



Report: Calif. 'Duck Curve' Growing Faster than Expected Utility-Scale Solar Having More Impact than Rooftop

By Robert Mullin

A new research report indicates that the belly of CAISO's "duck curve" is deepening more quickly than originally expected, with its effects increasingly spread across the year — and not just on the typical spring day depicted by the graph.

The report from consulting firm ScottMadden also suggests that distributed energy resources such as rooftop solar are contributing only modestly to the decline in net load and ramping rates associated with the widespread adoption of solar energy in California.

"The duck curve is driven by utility-scale solar in California, not distributed resources," the report says.

The report's authors contend that understanding the root causes and impact of the curve is necessary for responding appropriately to its effect on grid operations.

"If we are to effectively address renewable integration challenges, it is imperative that we understand and address the actual issues that exist," the report says. "Solutions for a seasonal, weekend, utility-scale solar issue may well be different than solutions for an everyday, distributed resource issue."

California's duck curve first appeared in 2013, the product of CAISO's effort to forecast the long-term impact of increased renewable penetration on its daily operations.

That forecast demonstrated how the adoption of solar and other renewable

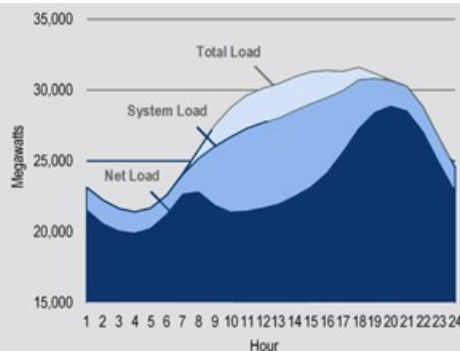
resources would steadily undercut the ISO's "net load," which represents the portion of load that must be served by dispatchable resources such as gas-fired generation and imports. The net load calculation looks at total load for a given interval and subtracts energy generated by variable renewable resources.

Load Declines not Limited to Spring

The duck-shaped curve illustrates how daytime solar output crowds out the need

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- **Total Load:** Total load regardless of supply source.
- **System Load:** Load supplied by the electric system (total load minus behind-the-meter output).
- **Net Load:** Load supplied by dispatchable resources (system load minus utility-scale renewables).



FERC Chair, Panelists Make Industry Forecasts at OMS Annual Meeting (p.7)



OMS President Sally Talberg and FERC Chairman Norman Bay | © RTO Insider

The ScottMadden report contends that growth in distributed energy resources is keeping a lid on total load growth but has little impact on system load — and, therefore, the deepening of the duck curve.

| ScottMadden

PUCO Rejects FirstEnergy's \$558M Rider, OKs \$132.5M

By Ted Caddell

Ohio regulators Wednesday rejected FirstEnergy's request for an annual \$558 million rider for eight years, voting instead to give the company \$204 million annually for only three years.

FirstEnergy, whose request would have totaled \$4.46 billion, will receive \$612

million (nominal dollars) under the unanimous decision by the Public Utilities Commission of Ohio.

The company said the eight-year retail rate stability (RRS) rider was necessary to ensure the corporation's financial health at a time in which its coal- and nuclear-fueled generation is challenged by low natural gas wholesale energy prices.

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The commission said its staff proposal for a distribution modernization rider (DMR), introduced in July, would do that. (See [PUCO Staff Recommends \\$131M Annual Rider for FirstEnergy](#).)

The staff's proposal "will provide FirstEnergy with an infusion of capital so that it will be financially healthy enough to make future investments in grid modernization," the commission said in a [statement](#). The commission's unanimous order limited the rider to three years, with the possibility of a two-year extension.

The company reported a \$1.1 billion loss in the second quarter, much of it related to the closure of five coal-fired units. (See [FirstEnergy Posts \\$1.1B Loss, Eyes Exit from Merchant Generation](#).)

'Not a Bank'

Chairman Asim Haque said the rider is not meant to solve all of FirstEnergy's financial problems.

"If FirstEnergy truly needs \$4.5 billion to achieve full financial health, then the commission decision today falls well short of that expressed need," he wrote in his concurring opinion. "The commission does not intend to be, nor will it be, nor should it be the entire solution for FirstEnergy's current financial difficulty. ... The commission is an economic regulator. It is not a bank. It is not a trust fund. We authorize rates and charges that come directly from the pockets of consumers and businesses in this state. We have no rainy day fund to dip into.

