counsel, LLP, www.energy-counsel.com.*

[1] If you're one of those owners, you might want to hold the wrecking ball. Or come to think of it, maybe you wouldn't: more rate base if you wreck and rebuild.

[2] The *Wall Street Journal* cites unidentified experts for the notion that only nuclear and coal plants will qualify under the DOE proposal. That is wrong. Installing oil storage at natural gas plants is routinely done. Of course, if rate base becomes the game, LNG tanks would be used instead.

[3] PJM alone has about a thousand generating units that do or could qualify for the federal rate guarantee. http://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-rpm-resource-model.ashx?la=en.

[4] There's a straight-faced argument for that: If new generation investment costs that much, existing generation should be compensated at the same level. Otherwise we would be incenting existing generation to retire that would cost less to keep around than paying for replacement new generation.

[5] https://www.seattletimes.com/nation-world/cash-for-clunkers-in-trouble-politics-or-prudence/. "Senate Republican leaders railed against the program Monday, calling it a model of government inefficiency and out-of-control spending."

[6] http://pjm.com/-/media/committees-groups/committees/mrc/20170928/20170928-item-07-2017-irm-study-presentation.ashx (slide 7).

[7] http://pjm.com/~/media/library/reports-notices/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx (page 26).

[8] https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13502869, (page 11, n. 4).

[9] http://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx (click on Brochure 4 for 2012-2016 and compare EFORd (column AC) for the fuel types).

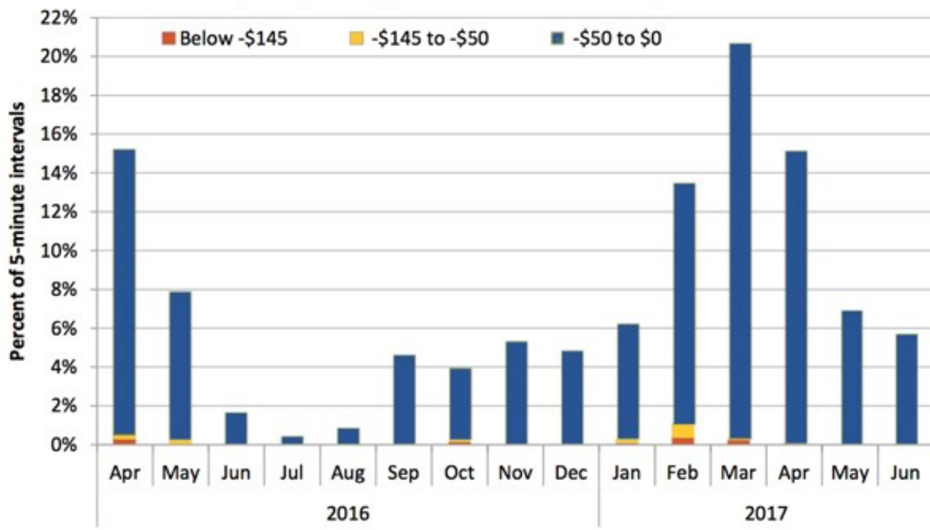
[10] http://pjm.com/-/media/committees-groups/committees/elc/postings/performance-assessment-hours-2011-2014-xls.ashx?la=en.

[11] DOE gives lip service to the statutory requirement by using the term "just and reasonable" twice in its proposed regulation. It's like saying "bring me a blue rock that is red."

## CAISO NEWS

# Monitor: CAISO Q2 Prices Hit Record Despite Mitigation

By Jason Fordney




Frequency of negative five-minute prices by month | *CAISO*

California's scorching heat and soaring load pushed CAISO day-ahead energy prices to record highs in the second quarter after the ISO's market mitigation measures unexpectedly failed.

CAISO's Department of Market Monitoring said it will investigate some of last quarter's day-ahead market outcomes that may be rooted in a misalignment between software systems.

The Monitor raised concerns in its second-quarter report because energy prices increased even after undergoing mitigation. At one point in the midst of the heat wave, day-ahead prices exceeded $200/MWh during a five-hour period and pushed past $600/MWh in one hour.

"DMM expects that prices should generally not be significantly higher in the final market run than in the market power mitigation run," the report says. "Both DMM and the ISO will continue to investigate this issue."

On June 21, "the total bid in cost of energy in the binding pricing interval run was about $1 million higher than the as-bid cost before market power mitigation," the Monitor said. "However, energy revenues were almost $25 million greater in the binding integrated forward market than in the market power mitigation run due to the magnified impact that higher prices have on the total market."

One possible cause, which has been raised previously in stakeholder discussions: software differences between the market mitigation and the integrated forward market (IFM) runs, the latter of which is a fundamental CAISO market process that establishes exactly what generators will be needed to meet demand forecasts.

The two processes run independently of each other and produce separate results, or solutions, based on differing inputs, specifically because the mitigation run relies on mitigated bids that can produce a different dispatch order from the IFM.

"If it is determined that a software error resulted in erroneously high prices, DMM requests that the software error be resolved and that the ISO consider the possibility of price corrections," the Monitor said in the report.

According to the report, CAISO has proposed two explanations for the deviation between the mitigation and IFM runs: differences in unit commitment due to the reduction in available bids (due to lower prices) in the market power mitigation run; and differences in the solution stemming from the independence of the market runs and solution error tolerance.

In the report, the Monitor recommends that the ISO study revisions to solution time and tolerances in the day-ahead market "given the substantial settlement impacts of this case."

"DMM's analysis indicates it is unlikely the differences are due to the impact of bid mitigation," CAISO spokesman Steven Greenlee told *RTO Insider*. "DMM is asking the ISO to continue investigating the cause further in the event it is caused by a software or other issue that may have a significant impact on market results in the future."

Greenlee also said that CAISO currently has no plans to issue price corrections until there is "conclusive" evidence of an error, noting that the ISO is "significantly beyond" the price corrections window.

As for the $25 million discrepancy, "DMM has not concluded this is an overpayment but believes the magnitude of this impact highlights the need to further investigate the cause of significantly higher prices in the market run compared to the market power mitigation run," Greenlee said.

### Hot Weather Drives Up Prices

Average day-ahead and 15-minute prices increased during every month in the second quarter, the report showed. Monthly average day-ahead prices rose from less than $23/MWh in March to about $34/MWh in June, caused by high temperatures and loads.

Aside from weather and load, congestion was high on the Path 26 transmission line, which links the Southern California Edison and Pacific Gas and Electric service areas. Price spikes — as high as $250/MWh in the five-minute market and a $750/MWh in the 15-minute market — also increased as a result of weather and the line restrictions. North-south congestion on Path 26 drove real-time congestion to its highest level since the 15-minute market became binding in 2014.

Solar output hit a new record in the second quarter, but higher system loads reduced the instances of negative pricing that accompanied solar surpluses in the first quarter. Real-time prices went negative

Continued on page 6

## CAISO NEWS

# Monitor: CAISO Q2 Prices Hit Record Despite Mitigation

*Continued from page 5*

during 15% of intervals during April, falling to under 6% in June, compared with about 22% of intervals in March.

Solar generation continued to grow on the system, reaching a record peak output of 9,914 MW on June 17. There were reduced curtailments in the second quarter despite a reduction in the power balance constraint tool for oversupply from 300 MW to 30 MW, effective April 11.

"During nearly all of the intervals in the second quarter when prices were negative, there were sufficient dispatchable market bids to resolve oversupply and the software did not have to relax the power balance constraint or curtail self-scheduled generation," the report said.

### EIM Members Fail Sufficiency Tests

In the Energy Imbalance Market (EIM) region comprising PacifiCorp East, NV Energy and Arizona Public Service, prices were often similar because of large transfer capacity and little congestion. There was some price separation in these balancing authority areas because one or more failed the flexible ramping sufficiency test, which limited transfers among them. EIM balancing areas continued to fail the upward and downward sufficiency tests "regularly" in the second quarter, the report said. "In particular, Puget Sound Energy failed the downward sufficiency test more frequently, during about 13% of hours, up from about 3% of hours in the previous quarter."

EIM participants have discussed what they see as problems with the market's resource sufficiency test stemming from shifting CAISO load forecasts. (See *EIM Participants Seek Resource Test Tweaks*.)

The ISO and PacifiCorp were exporters in the EIM during the quarter, while the other areas were mostly net importers, with the ISO's largest exports occurring during solar-heavy hours.

The quarter also saw relatively high "bid cost recovery payments," which ensure that resources scheduled in the market recover costs when the market does not provide sufficient revenues. Excessively high bid cost recovery payments can indicate that unit commitment or dispatch is inefficient, and the costs of the payments are allocated to market participants through uplift costs.

Those payments were estimated at about $28 million during the quarter, the highest since 2013, with much of that covering during several days in May. On May 3, the ISO declared a system emergency for the first time in nearly 10 years, and many committed units received payments higher than $50,000, the report said.

## CAISO NEWS

# FERC Suspends PG&E Rate Ask, Approves Portland MBRA

*By Jason Fordney*

Last week saw a handful of CAISO-related developments at FERC, including the commission's suspension of a Pacific Gas and Electric transmission rate request and approval of Portland General Electric (PGE)'s authority to charge market-based rates in the Western Energy Imbalance Market (EIM) ahead of the utility's Oct. 1 entry into the market.

The commission on Thursday set settlement hearings over PG&E's request for a transmission rate increase after receiving protests from state regulators and others. FERC accepted and suspended until March 1, 2018, PG&E's request for a 6% increase, saying there are issues that "are more appropriately addressed through hearing and settlement judge procedures" (ER17-2154).

In its July 27 tariff filing, the utility said the rate increase will allow it to recover costs incurred so far in 2017 for transmission expansion, as well as in 2018. It expects to invest $1.2 billion this year and another $1.4 billion next year. The approved rates would produce about $1.8 billion in revenue in 2018.

PG&E said the requested increase is largely driven by the need to replace aging. Other factors include compliance with reliability rules and the magnitude and location of changes in California's forecasted electricity load. A substantial amount of its system was built more than 50 years ago, PG&E said.

Numerous protests were filed by parties, including the California Public Utilities Commission, a handful of California cities, the Energy Producers and Users Coalition, municipal electric agencies and the Transmission Agency of Northern California.

Some protesters argued that PG&E's proposed 10.25% return on equity should be no higher than 8.84%, and there were disputes over the proxy group screening tool, which is used to determine a reasonable return. Others disputed the utility's request for a 50-basis-point adder for participation in CAISO, which FERC granted.

The PUC's challenge of two recent FERC approvals of the adder in previous tariff filings are on appeal with the 9th U.S. Circuit Court of Appeals. FERC rejected the PUC's request to abstain from a ruling on the current adder until that court proceeding is resolved.

### ISO Submits Aliso Canyon Measures

CAISO also submitted Tariff amendments to address the loss of the Aliso Canyon natural gas storage facility. The measures extend previously approved changes that can limit market bidding flexibility in response to gas constraints.

"The maximum gas constraint has proven to be a useful and discrete tool that balancing authority areas can use to reflect the interactions of gas limitations in the electric market optimization. Therefore, the CAISO proposes to adopt that measure on a permanent basis and throughout its entire system," CAISO said.

The measures allow the grid operator to constrain the operations of gas plants across the state and the EIM, part of a package of initiatives drawn up in response to the loss of the storage facility after a massive leak was discovered in October 2015. The proposal required approval by the CAISO Board of Governors and the EIM Governing Body. (See *CAISO Board Approves Aliso Canyon Rules Package*.)

### Portland General Electric Begins EIM Participation

FERC also approved PGE's application to charge market-based rates in the EIM, saying that the Oregon utility's balancing authority area will not be a sub-market and does not require a separate market power analysis (ER17-1693).

PGE began transacting in the EIM on Oct. 1. The company in early September briefed the EIM Governing Body on its implementation activities. It reached an implementation agreement with CAISO in November 2015.

## CAISO News

# CAISO, PG&E Request FERC Rehear Incentive Decision

*By Jason Fordney*

CAISO and Pacific Gas and Electric have asked FERC to reconsider its decision last month to approve only some of the utility's requested transmission rate incentives related to more than $1 billion in planned grid improvements.

The ISO and the utility on Sept. 25 filed separate requests for FERC to rehear a determination that PG&E had not justified all of its proposed "abandoned cost" recovery, which allows it to recover from its customers the costs of abandoning construction for reasons beyond its control. (See *FERC Approves PG&E Transmission Cost Recovery*.)

PG&E in its rehearing request called the incentive request "narrowly tailored" and said it faces significant challenges in developing the greenfield projects that are not in an existing right of way (EL16-47). The utility had requested 100% recovery of costs for any of the eight projects if they are abandoned, but FERC approved incentives for only three of them. The utility said it has already invested $68 million in construction and that the projects face risks, including environmental permitting, siting authority and potential impacts of from California's renewable energy goals.

| Project | Cost Estimate | Kickoff Date | Expected Online Date |
|---|---|---|---|
| Wheeler Ridge Junction | $250,300,000 | 4/29/2015 | 5/1/2020 |
| Spring | $191,600,000 | 5/6/2015 | 5/1/2021 |
| Estrella | $112,400,000 | 6/3/2015 | 5/1/2019 |
| Martin Bus Extension | $140,001,312 | 7/15/2015 | 12/1/2022 |
| Northern Fresno | $381,372,453 | 7/22/2015 | 12/1/2022 |
| Midway - Andrew | $413,770,544 | 8/6/2015 | 12/1/2025 |
| Lockeford - Lodi | $171,103,353 | 2/24/2015 | 12/1/2022 |
| Oro Loma | $97,280,668 | 9/2/2015 | 12/1/2020 |

Pacific Gas and Electric project timelines | *PG&E*

"Consequently, under a rigid application of the effective-date limitation imposed in the orders under review, PG&E now faces an unexpected risk of loss equal to 50% of that initial $68 million investment," the company said, adding that "if allowed to stand, this outcome will create a disincentive for PG&E to make similar investments in the future."

PG&E said that while the requested incentives would allocate to ratepayers 100% of the risk of abandonment for reasons beyond a utility's control, "FERC's orders here shift 50% of that risk for a defined period (before the issuance of a project specific declaratory order) to the utility and its shareholders. This reallocation makes investment in new transmission projects riskier and less attractive."

CAISO's filing contended that each project meets FERC's standard because it was approved by the ISO as part of a regional planning process and that "CAISO approved these specific projects to meet identified reliability needs on the CAISO system." Project sponsors such as PG&E have an obligation to obtain approvals and rights if the projects are approved as part of the ISO's annual transmission planning process.

CAISO said it has canceled other projects approved in annual plans and that it is currently assessing whether to cancel other previously approved projects, so "the risk of abandonment is not hypothetical." When developing its 2015-2016 plan, the ISO canceled 13 PG&E low-voltage transmission projects it had previously approved.

Southern California Edison on April 7 filed a similar request for abandoned cost recovery upon which the commission has yet to rule (EL17-63). The petition requested approval of incentives for a package of transmission improvements totaling about $1.3 billion, approximately $903 million of which are recoverable in transmission rates.

While the California Public Utilities Commission had objected to PG&E's incentive rate request, FERC rejected the state regulators' arguments about PG&E's transparency and cost control.

Earlier this month, FERC in a different proceeding also rejected a protest from the PUC over incentive rate adders the commission had approved for PG&E in 2016. (See *FERC Upholds PG&E ISO Incentive Adder, Rebuffs CPUC*.)

## ERCOT NEWS

# Texas PUC Resistant to NextEra's Minority Interest in Oncor

By Tom Kleckner

At the dais (left to right): Commissioner Ken Anderson, Chair DeAnn Walker and Commissioner Brandy Marty Marquez. | © *RTO Insider*

AUSTIN, Texas — Having thrice been rejected in its attempts to acquire Oncor Electric Delivery earlier this year, NextEra Energy is now making a long-shot bid to acquire a minority ownership in Texas' largest electric utility.

However, the state's Public Utility Commission has been resistant. During an open meeting Thursday, it invited Texas utilities to file amicus briefs and comments to help the commission determine whether Oncor should be a party to the proceeding (Docket 47453).

NextEra and Texas Transmission Holdings Corp. (TTHC) filed a joint application with the PUC in July seeking permission to complete an acquisition of TTHC's 19.75% interest in Oncor. However, staff in August ruled the application deficient, saying neither applicant is a public utility under state regulations and that the case should not proceed without Oncor's involvement.

"Information that is possessed by Oncor relating to Oncor's facilities, customers and financial records will be necessary to assess the statutory factors to be considered in this proceeding," staff said.

In September, Oncor filed for intervention as a party to the proceeding, making it clear to the PUC that it is not an applicant and "is not seeking commission approval of the proposed sale."

"We didn't want [the case] dismissed on a technicality that the utility wasn't a part of it," Oncor CEO Bob Shapard told the commissioners. "That would essentially be us ruling on the issue. We're clearly not advocating the transaction, but we felt like it should be put it back in your hands, where it belongs, and not ours, to make a decision."

"Thanks," Commissioner Ken Anderson responded wryly.

TTHC is owned by Cheyne Walk Investment, BPC Health, Borealis Power Holdings and Hunt Strategic Utility Investment.

NextEra last year tried to acquire the minority share along with the rest of Oncor, but the commission rejected the deal in April. It then turned down two subsequent requests for rehearing. (See *NextEra-Oncor Deal Meets Third Denial*.)

Anderson said he was not ready to consent to a preliminary order, saying he has a concern as to whether the applicants should include the utility in question, even if the acquisition is hostile or "not friendly."

"Should the utility be an applicant or joint party, or not an applicant at all?" Anderson asked. "How can you be opposed to a transaction and be both applicant and an opposing party? Oncor has not filed any briefing materials because they weren't party to order, or didn't want to be. Can the [utility or its holding company] be forced to be an applicant? Can they be forced to be joined?"

Anderson said the utility's stockholders and ratepayers should not bear the costs in these kinds of transactions and asked for a "full airing" of the issues. Newly minted PUC Chair DeAnn Walker agreed, asking for additional briefings from the parties.

Parties have until Oct. 12 to file briefs on whether Oncor should be a joint applicant, whether the commission has the authority to order Oncor's participating in the case, and when the 180-day timeline to consider the application should begin.

The PUC said it may consider the draft order at its Oct. 26 open meeting.

"How we decide this has ramifications that go beyond this," Anderson said. "Let's say we have another … hostile takeover bid and [the acquirer] files a [sale, transfer and merger form] seeking to approve it. The consensus in an existing brief is the commission can require you to be a party. If a utility is forced to participate in a proceeding, should the real party, the real applicant be required as a condition to be either an intervenor or a co-applicant, to agree in advance to reimburse the utility for all the expenses by the utility?"

California-based Sempra Energy has since become the third entity to seek regulatory approval of an Oncor purchase. Sempra emerged from a pack of suitors in August and said it would put down $9.45 billion for bankrupt Oncor parent Energy Future Holdings and its 80% interest in Oncor. (See *Sempra Begins 'Listening Tour' of Key Stakeholders*.)

### Oncor, Sharyland Face More Work in Proposed Swap

Oncor and Sharyland Utilities went into the open meeting hoping for a final order in their proposed swap of $400 million in assets, but instead they discovered they have much work in front of them (Docket 47469).

Walker filed a memo before the meeting, asking the parties for more specificity on the

*Continued on page 10*

## ERCOT NEWS

# Texas PUC Resistant to NextEra's Minority Interest in Oncor

Continued from page 9

assets to be transferred and expressed her concern about the proposed treatment of the refunds related to the energy efficiency cost recovery factor (EECRF) for both Oncor and Sharyland.

"I really believe this transaction is in the best interest of the ratepayers," Walker said. "I'm not trying to be a deal-killer, but I have questions and concerns."

Walker asked for responses by Oct. 4 to help the PUC meet its Feb. 1 deadline for reaching a decision.

The asset swap would resolve rate cases for both Oncor and Sharyland and would help the latter address customer complaints about Sharyland's high rates. The two companies are continuing to hammer out details in settlement negotiations.

"Systemwide rates are the goal here," said Vinson & Elkins' Jo Ann Biggs, representing Oncor. "After the [new] rates go into effect, Oncor would prefer a single refund under the EECRF. We want to treat Sharyland customers like all Oncor customers."

One of the issues is whether Oncor can charge incoming Sharyland customers for deploying an advanced metering system (AMS), already in place in much of its service territory.

"We feel strongly that Sharyland customers should be treated like Oncor customers," said Laurie Barker, with the Office of Public Utility Counsel (OPUC). "We feel like it's important Sharyland customers be treated like any other customer that comes into the Oncor system. We'll have that same issue with the AMS charges."