"I do, however, want our regulated utilities to be healthy so that they can invest in bettering the delivery of services to consumers and businesses in the state of Ohio," he went on. The rider "is meant to assist FirstEnergy in deploying the grid of the future while simultaneously providing it with a boost to improve its credit rating and financial health."

FirstEnergy Unhappy

FirstEnergy will collect \$132.5 million a year, with the balance of the \$204 million going to taxes, said company spokesman Doug Colafella. Haque concurred with that figure "assuming current tax rate."

The charge will boost monthly bills \$3 (about 3%) for a typical residential customer using 750 kWh, the company

said.

The company was not pleased with the decision.

"Today's decision is disappointing for our customers," CEO Charles E. Jones said. "While we clearly demonstrated to the PUCO what is essential to ensure reliability for customers in the future, the amount granted is insufficient to cover the necessary and costly investments. The decision also fails to recognize the significant challenges that threaten Ohio utilities' ability to effectively operate."

FirstEnergy said it is evaluating the order and considering its next steps. It has 30 days to appeal.

The modified RRS was FirstEnergy's latest attempt for a state bailout. Its first attempt, submitted as a power purchase agreement, was approved by PUCO but collapsed after FERC said it — and a similar deal involving American Electric Power — would be subject to stringent reviews. (See [FERC Rescinds AEP, FirstEnergy Affiliate-Sales Waivers](#).)

FirstEnergy and AEP went back to the drawing board. While FirstEnergy went with the modified rider request, AEP has chosen to go a different route: It is currently working with Ohio legislators to reverse customer choice and reregulate the industry.

Opponents also Miffed

Environmental groups and consumer advocates argued that the FirstEnergy request was unreasonable.

"Today's decision takes hundreds of millions of dollars out of customers' pockets in order to create a massive slush fund for FirstEnergy Corp. and its shareholders," said Shannon Fisk, attorney at the nonprofit environmental law firm Earthjustice.

"The fact that FirstEnergy asked for billions more does not make this decision any less unreasonable. Rather than forcing customers to prop up profits for a corporation that made a bad bet on aging coal plants, the commission should be looking after customers and ensuring investments in job-creating renewable energy, energy efficiency and smart grid initiatives."

The Sierra Club said PUCO could have used the ruling to encourage FirstEnergy to make further efforts to move toward more renewable energy.

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CAISO Seeks to Keep EIM Governing Body in the Policy Loop

By Robert Mullin

CAISO is seeking stakeholder input on developing procedures to ensure that the Energy Imbalance Market's governing body and participants have a say in ISO policy initiatives that affect the operation of the market.

The objective is to create a "guidance document" that spells out how CAISO staff should interact with the EIM, including a schedule for notifying the market's governing body about ISO initiatives and the processes by which that body and EIM market participants will provide feedback on the issues.

The EIM governing body was appointed in June and convened its first meeting in late August. (See [EIM Governing Body Convenes First Meeting, Selects Leadership](#).)

The idea for the guidance document originated with the EIM's Transitional Committee, the West-wide stakeholder group that was responsible for creating the

market's overall governance plan.

"The purpose of [the plan] was to give stakeholders throughout the region a voice in the market rules that affect the EIM," CAISO Lead Counsel Dan Shonkwiler said during an Oct. 11 call to discuss a draft [proposal](#) for the document. He said it is now up to the ISO to translate that plan into actual procedures.

Driving the effort is the fact that the governing body and the ISO's Board of Governors hold overlapping authority over the approval of policies that affect both the EIM and the ISO's broader market.

"The core of this [effort] is that the Board of Governors has delegated a part of its authority related to [Federal Power Act] Section 205 filings to amend the ISO Tariff to the EIM governing body," Shonkwiler said.

That delegation of authority gave rise to the concept of "primary authority" for the EIM's governing body: the right to approve or reject Tariff amendments specific to the

operations of the EIM. When body members vote to approve a change, the board is expected to give "great deference" to the decision and place the matter into a consent agenda.

For amendments covering general market rules that also affect the EIM, the governing body is expected to play an "advisory" role in the initiative process, but it will not have a vote on the outcome.

Initiatives designated as "hybrid"—proposals that would amend multiple Tariff provisions affecting both the EIM and the ISO at-large—get more complicated treatment.

If the EIM is the primary driver of such an initiative, approval authority falls to the governing body. If the ISO is driving the changes, the governing body has primary authority over EIM-specific elements only. In either case, the ISO board must issue the final decision through a full vote.

The guidance document will seek to

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for dispatchable resources during much of the day. That, in turn, creates the need for the sharp ramping of dispatchable resources as the sun begins to set. Over the long term, that ramp is expected to grow steeper as more solar resources come online and further depress net load as the state seeks to meet a 50% renewable energy mandate.

While CAISO's original duck curve forecast predicted that minimum net load would fall to about 15,000 MW in 2016, this past spring already saw that figure—represented by the curve's trough—sink to a low of 13,894 MW, a 31% decline from 2011. (See [Solar is the Generation of Choice in California](#).)

Since 2011, ScottMadden said, CAISO's daytime minimum net loads have been declining throughout the year, not just during the spring periods characterized by low residential loads coupled with relatively high solar generation. Furthermore, steep ramps are becoming more frequent, with the late-day three-hour ramp exceeding 5,000 MW on 58% of days in 2015, com-

pared with 6% in 2011. Last year's steepest ramp was 10,091 MW, a 62% increase from four years earlier, the report shows.

And the most significant ramps are occurring in fall and winter, when California's net loads are at their lowest. In 2015, the 20 steepest ramps occurred in December (10), November (eight) and January (two).

The firm's analysts also determined that the sharpest ramps consistently occur on weekends, the low point for weekly loads. Weekend ramps average 10% higher than those occurring on weekdays.

Weekends More Prone to Impacts

"These results suggest that weekends are more prone to experience the impacts of the duck curve because of their lower system loads," the report says. "Conversely, higher system loads on weekdays mitigate the midday decline in net load and the impact of the duck curve."

Perhaps most important from a system planning perspective, the report attempts to dispel the notion that DER is contributing

significantly to the shape of the duck curve.

The authors explain that, while behind-the-meter distributed resources and energy efficiency appear to be offsetting growth in California's total load, together they have little impact on the shape of the daily curve of system load—or load that must be supplied by system resources.

The authors back this claim by comparing CAISO—where distributed resources are just 3% of utility-scale capacity and do not participate in the wholesale market—with Hawaii, where residential solar represents 9% of generation managed by the state's largest utility. In California, daytime system load has changed little since 2011, while Hawaii has seen a sharp decline over the same period.

Based on those findings, grid solutions need not "be totally dependent on complex DER management," the report contends.

"Instead, the operational challenges associated with utility-scale solar present the potential for more targeted utility-scale solutions," the report says.



FERC to Consider Western Energy Crisis ‘Umbrella Pricing’ Theory

By Robert Mullin

FERC last week agreed to consider whether the failure of some power sellers to file compliant price reports contributed to unreasonably high rates for long-term electricity contracts filed during the Western Energy Crisis of 2000-2001 (EL02-71-052).

The case, which involves Shell Energy North America, TransCanada Energy, Koch Energy Trading, Allegheny Energy Supply, Merrill Lynch Capital Services and other sellers of energy and ancillary services into the CAISO market during the crisis period, was re-manded to FERC last year by the 9th U.S. Circuit Court of Appeals (12-71958).

FERC’s decision breathes life into California’s contention that reporting deficiencies may have helped conceal market manipulation and create a “pricing umbrella” under which California’s Department of Water Resources was compelled to sign overpriced contracts near the conclusion of the crisis.

“We agree with California parties that evidence regarding a pricing umbrella theory could be relevant to the 9th Circuit’s instructions on remand to examine the nexus between reporting deficiencies, market power and market outcomes, including evidence of how reporting deficiencies may have masked manipulative behavior by sellers,” the commission wrote.

The California parties – which include the Public Utilities Commission, Attorney General Kamala Harris, Pacific Gas and Electric and Southern California Edison – asserted

that the sellers’ quarterly reports did not meet requirements during the crisis period because they contained no hourly transaction detail or any information on the timing or location of the trades. The reports provided only aggregate quarterly or monthly sales data along with a range of prices, the parties contended.