The PUC approved a preliminary order on the proposed swap in August. (See "PUC Approves Preliminary Order in Oncor-Sharyland Asset Swap," *Public Utility Commission of Texas Briefs: Aug. 31, 2017*.)

The order lists a set of 27 issues to be discussed before the PUC renders a decision, which is due by Feb. 1. Oncor and Sharyland filed a settlement agreement in July, asking the PUC to expedite the case by deciding it without referring it to the State Office of Administrative Hearings (SOAH).

The companies said Sharyland's current retail customers will receive "substantial rate relief" under the transaction, in which Sharyland will take over 258 miles of 345-kV transmission from Oncor in exchange for Sharyland's distribution network and retail delivery customers.

The PUC on Thursday did approve Oncor's request to recover a retail-customer surcharge over the next nine months of almost $27.2 million, as corrected by an administrative law judge (Docket 46884); Sharyland's amendment to a certificate of convenience and necessity for an $18.6 million, 7-mile, 138-kV transmission line southwest of Abilene in West Texas (Docket 46726); and applications by Oncor (Docket 47235) and Sharyland (Docket 47248) to adjust their energy efficiency cost recovery factors. Should the transaction be closed, Oncor would be refunded nearly $6.1 million for over-recovered energy-efficiency costs in 2016, and Sharyland would be credited about $243,000 for its over-recovered 2016 costs.

But the commission dismissed a Sharyland request dating back to 2015 to deploy an advanced metering system (Docket 44361) and a rate review rendered moot by the swap (Docket 45414).

### Walker Takes Chairman's Gavel in First Meeting

Walker wasted no time asserting herself in her new role during her first open meeting.

DeAnn Walker | *© RTO Insider*

After calling the meeting to order, Walker admitted she was nervous and excited. She then asked for a moment of silence to recognize the many victims of Hurricane Harvey, including, by name, a Kentucky lineman who was killed during the restoration effort.

The meeting marked Walker's return to an organization she served as an assistant general counsel and an ALJ from 1988 to 1997. She thanked staff and her family for their support, and Texas Gov. Greg Abbott for her appointment.

Abbott "has bestowed a great duty, obligation and honor on me. I take it very seriously," she said. "He has taught me how to do hard work, and to do it with integrity. I assured him that is my intention while I am here, to work hard and to serve with integrity."

Adrianne Brandt, who was formerly with San Antonio's CPS Energy and chaired ERCOT's Technical Advisory Committee, will serve as Walker's adviser, effective Oct. 16.

Walker replaces Donna Nelson, who stepped down as the PUC's chair in May. She will fill out the remainder of Nelson's term, which expires in September 2021. (See *Texas PUC Chair Nelson Stepping Down*.)

Previously Abbott's senior policy adviser on regulated industries, Walker spent 15 years at CenterPoint Energy as director of regulatory affairs and as an associate general counsel.

Walker also agreed to take on Nelson's role with SPP's Regional State Committee, which Commissioner Brandy Marty Marquez had been filling.

"I think it's a great opportunity for you to step into SPP and see what that is all about," Marquez told Walker. "They're great people."

Anderson will continue representing the PUC on the Organization of MISO States. Anderson and Marquez have kept the three-seat PUC running while waiting on Nelson's replacement. Anderson has served on the commission since September 2008 — a record tenure — though his term expired Aug. 31. Marquez' six-year term expires in September 2019.

### Utilities Make Final Harvey Restoration Reports

Texas utility representatives gave the commission a final update on their Hurricane Harvey restoration efforts, after which the commissioners extended their Aug. 31 order directing retail providers to offer their customers deferred payment plans,

Continued on page 11

## ERCOT NEWS

# Texas PUC Resistant to NextEra's Minority Interest in Oncor

Continued from page 10

"recognizing that many customers are still recovering" (Project 47552).

The utilities said their efforts were aided by the state government, mutual-assistance agreements between each other and community support.

"Customers were bringing us food, even when it wasn't needed," AEP Texas CEO Judith Talavera said.

"Texas rocks," said Kenny Mercado, CenterPoint's senior vice president of electric utility operations. "I can't say enough about the friends and neighbors who chipped in."

Mercado said the heavy rains and flooding resulted in the utilities relying on air boats, drones, amphibious vehicles and mobile substations to restore service.

"We were using different equipment than we've ever used before. I'm not sure we even knew we had air boats," he said.

ERCOT COO Cheryl Mele said the ISO did much of its work in preparing for Harvey's landfall. Transmission and generation outages resulted in a load drop of 15 to 20 GW below normal August conditions, she said.

"We never had a shortage of generation on the system," Mele said, noting ERCOT never had to shed load or call for imports. The ISO issued reliability unit commitment instructions just twice.

Walker asked PUC staff to work with the utilities in evaluating the future use of mobile substations, ensuring an accurate outage count and how to better share equipment.

AEP gave a presentation to the commission on the recovery from Hurricane Harvey. | *AEP*

"This to me is about Texans helping Texas," Walker said. "I know El Paso Electric and [Southwestern Public Service] never got called on. It's a lot quicker to get them here than people from Kentucky."

Walker also wondered aloud whether substations should continue to stand in areas that were flooded.

### SOAH to Hear Discovery in LP&L's Migration to ERCOT

After some debate, the commissioners postponed until their next open meeting a final decision on whether they would hear Lubbock Power & Light's proposal to migrate part of its load from SPP into ERCOT or send the application to SOAH.

PUC staff will meanwhile conduct an Oct. 9 prehearing conference to set a procedural schedule in the case (Docket 47576). Staff expects an LP&L filing this week, which will set a 180-day deadline for a decision on the migration.

The commission appears to be leaning toward letting SOAH handle discovery for the docket. Several intervenors support that decision, pointing to the "extensive discovery" needed to explore the large number of modeling studies that have been conducted on the issue.

"There aren't a bunch of documents, but questions about modeling assumptions and what happens under different scenarios," said Katie Coleman, legal counsel for Texas Industrial Energy Consumers (TIEC). "That could get extensive, given the number of studies in the case."

ERCOT, SPP and LP&L have all filed studies in the case, which began in 2015 when Lubbock announced it intended to move 470 MW of its approximately 600 MW of load into ERCOT. LP&L is hoping for a decision before March 2018, which will enable it to maintain its plan to integrate with ERCOT by June 2021, after extending a power purchase agreement with SPS.

Anderson noted that while SOAH would develop "specific facts" that would help the commission reach a decision, "90% of that decision is going to revolve around big policy issues."

"The ALJ's decision would be purely advisory," he said.

Walker agreed with Anderson, saying the decision would be "policy-driven."

"I guess we'll hear it ourselves," Anderson said.

SPS, TIEC, ERCOT, the Office of Public Utility Counsel and Golden Spread Electric Cooperative have intervened in the case. Oncor and the Alliance for Retail Markets have filed pending motions to intervene.

### Commission Approves RMR Rule Change

The commissioners approved revisions to its reliability-must-run (RMR) service rules, accepting Anderson's modifications that exempt seasonally mothballed units from the must-run alternative (MRA) solicitation process (Project 46369).

Staff's draft order adjusts the suspension-of-operations notice requirements and complaint timeline, requiring written notification to ERCOT at least 90 days before a generating resource is seasonally mothballed. The ISO would then have 60 days to respond.

The order also gives ERCOT discretion to decline entering RMR service agreements based on the economic value of lost load; requires ERCOT board approval of staff recommendation regarding RMR and MRA service; and requires capital expenditure refunds related to the service agreements in certain circumstances.

The ISO and its stakeholders have already taken action to address RMR contracts, driven by a 2016 agreement with NRG Texas Power's Greens Bayou Unit 5 in Houston. The contract was terminated last month. (See *ERCOT Ending Greens Bayou RMR May 29*.)

ERCOT's recent protocol revisions require that RMR units only be procured when they have a material impact on expected transmission overloads, clarify the grid operator's commitment process for RMR units, and update the contracting and reimbursement process for RMR units.

*— Tom Kleckner*

## ERCOT NEWS

# TAC Briefs

## Compromise Reached on Eliminating ERCOT CRR Deration

After two months of significant discussion at various levels of ERCOT's stakeholder process, the Technical Advisory Committee on Thursday unanimously approved compromise language eliminating the reduction of congestion revenue rights (CRRs), or "deration."

The nodal protocol revision request (NPRR821) eliminates the deration process for resource node-to-hub or load zone CRRs. Stakeholders drafted compromise language in the Protocol Revision Subcommittee (PRS) to address concerns that the deration process interfered with hedging behavior.

In the end, stakeholders agreed that the language deters the exploitation of CRR gaming opportunities that pose the most risk to loads, and continues the policy of sharing CRR underfunding costs established when the nodal market went live.

"Stakeholders have been working on and debating a solution for three months now," Reliant Energy's Bill Barnes said. "Parties on all sides have had follow-up discussions and gotten comfortable with what's proposed here."

"This solution is better than what we had," Shell Energy's Greg Thurnher said. "I do believe this particular solution solves the vast majority of the needs. … I suggest we test the waters with this solution and revisit it in the future. The seemingly yearlong discussion may have been unnecessary, but we've rid ourselves of unnecessary processes."

The new process will be implemented by July 1, 2019, despite a request by the Lower Colorado River Authority (LRCA), one of those pushing for the change, to deploy it as soon as possible.

"As soon as it's implemented, we eliminate the risk we're concerned about," LCRA's John Dumas said.

The TAC tabled the NPRR during its July meeting, then remanded it back to the PRS in August. (See "CRR Deration Remanded Back to Subcommittee," *ERCOT Technical Advisory Committee Briefs: Aug. 24, 2017*.)

## Revision Request Would Create Panhandle Hub

Stakeholders also easily approved NPRR817, which will allow additional trading liquidity and forward price discovery in the Texas Panhandle with the creation of the "Panhandle 345-kV Hub." The revision excludes the new hub from the existing ERCOT-wide hub and bus average calculations.

Citigroup Energy's Eric Goff argued the NPRR's estimated $150,000 to $200,000 implementation costs would be a one-time hit, eased by additions of new hubs in ERCOT's southern or western footprint.

"I anticipate further need for additional hubs that will reduce the cost substantially each time," he said. "This NPRR allows very simple hedging for the Panhandle."

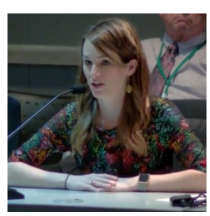
Goff explained that, under current practice, any generator in that area seeking to hedge must pick a resource node that could at times be subject to a random outage due to maintenance or some unforeseen event.

"This will improve the commercial hedging and has one-time upfront costs that address concerns raised by those comments [about costs]," he said.

Staff agreed, saying future hubs could be created at 30 to 40% of the cost of the new Panhandle hub.

## TAC Tables Several Market Changes

After a roll call vote following vigorous discussion, stakeholders agreed to table NPRR815, which would revise the current limit of 50% for load resources providing responsive reserve service (RRS) to any capacity above a minimum level of RRS offered by resources providing primary frequency response (PRF).


Coleman

Katie Coleman, legal counsel for Texas Industrial Energy Consumers, asked to table the NPRR following the filing two days earlier of a related revision request (NPRR848), which would create separate pricing for load resources and PRF-capable resources providing RRS. Coleman said she had not yet been able to gather her group's position on the latest change.

Dynegy's Bob Helton, ERCOT's Kenan Ögelman lead the TAC meeting.

"There's a relationship between the issues in this NPRR and the issues in 848," she said. "If 848 moves forward, we would want not only this but probably much more significant changes to how the load megawatts are determined."

The motion to table was opposed by several generating members, who feared reliability issues. Bob Wittmeyer, a consultant with Resolved Energy, pointed to the change's estimated $3 million in average savings and urged the TAC to considering rejecting the motion to table.

"Tabling this today is not a one-month delay; it's a two-month delay," he said. "There are two groups of people in this room — the ones that sell ancillary services and want to table it, and the ones that get fired if we have a reliability problem. The ones that get fired if we have a reliability problem are saying this is not a reliability problem. They're also saying we can save $3 million a year."

ERCOT staff pushed back against claims that grid reliability would be harmed, with Sandip Sharma saying he wanted to "rule out reliability issues."

"This NPRR allows ERCOT to procure ancillary services in a more cost-effective way, while it is meeting its reliability obligation," he said. "In the absence of this NPRR, we would do exactly the same study we do today, but we would increase the number, because there is a limitation on load resources. The loads are not allowed to provide more than 50%, especially during the time when they are more effective solving reliability issues … that's the main issue here."

Only three members eventually opposed tabling the NPRR.

Continued on page 13

## ERCOT NEWS

# TAC Briefs

Continued from page 12

The committee also tabled NPRR825 and a verifiable cost manual revision request (VCMRR019). Staff said it missed a system requirement in the NPRR's impact analysis (IA), which likely would increase the costs of issuing DC tie curtailment notices before curtailing the tie's load.

"We're reviewing the IA process, so we can improve and bring things to you more accurately," said Kenan Ögelman, ERCOT's vice president of commercial operations. "That may require us taking more time than we have on some of these, but ERCOT-wide, from the executives to every person, we're not satisfied with how this is playing out."

### PRS Adds Resource Definition Task Force

The TAC approved a previously tabled revision request (NPRR829), despite a revised impact analysis of between $200,000 and $300,000. The increase came after staff added previously overlooked distributed generation resources in its analysis.

The change requires the day-ahead market to use telemetered data from non-modeled generation to more accurately calculate collateral requirements for qualified scheduling entities (QSEs). The NPRR increases day-ahead liquidity through the increased participation of non-modeled generation, and potentially allows ERCOT to gain near real-time transparency into the generation.

"If we don't do these infrastructure changes now, it'll be sometime in the future," Thurnher said. "It's not a small segment anymore, in terms of megawatts. The class that will use this will continue to grow in the future. This levels the playing field. Right now, distributed generation does not get the same credit treatment as traditional generation does when it injects into the system."

The NPRR passed, with three members voting against it.

The committee unanimously approved single NPRRs, nodal operating guide requests (NOGRR) and system change requests (SCR). It also approved ERCOT's high-impact transmission element list, which doubled last year's list at 222 elements.

- NPRR840: Synchronizes implementation of NPRR782, which removes inconsistencies in protocol language governing the settlement of ancillary services for resources unable to deliver on their responsibilities because of transmission constraints. The change removes the two-hour advance notice period inadvertently left in the protocols when 782 was approved, allowing ERCOT to declare an ancillary service as infeasible in either the adjustment or operating period.
- NOGRR173: Removes orphaned grey-boxed language in order to align with NOGRR166, which struck language added with NOGRR084. The change cleans up removal of other items related to NOGRR084 and NOGRR166, but does not remove any current reporting requirements in Section 9.4.3 (Resource-Specific Responsive Reserve Performance)'s duplicative language to the current black-lined language.
- SCR791: Populates unused megawatt price values in SCED generation-resource data energy-offer curves with null values rather than zero. The zero values make the energy-offer curves non-monotonic and are indistinguishable from valid zero offers.

*— Tom Kleckner*

# ISO-NE NEWS

## PAC Briefs

### Refining 2016 Scenario Analysis – Phase I Report

WESTBOROUGH, Mass. — ISO-NE's Planning Advisory Committee on Thursday hashed over technical details from about 95 stakeholder comments regarding the grid operator's draft 2016 Scenario Analysis – Phase I Report.

"Two sets of comments concern carbon emissions and making some judgement on whether the region will meet the [Regional Greenhouse Gas Initiative] goals that are being promulgated," said Michael Henderson, ISO-NE director of regional planning and coordination, as he reviewed the feedback during a Sept. 28 committee meeting. "Other comments concern the inverter-based resources (solar, wind, storage), which becomes more important with the growth of wind and the increased penetration of energy efficiency."

The New England States Committee on Electricity wanted a disclaimer placed more prominently in the report saying, "The report and the hypothetical future scenarios are not plans, predictions or preferences." The grid operator agreed to the request.

#### Scenarios, not Policies

Henderson emphasized that the report constitutes the RTO's analysis of scenarios provided by the New England Power Pool — not an evaluation of state policies.

Bob Stein of Signal Hill Consulting Group said, "We have heard they are NEPOOL scenarios, but I don't think NEPOOL endorses any of the scenarios, either."

Joining by phone, David Ismay of the Conservation Law Foundation said, "The study would be more valuable to the region if it considered various state policies ... what we're getting at is a level of emissions that approximates goals."

"The ISO is taking the proper approach," said NESCOE's Ben D'Antonio. "The idea here is to make sure the report is clear so people can understand it ... keeping it straightforward and clear is right."

The American Wind Energy Association complained that the report's assumed wind development costs used out-of-date U.S. Energy Information Administration data.

"Our main concern is that transmission costs are too high by a factor of 10. Most obviously, there is a 50% 'margin' added to transmission costs, which are already extremely high," wrote AWEA's Michael Goggin. "This assumption has a major impact on the results, since the transmission costs nearly as much as the wind generation in the scenarios with high levels of onshore wind."

"I don't think we are using the costs incorrectly, especially when you consider the interconnection costs for a wind farm in Maine can be extraordinarily higher than for one located right next to a major transmission line," Henderson said.

Henderson added that the RTO didn't just look at offshore wind and measure the shortest distance to shore to derive cost estimates.

"Transmission costs were the same issue and, again, they are order-of-magnitude estimates," he said. "They proved remarkably accurate because they were part of the Maine wind integration study." (See *ISO-NE Files Cluster Study Rules; Window to Open in Nov.*)

### 2027 Needs Assessment Scope of Work

ISO-NE senior transmission engineer Kaushal Kumar presented the assumptions and study methodology behind the 2027 Needs Assessment Scope of Work, a study produced biannually to provide insights into the system 10 years into the future.

The studies evaluate performance and identify reliability-based needs in six study regions, factoring in future load distribution, reliability over a range of scenarios, project coordination and the retirement or addition of major resources. They also apply all relevant transmission planning reliability stand-

*Continued on page 15*

# ISO-NE NEWS

## PAC Briefs

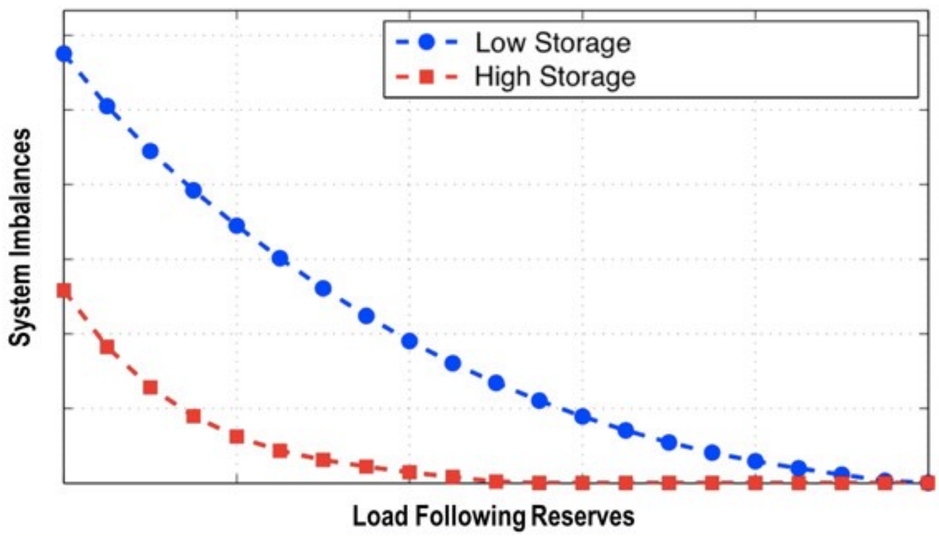
Continued from page 14

ards from NERC, the Northeast Power Coordinating Council and ISO-NE.

### Questioning Assumptions

One of Kumar's slides contained a footnote saying that demand resource assumptions included 5.5% distribution losses. Stein asked where the figure came from, and also questioned the RTO's assumption of cutting that loss to zero when modeling solar, contending that not all PV installations are located right next to load.

ISO-NE Director of Transmission Planning Brent Oberlin said the RTO's modeling has long assumed an 8% energy loss, with 2.5% lost in transmission and 5.5% in distribution. But he added that he would consider refining the assumptions for PV's reduction of distribution losses.




Impact of energy storage on load-following reserves | *Dartmouth*

## 2017 Renewable Energy Integration Study Nears Completion

Professor Amro M. Farid, of Dartmouth College's Thayer School of Engineering, briefed stakeholders on the scope of his team's work on the grid operator's 2017 System Operational Analysis and Renewable Energy Integration Study (SOARES).