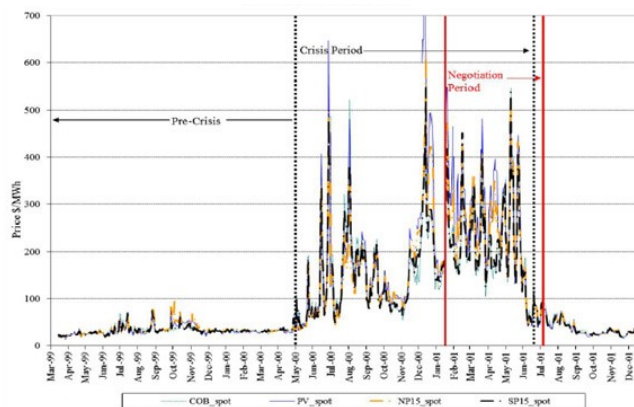
As a result, FERC will allow California to introduce relevant evidence at a future hearing – evidence that could “provide greater context and depth” into the examination of factors that enabled sellers to charge the state exorbitant rates.

Mobile-Sierra Caveat

Embedded in FERC’s ruling, however, was one important qualification: that the commission disagreed with the state’s contention that evidence of a reporting violation alone could overcome the *Mobile-Sierra* presumption of the “justness and reasonableness” of any of the bilateral contracts at issue.

“The *Mobile-Sierra* analysis requires more than just an unlawful act,” the commission said.

In support of that determination, the commission cited the Supreme Court’s 2008



Western daily on-peak spot prices (March 1999–December 2001) | FERC order EL02-60-007, April 12, 2016

decision in *Morgan Stanley Capital Group Inc. v. Public Utility District No. 1 of Snohomish County*, which stated that a contracting party’s engagement in unlawful activity in the spot market does not automatically strip its forward contracts of *Mobile-Sierra* protections.

“We find that the California parties’ argument, if accepted, would require us to abrogate the contracts at issue based solely on an unlawful act itself (i.e., the misreporting), without the required causal connection between an unlawful act and an unjust and unreasonable rate, as required by the Supreme Court,” the commission wrote.

In the words of the 9th Circuit, the commission concluded, the purpose of the remand is to determine whether “reporting deficiencies fostered the subtle accumulation of market power and resulted in an excessive rate.”

CAISO Seeks to Keep EIM Governing Body in the Policy Loop

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describe exactly how the governing body will exercise its advisory function for initiatives over which it has no voting power.

More important, the document will detail the process by which the governing body and EIM stakeholders can voice opinions about the ISO’s “tentative decisional designation” for an initiative.

To facilitate that process, the ISO is proposing to provide quarterly updates to the

governing body about all upcoming initiatives including its decisional designations. After receiving an update, the body can decide which general ISO initiatives will require its advisory contributions. If the body thinks an initiative has been designated incorrectly, it can take up the matter with ISO staff, possibly heading off a future dispute over decisional authority.

After receiving stakeholder comments on a draft final proposal, ISO management would decide on an initial designation. If the chair of either the governing body or the board objects to the designation, they will meet to

discuss the matter. In cases when the two disagree on a proper classification, a dispute resolution process is triggered in which public comment is solicited followed by a combined vote of both the governing body and the board.

CAISO is also proposing to implement a procedure that would split up hybrid initiatives to facilitate decisions.

Comments on the guidance document are due Oct. 18. The ISO plans to present a proposal to the EIM governing body in late November and seek approval from the board in mid-December.



Board of Directors Briefs

Greens Bayou Still Needed Under RMR Protocol Changes

ERCOT on Monday released the [results](#) of planning studies under new reliability-must-run rules approved by the Board of Directors last week, confirming that Greens Bayou is still needed to support reliability in the Houston area until the new 1,100-MW, gas-fired combined cycle Colorado Bend Generating Station becomes operational in July.

The ISO also determined that removing Calpine's 344-MW Clear Lake cogeneration facility from the system will not cause reliability concerns under the new rules, which went into effect the day after the board meeting.

The board approved three rule changes intended to improve ERCOT's management of its RMR processes. Two of the nodal protocol revision requests (NPRRs [793](#) and [795](#)) were included in the board's consent agenda. The third, [NPRR788](#), was unanimously approved in a separate vote after receiving four opposing votes from the investor-owned utility sector. (See "Stakeholders Send Three RMR Revisions to ERCOT Board," [ERCOT Technical Advisory Committee Briefs](#).)

NPRR788 requires ERCOT's RMR planning studies to include forecasted peak loads and that a potential RMR unit must have "a meaningful impact on the expected

transmission overload" to be considered for an agreement.

At last week's board meeting, Jeff Billo, ERCOT's senior transmission planning manager, quantified "meaningful impact" as the unloading effect a potential RMR unit would have on the transmission constraint. The unit would also need a shift factor of at least 2% and an unloading factor of at least 5% on the constraint.