The study focuses on regulation, ramping and reserves, and addresses the reduction in traditional thermal generation that provides the grid with inertia and other reliability services.

"We need to adopt a holistic way of looking at how renewable energy integration causes fundamental changes in grid dynamics and erodes the power grid's overall dispatchability," Farid said.

Methodologies used in past renewable energy studies operate on assumptions for which there is no supporting research, Farid said. The Electric Power Enterprise Control System simulator his group developed to address this need can more accurately study such things as the impact of energy storage on load-following resources and the RTO's day-ahead unit commitment, he said.

SOARES is a key element of Phase II of the 2016 NEPOOL Scenario Analysis/Economic Study. Farid expects to complete SOARES by the end of the year.

*— Michael Kuser*

## MISO NEWS

# MISO Ranks MTEP 18 Futures by Stakeholder Preference

*By Amanda Durish Cook*

Stakeholder sectors have eschewed MISO's suggestion that they apply equal importance to each of the RTO's four 15-year future scenarios used for next year's transmission planning, instead giving more weight to the potential for a slow-and-steady evolution of the generation fleet.

As a result, MISO's 2018 Transmission Expansion Plan will include a 30% weighting for a continued fleet future, 25% each for limited fleet change and distributed and emerging technologies futures, and 20% for an accelerated fleet change future. The RTO used sector averages and rounded figures to the nearest 5% increment.

Some stakeholders asked why MISO decided to round the averages.

"A percentage here and a percentage there — that doesn't make a big impact when it comes to project recommendation," MISO policy studies engineer Matt Ellis said during a Sept. 27 Planning Advisory Committee meeting.

MISO had recommended an equal 25% weighting for all four MTEP 18 futures. Beginning with MTEP 19, equal importance will be assigned to all four grid and generation scenarios, effectively eliminating differential weighting. Staff initially said MISO would abolish weighting beginning with MTEP 18 but changed course in August, explaining that MTEP 18 futures were developed with the understanding that stakeholders would be involved in deciding their importance. (See *MISO Delays Removing MTEP Futures Weighting to 2019*.)

Minnesota Public Utilities Commission staff member Hwikwon Ham said he supported MISO's August plan to apply an even 25% likelihood across the board for 2018.

"I share MISO's concern that we are spending too much time slicing and dicing percentages," Ham commented, saying that stakeholders were devoting too much time to debating issues that wouldn't alter project recommendations.

### Resource Additions Estimates in MTEP 18

MISO has meanwhile completed a draft projection of future resource additions to inform MTEP 18. The RTO is not projecting much change in resource siting between the MTEP 17 and MTEP 18 futures. However, it created an additional future scenario for the 2018 cycle — the distributed and emerging technologies future — that it predicts will show more than 20 GW of distributed solar in the next 15 years.

Additionally, MISO found that the MTEP 18 futures overall indicate that demand-side and distributed technologies would be spread across more buses in the footprint than in previous cycles.

The futures set out the following scenarios:

- In a limited fleet change future, MISO predicts about 32 GW of generation additions and almost 30 GW of retirements, resulting in coal inching forward to take a 51% share of the resource mix by 2032, compared with today's 48%. Natural gas generation remains unchanged at 24%, while renewables crawl forward to take a 10% share of generation, up from today's 8% share.
- In the continued fleet change scenario, the RTO projects more than 54 GW of additions and just about 38 GW of retirements, with a resource mix consisting of 43% coal, 27% natural gas and 15% renewables.
- The accelerated fleet change future yields the most additions at roughly 82 GW, offset by 38 GW of retirements, resulting in 35% coal, 21% natural gas and 30% renewables fleet mix.
- In a distributed and emerging technologies future, generation additions hit 70 GW, while retirements slightly exceed 40 GW, producing a mix of 40% coal, 27% natural gas and 21% renewables.

"There are 45 GW of renewables in the definitive planning phase of the interconnection queue set to come online in the next three years," Ellis reminded stakeholders. "Now, it's safe to say that not all of that will come online. I'll leave that to you to determine. But, if you look at historic trends, roughly 60% of projects make it through the queue."

# Early Release for MISO Long-Term Tx Overlay Study

*By Amanda Durish Cook*

MISO will release results from its regional transmission overlay study by December — nearly two years ahead of schedule.

The RTO finished the overlay analysis earlier than the slated 2019 finish, citing the collapse of the Clean Power Plan as a factor in speeding up the process.

"Originally, we set aside three years," said Lynn Hecker, MISO manager of expansion planning.

Hecker said MISO "no longer has the urgency of the Clean Power Plan," so the more specific planning work of the study would become more protracted, broken up over MISO's usual annual planning Transmission Expansion Plan studies. Furthermore, transmission issues gleaned from the overlays could inform specialized, targeted studies in the MTEP 18 planning cycle, she said.

Lynn Hecker | © *RTO Insider*

MISO will generally "shift away" from studies that run three years to focus on one-year studies in order to provide detailed transmission needs instead of a "macro look," Hecker said. However, the RTO learned "valuable" economic and reliability lessons from the overlay study, which was originally meant to inform long-term transmission planning as the resource mix shifts. The study created a possible transmission map — or overlay — for each of the three future scenarios in MTEP 17. (See *MISO Planners Looking at 3 La. Projects, Overlay 'Skeleton'*.)

A second round of preliminary overlay

*Continued on page 17*

## MISO News

# Triennial Review Shows MISO Multi-Value Project Benefits

By Amanda Durish Cook

After a second full review of the 2011 slate of multi-value transmission projects, MISO has concluded that although project costs are rising, benefits still far outpace them.

MISO said its multi-value project (MVP) portfolio creates anywhere from $12 billion to $52 billion in net benefits. Total portfolio costs have increased from an estimated $5.6 billion during MISO's 2011 Transmission Expansion Plan to $6.5 billion today.

The findings were part of a mandated, three-year review of the MVP portfolio, included in MTEP 17.

MISO's MVP portfolio was approved by the RTO's Board of Directors in 2011 and contains 17 transmission projects designed to cut costs, support regional reliability and broaden access to renewable resources. The RTO said its MVPs currently show benefit-to-cost ratios ranging from 2.2:1 to 3.4:1. MISO only measures benefits for its Midwest region, as MISO South was not yet part of the RTO at the time of project approval. In 2014, the RTO put the benefit-cost measure at 1.8:1 to 3:1.

| © RTO Insider

The results also "reconfirm the MVPs are essential to meeting renewable portfolio standards goals," said MISO engineer Ben Stearney during a Sept. 27 Planning Advisory Committee meeting. MVPs will allow the delivery of 52.8 million MWh of renewable energy through 2031, supporting states' renewable energy mandates and goals, he said. Had the project portfolio not been approved six years ago, an estimated 11.3 GW in dispatched wind generation would have to be curtailed in 2026. Wind curtailments in MISO are currently rare, due in large part to the RTO increasing dispatch frequency from one hour to five minutes and introducing its Dispatchable Intermittent Resource type, which allows wind operators to respond economically to dispatch instructions.

Stearney said projected natural gas prices represent the largest difference between the MTEP 14 and MTEP 17 reviews, the latter of which shows much lower prices.

MISO will file the MVP report with FERC in spring.

# Early Release for MISO Long-Term Tx Overlay Study

Continued from page 16

results using an existing fleet projection shows several 345-kV line additions in MISO Midwest, as well as a handful of 500-kV lines in — and one leading into — MISO South. The "policy regulations" future shows a bigger network of 345-kV lines in the Midwest region and multiple 500-kV lines in MISO South. One DC line would link South and Midwest while another would stretch from Arkansas to Iowa.

The "accelerated alternative technologies" future depicts a large network of 765-kV lines in the Central region, including two 765-kV paths connecting with South, and a DC line across North Dakota and Minnesota, in addition to the proliferation of lines in Midwest and South.

"Now that we've closed the books on the regional transmission overlay process, it's time to take a closer look … to address targeted studies further and answer stakeholder questions," Hecker said.

She said future targeted studies could be themed, focusing on transmission issues across seams, generation retirement impacts, increased distributed energy resources, grid stability in Minnesota and Wisconsin, renewable integration impacts and potential transmission to support "resilient" resources — a concept handed down by the recent Energy Department grid study and yet to be explored by MISO.

Several stakeholders balked at MISO's mention of studies based on "resiliency," but MISO Director of Policy Studies J.T. Smith assured attendees that the RTO and its stakeholders would together set out to define the concept in later public meetings.

"In the meantime, MISO will continue on the complicated process to improve the alignment of the project costs and benefits," Hecker promised stakeholders during a Sept. 25 special conference call of MISO's Economic Planning Users Group.

Some stakeholders asked why MISO did not consult its own generator interconnection queue to inform the overlays.

Hecker said the RTO took "a much more forward-looking" approach, examining congestion 20 years out amid MISO's shifting resource mix.

"We did a best guess of where generators will be sited in the future," she said.

The study will not be used to justify projects in future MTEP cycles, which will still require the usual rigorous MTEP studies.

The overlays "will help us look at if what is needed in the short-term will be compatible with long-term needs," Hecker said. "They're multiple, long-term views of what transmission may be needed."

Wind on the Wires' Natalie McIntire noted that there are "several" lines that appear in all three preliminary overlays. She asked if MISO planned to use the recurring lines as part of a "no regrets" lineup of projects.

Hecker acknowledged the "commonalities" between overlays, but she said that MISO would not guarantee it would include the lines in a future list of recommended projects, despite their possible recurrence in future MTEP planning cycles.

## MISO NEWS

# MISO Works to Address Unprecedented Queue Volume

By Amanda Durish Cook

MISO planners continue to sift through the largest batch of interconnection applications in a decade while still working out lingering details about the RTO's new queue process.

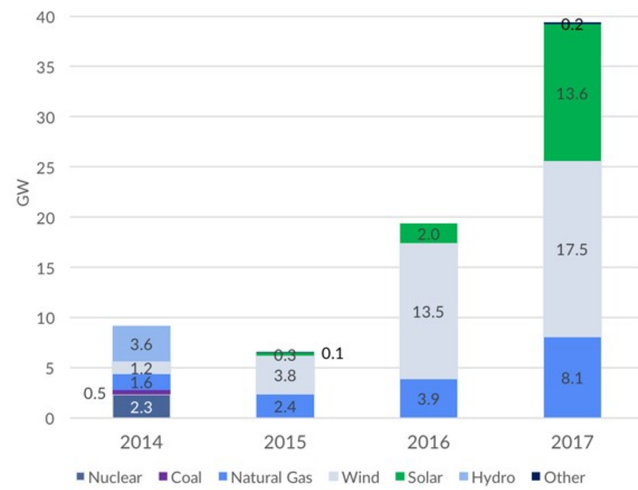
In the last year the queue has grown to 355 projects totaling 58.8 GW.

"I don't think we've ever had 191 projects enter the definitive planning phase at once," said MISO planning manager Neil Shah, speaking about the August 2017 cycle of projects, representing 32 GW. The RTO accepts new projects into its queue twice per year, in August and February.

Stakeholders participating in a Sept. 26 Interconnection Process Task Force (IPTF) conference call asked if all the proposed projects will complete the queue's studies.

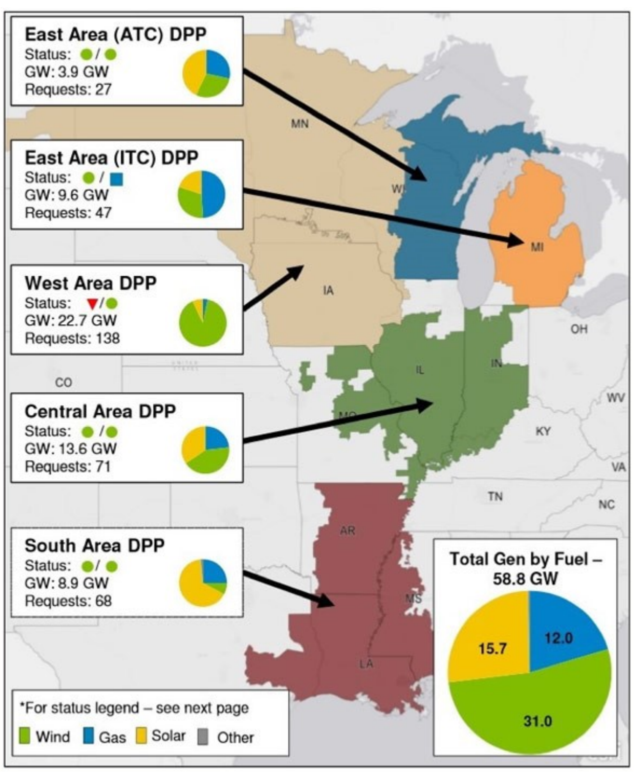
"From MISO's perspective, they've submitted everything they've needed under the Tariff," Shah said.

"There's a lot of capacity in the queue, and a lot of it won't come online, but a lot of it will," CEO John Bear said during a Sept. 21 board meeting, adding that solar and renewables represent a large share of prospective projects. At the same meeting, Executive Vice President of Operations Clair Moeller noted that the queue hasn't been so packed since 2007.



Definitive planning phase queue trends | MISO

Amid the heavy queue workload, stakeholders must also decide whether to continue the IPTF under its current structure, or convert it into a working group to finish implementation of the new queue design, which is intended to streamline a process beset by restudies and backlogs. However, MISO staff have already warned stakeholders to prepare for delays as the approximately 100-employee queue team examines the copious amount of projects.



Definitive planning area map | MISO

Rhonda Peters, a Wind on the Wires consultant, urged IPTF leadership to consider the switch to a working group.

"We have a lot of needs with this interconnection queue, and they're not going away. They're urgent needs. … We need to not waste time discussing a sunset date every six months," Peters said.

Wisconsin Public Service's Chris Plante said he was also in favor of moving to a more permanent working group organization, noting that he's saved documents from 2008 IPTF meetings.

"We're pushing 10 years here, and from a Stakeholder Governance Guide standpoint, that's not temporary," Plante said.

Vikram Godbole, MISO director of resource utilization, said the larger goal was that stakeholders continue working out a new queue process, whatever the venue. IPTF Chair Randy Oye asked for stakeholder comments on whether they support discussing interconnection issues under a working group or task force structure.

MISO attorney Jacob Krause also said the RTO is seeking written stakeholder feedback on the number of days that should be allowed for negotiating and executing generator interconnection agreements.

In early September, FERC ruled that MISO did not provide "sufficient support" for Tariff revisions that would have required that generator interconnection agreements be negotiated and executed within 90 days, down from the current 150 days. (See *FERC Blocks MISO Plan to Shorten Queue Negotiations*.)

Oye said he didn't see why the RTO couldn't shorten the agreement timeline by having interconnection customers and transmission owners simultaneously sign off on agreements. Currently, agreements are negotiated for 60 days, with customers given additional 60 days to execute the agreement. TOs then have another 30 days to sign off.

MISO staff asked for written comments so the issue could be taken up again in October.

## MISO News

# MISO Study to Examine Incremental Impact of Renewables

*By Amanda Durish Cook*

MISO's proposed multiyear evaluation on the future impact of integrating renewable energy will consist of 10 separate studies, with each focused on projected grid conditions at steadily increasing levels of renewable penetration.

But the RTO's sweeping approach is drawing mixed reactions from stakeholders.

MISO policy studies engineer Jordan Bakke said the evaluation will first model current renewable penetration — about 8% of the resource mix. It will then examine growing system complexity in increments of 10% renewable resource penetration, concluding with an RTO system powered 100% by renewable sources.

At each 10% checkpoint, MISO will assess systemwide ramping capability, operating reserves, transmission congestion, voltage and frequency stability, and loss-of-load expectation, among other data.

"Between some milestones, the system complexity might not increase much, but at other points, it could increase a lot — and those are our inflection points," Bakke said during a Sept. 27 Planning Advisory Committee meeting. "We currently don't know where these inflection points lie."

The evaluation will attempt to identify when the growth of renewables and the retirement of baseload units require changes in the structure or operation of the system, something MISO has not attempted to answer until now, Bakke said. (See *MISO to Conduct Long-Term Renewable Integration Study*.) It also aims to predict:

- How and when system reliability will be impacted by heavy renewable output;
- Whether there are limits to the amount of wind and solar generation MISO can support;
- How long until energy storage becomes a requirement;
- What parts of the grid will be stressed first; and
- How much renewable energy can be deployed before substantial system changes are needed.

The study will also explore what solutions will best mitigate system stressors, Bakke said, whether they be new transmission lines or buses, energy storage, better dispatch availability, demand response measures or better coordination efforts.

Bakke said he would return to later PAC meetings to discuss what MISO has discovered at each study milestone. The study doesn't have a definitive end date, but Bakke said MISO would likely examine the effectiveness of continuing the study after a year.

Wind on the Wires' Natalie McIntire said the study may not be "helpful or accurate" given that MISO has not yet reached a 10% renewable penetration and will take several years to achieve a 50%. Transmission could look very different by then, she noted.

"We've seen a lot come on in a relatively short amount of time," countered Bakke, adding that MISO is especially interested in studying the system at a 30-60% renewable penetration, which may become a reality.

Other stakeholders pointed to the high number of renewable projects lined up in MISO's interconnection queue, which could quadruple wind capacity in some parts of the footprint.

"We started out calling this a breakpoint study," said MISO Director of Planning Jeff Webb. "If the systems breaks here, what do you do to fix it? And if it breaks here, what do you do to fix it?"

Some stakeholders said the study seems like a high-risk, low-reward endeavor, considering that advances in renewable technologies could solve their own shortcomings by then. Others suggested that generation and transmission owners might question the relevance of study results going out to 2050.

"We're asking what things do we need to care about in 10 years, and what things do we have to care about in 30 years," Bakke explained.

Xcel Energy's Drew Siebenaler said that the study could yield a "holistic look" at renewables and system capability. "We fully support this effort as long as it takes," he added.


| *MISO*

## MISO NEWS

# Renewables, Storage Get More Play in MISO 2019 Planning

*By Amanda Durish Cook*

Wind turbines in Indiana | © *RTO Insider*

MISO is seeking stakeholder guidance on how to forecast the probable locations of future renewable, energy storage and distributed energy resources in order to better inform its transmission planning.

To prepare for MISO's 2019 Transmission Expansion Plan modeling, stakeholders had asked the RTO to update probable utility-scale renewable zones, map out future storage placement based on likely economic benefits, create an electric vehicle siting methodology and gather more information on DER through forecasts of customer-driven adoption and surveys of load-serving entities.

"Some of these categories are relatively new to our MTEP process," MISO Senior Policy Studies Engineer Jordan Bakke said.

James Okullo with MISO's policy studies group said MTEP 19's utility-scale renewable study, prepared by Vibrant Clean Energy and used to predict future renewable siting, may include areas outside of the RTO's territory.

"We cannot ignore the impact of our neighbors and what's happening outside of our footprint," Okullo said during a Sept. 29 MTEP 19 workshop.

The RTO's current MTEP siting methodology allows for siting of about 50 GW of new wind projects and 9 GW of utility-scale solar expansion in the footprint over the next 15 years.

Okullo said MISO would also examine which states have opened state-owned land to renewable project siting.

ITC Holdings' Cynthia Crane asked if MISO would want utilities and states to supply information on county efforts to stifle renewable siting, pointing to residents in Michigan's Thumb region that are actively campaigning against new wind farms.

Okullo said such information would be useful to MISO planners.

After stakeholders suggested the RTO rank its states in order of receptivity to renewable development, Indiana Utility Regulatory Commission adviser Dave Johnston cautioned against such a political exercise.

"In a state like mine, you wouldn't think we'd be very open to renewable development, but we're very into economic development and manufacturing, so we welcome those plants. So it's hard to paint states in certain boxes. It's hard to predict," he said.

In MTEP 18, MISO projected the siting of 2 GW of future energy storage in its future with the most aggressive growth of DER. It also placed no more than 100 MW of energy storage at any single load bus in the next 15 years. In MTEP 19, MISO could predict greater penetration by studying the full range of storage benefits, engineer Kunjal Yagnik said.

Wind on the Wires' Natalie McIntire asked why MISO would include energy storage in MTEP resource assumptions when storage could very well solve transmission needs and become a project recommendation itself.

"It seems like it could serve both functions," she said. MISO officials agreed.

Bakke said MISO will have to sort through the several nuanced benefits of storage when predicting future locations. For example, storage could be placed near a proliferation of renewable resources or situated in areas where frequency response could use improvement, he said. Customized Energy Solutions' David Sapper said he agreed with MISO's view of storage as a "composite resource."

Ann Benson, a MISO policy adviser, said the RTO is looking for better ways to increase DER visibility in MTEP siting. She asked stakeholders for ideas about how MISO could prepare a more complete database of existing and anticipated DER locations.

Marcus Hawkins, director of member services for the Organization of MISO States, advised MISO against using footprint-wide assumptions for DER trends, noting that in listening to recent discussion from stakeholders and regulators, he's heard a clear preference for a state-by-state differentiation of DER assumptions.

If appropriate, MISO could also forecast use of other emerging technologies, MISO policy studies staffer Temujin Roach said. Those could include small hydropower resources near rivers and lakes, small modular nuclear reactors and compressed air energy storage.

MISO will hold two more workshops before moving forward with final MTEP modeling in early 2018. For now, the RTO is asking stakeholders by Nov. 1 to provide suggestions on how to incorporate forecasts for renewable and new technologies into MTEP modeling and resource siting.

## NYISO NEWS

# Management Committee Briefs

### NYISO Plans Carbon Pricing Task Force

RENSSELAER, N.Y. — NYISO will soon announce the formation of a carbon pricing task force, CEO Brad Jones told the Management Committee on Wednesday.

The task force will "provide guidance on implementation, to explore how fast we can move forward on these issues," Jones said.

NYISO in August released a Brattle Group report on pricing carbon into its wholesale energy market to support New York's decarbonization goals. At a Sept. 6 public hearing held by the ISO and the New York Department of Public Service, stakeholders offered broad support for incorporating a $40/ton carbon charge into the market. (See *NYISO Stakeholders Talk Details of Carbon Charge*.)

Stakeholders are still concerned about how the costs for decarbonization will be allocated, and committee participants wondered who would be running the task force. Jones said the group will report to the grid operator's Market Issues Working Group.

### Hot September Causes Historic First in Flow Limits

Unseasonably warm weather in the second half of September led NYISO to secure the West Central interface to limit flows toward western New York, the first time the ISO had to secure flows in the reverse direction because of high levels of Lake Erie loop flows, COO Rick Gonzales said.

"This shoulder period is usually the time for generators and transmission owners to schedule their off-peak maintenance outages, so unusually warm weather during this period can present reliability challenges," Gonzales said. "We did reschedule a number of major transmission maintenance outages to later in the week and bring on one additional generator to make sure that NYISO was meeting its reliability commitments."

In his regular operations report, Gonzales highlighted that "peak load in August was even less than the peak load in July, so we didn't even reach 30,000 MW of peak load this summer." The balance of the operations report was delivered at the Business Issues Committee earlier in September. (See *NYISO Business Issues Committee Briefs: Sept. 12, 2017*.)

### Mild Summer Poses Few Challenges

This summer was the fourth consecutive summer in which the ISO's peak load fell short of the 50/50 forecast, Vice President for Operations Wes Yeomans said.

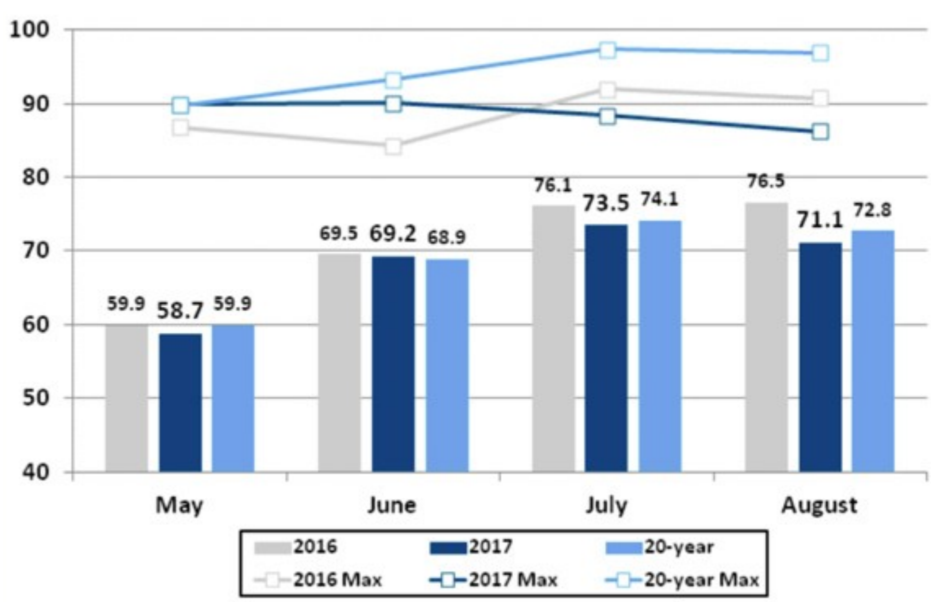
The Summer 2017 Hot Weather Operations report showed that actual ambient temperatures, total summer loads and peaks were all below 50/50 projections. New York did experience two instances of hot weather, but only for short durations.

A warm front crossed Upstate New York and New York City during June 11-13, with Albany registering temperatures of 95 F and LaGuardia Airport hitting 100 F. June 13 peak load was 29,126 MW.

NYISO's summer peak of 29,699 MW occurred July 19, coming in far below the 50/50 peak forecast of 33,178 MW, Yeomans said. NYISO met all reliability operating criteria during the peak and required no statewide out-of-market commitments or demand response activations, he said.

Yeomans noted that New York State Electric and Gas this summer completed its Auburn Transmission Project, which included construction of a new 115-kV Elbridge-State Street line and reconductoring of the existing line linking those points. The upgrades provide higher thermal ratings and alleviate the need for the coal-fired Cayuga plant to maintain local reliability.

A new 345-kV Dolson Avenue substation interconnection for the CPV Valley Energy Center was completed in early September and the second Ramapo phase angle regulator returned to service Sept. 14, Yeomans said.




Monthly average and max temperatures | *NYISO*

### 2018 Budget up 5% on Security Enhancements

NYISO's draft 2018 budget calls for $155.7 million in spending allocated across a forecast of 157.8 million MWh of usage, representing a Rate Schedule 1 charge of 98.7 cents/MWh, according to an overview presented by Alan Ackerman, chair of the Budget and Priorities Working Group.

The draft budget represents a 5% increase in revenue requirement from this year and a 0.3% decrease in projected megawatt-hours, translating into a 5.45% increase in transmission charges.

Among the ISO's key priorities for next year are physical and cybersecurity enhance-

*Continued on page 22*

## NYISO NEWS

# Management Committee Briefs

Continued from page 21

ments to secure operations and meet audit and compliance needs. System and resource planning will focus on reliability and the support of studies requested by the Public Service Commission, including assessing potential public policy transmission needs such as offshore wind integration, Clean Energy Standard implementation and congestion in the North Country (the state's extreme northern frontier, bordering Lake Ontario, Lake Champlain, the Saint Lawrence River, Vermont, Ontario and Quebec).

### Busy NYISO Agenda Drives Consumer Impact Analysis

The ISO will conduct consumer impact analyses on five major projects for 2018, NYISO Senior Manager for Consumer Interest Liaison Tariq N. Niazi told the committee. The ISO conducts such analyses for projects with anticipated net production cost impacts of at least $5 million or changes in energy or capacity market prices of at least $50 million per year.

Also to be analyzed are projects incorporating new technology into ISO markets for the first time, those that allow or encourage a new market product and those that create mechanisms for out-of-market reliability payments. The grid operator leaves room in the process for unanticipated analyses, such as FERC directives where NYISO has implementation flexibility or emergent stakeholder issues.

For 2018 the projects being analyzed are:

- Integrating Public Policy: This project is attempting to accommodate state's decarbonization goals with the wholesale energy and capacity markets and align the process with the Reforming the Energy Vision initiative.
- Buyer-Side Mitigation (BSM) of Repowering Projects: To encourage private investment, the ISO will seek to develop a specially tailored BSM evaluation process that reduces the potential for over-mitigation of repowering projects.
- Constraint Specific Transmission Demand Curves: The ISO will would study replacing its current transmission constraint pricing methodology with multiple transmission demand curves that can vary according to the importance, severity and/or duration of the transmission constraint violation. It would replace the current procedures, in which some transmission shortages are resolved by relaxation instead of by setting prices through use of a transmission demand curve. The goal is more efficient pricing of transmission constraints, reduced price volatility and more efficient resource scheduling.
- DER Participation Model: The ISO is evaluating potential modifications to its existing demand response programs as part of the Distributed Energy Resource (DER) Roadmap it announced in February. (See NYISO 'Roadmap' Sees Dispatchable DER by 2021.) The project will include the design of DER performance obligations, metering and telemetry requirements, baseline and performance measurement and verification rules, and resource modeling. It also will seek to develop ways to balance the simultaneous participation of DER in the wholesale markets and retail-level programs.
- Energy Storage Integration and Optimization: The ISO will continue to develop its model for the participation of energy storage in the wholesale markets, including improving the optimization of storage on a least-cost basis through more sophisticated energy constraint modeling. The goal is to improve modeling of resources that can inject and withdraw energy from the grid in response to ISO dispatch signals.

### Committee Approves Western New York Tx Proposal

The Management Committee voted unanimously to advise the Board of Directors to approve NextEra Energy's proposed Empire State Line in western New York, as recommended by an ISO public policy transmission planning report. The ISO's Business Issues Committee endorsed the same report earlier in September. (See Public Policy Tx Project Wins Key NYISO Endorsement.)

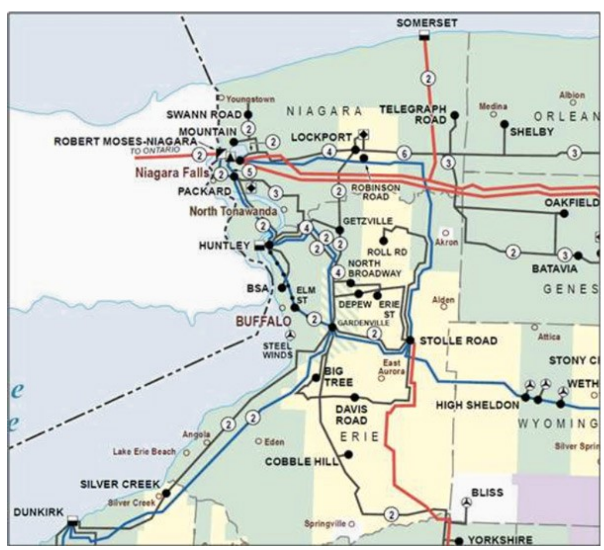
Dawei Fan, NYISO supervisor of public policy and interregional planning, presented the report, which represents NYISO's first-ever evaluation of transmission needs stemming from public policy requirements.

NYISO received comments on the report from the New York Power Authority, NYSEG, New York State Energy Research and Development Authority, NextEra and LS Power's North America Transmission, the last of which intends to pitch its own transmission project to the board on Oct. 16, before the board's October meeting.

Several meeting participants sought more information about what topics would be discussed at the upcoming board meeting and whether their absence would "dilute" the impact of their already submitted comments. Howard Fromer of PSEG Power wanted to know if participants seeking to speak to the board planned to address legal arguments as opposed to more technical points.

NYISO Vice President for System and Resource Planning Zachary Smith responded that the comments would not focus on legal matters and asked that all supplementary comments be delivered to the RTO by Sept. 29. Stakeholders who want to speak directly to the board were asked to notify the RTO by today.

*— Michael Kuser*



Map of transmission in western New York | NYISO

# NYISO NEWS

## Money and Cooperation Drive New York REV

Continued from page 1

Kauffman said last week at Greentech Media's New York REV Future 2017 conference in Brooklyn.

Government is changing too, the state's first "energy czar" said. While state agencies "used to just do one-time grants," they are now working to develop sustainable business models for the electricity sector.

### REV Changing the Role of the Utility

Kauffman said he sees "green shoots of change" as evidence of New York's evolving energy framework, such as Consolidated Edison's Brooklyn-Queens Demand Management program (BQDM), a $200 million effort designed to defer infrastructure spending through energy efficiency, distributed energy resources and demand response. (See NYPSC Extends Con Ed Demand Program.)

"Its non-wires requirement — that was a big deal and that has spread to Central Hudson ... and we're close to National Grid — thousands of rate cases," he said.

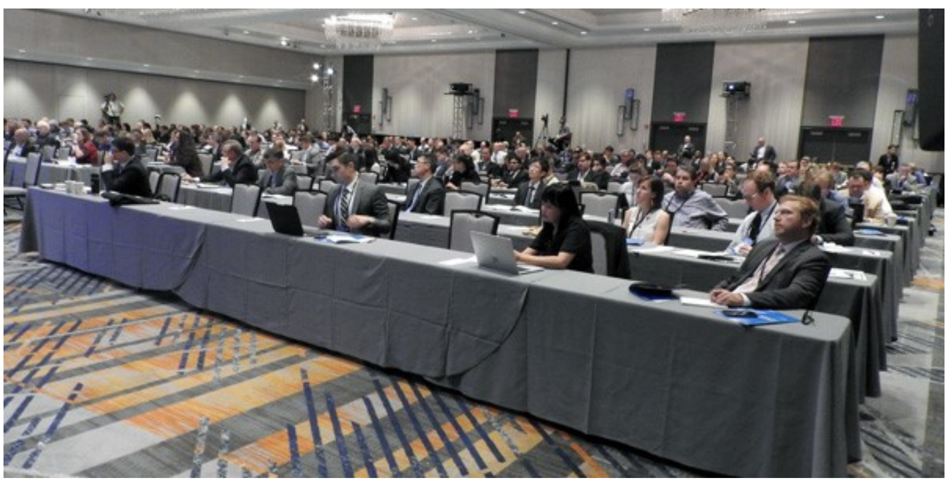
And while the solar industry has shown a profound change in its willingness to engage with state agencies, utilities have "a real struggle to figure out how to be partners [with DER providers] instead of competitors."

But integration of DER will be key to the evolution of the grid, he said.

"There's no question that storage has to be a critical part of the system, which is getting peakier and peakier. Yet the value of storage is not adequately captured yet," Kauffman said. "Utilities procure power, but up to now have not had any financial incentive to reduce peak power purchases."

Moderating a panel on REV policy, Greentech's Katherine Tweed asked where to draw the line to mark the right mix of energy resources: "BQDM is the greatest experiment in the world ... but people say Con Edison's going to build that substation when they need it."

Con Ed Vice President for Distributed Resource Integration Matt Ketschke said, "Most DER doesn't line up with Con Edison because most of it is not in the business of power generation. ... Our real goal is ultimately to eliminate the need for those substations."



| © RTO Insider

### Theatrical Disruption

Three protesters from the New York Energy Democracy Alliance disrupted Kauffman's talk with a bit of guerrilla theater to highlight the difficulty they say some 800,000 low-income people in the state have paying their energy bills under REV.

The skit began when a man several rows from the stage stood up and identified himself as a renter having trouble paying his utility bills.

After he had asked Kauffman how REV would address the concerns of "low-income communities of color," two women on either side of the man stood up, pretending to be Kauffman's security guards.

"Silence!" shouted the women, who wore capes reading "REV = Not Your Business"

Continued on page 24

## FERC Grants NYISO Shortage Pricing Waiver

FERC last week granted NYISO a waiver of its shortage pricing rules, giving the ISO time to align its Tariff with its market software (ER17-758).

NYISO requested the waiver after its Market Monitoring Unit discovered that the ISO's software had not been calculating prices in accordance with the Tariff language since it implemented transmission shortage cost pricing in February 2016.

The MMU, Potomac Economics, reported the problem to the ISO at the end of August 2016. After further investigation, the ISO told stakeholders Nov. 3 that the inconsistencies constituted a "Market Problem" because they had materially impacted its markets.

The ISO asked FERC to waive the relevant Tariff provisions from Feb. 11, 2016, until the Services Tariff was revised — as occurred June 14, 2017, when the commission accepted the ISO's proposed revisions, under delegated authority.

"NYISO now realizes that it inadequately explained the pre-existing logic for its software and the interaction of this logic with the graduated transmission shortage cost provisions," FERC recounted.

Noting that no commenters opposed the waiver, the commission said that the ISO had "acted in good faith and worked diligently with MMU and its stakeholders to resolve the inconsistency."

*— Rich Heidorn Jr.*

## NYISO NEWS

# Money and Cooperation Drive New York REV

*Continued from page 23*

and "REV = Not a Democracy."

"This is not the place for the complaints of the working class."

They went on to bow at Kauffman, a former Goldman Sachs banker, mocking him as the "all-powerful energy czar."

They finished their skit within a couple minutes — escorting the man out of the conference room before the real security could arrive — and exited to scattered audience applause.

Kauffman took the disruption with humor, saying he was "well aware that accountability is key and that well more than 800,000 New Yorkers have trouble paying their electric bills."

The electric power system "is financially inefficient as well as energy-inefficient," Kauffman said.

"So, guilty as charged — I do have a financial background," he said. But Kauffman said that background only motivates people inside the industry to make the system more efficient.

### 'Where Policy Meets Reality'

Nilda Mesa, director of urban sustainability and equity planning at Columbia University's Urban Design Lab, opened the conference by saying that energy efficiency should be treated like a renewable resource "because the greenest electron is the one that's not used." Eventually, "financing people can start to understand the engineering language," she said.

Scott Weiner, deputy for markets and innovation at the New York Department of Public Service, pointed to the challenge of shifting "from a paradigm of net metering to more market-based uncertainty that exists through the value of DER methodology," particularly for the solar sector.

"But the industry has stepped up," he said.

Financing is key to the transformation of the grid, Weiner said: "If I could take out my magic REV wand, I'd like to see the investment community, the people who provide project financing, more directly engaged."

Todd Glass, energy lawyer with Wilson Sonsini Goodrich & Rosati, asked how project financiers could judge utilities, considering the wide spread between various utilities' cost of service estimates. Weiner said, "Figuring out the marginal cost of service can be hard to do; that's where policy meets reality."

Left to right: Katherine Tweed, GTM; Matt Ketschke, Con Edison; Scott Weiner, DPS; Todd Glass, energy lawyer with Wilson Sonsini Goodrich & Rosati; and Jim Steffes, Direct Energy. | © *RTO Insider*

## PJM NEWS

# Founding Companies, Officials Convene to Celebrate PJM's 90 Years

*By Rory D. Sweeney*

VALLEY FORGE, Pa. — PJM capped a busy week Friday with a 90th birthday celebration that attracted utility CEOs and government officials.

CEO Andy Ott described that "beautiful September day" when PJM — which is also celebrating 20 years as an RTO — was formed.

"We could never have imagined in '27, or even in 1997, what we'd grow into," Ott said. Yet, he added, "Our mission remains the same: to keep the lights on."

Senior executives of the three utilities that founded PJM — Exelon's PECO Energy (formerly Philadelphia Electric Co.), PPL and Public Service Electric and Gas — were among more than 100 in attendance.

"Today, PJM represents the largest energy-transaction marketplace in the world," said Exelon Utilities CEO Denis O'Brien, noting that his company now owns almost half of the dozen companies that were PJM members when he began his career 35 years ago. He presented Ott with a photograph of the lighted signs at the top of PECO's landmark building in Philadelphia displaying a message of congratulations to PJM.

PPL CEO William Spence congratulated the many people who transformed PJM into the world's first continuing power pool.

"Today, nearly a century after PJM's founding, it's hard to imagine life without the electricity that we provide," he said, noting its importance to medicine, education and the economy. "It was these people who transformed that 1920s patchwork of power lines and power plants into the robust interconnected system that we have today."

Ralph Izzo, CEO of PSE&G parent Public Service Enterprise Group, noted that PJM was originally named PNJ, but changed its name as it expanded. The idea for the interconnection came when a company engineer realized that if every electrical device was turned out simultaneously, it would demand 3.5 times more power than the company owned, Izzo said. Only through "a fortunate lack of coincidence … this nightmare never materialized," Izzo said.

Left to right: William Spence, PPL; Gladys Brown, Pa. PUC; Denis O'Brien, Exelon; Andrew Ott, PJM; Robert Powelson, FERC; U.S. Rep. Ryan Costello (R-Pa.); Richard Mroz, N.J. BPU; Ralph Izzo, PSEG | *© RTO Insider*

The power pool allowed resources that were going unused in one company's territory to be used in another area where demand was outstripping supply. "At the outset, transmission was the great enabler of the founders' vision," Izzo said.