"I recognize we need to make improvements in the contract analysis surrounding RMR agreements," said American Electric Power's Wade Smith, whose company opposed the Technical Advisory Committee's endorsement of the NPRR. "We need to continue to work on our planning and ... build transmission solutions quickly."

Beth Garza, director of ERCOT's Independent Market Monitor, pegged Greens Bayou's contract — projected to cost the market \$63.9 million — as equivalent to almost 18 hours of firm load shed in the Houston area, assuming a \$9,000/MWh cost of load curtailment.

"If I drive a \$10,000 car, it's ridiculous for me to pay \$10,000 in premiums for the full replacement of that car," Garza said. "Frankly, I believe the decision we made on this RMR unit is to pay the full replacement cost — the full value of the potential risk of load shed — for this unit."

Garza noted that the Public Utility Commission of Texas has opened an RMR-related [rulemaking](#) that offers guidelines

mitigating involuntary load curtailment ([45927](#)). The PUC will hold a public hearing on the issue Nov. 30.

"So things are ripe for discussion at the commission and ERCOT," she said.

Board Approves West Texas Tx Projects

The board approved a pair of transmission projects addressing reliability concerns in West Texas resulting from load growth in the Permian Basin oil fields. The Texas-New Mexico Power [rebuild](#) of 69-kV facilities to 138 kV is projected to cost \$50.6 million, while the AEP-Oncor 54-mile, 138-kV [line](#) is estimated to cost \$77 million. The latter project passed with one abstention.

Luminant, TXU Energy Provisions OK'd

The board also unanimously approved staff's acceptance of Texas Competitive Electric Holdings' (TCEH) request that its Luminant and TXU Energy companies not be recognized as affiliates of any ERCOT member companies. The vote clears the way for the subsidiaries to seek a corporate membership in the ISO's independent generator segment and an associate membership in the independent retail electric provider segment, respectively, replacing their prior memberships.

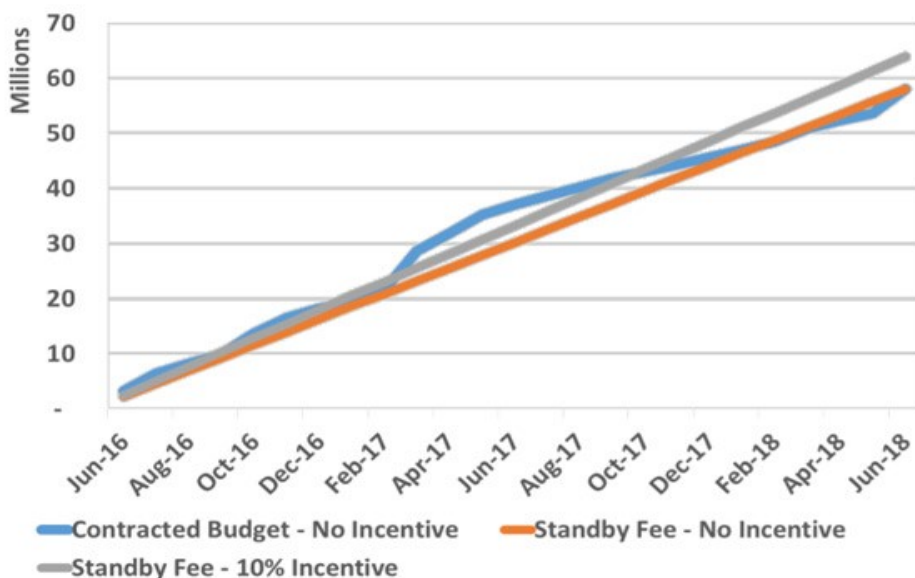
TCEH recently emerged from bankruptcy as a tax-free spinoff. It is composed of Luminant and TXU Energy. (See [Luminant, TXU Energy Emerge from Bankruptcy](#).)

Bermudez Resignation Leads to Revotes

Jorge Bermudez, who resigned as an unaffiliated member of the board two weeks ago, made his presence felt with his absence. (See "ERCOT's Bermudez Resigns from Board Position," [ERCOT Briefs](#).)

Because ERCOT's legal staff determined Bermudez's recent marriage made him ineligible to be on the board before its Aug. 9 meeting, the directors were forced to vote again on three items he moved in that meeting: the consent agenda and two proposals related to the ISO's 401(k) plan.