The mood at the celebration was light, and many speakers found opportunities for humor.

PJM has "lasted through the Great Depression, through war and economic troubles, through FERC Order 1000," Izzo joked. "Oh, that wasn't in the script."

Commissioner Robert Powelson came to FERC's defense.

"I think it's fair to say that if Thomas Edison were here today he would say, 'Job well done, Andy and team,'" he said. "And he would say, 'Job well done, Federal Energy Regulatory Commission.'"

Powelson, a former member and chair of the Pennsylvania Public Utility Commission, also singled out Mike Bryson, PJM's vice president of operations, for "doing the boring good" to ensure the reliability of the RTO's $30 billion in annual electron sales.

"Not a lot of people know who you are; I know who you are," he said. The PJM staff "make Federal Energy Regulatory Commission commissioners look good in spite of ourselves."

Current PUC Chair Gladys Brown noted that PJM is 10 years older than her commission. She thanked the RTO for being the "backbone" of wholesale energy transactions that enables her state's competitive retail sales program.

She also voiced appreciation for the "tightrope and tug-of-war" that PJM staff administer in the stakeholder process, referencing the current efforts to accommodate state generation subsidies without allowing them to impact competitive prices. (See related story, *PJM Pressed on Plans to File Capacity Changes*, p.31.)

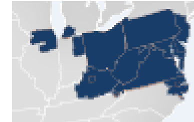
Pennsylvania is "proud" to be PJM's home and birthplace, she said.

Richard Mroz, president of the New Jersey Board of Public Utilities, brought congratulations from a long list of industry stakeholders, including the National Association of Regulatory Utility Commissioners.

U.S. Rep. Ryan Costello, who represents the district that is home to PJM headquarters, said "a secure, safe, reliable, efficient grid is critical for the future of our country."

"It is a particular source of pride for me when we have a power subcommittee roundtable and we're talking about the challenges facing RTOs moving forward, and who's really running the show? Who does everybody listen to?" he said. "It's the folks at PJM, because you are out front in terms of innovation, and you are out front in terms of wrestling with the complexities and the challenges that RTOs face."

## PJM NEWS



# Softer Rhetoric as PJM TOs, Customers Seek Accord on Replacement Rules

By Rory D. Sweeney

VALLEY FORGE, Pa. — Discussion at PJM's Transmission Replacement Processes Senior Task Force has not advanced much in the four meetings the group has held since being reactivated in late July, but the rhetoric has softened.

The PJM Transmission Owners, their customers and RTO officials all took that as a positive sign at the task force's most recent meeting Wednesday. Throughout the meeting, all sides thanked each other for the cooperative tone.

"We don't think we're that far apart," American Municipal Power's Ed Tatum said. AMP's Lisa McAlister hoped it wasn't overly optimistic to anticipate that the group might agree on a joint filing to FERC. Participants agreed to define "end-of-life" at the next meeting on Oct. 25 and determine what transmission equipment should be included in that definition.

### Hiatus

The atmosphere was a far cry from the Markets and Reliability Committee meeting in July, where load interests blocked TOs' attempt to continue the task force's 10-month hiatus. (See *Load Blocks TO Effort to Delay PJM Tx-Replacement Talks*.)

The hiatus began last September, after FERC questioned whether the TOs' procedures for planning supplemental projects provided stakeholders opportunity for "early and meaningful input and participation" as required by Order 890 (EL16-71).

Supplemental projects are proposed by TOs to meet local needs, but they are not required by PJM's reliability, economic efficiency or operational performance criteria. Their costs are paid by the TO zone and are not regionally allocated, unlike baseline upgrades resulting from the RTO's Regional Transmission Expansion Plan.

The commission's show cause order directed the TOs to file rule revisions, or counter with evidence that they were already in compliance, within 60 days. The TOs responded Oct. 25, contending that the Operating Agreement already complies with Order 890, but also proposed a Tariff amendment, Attachment M-3, that they said would improve transparency. Attachment M-3 would institute an annual stakeholder review of TOs' assumptions and methodology. It also would require TOs to present their view of local transmission needs and proposed solutions for stakeholder comment.

FERC, which was without a quorum between February and August, has not ruled on the filing despite promising it would act within about three months of the TOs' response.

At last week's task force meeting, Exelon's Gloria Godson reviewed a timeline of the issue and a summary of the proposed amendments.

AMP followed with a presentation that compared the TOs' suggested changes through the M-3 proposal to changes AMP proposed to the PJM Operating Agreement, Schedule 6, Regional Transmission Expansion Planning Protocols. AMP's position would apply the same PJM process used for baseline project planning to end-of-life project planning, which Tatum said would result in the PJM Members Committee retaining filing rights under Section 205 of the Federal Power Act as opposed to shifting filing rights to the TOs as the M-3 proposal would do.

The organization said it was focused on the processes to determine when infrastructure has reached the end of its serviceable life and how it gets replaced. (On Friday, AMP released an analysis showing that more than half the transmission spending in PJM since 2012 was on supplemental projects. See related story, *Report Decries Rising Tx Costs; Seeks Transparency on TO Projects*, p.1.)

### RTEP Process 'Working Well'

Mark Ringhausen of Old Dominion Electric Cooperative called for pulling the TOs' local planning for certain Supplemental projects into the RTEP process and requiring designated entity agreements between PJM and the transmission developer to set expectations and remedies for nonperformance for better PJM planning models. He said it would "provide consistency and transparency across all the TOs and PJM if we use a process that's been working well for the past 15 years."

He and AMP also asked for one-line diagrams to be provided for some project presentations, which they said would speed up meet-

Continued on page 27

## PJM NEWS

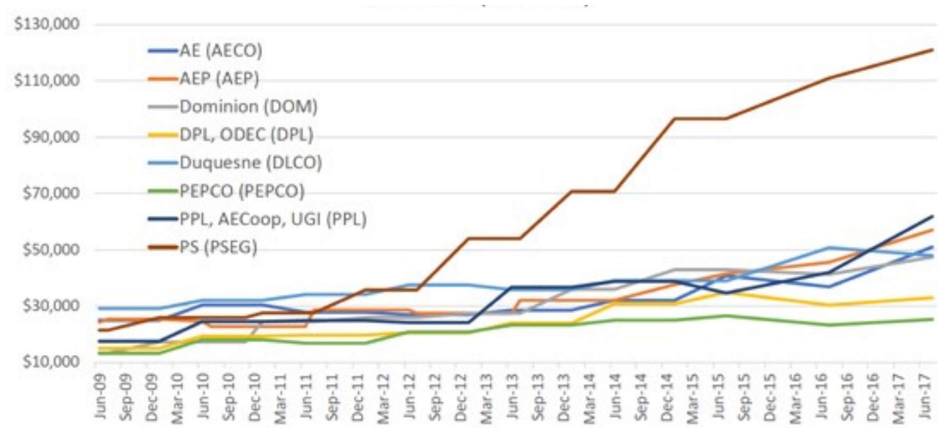
# Report Decries Rising Tx Costs in PJM; Seeks Transparency on TO Projects

Continued from page 1

At a teleconference Friday, AMP used the findings to call for more transparency into transmission owner-proposed supplemental projects, which represented $12.7 billion of the total spending since 2012.

Supplemental projects are proposed by a TO and fully paid for by its customers. They are not required to fulfill any reliability obligations from NERC, FERC or PJM, which reviews the projects only to make sure they do not negatively impact the grid. This is in contrast to network upgrades and regionally funded baseline projects proposed by PJM to address violations of RTO, NERC, ReliabilityFirst or TO planning criteria. Supplemental projects also are exempt from the competitive transmission requirements of Order 1000.

Of the $28.1 billion in planned or in-service transmission projects from 2005 to 2012, only 24% ($6.8 billion) were supplemental, according to the report by Ken Rose, an independent consultant and senior fellow at Michigan State University's Institute of Public Utilities. After 2012, supplemental projects made up 52% of total spending, compared to 48% ($11.6 billion) in baseline projects and network upgrades.




Transmission rates by TO ($/MW-year) | *AMP*

"There is a shift from baseline projects to supplemental projects as revenue requirements and transmission rates have gone up, a lot — way beyond the levels of inflation," Rose said. "Basically, if you continue to have a process where it is fairly easy for the regulated entity to pass project costs through, there is going to be an incentive to continue pursuing supplemental projects."

### PSEG, AEP, PPL Cited

Three TOs — the "overachievers," as Rose called them — were particularly aggressive

Continued on page 28

# Softer Rhetoric as PJM TOs, Customers Seek Accord on Replacement Rules

Continued from page 26

ings and reduce their questions and information requests.

TOs hesitated to agree to the one-line requests in public meeting materials, citing Critical Energy/Electric Infrastructure Information (CEII) concerns and that they often lack comprehensive information when projects are presented. But they said that the information is available with appropriate CEII protection. PJM acknowledged the concerns. The TOs noted that they provide project maps during the planning process, which they said serve a similar purpose, but AMP and ODEC disagreed.

### Frustration

The hesitation has frustrated customers, who said they've heard the same arguments before and that other PJM stakeholder groups "don't seem to have a problem working" while awaiting the FERC decision.

"You're working very hard to improve the process without asking us what we want or need," McAlister said.

PPL's Frank "Chip" Richardson said the TOs are not willing to discuss augmenting what they've already filed at FERC but will consider other items.

Godson stressed the gravity of the show cause order, noting it "is not something that happens often."

"Unfortunately, FERC failed to issue an order within three months as [promised] due to the lack of a quorum," she added.

GT Power Group's Dave Pratzon said he doesn't have a direct interest in the dispute, but he suggested that the customers list their requests and that the TOs then indicate which of them they *can* talk about "rather than have everybody dance around the table."

"Let's get to the substantive work. We're tired of having this same discussion," said McAlister. "We understand the TOs' litigation position and believe that what we're proposing is within the bounds of the task force's charter and not that far off — from a substantive perspective — from what the TOs proposed."

"I would love nothing better than to engage in a productive discussion with the TOs on this. I can't make them love me. … I can't force them to do that. But we do have an MRC-approved taskforce and charter with things to work on," Tatum said. "There's lots of opportunities to do productive things here. There's one group who won't play."

"It's not that we won't play. We're here. We have considered things," Richardson responded. "Just because we're not willing to negotiate what is pending at the FERC in a stakeholder forum — and require the task force to work within its charter — doesn't mean we're not willing to play."

## PJM NEWS

# Report Decries Rising Tx Costs in PJM; Seeks Transparency on TO Projects

*Continued from page 27*

in such spending. Between May 9, 2005, and September 2017, supplemental projects represented more than 44% of the transmission spending within the PSEG zone, 40% of spending in the AEP zone and almost 59% of that in the PPL zone.

The three TOs also saw their transmission revenue requirements and rates more than double since 2009, with PSEG's requirements jumping 420% and its rates increasing 465% since 2009, far more than any other TO.

"Those transmission costs that we've seen increasing are being passed along to our members," said Jolene Thompson, executive vice president of member relations for AMP, which provides generation, transmission and distribution to 135 members in Delaware, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia. AMP has "prioritized trying to find ways to mitigate the impact of the increasing transmission costs" on its members, she said, and chief among those is shedding light on the RTO's supplemental projects.

"Our members are seeing their transmission rates skyrocket," AMP President Marc Gerken said in a statement. "We need to able to tell them why this is happening."

### Aging Infrastructure

At a 2015 FERC technical conference, PJM Vice President of Planning Steve Herling told commission staff that supplemental projects are often proposed to replace aging infrastructure. "If you went down the list in our database, I guess half of them start with the word 'replace,'" he said. (See *PJM TOs Defend Jurisdiction at FERC Conference*.)

The conference led FERC last year to issue a show cause order finding that PJM's TOs were not complying with Order 890's requirements that stakeholders have "early and meaningful input and participation" in the planning process for supplemental projects (EL16-71). The commission said some TOs "appear to be identifying — and even taking steps toward developing — supplemental projects before providing any opportunity" for stakeholders' input through the Regional Transmission Expansion Plan. (See *FERC Orders PJM TOs to Change Rules on Supplemental Projects*.)

While insisting they already comply with Order 890, the TOs in October proposed a Tariff amendment they said would increase transparency. FERC, which had no quorum between February and August, has yet to act on their response.

"PSE&G works closely with PJM and its stakeholders to review and respond to questions about its transmission projects, including supplemental projects," said Karen Johnson, PSE&G director of communications. Investment in transmission "puts downward pressure on energy and capacity prices by alleviating congestion on the system" and that "PSE&G's electric bills have remained flat to slightly lower over the past nine years," she said.

AEP and PPL did not respond to requests for comment.

### Task Force

In the interim, the TOs and stakeholders have resumed meetings of the Transmission Replacement Processes Senior Task Force, which had gone on hiatus awaiting a FERC ruling. (See related story, *Softer Rhetoric as TOs, Customers Seek Accord on Replacement Rules*, p.26.)

AMP wants to "proceed as aggressively as we can in the current PJM stakeholder process in trying to get the transmission owners to provide a similar amount of information and transparency of data for the supplemental projects as they do for the baseline and Regional Transmission Expansion Plan projects," Ed Tatum, AMP's vice president of transmission, said at the teleconference. FERC's show cause order gives the organization "a good opportunity to get the transparency that we need. But it's important that those orders be implemented in the spirit with which the commission intended them."

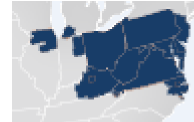
Asked by *RTO Insider* why PSEG, PPL and AEP proposed so much supplemental spending, Tatum responded, "I think you make our point for us right there: We don't know."

He said PJM should be doing more to protect ratepayers.

"By virtue of being the regional *transmission* organization … they are in charge of the planning and operation of the system. We see [TO-proposed] projects that come in that talk about building new infrastructure or replacing infrastructure. We have this crazy idea that it's planning. … There's certainly an important role for the transmission owners, but at the end of the day we do believe it's PJM's process and I think the commission has been clear on that, saying that PJM is in charge of not only the regional but the local

*Continued on page 29*

## PJM NEWS



# MRC/MC Briefs

## Markets and Reliability Committee

### Give me a B…

VALLEY FORGE, Pa. — PJM is attempting to calculate the market seller offer cap (MSOC) for Capacity Performance units for the 2021/22 delivery year, but it's come across a hitch in the process, stakeholders learned at last week's Markets and Reliability Committee meeting.

The MSOC is calculated using the balancing ratios, often represented as "B," from the three calendar years prior to the Base Residual Auction. The BRA for 2021/22 will happen next May.

B is calculated when emergencies, or performance assessment hours (PAHs), are called. It is used to determine each generation capacity resource's obligation to deliver energy during the PAH.

However, no PAHs happened in 2015 or 2016, and none has happened so far in 2017. Even if one did, the resulting B might not be known in time for the MSOC values to be posted mid-December, PJM's Adam Keech explained. That timing is important because market sellers will need to determine in early January whether they want to use the default MSOC values or pursue unit-specific valuations, he said.

PJM has proposed revising the Tariff to carry over the B used in the 2020/21 BRA of 78.5%, along with a problem statement and issue charge to explore a long-term solution that would be filed with FERC by October 2018, in time for the 2022/23 BRA. The focus of the investigation would be to determine if B should remain based on historic performance or something more prospective. Keech gave a presentation on the issue at September's Market Implementation Committee meeting.

Joe Bowring, PJM's Independent Market Monitor, disagreed with the proposal, saying the current Tariff language addresses such a situation. The math, he said, implies that B goes to zero and the MSOC values revert to each unit's avoidable cost rate (ACR). Keech disagreed with that interpretation.

"In the absence of data, we don't just assume that it is zero. And that's the case that we don't have balancing ratios to use," he said. "PJM is not comfortable assuming that it's just zero because that's not the way the Tariff reads."

"I'm not assuming anything," Bowring responded. "It is a fact that there is zero performance assessment hours. It is a fact that the average of the last three years is zero."

Calpine's David "Scarp" Scarpignato asked how PJM planned to address other formulas that use B, such as the CP penalty calculations.

"If you're changing your assumptions or calculations related to performance assessment hours [and how B is calculated], you should change it elsewhere in CP also because it's all tied together," he said.

Stakeholders raised additional concerns, such as the use of 30 expected PAHs in the formula. Borgatti suggested adopting ISO-NE's flat fee for the penalty instead of being formula-based. Following the discussion, PJM agreed to review the proposed Tariff revisions, problem statement and issue charge and bring the revised versions for a vote at next month's meeting.

### Amendment on DER Charter Sparks Debate

PJM proposed a draft charter to transfer all of its work on distributed energy resources into a subcommittee, but a friendly amendment by FirstEnergy sparked debate on how stakeholders should defer to local and state governments.

FirstEnergy proposed that the charter include a statement that "market rules must respect the distribution system and state/local jurisdictional agency standards and protocols to ensure safety and reliability. Rules should adhere to all pertinent jurisdictions and respect the Relevant Electric Retail Regulatory Authority (RERRA)."

Under FERC Order 719-A, demand response resources served by large electric distribution companies (>4 million MWh) are permitted to participate in wholesale markets unless their RERRA — such as a state regulatory commission — prohibits it. DR resources served by small EDCs (<4 million MWh) are prohibited from participation without RERRA approval.

PJM's Chantal Hendrzak presented the proposed charter, saying the current problem statement and issue charge on DER is "very narrow" and should be broadened to incor-

Continued on page 30

# Report Decries Rising Tx Costs in PJM; Seeks Transparency on TO Projects

Continued from page 28

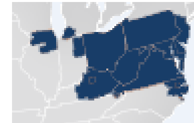
planning processes as well."

"This is a complex issue and one we continue to work through with our stakeholders. It is important to note that there is an active FERC proceeding right now," PJM spokesperson Paula DuPont said. She pointed to Planning Community – an online communications platform – and the new Manual 14F: Competitive Planning Process, saying they "demonstrate the value we place on transparency."

AMP acknowledged that PJM is not alone in seeing increasing transmission costs. But "this supplemental cost category is unique to PJM and those are the ones we really have an issue with because they lack the same rigorous oversight process," said Lisa McAlister, AMP's senior vice president and general counsel.

### MISO 'Out-of-cycle' Controversy

TO-proposed projects also have generated controversy in MISO. In 2015, the RTO approved a $187 million "out-of-cycle" project by Entergy in Lake Charles, La. Transmission developers complained that they had been denied an opportunity to compete on the project, which Entergy had argued was an "immediate need" and thus could not wait for the RTO's next Transmission Expansion Plan. The complaints led the RTO to change the rules for dealing with out-of-cycle proposals under a new "expedited review" procedure that was added to its transmission planning manual (Business Practices Manual 20) in May 2016. (See *Ideas to Reform MISO Out-of-Cycle Process Emerge*.)



# MRC/MC Briefs

*Continued from page 29*

porate issues such as microgrids, coordination with EDCs, the visibility of non-wholesale resources and the pending FERC Notice of Proposed Rulemaking on DER and energy storage (RM16-23, AD16-20). (See *FERC Rule Would Boost Energy Storage, DER*.)

Hendrzak said special sessions of the Market Implementation Committee are not the right forum for the issues, which affect markets, operations and planning.

FirstEnergy's Jon Schneider said the additional language was necessary to ensure the involvement of EDCs. "We think it's important to have the right folks at the table, specifically distribution operators," he said. "We don't think it's appropriate to assume that transmission operators will fully represent the interests of distribution utilities."

"There is nothing that PJM does that would violate a reliability rule at the distribution company," responded Direct Energy's Marji Philips. "My concern is this is a very evolving industry. ... To flatly say ... that we're not going to even talk about something because it violates an existing rule today doesn't do anyone any good. The purpose of PJM is to provide a platform for discussion."

Several stakeholders were concerned with another addition to the charter, which would require the subcommittee "proactively collaborate with states." American Municipal Power's Steve Lieberman said that commitment could lead to conflict about favoritism or prioritization.

"With 13 states [in PJM], if two of them feel you weren't as proactive with them as you were with the other 11, then things could start to snowball unnecessarily," he said.

Susan Bruce, who represents the PJM Industrial Customer Coalition, objected to the charter's definition of DER including any generation or storage resource "behind a load meter."

"Visibility into an industrial customer's behind-the-meter generation that becomes visible to the world gives them a competitive disadvantage, and that's a sensitivity that we would hope that PJM would respect for retail customers that are looking to just mind their own business, support their own operations," she said. "The principle of what goes on behind a customer's meter really is not anyone else's business. It's their economic decision from that perspective."