Bermudez's tenure will be celebrated during December's annual meeting, when all directors leaving the board are honored for



Cumulative costs of Greens Bayou RMR | Potomac Economics

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ERCOT NEWS



Board of Directors Briefs

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their service.

Board Approves 14 NPRRs, Other Changes

The board unanimously approved [NPRR760](#), which received opposing votes from American Electric Power and Luminant last month and abstentions from Center-Point Energy and Sharyland Utilities. The change ensures that operating days with no activity are captured in the calculation of credit variables.

The consent agenda included 13 additional NPRRs, three revisions to the Planning Guide (PGRRs) and a revision to the Retail Market Guide (RMGRR).

- [NPRR755](#): Allows an entity to register as a data-agent-only qualified scheduling entity (QSE) to connect to ERCOT's wide area network (WAN) as an agent for another QSE, without meeting applicable collateral and capitalization requirements.
- [NPRR769](#): Clarifies the alternative-dispute resolution process to note the proceeding is the next level of appeal following ERCOT's denial of verifiable costs. Also clarifies the confidentiality of data submitted in connection with a verifiable-cost appeal.
- [NPRR775](#): Strengthens the limits on fast responding regulation service (FRRS) to address future operational issues. A previous revision request (NPRR581) added limits of 65 MW to FRRS up and 35 MW to FRRS down but lacked implementation details regarding self-arrangements in the day-ahead market and restrictions on providing the service in real time without a day-ahead award.
- [NPRR778](#): Changes competitive retailer rules regarding move-in or move-out date changes to prevent inadvertent errors. The change should eliminate two-thirds of manual interventions currently required.
- [NPRR779](#) and [PGRR048](#): Clarifies references to the Texas Reliability Entity (Texas RE) and the Market Monitor. Current protocols refer to the Texas RE in both its capacity as the Regional Entity and the Public Utility Commission of

Texas Reliability Monitor. The NPRR also removes the 24-hour deadline for ERCOT to notify the reliability monitor of a failure to provide ancillary services. The new language clarifies that the Market Monitor is an included party in several provisions related to the ERCOT stakeholder process.

- [NPRR781](#): Addresses the market's growing use of advanced metering systems (AMS) by updating protocol language to clarify purpose and definitions, update processes and methodologies and remove outdated ones.
- [NPRR782](#): Removes inconsistencies in protocol language by changing the equations governing the settlement of ancillary services. The change affects resources unable to deliver on their ancillary service obligations because of transmission constraints.
- [NPRR785](#): Allows ERCOT to automatically prepopulate current operating plans (COP) for wind and photovoltaic resources with the most recent forecast for the next 168 hours. QSEs representing these resources can either submit the prepopulated forecast as the COP by default or submit a lower number.
- [NPRR786](#): Corrects the allocation of transmission losses, distribution losses and unaccounted-for energy (UFE) so that negative loads do not result in the loss of UFE allocations.
- [NPRR787](#): Removes the requirement that the QSE receiving a verbal-dispatch instruction confirmation include the name of the individual that received the confirmation within the electronic acknowledgement.
- [NPRR789](#): Requires ERCOT to publish all its midterm load forecasts for market participants and note which one is currently being used by operations. The ISO currently publishes several

forecasts per weather zone but only makes one at a time available to the market.

- [NPRR793](#): Adds several responsibilities for RMR unit owners, revises RMR formulas and makes other clarifications to ensure RMR units are not accidentally committed as a reliability unit before other resources.
- [NPRR795](#): Creates a mechanism to refund capital expenditures funded by ERCOT under an RMR agreement.
- [PGRR047](#): Requires energy developers seeking an interconnection agreement to include among their materials a signed affidavit that they have notified the Department of Defense of their proposed project and have requested a review.
- [PGRR049](#): Removes the option to submit generation interconnection or change request (GINR) applications through standard mail or fax and updates the mailing address for GINR payments to ERCOT's treasury department.
- [RMGRR134](#): Gives non-modeled generators the option to use the AMS data-submittal process and clarifies processes for unregistered distributed generation versus registered non-modeled generators.

— Tom Kleckner

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Organization of MISO States Annual Meeting

FERC Chair, Panelists Make Forecasts, Talk Jurisdictional Lines at OMS Meeting

By Amanda Durish Cook

LEXINGTON, Ky. — FERC Chairman Norman Bay headlined the Organization of MISO States' annual meeting Thursday, where panelists discussed the grid of the future, the growing role of natural gas and the continuing uncertainty over state and federal regulators' jurisdictions.