**"As far as we're concerned, this issue is not going away. ... If you want to get it over with quickly and not waste any more time, just vote."**

**Joe Bowring, Independent Market Monitor**

Scarp found security in FirstEnergy's amendment.

"If we're going to delete that friendly amendment, I'm not sure I can still support the [proposed charter] because I don't want to guarantee DER participation in the wholesale market. I think that's a little bit strong when there's lots of other things going on," he said.

Hendrzak said staff will consider the comments in revising the charter before seeking an approval vote next month.

## MTSL 'Not Going Away'

The Monitor sought to resume a debate on calculating the minimum tank suction level (MTSL) for black-start units, arguing that the vote at September's MIC meeting to forego changes was "clearly wrong." However, Ruth Ann Price of the Delaware Division of the Public Advocate, who intends to sponsor the Monitor's proposal, asked Bowring to delay his comments until the issue can be brought back to the committee after further consideration. (See "MTSL Revisions Kaput," *PJM Market Implementation Committee Briefs: Sept. 13, 2017*.)

Greg Poulos, the executive direction of the Consumer Advocates of the PJM States, explained that he had advised his membership "that this might not be the best time" to bring up the issue, which represents a relatively small amount of money, when there are many larger topics being debated.

Still, proponents warned that the issue wasn't dead.

"There is a bit of heartburn if this comes off the table," Bruce said. "To the extent that this is a vehicle being used for resilience, we would hope that there would be explicit recognition of that fact, that we are paying for this as a service."

"As far as we're concerned, this issue is not going away," Bowring said. "It's being postponed for a meeting or two. If you want to get it over with quickly and not waste any more time, just vote."

## 'Jump Ball' on IA Changes Indicates Compromise Possible

None of six proposals considered by the Incremental Auction Senior Task Force won support of more than 39% of those taking part in a recent poll, but half the respondents called for some change to the status quo, giving some stakeholders hope that the issue is not dead. (See *Consensus Fades on PJM Incremental Auction Solution*.)

PJM's Brian Chmielewski, who administers the task force, said the "jump ball" suggests that compromise is possible.

"Ending up with the status quo from a customer standpoint is not the right result," Bruce said. "In the interest of not ending up with status quo, we are willing to negotiate, so I hope we get a chance to do so."

"In the old days, we all gave blood," said Philips, whose company proposed the problem statement that founded the group. "It looks like nobody wants to give blood anymore. The art of compromise is part of this process, and I hope we haven't lost it."

The group's next meeting is Oct. 17.

## Stakeholders Endorse Manual Revisions

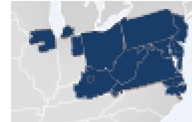
Stakeholders endorsed several manual revisions and other operational changes:

The charter for the Primary Frequency Response Senior Task Force. (See "Primary FR Task Force Begins July 25," *PJM OC briefs: July 11, 2017*.)

Tariff and Operating Agreement revisions to clarify definitions developed through the

*Continued on page 32*

## PJM NEWS



# PJM Pressed on Plans to File Capacity Changes

*By Rory D. Sweeney*

VALLEY FORGE, Pa. — With a myriad of proposals emerging to revamp PJM's capacity market, stakeholders are focused on what the RTO will do, but staff aren't tipping their hand.

Attendees at last week's meeting of the Capacity Construct/Public Policy Senior Task Force (CCPPSTF) peppered PJM's Stu Bresler with questions about his plans should stakeholders decide, after nearly a year of discussion, that the capacity market is better in its current design than anything else proposed. The RTO has proposed a two-stage "repricing" process that would ignore units that don't clear the initial auction but clear in a second auction in which subsidized units are removed. Those so-called "in-between" units still wouldn't receive a capacity commitment. (See *NOVEC Offers 10th Capacity Proposal*.)

Stakeholders fear that, short of a clear mandate on which proposal to file with FERC for approval, PJM plans to file its own rather than maintain the status quo. They pressed Bresler to at least hint at PJM's inclination, but he repeated that he would not be able to "definitively say" what staff will recommend to the Board of Managers by the next meeting of the task force on Oct. 16.

"It depends on too many factors," he said. "We need to defend our markets."

"It puts us all in the same predicament because we're all trying to prevent something that we don't really want to happen, and that is to have a unilateral filing made. We really want to avoid that," said John Rainey of Northern Virginia Electric Cooperative (NOVEC).

Rainey said the "quandary" is that PJM has requested stakeholders declare their preferences among the proposals without indicating "whether status quo is a viable option."

### IMM Plan Leads Poll

Earlier in the six-hour discussion, the latest of 18 such meetings since March, attendees reviewed the results of a long-awaited poll on 10 proposals. The Independent Market Monitor's extended minimum price offer rule (MOPR) proposal received the most overall support with a weighted average of 2.74. The three main two-stage "repricing" proposals from PJM, LS Power and NRG Energy received the next-highest levels of support of 2.05, 1.86 and 1.9, respectively.

The results also broke down how well the proposals addressed certain criteria, such as removing the price impact of a subsidy or driving a competitive outcome. The Monitor's proposal received the most support in all but one question: whether it accommodated state initiatives. There, PJM's design narrowly edged the other repricing proposals.

Four non-members also submitted responses. Their votes, which were presented separately from the member results, heavily favored a proposal from the Natural Resources Defense Council that would reduce the capacity requirement to the needs of the off-peak season and allow seasonal resources to account for the additional demand during the peak season.

Stakeholders complained that the structure of the poll was restrictive, so they provided comments to add nuance to their votes. However, PJM's stakeholder process purposefully withholds any comparison to the status quo until stakeholders have chosen an alternative proposal on which to vote.

### Strong Support for Status Quo

Some stakeholders, however, have already made up their minds.

Kristin Munsch, Illinois CUB | © *RTO Insider*

"We've given this a huge amount of consideration," said Carl Johnson, who represents the PJM Public Power Coalition. "How do we get across that we think that the current process is still the best process?"

Representatives from the Consumer Advocates of the PJM States and Old Dominion Electric Cooperative also said they preferred the status quo.

For the first time, the group hosted a substantial contingent of state representatives. In addition to Ruth Ann Price from Delaware's Division of the Public Advocate and John Farber of the Delaware Public Service Commission, who are often involved in stakeholder meetings, the audience included Bill Fields from the Maryland Office of People's Counsel, Kristin Munsch of the Illinois Citizens Utility Board and Brian Lipman from the New Jersey Division of Rate Counsel.

Lipman said his office's understanding was that PJM is "going to file something," which would indicate a change, and that the poll didn't make it "obvious" how to indicate support for the status quo.

PJM's Dave Anders, who administers the task force, acknowledged the complaints but declined to suggest any implications from the poll.

"I achieved consensus in a very difficult committee: Nobody liked the poll," he said. "You're all entitled to your interpretation of the results. I'm not trying to lead you [to any conclusions]."

Several stakeholders said their frustration was aimed at the topic, not Anders.

"Don't take this as a knock on the poll design," Johnson said. "I think it was a useful exercise, even though I didn't want to do it. … Sometimes you can't tease [your specific wishes] out until you have to make a decision about a question that's right in front of

*Continued on page 32*

**"... we're all trying to prevent something that we don't really want to happen, and that is to have a unilateral filing made."**

**John Rainey, Northern Virginia Electric Cooperative**

**PJM NEWS**

# PJM Pressed on Plans to File Capacity Changes

Continued from page 31

you."

NRG's Neal Fitch asked that the poll results be used to "winnow down" the proposals still in contention to focus attention on viable candidates. PJM's Adam Keech agreed that "maybe that's a good place to start," but Steve Lieberman of American Municipal Power, whose proposal polled near the bottom, cautioned against becoming narrowminded.

"Let's be careful about latching onto one side," he said.

To begin narrowing the options, Adrien Ford withdrew ODEC's proposal, which took a different approach to the repricing concept, but also didn't want to limit the focus.

"I struggle to agree that we should focus on the repricing proposals," she said.

### A Poll, not a Vote

Stakeholders also differed on how to treat non-member poll results. Calpine's David "Scarp" Scarpignato said it "doesn't mean much in regards to a pass/fail vote at the senior committee level." Direct Energy's Marji Philips said examining the results of an anonymous, four-voter poll is "inappropriate" and "could actually distract from the conversation."

However, EnerNOC's Katie Guerry said "it's actually helpful to see what non-members think" in comparison to member preferences. "It's so different," she said.

Farber reminded stakeholders that "this is a poll, not a vote," and that they should consider "the optics" of saying non-members can watch but not express opinions.

Anders requested that proposal sponsors indicate for the next meeting whether they intend to withdraw their proposal and, if not, to update the stakeholder matrix and develop a presentation with any changes. He also requested an "executive summary" describing the proposal.

"I don't want a book. I don't want 20 pages, but I want enough," he said.

# MRC/MC Briefs

Continued from page 30

Governing Documents Enhancement & Clarification Subcommittee.

- Manual 3A: EMS Model Updates and Quality Assurance. Revisions developed in response to a periodic review of the manual were endorsed by acclimation.
- Manual 6: Financial Transmission Rights. Revisions developed to comply with FERC's January order on financial transmission right forfeitures were endorsed in a sector-weighted vote with 4.26 in favor. (See "FTR Forfeiture Rebilling to Start," *PJM Market Implementation Committee Briefs: Sept. 13, 2017*.)
- Manual 11: Energy & Ancillary Services. Updated language to implement intraday generation offers were endorsed by acclimation. (See "PJM, IMM Agreement on Intraday Offers Seen as 'Massive Change,'" *PJM Market Implementation Committee Briefs: Sept. 13, 2017*.)
- Manual 14A: Generation and Transmission Interconnection Process. Revisions developed in response to a periodic review of the manual were endorsed by acclimation.
- Manual 14B: Regional Transmission Planning Process. Revisions change the method for calculating capacity export transfer limits. (See *Post-'Wheel' Changes Spark PJM Member Concerns*.)
- Manual 28: Operating Agreement Accounting. Changes eliminating redundant language and clarifying procedures associated with the implementation of intraday offers were endorsed by acclimation.

## Members Committee

### Stakeholders Approve Proposals

The Members Committee approved all proposals presented to them, including Tariff and Operating Agreement changes associated with PJM's dynamic schedule *pro forma* agreements. (See *Critics Protest PJM Dynamic Transfers Plan*.)

Members also approved Tariff and OA revisions on limitations of billing claims and changes extending the proposal window for short-term transmission projects from 30 days to 60 days. (See "RTEP Cycle Revisions Approved," *PJM PC/TEAC Briefs: July 13, 2017*.)

### Nominating Committee Nominations Approved

Stakeholders appointed a representative from each of the five stakeholder sectors to a one-year term on the committee. The committee will be tasked with considering whether to nominate Neel Foster, Howard Schneider and Sarah Rogers, whose terms expire next May, for re-election to the Board of Managers.

DC Energy's Bruce Bleiweis asked whether term limits could be waived "since we only have one original board member and we would not want him to leave" — a reference to Schneider, who has served on the board since its inception in 1997.

In 2015, PJM instituted term limits making board members ineligible for re-election once they either turn 75 or have served five three-year terms. (See *New PJM Board Member Elected, Re-election Eligibility Changed*.)

"I think waivers can be done through the board," PJM CEO Andy Ott said. "I think I'll just leave it at that."

### Reducing the Workload

MC Vice Chair Mike Borgatti of Gabel Associates announced that the MRC, MIC, Operating Committee and Planning Committee will be directed to determine if any timelines can be relaxed to "free up a little room in the schedule."

The directive came at the request of stakeholders, who have been complaining about the roughly 500 stakeholder meetings PJM conducts each year.

The workload concern is nothing new. In 2013, one member likened the stakeholders to ponies who will eat themselves to death if given unlimited access to food. (See *PJM Faces Resource Limits*.)

*— Rory D. Sweeney*

# Entergy Abandons Palisades PPA Termination

*By Amanda Durish Cook*

Entergy on Thursday said it will continue to operate the Palisades nuclear plant until early 2022 under the terms of its original agreement with Consumers Energy, representing an about-face for the companies after they announced last winter they planned to terminate the arrangement.

The two companies now say they will honor the terms of their 15-year power purchase agreement, which will keep the Michigan nuclear unit running until April 2022. The companies signed the deal in 2007 after Entergy paid Consumers parent CMS Energy $380 million for the plant.

Charlie Arnone, Entergy's top official at Palisades, said a recent ruling from the Michigan Public Service Commission factored heavily into the decision to terminate the buyout of the PPA. The Sept. 22 order (U-18250) permitted Consumers to issue securitization bonds for just $142 million of the $184.6 million in qualified costs needed to buy out the PPA. Consumers planned to make a one-time, $172 million payment to Entergy.

The PSC said Consumers' substitute capacity plan was not solid enough to grant the requested funds, and customer savings as a result of exiting the PPA wouldn't be as significant as the company had estimated.

"Having certainty around the replacement portfolio is integral to the commission's determination on whether a regulatory asset should be granted because it will ultimately affect electric reliability and whether savings will be achieved," the PSC wrote in its decision. "Accordingly, the replacement portfolio is the underpinning of the commission's evaluation and approach to the regulatory asset determination."

The PSC pointed out that major components of Consumers' plan — which included the purchase of a gas-fired plant and the expansion of the 60-MW Filer City coal plant in Michigan — "are either not near the conclusion of the regulatory process or, in the case of the gas plant purchase, have not yet been filed," even at the "tail-end" of a seven-month proceeding.

Consumers spokeswoman Katelyn Carey said the decision not to pursue a 2018 Palisades shutdown was made after careful review by both parties.

"Moving ahead under the terms of our current Palisades' power purchase agreement through 2022 is the best path forward. We appreciate the thoughtful, deliberate approach by all parties during the process and remain committed to delivering affordable, reliable, safe and clean energy to our customers across Michigan," Carey said in a statement.

Entergy last December announced it would close Palisades on Oct. 1, 2018, citing unfavorable market conditions for nuclear generation and more economic alternatives. (See *Entergy, Consumers Announce Closure of Palisades Nuke*.)

In a press release Thursday, the company said that it "remains committed to its strategy of exiting the merchant nuclear power business."

"We greatly appreciate the continued patience of our employees and the local community in Southwest Michigan throughout this regulatory process, and we will continue to focus on the plant's safe and reliable operations," Arnone said. "Entergy will continue to make all necessary investments and maintain appropriate staffing, in accordance with strict licensing standards."

Local media outlet MLive reported that some of Palisades' 600 employees celebrated the news.

Entergy said it expects to free up $100 million to $150 million in cash flow through keeping the PPA in place. Revoking the termination also enables the company to amortize and depreciate refueling outage costs and capital expenditures, with those cost to be included in operational results, rather than incurred as expenses.

As recently as late July, officials from the Nuclear Regulatory Commission were attending citizen meetings on Palisades' decommissioning process, with some nearby residents concerned about on-site storage of radioactive materials. NRC said that a reserve account for Palisades contained $425 million to cover the potentially 60-year decommissioning process.

During a February earnings call, Consumers CEO Patti Poppe said CMS would improve its financial position by terminating the Palisades nuclear plant PPA in favor of employing more energy efficiency, demand response, renewable power and coal-to-gas switching. She added that Consumers' substitute capacity plan for the "above-market" PPA would have replaced a single, big-bet capital project with many smaller options carrying less risk, and that CMS could replace other PPAs by building its own plants.

Palisades nuclear plant | *Entergy*

# PacifiCorp Seeks 1,270 MW of New Wind

By Jason Fordney

Western utility PacifiCorp is seeking bids for up to 1,270 MW of wind power to integrate into its system by the end of 2020.

Successful proposals for new or repowered wind projects must demonstrate that they qualify for the federal production tax credit and can achieve commercial operation by Dec. 31, 2020, according to the company's request for proposals.

The RFP is for "new or repowered wind energy interconnecting with or delivering to PacifiCorp's Wyoming system with the use of third-party firm transmission service and any additional wind energy located outside of Wyoming capable of delivering energy to PacifiCorp's transmission system that will reduce system costs and provide net benefits for customers." The minimum project size is 10 MW.

Portland, Ore.-based PacifiCorp said it would consider a "build-transfer" agreement where the developer assumes responsibility for construction and transfers the facility to PacifiCorp, or a power purchase agreement for up to a 30-year term.

"These new wind resources are a key part of the company's plan to both meet customer energy needs and continue our cost-conscious transition to less carbon-intensive energy," said Stefan Bird, CEO of PacifiCorp's Pacific Power unit.

PacifiCorp held a bidder conference on Oct. 2, with notices of intent to bid due Oct. 9 and benchmark bids due by Oct. 10. RFPs for Wyoming-based projects are due on Oct. 17 and non-Wyoming projects on Oct. 24. Agreements will be executed by April 16, 2018, according to PacifiCorp's schedule. The RFP requires approval from Utah and Oregon regulators.

PacifiCorp included in its 2017 integrated resource plan a proposal to add new wind resources. (See *PacifiCorp IRP Sees More Renewables, Less Coal*.) The wind energy will be procured in association with the new 500-kV Aeolus-Bridger/Anticline transmission line, a segment of PacifiCorp's Energy Gateway, a 2,000-mile transmission project that has been developed over the past 10 years. The wind solicitation is part of the IRP's "Energy Vision 2020" initiative, which also includes plans to repower and improve the utility's current wind portfolio.

PacifiCorp is a subsidiary of Berkshire Hathaway Energy and serves 1.8 million customers in six states through its Pacific Power and Rocky Mountain Power subsidiaries. PacifiCorp operates 72 generating units with nearly 11,000 MW of capacity, which is currently 62% coal, 15% natural gas, 7% wind and 5% hydro, and the rest coming from biomass, solar, nuclear and geothermal.

# Company Briefs

## Toyota, Mazda, Denso Form Partnership for EV Development

Toyota Motor, Mazda Motor and auto parts supplier Denso have formed a partnership to develop electric vehicles.

The new company, called EV Common Architecture Spirit, will cooperate on developing the architecture and components of electric cars, which both companies can use in developing their own vehicles.

Toyota is expected to start selling new electric vehicles in China within the next few years and has said that in the early 2020s it intends to introduce vehicles with next-generation solid-state batteries. Mazda has said it plans to launch an electric vehicle in 2019.

More: *Automotive News*

## Xcel Plans 300-MW Wind Farm for South Dakota

Xcel Energy has announced plans to build and own a 300-MW wind farm in northeastern South Dakota, putting it on track to be the first U.S. utility to surpass 10,000 MW of wind on its system.

Xcel expects to begin operating the Dakota Range project in 2021, pending regulatory approval.

More: *The Associated Press*

## Blackstone, Apollo Join Forces to Bid for Westinghouse

Private equity firms Blackstone Group and Apollo Global Management have joined forces to bid for bankrupt Westinghouse Electric, people familiar with the matter said.

A deal could value the company at close to $4 billion, sources said.

Buyout firm Cerberus Capital Management is also in talks with U.S. nuclear power plant component provider BWX Technologies about submitting a joint bid, according to sources who cautioned that an offer is not certain to materialize.

More: *Reuters*

## Westinghouse Objects to Georgia Power Ending Vogtle Contract

Westinghouse Electric asked a New York bankruptcy court last week to block Georgia Power from terminating a contract for it to build the two-unit Plant Vogtle and to keep a Chapter 11 automatic stay in place.

Southern Co., parent of Georgia Power, decided in August to take over construction of the nuclear plant, which has ballooned into a $25.2 billion project, after Westinghouse filed for bankruptcy.

Westinghouse filed an objection to a motion by Georgia Power seeking an order lifting the bankruptcy court's automatic stay so it can terminate the rejected engineering, procurement and construction agreement. Westinghouse said it didn't abandon the work.

More: *Atlanta Business Chronicle*

## Westar Shareholder Sues over Merger Plans with Great Plains

A Westar Energy shareholder has filed a federal lawsuit seeking to delay, and

Continued on page 35

# COMPANY BRIEFS

Continued from page 34

potentially stop, the utility's attempt to enact a merger of equals with Great Plains Energy.

David Pill seeks class action status, an injunction halting the proposed merger and documents that provide information on the merger's financial effect.

The two utilities announced the merger in July. It would create a $14 billion electric utility with 1.6 million customers. The Kansas Corporation Commission rejected in April an attempt by Great Plains to acquire Westar.

More: *Kansas City Business Journal*

## ABB to Buy GE's Industrial Solutions Business for $2.6B

ABB has agreed to buy General Electric's industrial solutions business for $2.6 billion to strengthen its foothold in the U.S. market for electrification products, which the Swiss engineering company said is worth $30 billion.

ABB CEO Ulrich Spiesshofer said the company will incur costs of $400 million over five years to integrate the GE unit.

He described the unit as being a non-core business or "unloved child" of GE, which will prosper as part of ABB.

More: *Bloomberg*

## SolarWorld Plans to Ramp Up Production Following ITC Ruling

Citing the U.S. International Trade Commission's ruling that opened the way for tariffs on PV imports, SolarWorld Americas has announced plans to ramp up manufacturing operations at its Hillsborough, Ore., plant and to rebuild its workforce.

The company said that by May 2018, it expects to employ about 500 workers, some of whom will be returning employees. A mass layoff earlier this year reduced the workforce at the Oregon plant from 800 workers to about 300.

However, a spokesperson for SolarWorld said the company is still exploring a possible sale of its business, as well as other options.

More: *Solar Industry*

## Westinghouse Used Unlicensed Designs for VC Summer

Westinghouse Electric and other contractors used construction drawings that were not approved by professional engineers to design parts of the nuclear reactors at the canceled V.C. Summer station, according to documents obtained by *The Post and Courier*.

In a project that cost $9 billion before its demise, the practice contributed to thousands of design revisions, construction setbacks, schedule changes and, ultimately, the project's cancellation, engineers said.

More: *The Post and Courier*

# FEDERAL BRIEFS

## Wind Turbine Blade Materials Market Forecasted at $37B

More than $37 billion worth of wind turbine blade materials is expected to be produced and purchased between 2017 and 2026, according to a report published last week by Navigant Research.

"Market Data: Wind Blade Materials Demand Forecast" finds downward pressure in the 10-year forecast in part because of the U.S. and China being in the midst of a peak period of installation, driven by a mixture of energy market demand and government incentive policies that encourage near-term growth but don't impact long-term growth trends.

The value of the wind turbine materials market is estimated at about $4.57 billion this year.

More: *Clean Technica*

## Report: Climate Change Contributing to Loss of $240B Yearly

The U.S. economy suffered a $240 billion a year loss over the past 10 years because of extreme weather, worsened by climate change, together with the health impacts of burning fossil fuels, according to a new report published online Thursday by the Universal Ecological Fund.

"The Economic Case for Climate Action in the United States" does not include September's three major hurricanes or 76 wildfires in nine Western states in its calculation. The report estimates the economic losses from September's events will top $300 billion.

The report cites doubling the current share of renewable energy as a low-carbon solution that would benefit the U.S. economy. It says doing so would create 500,000 new jobs, while improving air quality and reducing health costs.

More: *National Geographic*

## EEI Supports Trump's Tax Reform Efforts

The Edison Electric Institute weighed in Wednesday in favor of the tax reform framework proposed by President Trump and congressional Republicans.

"EEI's member companies strongly support tax reform because we believe that a simpler tax code, broader tax base and lower tax rates will grow the economy and increase the competitiveness of the United States, support job creation in America and benefit our customers," EEI President Tom Kuhn said in a statement.

Kuhn said the electric power industry stands ready to work with the Trump administration and Congress on tax reform solutions.

More: *Edison Electric Institute*

Continued on page 36

# FEDERAL BRIEFS

Continued from page 35

Present and former FERC commissioners gathered last week to celebrate the agency's 40th birthday. From left to right: Philip Moeller, Elizabeth Moler, Norman Bay, Colette Honorable, Charles Trabandt, James Hoecker, Cheryl LaFleur, Neil Chatterjee, Robert Powelson, Vicky Bailey, Joseph Kelliher, Tony Clark, John Norris, Suedeen Kelly and C.M. "Mike" Naeve. | *FERC*

## House Investigating Russia's 'Green Initiatives' on Social Media

The House Science and Technology Committee asked Facebook, Twitter and Alphabet on Wednesday to turn over information about Russian entities that may have bought antifracking advertisements.

Chairman Lamar Smith, a Texas Republican and climate change denier, asked the companies' CEOs to supply by Oct. 10 documents that detail the involvement of Russian-based or funded entities detected on their platforms, information on ads they purchased and any communications pertaining to ads advocating for "so-called green initiatives."

In a letter to the CEOs, Smith said the committee is concerned that social media messages "negatively affected certain energy sectors, which can depress research and development in the fossil fuel sector and expanding potential for natural gas."

More: Reuters

## Zinke Pursuing Major Reorganization of Interior Dept.

Interior Secretary Ryan Zinke said he is pursuing a major reorganization of his department that would place most of its decision-making outside Washington and move several agencies, including the Bureau of Reclamation and Bureau of Land Management, to undetermined Western states.

Ryan Zinke

In a speech to the National Petroleum Council, Zinke said one-third of the department's employees are not loyal to him and President Trump and that he is working to change the department's regulatory culture to be more business-friendly.

Zinke said he wants to issue speedier permits for oil drilling, logging and other energy development.

More: The Associated Press

## Residential Electricity Prices Rise 3% in First Half of 2017

Residential electricity prices averaged 12.8 cents/kWh during the first six months of 2017, an increase of about 3% compared with the same period last year, according to data from the U.S. Energy Information Administration.

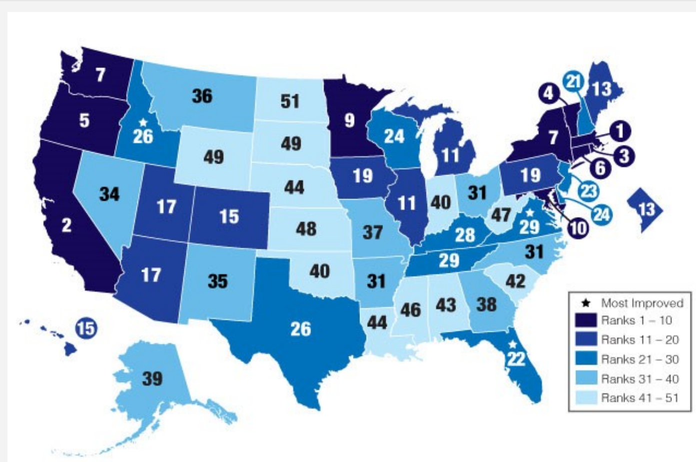
Alaska and Hawaii had the highest residential electricity prices in the U.S., averaging 18.1 cents/kWh and 23.3 cents/kWh, respectively. The prices were 5% and 9% higher respectively, compared with the same period in 2016.

The six states in the New England region have the second-highest residential electricity prices in the U.S. New England's average residential electricity price was 0.5% higher than during the same period last year. This comes after a 3% decline in average annual New England prices during 2016.

More: Energy Information Administration

# STATE BRIEFS

## Report Names Top States For Energy Efficiency




| *ACEEE*

Massachusetts ranks as the No. 1 state in the nation for energy efficiency, followed by California, Rhode Island, Vermont and Oregon, according to a report released Thursday by the American Council for an Energy-Efficient Economy.

The "State Energy-Efficiency Scorecard" finds Idaho, Florida and Virginia are the three most-improved states. The other most-improved states include Oklahoma, Utah, Nevada, Louisiana, Oregon and Kentucky.

California, Massachusetts and New York led the way in energy-efficient transportation policies for the second consecutive year.

More: ACEEE

Continued on page 37

# STATE BRIEFS

Continued from page 36

## CALIFORNIA

### Brown Contemplating Ban on Internal-Combustion Engines

Gov. Jerry Brown is interested in barring the sale of vehicles powered by internal-combustion engines, Mary Nichols, chairwoman of the state's Air Resources Board, said in an interview.

Nichols said such a ban in the state, which registered more than 2 million new passenger vehicles last year, is at least a decade away.

"I've gotten messages from the governor asking, 'Why haven't we done something already?'" she said.

More: Bloomberg

### Study: $40M to Install Solar-Plus-Storage in San Francisco

Equipping multiple community buildings at 12 sites in San Francisco to provide power with solar-plus-storage systems for use during a power outage caused by a major earthquake would cost $40 million, according to a new city study.

Jessie Denver, energy program manager with the Department of the Environment, which is spearheading the effort in partnership with energy consultant Arup, said the system sizes are scoped to provide critical loads for about three to five days, but not the electrical needs of the entire buildings.

The city presently does not have solar-plus-storage systems in place and would use diesel generators in the event of a major outage.

More: San Francisco Examiner

## MAINE

### Paper Mill Energy Manager Nominated for PUC

Gov. Paul LePage on Wednesday nominated Randall Davis, the energy manager at Sappi North America's Somerset paper mill, to fill a vacant seat on the Public Utilities Commission.

Davis, who has worked for Sappi for 38 years, spent the past six years managing electric and natural gas contracts and other energy matters to maximize the mill's revenue. He would fill the vacancy left when Carlisle McLean resigned in June.

Last February, LePage said he would fire all three current commissioners, whom he appointed, if he could. He was upset over a rooftop solar policy they enacted, which he said would massive expand the industry and hurt businesses and consumers.

More: Portland Press Herald

## MARYLAND

### State Sues EPA over Air Pollution from Upwind States


Ben Grumbles | Maryland

The state filed a federal lawsuit against EPA on Wednesday demanding it address air pollution that blows in from dozens of power plants in upwind states.

The suit wants EPA to provide stricter pollution controls for plants in Indiana, Kentucky, Ohio, Pennsylvania and West Virginia, which officials argue is required to uphold the Clean Air Act. It seeks to require 36 generating units at 19 plants in upwind states to install the same scrubbers and other air-cleaning technology the state requires for plants within its borders.

The Department of the Environment estimates 70% of ozone pollution in the Baltimore and D.C. regions blows in from other states, Secretary Ben Grumbles said.

More: The Baltimore Sun

## MISSISSIPPI

### City Utility Attributes Plant Closing to MISO

The city of Greenwood's municipal utility will close its power plant in May because it says demand for its electricity fell when other public utilities in the state joined MISO.

Greenwood Utilities says its Henderson Station, which is more than 50 years old, is no longer economically viable. The plant currently produces 3% of the electricity Greenwood buys from the Municipal Energy Agency of Mississippi.

More: The Associated Press

## NEW HAMPSIRE

### Bill Filed to Prevent Electric, Gas Cos. from Owning Water Cos.

State Rep. Renny Cushing is filing legislation to prevent water companies from being purchased by gas and electric companies in response to a $1.675 billion deal announced in June by Eversource Energy to purchase Aquarion Water.

The Public Utility Commission said it intends to produce an order ruling on the sale by Oct. 25. Cushing, who is an intervener in the commission's review of the acquisition, argues a gas or electric company would become too powerful if it could own a water company too.

Cushing said he doesn't know if language can be put in the final bill that would undo the commission's approval of the sale, if it does so in October.

More: Seacoastonline.com

## NEW YORK

### Rebates Drive 74% Increase in EV Sales

The state has seen a 74% increase in electric car sales from April to June compared with the same period last year as a result of its Drive Clean Rebate initiative, Gov. Andrew Cuomo announced Wednesday.

The initiative, which supports the governor's goal to reduce greenhouse gas emissions 40% by 2030, provides state residents with a rebate of up to $2,000 for the purchase of a new electric car from participating dealers.

In April through June 2016, 1,476 electric cars were sold. During the same period in 2017, when the initiative began, 2,574 electric cars were sold.

More: Gov. Andrew Cuomo

### Army, Community Oppose More Wind near Fort Drum

U.S. Army officials and community leaders are coming out against building more wind turbines in Fort Drum's airspace, saying existing turbines are making aircraft and weather systems unreliable and ultimately could impact military training and readiness.

Continued on page 38

# STATE BRIEFS

Continued from page 37


| Department of Defense

Brian Ashley, executive director of the Fort Drum Regional Liaison Organization, said two existing wind developments near Fort Drum show up on aircraft radar as "little flickering lights in a band where those wind turbines are located," and that pilots and air traffic controllers are electronically blacking out the spots. "If you have significant numbers of black holes on the radar screen, then you've really impacted the ability of that radar to be useful for training and for operations," he said.

Currently, there are eight proposed wind projects from northern St. Lawrence to northern Oswego counties. State Assemblywoman Addie Jenne is meeting with stakeholders to figure out which of the projects would most affect Fort Drum's training capabilities and drafting legislation to prevent those developments from receiving state subsidies.

More: North Country Public Radio

## OHIO

### Cincinnati Mayor Plans to Build Largest Municipal Solar Array in US

Cincinnati Mayor John Cranley on Thursday announced plans to build the largest municipal solar array in the country.

The array, which is estimated to cost $40 million to $45 million before federal incentives, would produce 25 MW of power and cover 125 to 150 acres of city-owned land, including 60 acres at Lunken Airport and 60 acres at Center Hill Landfill. The city hopes to start construction in the spring of 2019.

The project still requires the City Council's approval and permission to from the Federal Aviation Administration to install solar panels at Lunken.

More: WLWT

## WYOMING

### Council: Plan for New Mine Fails to Protect Water, Land

An independent citizens council ruled Wednesday that Ramaco's plan for the first proposed coal mine in the state in decades fails to protect against water and land impacts in and outside the mine permit boundary.

The Environmental Quality Council, which in August told state regulators that Ramaco's plans for the Brook Mine were incomplete, voted on the steps necessary for Ramaco to go forward with its mine. The company must amend its permit application to address the concerns and submit it again to state regulators before it can receive a coal mining permit.

Ramaco CEO Randall Atkins said the council's decision would require the company to start from scratch after almost five years of effort and having complied with all the state's permit rules and regulations. He said he was confident the state courts would not let the council's decision stand.

More: Casper Star Tribune

# Perry Orders FERC Rescue of Nukes, Coal

Continued from page 1

tionally approved a $3.7 billion increase in the federal loan guarantees for the over-budget and behind-schedule Vogtle nuclear project. Georgia Power and its partners, Oglethorpe Power and the Municipal Electric Authority of Georgia, had previously received guarantees of $8.3 billion to support construction of Vogtle Units 3 and 4.

In a letter to FERC, Perry cited coal and nuclear retirement statistics and DOE staff's recommendations in the grid study it released in August. The study said FERC "should expedite its efforts with states, RTO/ISOs and other stakeholders to improve energy price formation in centrally organized wholesale electricity markets" to ensure "baseload" coal and nuclear generators receive compensation for their "resilience" to fuel supply disruptions. (See *Perry Grid Study Seeks to Aid Coal, Nuclear Generation*.)

Coal generators typically keep 60 to 90 days of fuel at plant sites; operators of nuclear plants refuel every 18 to 24 months.

### 60 Days to Act

"Now that a quorum has been restored at the commission, I am confident that the commission will act in an expeditious manner to address this urgent issue," Perry said his letter. "To that end, in the enclosed NOPR, I direct the commission to consider and complete final action on the rule proposed therein within 60 days from the date of the publication of the NOPR in the *Federal Register*. As an alternative, I urge the commission to issue the proposed rule as an interim final rule, effective immediately, with provision for later modifications after consideration of public comments."

Perry said the final rule should take effect within 30 days of publication in the *Federal Register* and that each RTO and ISO submit a compliance filing within 15 days of the effective date of the rule.

Perry began his letter by invoking President Trump's campaign slogan, saying "America's greatness depends on a reliable, resilient electric grid powered by an 'all of the above' mix of generation resources."

The secretary went on to cite the 2014 polar vortex, Superstorm Sandy and Hurricanes Harvey, Irma and Maria as evidence that "much more work needs to be done to preserve these fuel-secure generation resources" to ensure sufficient power, "voltage support, frequency services, operating reserves and reactive power."

"Distorted price signals in the commission-approved organized markets have resulted in under-valuation of grid reliability and resiliency benefits provided by traditional baseload resources, such as coal and nuclear," he said. "The rule will ensure that each eligible reliability and resiliency resource will recover its fully allocated costs and thereby continue to provide the energy security on which our nation relies."

Continued on page 39

# FERC Opens Proceeding over Entergy Nuclear Power Sales

*By Amanda Durish Cook*

FERC last week opened settlement proceedings to address a two-state complaint against an Entergy subsidiary's proposed return on equity for nuclear power sales to four other company affiliates.

Utility commissions in Arkansas and Mississippi earlier this year filed a protest claiming that the ROE used by System Energy Resources Inc. (SERI) in its current formula rate for energy sales from the Grand Gulf nuclear plant is excessive and outdated. They've asked FERC to open an investigation to determine the fairness of the return.

SERI owns 90% of the 1,400-MW facility in Port Gibson, Miss., and sells the plant's output under a FERC-regulated wholesale rate to Entergy Arkansas, Entergy Mississippi, Entergy Louisiana and Entergy New Orleans under a power sales agreement.

The commission said it will forward the matter to a still-unnamed administrative law judge who will oversee settlement discussions and report whether parties can negotiate a fair ROE. Barring a settlement, the issue would move to a trial-type evidentiary hearing (EL17-41).

Grand Gulf nuclear plant | *Entergy*

Regulators from the two states contend that Grand Gulf should sell its energy to Entergy affiliates at cost-based rates "to avoid overcharging retail customers." They point out that SERI's current ROE of 10.94% was calculated using an average of three discounted cash flow analyses produced in 1996 and seek to reduce the figure to 8.5%, in part reflecting a reduction in income tax from $125 million to $97 million.

A "re-examination of [the] current cost of equity is more than due," the two states argued, especially considering that the Nuclear Regulatory Commission last year extended Grand Gulf's license another 20 years, until 2044.

In opening the proceeding, FERC brushed aside SERI's argument that its existing ROE falls into the "zone of reasonableness" and does not require adjustment. The commission said it "has repeatedly rejected the assertion that every ROE within the zone of reasonableness must be treated as an equally just and reasonable ROE."

### Depreciation Rates also Under Review

The proceeding will also include an examination of SERI's depreciation rates for Grand Gulf.

In a separate August FERC filing in August prompted by the license extension, SERI sought to revise Grand Gulf's depreciation rates to an average 2.66% under the same power sales agreement for the four Entergy utilities (ER17-2219). The current 2.85% depreciation rate was based on the assumption that plant would operate only until Nov. 1, 2024. The Arkansas and Mississippi commissions, along with 10% plant owner Cooperative Energy, argue that SERI has not provided enough support for the new rates.

While FERC has for now accepted SERI's proposed rates effective Oct. 1, it said its own review "indicates that a further decrease may be warranted" and consolidated the matter into the larger ROE settlement procedures.

# Perry Orders FERC Rescue of Nukes, Coal

Continued from page 38

### Polar Vortex

When PJM lost as much as 22% of its generating capacity to forced outages during the polar vortex, Perry noted, the RTO needed generation from coal plants scheduled for retirement to prevent rolling blackouts, with American Electric Power reporting that it deployed 89% of its coal units scheduled for retirement. Nuclear plants, he noted, had an average capacity factor of 95% during the crisis. He did not mention that some coal plants also were unable to operate because of frozen coal piles and other problems.

Perry cited DOE's January 2017 Quadrennial Energy Review, which reported that 37 GW of coal capacity retired between 2010 and 2015, more than half of all generation retirements during the period. The report predicted coal would also represent half of the 34.4 GW of retirements projected between 2016 and 2020, with natural gas plants (30%) and nuclear (15%) making up most of the remainder.

The secretary quoted NERC's warning that "premature retirements of fuel-secure baseload generating stations reduces resilience to fuel supply disruptions." Unmentioned was that NERC's most recent State of Reliability report concluded "bulk power system reliability remained … adequate" in 2016, repeating the group's findings from 2013–2015.

At a 2013 technical conference, FERC stopped short of NERC's warning, saying that the shift in generation from coal toward gas and renewables "may result in future reliability and operational needs that are different than those of the past." (See *Capacity Market Attracts Praise, Criticism at FERC*.)

"The fundamental challenge of maintaining a resilient electric grid has not been sufficiently addressed by the commission or the commission-approved ISOs and RTOs, and the lack of a quorum at the commission has undoubtedly thwarted the issuance of rules," Perry continued in his letter. "But the continued loss of baseload generation with on-site fuel supplies, such as coal and nuclear, must be stopped. These generation resources are necessary to maintain the resiliency of the electric grid. Failure to act expeditiously would be unjust, unreasonable and contrary to the public interest."

Asked for comment, FERC spokeswoman Mary O'Driscoll said only, "We have received the proposal and are reviewing it."

DOE's proposed rule would require RTOs and ISOs to implement market rules that allow the generators with a minimum 90-day fuel supply on site "full recovery of costs."

"These resources must be compliant with all applicable environmental regulations and are not subject to cost-of-service rate regulation by any state or local authority," Perry said. "The rule requires the organized markets to establish just and reasonable rate tariffs for the full recovery of costs and a fair rate of return."