The Grid of the Future

Lorenzo Kristov, principal of market and infrastructure policy at CAISO, said a "one-way power flow with passive customers on the end is on its way out." In 15 years, he envisions a future in which utilities deliver just 50% of load and the rest is served by local resources.

He imagined buildings with smart technology and microgrids that can detach themselves from the grid when service is interrupted. "It can 'island' if it has to, but most of the time it doesn't want to because it wants to interact with the market," he said. "This is where bottom-up meets top-down."

Kristov said a more decentralized system is also more secure against increasingly severe weather and cyberattacks.

Jim Gardner, former chair of the Kentucky Public Service Commission, highlighted income disparity and email hacking, two trends tied to the presidential election, that he said would play a future role in power consumption.

Income disparity in the U.S., Gardner said, will manifest itself in the power industry, with one class wanting "concierge electrical service" while the other class "will barely be able to afford their electricity bills."

"You're going to have great disparity in the customers," he said.

Gardner also predicted more cybersecurity scares, which he said will result in more top-

down control of RTOs from the federal government.

Bay, who presided over a question-and-answer session at the annual meeting, hesitated to describe what an RTO would look like 20 years out. "The times I've been asked to be a talking head, I've been totally wrong," he joked. However, he said the need for RTOs would persist. "I think there's always going to be the need for the efficiencies of a large-scale grid. There is always going to be a need for transmission, so the wholesale market will continue to exist," he said.

Devin Hartman of the public policy research organization R Street Institute said new, high-voltage lines can unlock constrained resources. "It's important to know that sometimes so-called breakthroughs take years to develop," he said.

Bill Booth of the Mississippi Public Service Commission asked if it was wise to continue to construct new high-voltage lines if distributed resources continue to grow.

Kristov said a careful, "least regrets" planning process will have to be used when building new transmission. "I suspect we will need a lot less than we would under a central utility structure," he said.

Hartman said there are "huge question marks" in designing rates for distributed resources such as rooftop solar.

Gardner said the uncertainty around creating a model for distributed resources will likely continue. "The states are going to go in fits and starts. There's not going to be a uniform movement," he said. "The West doesn't even have RTOs."

Kristov said a rate structure could charge distributed resources based on how much volatility they introduce in the market. Standalone rooftop solar could be charged a higher rate than that with battery storage.

David Carr, counsel for the Mississippi

Public Service Commission, said the addition of distributed resources could leave low-income populations behind. Kristov said local governments could pick up the slack through community programs.

Joe Paladino, a senior advisor at the U.S. Department of Energy, said integrated, regional planning processes are needed to manage the convergence of natural gas infrastructure with the power industry.

"This industry is very fragmented. Jurisdictions are going to have to start considering each other," he said.

The panelists agreed that price disparities across locations will continue with the growth of microgrids. "Unless we had one huge central nuclear reactor transmitting power from the same distance," Paladino said.

"You do," Kristov injected playfully. "It's the sun."

Growth of Natural Gas

MISO strategy advisor Scott Wright said natural gas's share of MISO electric generation could climb to 40% by 2025, up from 23% in 2015.

"The short version is we have a lot of gas, it's going to be around for a long time and even the [U.S. Energy Information Administration] agrees," said panelist Amy Farrell of the American Petroleum Institute.

Richard Levitan of Levitan & Associates said there are 39 GW of gas-capable generation, 21 pipelines and more than 3 million horsepower of compression in MISO North alone. "This region is blessed with massive storage infrastructure," he added. "These serve as bellows to operating supply."

Wright added there are about 140 storage fields in the MISO footprint.

Levitan also said MISO North has comparatively very few hours of non-deliverability attributed to line breaks or other issues. "I think you can say there's barely a scintilla of vulnerability," he said.

However, DTE Energy's Don Stanczak did not agree with the rosy talk about the windfall of supply. He said the existing natural gas system was designed for predictable retail heating loads, but the increase in gas-fired power generation will require hourly withdrawals and injections.



From left to right: Jim Gardner, Devin Hartman, Joe Paladino and Lorenzo Kristov | © RTO Insider

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FERC Chair, Panelists Make Forecasts, Talk Jurisdictional Lines at OMS Meeting

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"We do have a lot of natural gas storage in Michigan, but I don't think it's properly configured," he said. "In the polar vortex, we were days away from having to decide if our customers wouldn't have electricity or they wouldn't have heat. And you can't have heat without electricity."