Analysts at ClearView Energy Partners said

Continued on page 40

# Perry Orders FERC Rescue of Nukes, Coal

Continued from page 39

Perry's action makes it likely that some method of compensating "essential reliability services" (ERS) could be in place in RTO markets by next spring, "although we caution that it may differ from the NOPR and reflect substantive variations across regions." NERC has described ERS as including frequency and voltage support, and ramping capability.

"In our view, DOE has placed the essential reliability services issue at the top of FERC's near-term electric agenda (even though we thought FERC might be leaning that way anyway). We also believe this rulemaking pushes consideration of the non-peak pricing proposal sketched out by PJM and other general price formation rulemakings aside between now and December, at least, should FERC hit DOE's aggressive timeline."

### Industry Reaction

Predictably, Perry's order sparked widely divergent reactions.

Maria Korsnick, CEO of the Nuclear Energy Institute, praised what she called Perry's "decisive … remarkable action," which she said addresses two "fundamental problems" in the electric sector.

"One is markets that fail to value everything that is important to our electricity system. … Our pricing system is badly broken and … is based almost entirely on short-term price. As a result, nuclear reactors, which provide benefits that everyone agrees we need, find themselves struggling to survive when the nation needs them most," she said.

"The other problem is that electricity is essential to modern life but only gets noticed if the electricity fails to flow, as has happened most recently in Texas, Florida and Puerto Rico. It is taken for granted, and it does not command the attention it needs from policymakers all across the nation. This course needs to change."

"We commend Secretary Perry for initiating a rulemaking by FERC that will finally value the on-site fuel security provided by the coal fleet," said Paul Bailey, CEO of the American Coalition for Clean Coal Electricity. "The coal fleet has large stockpiles of coal that help to ensure grid resilience and reliability. We look forward to working with FERC and grid operators to quickly adopt long overdue market reforms that value the coal fleet."

The American Wind Energy Association said Perry's proposal "would upend competitive markets that save consumers billions of dollars a year."

"The best way to guarantee a resilient and reliable electric grid is through market-based compensation for performance, not guaranteed payments for some, based on a government-prescribed definition," said Amy Farrell, AWEA's senior vice president for government and public affairs.

"This looks like federal cost-of-service regulation, and a major retreat from competition in electricity," said Rob Gramlich, a consultant who worked for AWEA for several years after serving as an aide for former FERC Chairman Pat Wood III.

Mary Anne Hitt, director of the Sierra Club's Beyond Coal campaign, said the NOPR ignores FERC's role as an independent agency.

"The Federal Power Act clearly states that FERC cannot favor one energy source over others in its rulemakings, and Perry's ask — without evidence or common sense — seeks to prop up dangerous coal and nuclear plants that can no longer compete in the wholesale market," she said. "We are prepared to take to court any illegal rule that props up dirty fossil fuel plants or weakens clean energy's market access."

Graham Richard, CEO of Advanced Energy Economy, said FERC should reject what he called a "Perry Energy Tax" on consumers.

"Simply put, this proposed rule has something for everyone to dislike. If you're a believer in competition and free markets, this rule would insert the federal government squarely into the middle of market decisions. If you are driven by keeping energy costs low, this rule would impose higher energy costs on consumers for no tangible benefit by forcing electricity customers to pay to keep uneconomic power plants in operation," Richard said. "Finally, if you are driven by innovation and technology, this rule purposefully puts a thumb on the scale for existing, century-old technology at the expense of modern advanced energy that is currently winning based on price and performance."

### RTO Reaction

ISO-NE spokesman Matthew Kakley said the RTO was reviewing the NOPR while it completes work on a fuel security study. "New England's wholesale markets have been competitive and brought forward the

Coal conveyor | *FEECO International*

resources necessary for reliable operations. With the region's resource mix evolving, ISO New England is conducting an operational analysis of fuel security risks under a range of potential resource scenarios, and we plan to release the study results next month."

SPP spokesman Derek Wingfield said the RTO was awaiting FERC's response to the NOPR. "As always, we remain committed to partnering with DOE, FERC and others in our industry to ensure our markets and other services are designed to protect our nation's electricity infrastructure," he said.

CAISO is aware of the NOPR and will continue working "with state and federal energy regulators and stakeholders to maintain and strengthen grid resiliency and reliability," spokesman Steven Greenlee said.

PJM, NYISO and MISO all said they were reviewing the directive.

"As you can imagine, with this just out, we'll need time to review, analyze and understand," PJM spokesman Ray Dotter said.

### Vogtle Guarantees

While Perry's NOPR is intended to preserve the current nuclear fleet, his approval of additional loan guarantees is intended to ensure that hopes for a new generation of units are not crushed under the weight of Vogtle's delays and cost overruns. Vogtle Units 3 and 4 are the first nuclear plants to be licensed and begin construction in the U.S. in more than three decades.

"I believe the future of nuclear energy in the United States is bright and look forward to expanding American leadership in innovative nuclear technologies," Perry said. "Advanced nuclear energy projects like Vogtle are the kind of important energy infrastructure projects that support a reliable and resilient grid, promote economic growth, and strengthen our energy and national security."

*Rory D. Sweeney, Jason Fordney, Peter Key, Amanda Durish Cook, Tom Kleckner and Michael Kuser contributed to this story.*

# FERC's Independence to be Tested by DOE NOPR

Continued from page 1

agenda. Perry's proposal would require that generators with 90 days of on-site fuel supply receive "full recovery" of their costs. (See related story, *Perry Orders FERC Rescue of Nukes, Coal*, p.1.)

Perry issued the NOPR under Section 403 of the Department of Energy Organization Act, subsection (a), which authorizes the secretary and the commission "to propose rules, regulations and statements of policy of general applicability with respect to any function within the jurisdiction of the commission."

But subsection (b) gives the commission "exclusive jurisdiction with respect to any proposal made under subsection (a)."

"Section 403 is pretty clear. What [Perry has] done so far is within his authority," said Douglas Smith, a partner with Van Ness Feldman who served as FERC general counsel from 1997 to 2001. "It's also clear that the final determination about what to do with a NOPR like this rests entirely with FERC."

The act also spells out FERC's independence. Section 401 (d) states that, "In the performance of their functions, the members, employees or other personnel of the commission shall not be responsible to or subject to the supervision or direction of any officer, employee or agent of any other part of" DOE.

### Does FERC have to Act?

The NOPR lists FERC docket number RM17-3, which was opened last December to consider fast-start pricing in RTO markets. (See *FERC: Let Fast-Start Resources Set Prices*.) But the commission filed the NOPR and Perry's accompanying letter to FERC in a new docket, RM18-1. Late Monday, the commission issued a notice setting an Oct. 23 deadline on comments on the proposal, with reply comments due Nov. 7.

The notice came after 11 industry groups representing natural gas, wind, solar, rural electric cooperatives and other technologies filed a motion in that docket opposing DOE's request and requesting a minimum 90-day comment period and a technical conference before the comment deadline. The groups said the deadline imposed by Perry — final action on the proposed rule within 60 days from its publication in the *Federal Register* — is "wholly unreasonable and insufficient."

Former FERC Chairman Jon Wellinghoff, now a renewable energy advocate and consultant, said in an interview that FERC can ignore the proposal without taking any action.

But others said the commission will almost certainly make some sort of formal response.

"I don't think they can ignore it. It would, No. 1, not be politically cricket," said former FERC Chairman and General Counsel James Hoecker. "Particularly since [interim FERC Chairman] Neil [Chatterjee] is from Kentucky and his former boss, Sen. [Mitch] McConnell [R-Ky.] has been pretty clear about wanting to soften the blows on the coal industry. I'm sure the commission will do something."

"Regardless of what legally the commission has to do, I think it's unlikely the commission is going to just stiff arm the secretary and the administration," agreed former Commissioner Tony Clark, now an adviser with Wilkinson Barker Knauer.

One reason for uncertainty is the recent turnover in the commission's membership: Chatterjee and fellow Republican Robert Powelson joined Commissioner Cheryl LaFleur on the commission in August. Republican nominee Kevin McIntyre and Democratic nominee Richard Glick are awaiting a Senate floor vote.

The commission has traditionally been independent and rarely decides issues on party lines. But some FERC watchers fear that could change because they believe the White House has already exerted its influence by dictating the selection of the commission's new general counsel, James Danly, and Chief of Staff Anthony Pugliese.

The two were named by Chatterjee, who is serving as interim chairman pending the confirmation of McIntyre, who was tapped by Trump to lead the agency. New chairmen typically select their own general counsel and staff chiefs. But at a news conference following the commission's meeting Sept. 20, Chatterjee suggested Danly — an Iraq War veteran who joined the commission from Skadden, Arps, Slate, Meagher and Flom — was not a temporary hire.

Asked whether Danly would remain in his position after McIntyre arrives, Chatterjee said of Danly, "I think his biography and service to his country speak for themselves,

FERC nominees Kevin McIntyre (left) and Richard Glick chat before their Senate confirmation hearing last month. | © RTO Insider

and at this time I don't anticipate any senior-level staffing changes."

### The Commissioners

Chatterjee, who like McConnell is from the coal state of Kentucky, has appeared sympathetic to Perry's claims that the grid's resilience is at risk from coal retirements.

In a podcast interview posted on the FERC website in August, Chatterjee said "baseload power … including our existing coal and nuclear fleet, need to be properly compensated to recognize the value they provide to the system."

He added, "as a nation, we need to ensure that coal, along with gas and renewables, continue to be part of our diverse fuel mix."

Whether the other commissioners share that view is unclear.

Asked at his confirmation hearing whether he agreed with Chatterjee, McIntyre said that "FERC is not an entity whose role includes choosing fuels for the generation of electricity."

Glick echoed McIntyre's position, adding that although the grid study released by DOE in August did not conclude that the loss of baseload generation had impacted reliability, "they also suggested it was something to keep an eye on and look for in the future."

"McIntyre and Chatterjee, I just think will have so much political pressure to pursue this, the expectation is that they will want to do so," said one former senior FERC official who asked not to be named. "Glick and LaFleur I would expect to be less inclined. The interesting one is Powelson. He's a pro-market person. … How will he reconcile competition with what is proposed here?"

Rather than pursuing a cost-of-service

Continued on page 42

# FERC's Independence to be Tested by DOE NOPR

Continued from page 41

approach, he said, the commission could adopt a more market-based approach that boosted prices for all capacity resources, including natural gas. "Then the gas folks end up winning just as much as coal and nuclear," he said. "My expectation is that Powelson would go more [for] that route."

### What Does Perry Want?

President Trump and Secretary Perry at a press conference in late June.

Smith said it was unclear whether Perry is seeking to ensure generating plants have fuel on site or is concerned about frequency response, inertia and other attributes of traditional baseload units.

"There's precious little detail in the proposed regulatory text about what exactly would be responsive," said Smith. "From FERC's perspective that may be good. It gives FERC more discretion … to determine what is plausibly responsive to this."

Ari Peskoe, senior fellow in electricity law at the Harvard Law School Environmental Law Program Policy Initiative, and a former FERC practitioner, said Perry raised more questions than he answered. "Is this cost-of-service ratemaking or is DOE suggesting that rate should be based on a plant's 'benefits and services?'" he asked in a series of tweets last week. "Does an eligible generator always receive this rate, or do they normally get paid LMP but receive this rate under certain circumstances? How does dispatch work if an eligible plant is not bidding into the market? Or is an eligible plant 'bidding' this special rate?"

If FERC issues a rule predicated on fuel supply and not on the type of fuel itself, some observers have noted, it could extend to gas plants that add a tank containing 90 days of fuel oil or those that sign firm pipeline contracts. (See Steve Huntoon's commentary, *Counterflow: Cash for Clunkers Redux*, p.3.)

The proposed "rule doesn't appear to have any real limiting principle, so nukes, coal and gas (so long as they kept on site diesel) could all qualify," said Montana Public Service Commissioner Travis Kavulla, former president of the National Association of Regulatory Utility Commissioners in a tweet.

Wellinghoff noted that solar can bid into PJM's capacity market with a discounted capacity value. "Can solar show it has 90 days of resource? That will be a very interesting question," he said.

### 'Just and Reasonable' Standard

If FERC were to act in response to Perry's proposal under Section 206 of the Federal Power Act, it would first have to make a finding both that current rules are not just and reasonable and that the new rules are, FERC legal experts say.

But the commission won't find that evidence in Perry's NOPR.

"The NOPR does not devote much attention to connecting the policy arguments in the preamble of the NOPR to the specific predicate findings required under Section 206, i.e., that current rates are not just and reasonable," Smith said. "FERC would need to connect those dots."

The evidence also is far from clear cut in the DOE grid study released in August. The study quoted NERC's warning that "premature retirements of fuel-secure baseload generating stations reduces resilience to fuel supply disruptions." But it also noted that NERC's most recent State of Reliability report concluded "bulk power system reliability remained … adequate" in 2016, repeating the group's findings from 2013–2015.

"If there's some ability to make a showing that plants with on-site fuel contribute to resilience and reliability … it may be appropriate to compensate that value, but I have yet to a see a study that does that," said Wellinghoff. "That's why it was shocking to see this letter on the heels of the DOE grid study. It seems to be contradictory to that study."

"DOE is calling this a proposed rule, but it's not," Peskoe said. "There's no rule; just an impossible timeline for FERC/RTOs to figure something out. And since there's no proposed rule, I don't think FERC can proceed to a final rule; DOE's timeline is practically and legally impossible."

Peskoe quoted from the Administrative Procedure Act, which says a proposed rule must "provide sufficient factual detail and rationale for the rule to permit interested parties to comment meaningfully."

"The two-sentence description of the proposed 'Reliability and Resiliency Rate' raises many questions that DOE doesn't even attempt to answer," Peskoe said. "There's a legal question about what [Perry's] document actually is. Can FERC treat it merely as a filed comment?

"DOE's so-called proposed rule doesn't say that current rates are not just and reasonable; hence, [there is] no authority for FERC to take final action," he continued. "It's not just that DOE's notice is missing the magic words; it has no discussion of current RTO tariffs."

Clark said that whatever FERC decides, it is unlikely to act in the short time frame Perry called for. "If they did something major within just the context of this rulemaking on a very expedited timetable, they'd probably open themselves to some litigation risk, because you have a fairly vague rule that people are being asked to comment on."

### Impact of the Proposal

Kavulla said Perry's proposal would replace competitive markets with "FERC-administered cost of service regulation," making it "the largest change to electricity regulation in decades."

"Some conservative reforms might have tried to take away or mitigate subsidized resources' perks. Instead, this reform is sort of the [DOE] equivalent of the Oprah 'you get a car, and you get a car. And you? A car!' approach," he added.

"The practical effect of implementing the order as written would be to basically destroy the wholesale energy markets as we know them, and I don't think anyone wants that," Wellinghoff said. "Ultimately it will cause prices to go up significantly for consumers."

Former Commissioner Nora Mead Brownell, a Republican, said she was "shocked and frankly disappointed" by the proposal. "If Republicans are presumably about fiscal responsibility and markets, this totally contradicts that," she said in an interview.

"It's the antithesis of good economics. It's

Continued on page 43

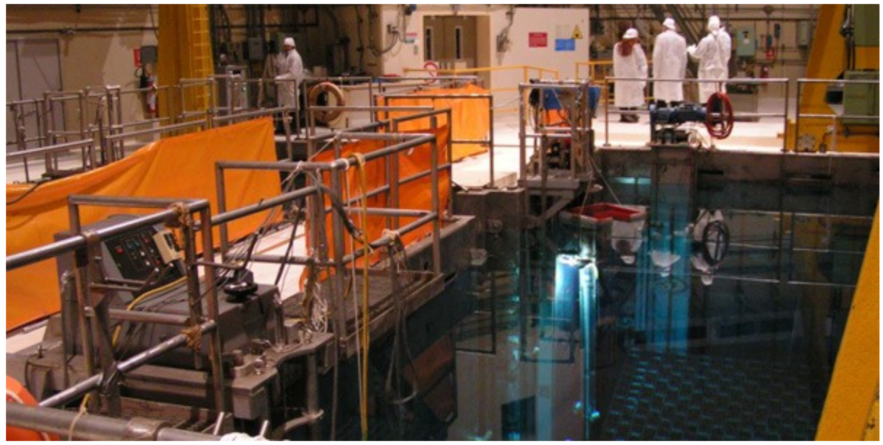
# FERC's Independence to be Tested by DOE NOPR

Continued from page 42

going to destroy the markets [and] drive away investment in new more efficient technologies, whether they be generating plants or energy efficiency, at a cost to business and ratepayers that is astronomical."

"If you want to throw $80 or $90 billion at something, spend it on cybersecurity."

Brownell noted that the coal and nuclear plants in question are fully depreciated and in many cases received stranded cost compensation in states that adopted retail choice. Before the rise of shale gas and renewables cut clearing prices, "these plants made a lot of money," she said. "In what other industry would we save old, fully depreciated, inefficient plants that have been paid for many times over? Markets are supposed to allocate resources efficiently and this totally distorts any valid signals you might have."



Spent nuclear fuel pool | *Simone Ramella via Wikimedia Commons*

Clark said the NOPR, like the DOE grid study, "puts another exclamation point" on the issue of price formation in the markets.

"Is the commission going to do more than it was already prepared to do? That I don't know," he said.

"It's pretty clear it would be challenging to the market design as it exists today, like the New York and Illinois [zero-emission credits for nuclear plants are] challenging to those markets. You'd be talking about nuclear plants across the entire footprint of restructured markets, and most coal plants too."

*Michael Brooks contributed to this article.*

# FERC Rejects 'Carve-Out' from SPP Congestion, Loss Charges

*By Rich Heidorn Jr.*

FERC last week rejected a request by several SPP members that they be exempted from congestion and marginal loss charges under a grandfathered contract signed before they joined the RTO (ER14-2850-008, ER14-2851-008).

The commission ruled Sept. 26 that Missouri River Energy Services, Basin Electric Power Cooperative, Western Area Power Administration – Upper Great Plains (Western-UGP), Heartland Consumers Power District and Nebraska Public Power District (NPPD) were ineligible for "carve-out treatment" under the SPP Tariff and a 1977 transmission service contract between NPPD and Basin Electric.

The 1977 contract arose from construction of NPPD transmission needed to deliver power to Western-UGP and Lincoln Electric System from the Missouri Basin Power Project — a venture owned by six public power and cooperative utilities that includes the 1,710-MW Laramie River coal generator, the Grayrocks Dam and reservoir, and more than 500 miles of EHV transmission.

The commission ruled that the utilities were not eligible for a carve-out, although it acknowledged that the section of the SPP Tariff governing grandfathered agreements (GFAs) was "ambiguous."

The commission rejected the utilities' claim that they should be exempted from the charges because FERC had previously granted carve-out status to Lincoln, which was also a party to the 1977 contract.

"Though parties to the same contract, Lincoln Electric and [the] parties seeking carve-out treatment are in a fundamentally different position with regard to the costs of participating in SPP because of when each party chose to join SPP," the commission said. "Lincoln Electric, an SPP member since 2008, was subject to a forced transition to a day-two energy market when SPP adopted the Integrated Marketplace in 2014 and, therefore, received carve-out treatment along with several other non-jurisdictional GFAs that were also subject to a forced transition. On the other hand, [the] parties seeking carve-out treatment were not subject to a forced transition to a day-two energy market when they joined SPP after the commencement of the Integrated Marketplace. Parties seeking carve-out treatment had a choice of whether or not to subject themselves to SPP's market rules."

## Network Agreements Approved

In a separate order Sept. 25, the commission approved SPP's unexecuted network integration transmission service agreements with Kansas Power Pool (KPP) effective June 1, 2017, and its executed network operating agreements with KPP, Midwest Energy Inc., Mid-Kansas Electric Co. and Westar Energy effective Sept. 1, 2017 (ER17-2032-002, ER17-2038-002).

KPP protested the service agreements' inclusion of language describing KPP's potential liability for credit payment obligations. KPP said that SPP staff had informed it that transmission studies had indicated it would not be responsible for any credit payments because they would be fully covered by base plan funding.

The commission rejected KPP's complaint, saying the company could be liable for credit payments because final cost information is not available for one upgrade under the agreements, the Woodward EHV 138-kV phase shifting transformer circuit #1.

"When SPP receives the final cost information for the Woodward upgrade, SPP can determine whether all the credit payment obligations are fully covered by base plan funding," the commission said.