Wright said future developments in rapid injection and withdrawal could allow gas scheduling for power to become more natural, "like breathing," and eliminate the panic of "did I schedule?" He said, however, that getting natural gas from the wellhead is often fraught with obstacles. "There's a lot of rate pancaking and nominations across several pipelines."

"I think we need to remind ourselves of the environmental opposition to pipelines," Levitan said. "Just expanding existing pipelines has become a daunting task. The Northeast is littered with failed projects."

Farrell suggested that FERC could encourage pipelines to offer an expanded set of market products.

"The gas-electric process that took place over the last four years was painful, but we have to open up that dialogue again," said attorney Kelly Daly of Stinson Leonard Street in D.C.

When Jurisdictions Collide

Ted Thomas, chair of the Arkansas Public Service Commission, who moderated a panel on the increasing entanglement of RTO, state and FERC jurisdiction, said "the bright line appears to be getting fuzzy."

Ohio Public Utilities Commissioner Howard Petricoff said the Federal Power Act's "just and reasonable" standard is vague when compared to the legislation such as the Clean Air Act.

"There's virtually no change in the language in the last 70 years in either the Federal Power Act or the Federal Gas Act," Petricoff said. "It's a much different industry than in 1935. ... Today, we have independent power producers; we have interstate lines; we have a fairly complex industry. ... The transmission, the grid and the resale are much more active."

Jeff Dennis, of Akin Gump Strauss Hauer & Feld, said behind-the-meter generation and merchant generators' competition with



From left to right: Ted Thomas, John Crespo, Howard Petricoff and Jeff Dennis. | © RTO Insider

vertically integrated utilities has complicated jurisdictional questions. "Power [used to] flow one way. Consumers consumed and generators generated."

Petricoff said the Supreme Court's *Electric Power Supply Association* ruling affirming FERC's right to regulate demand response has not answered the question of whether "1 MWh saved is 1 MWh generated." (See [Court's Reticence Frustrates Energy Bar.](#))

Dennis said the FPA lacks the "cooperative federalism" that can be found in other federal laws.

"I think unfortunately the courts are going to continue to have to pick sides. That means we're going to muddle through on a case-by-case basis.

"I think it's important for the Supreme Court to know what aim regulators have in mind. That aim is critically important," Dennis added.

"'Cooperative federalism' has different dimensions," Bay said. "If we share the same objective, we can get so much more done rather than if we're suing each other."

Bay suggested state regulators make use of pre-filing meetings with FERC to minimize the "chance of friction."

"I think my priorities are similar to every other [state] regulator here," Bay continued. "From my perspective, what we should be doing at FERC is adapting to the change while maintaining reliability and just and reasonable rates."

American Electric Power's John Crespo said RTOs are dependent on states and local governments, whose regulation of land use, granting of easements and implementation of environmental rules determine if transmission actually gets built.

Bay said states need jurisdictional wiggle room. "States deserve a lot of latitude in pursuing policies that they think are helpful for their citizens. ... The states are great for

experimentation. At the federal level, you can observe that state experimentation and make decisions."

Crespo pointed to MISO's plan to add a forward capacity auction to serve retail choice loads in Illinois and Michigan. "It's an interesting potential for cooperation between the states and RTOs."

Distributed resources and DR have created "prosumers," consumers who can become producers, Crespo continued. "What you could see is a blending of the wholesale and retail markets, and what will that look like from the FERC standpoint? It could be where you have a deeper encroachment of federal regulation on states' rights," he said. "I'm not so sure if states knew what they were giving up when they joined RTOs."

Bay said utilities are voluntarily joining RTOs in what he called the "march of markets."

"Utilities are making the decisions for themselves; FERC isn't forcing them to. Obviously there are benefits to joining an organized market," he said.

"The RTOs have been very good at producing the lowest cost megawatt-hour, but there are other valid policy goals," Dennis said. "My belief is that there should be a way for different models to coexist among states, the RTOs and FERC. There needs to be some cooperation with FERC, but that needs to be a two-way street."

Bay added that states and FERC will have to work together on cybersecurity efforts, quipping, "Hackers don't care that FERC has jurisdiction over the Bulk Electric System and states have jurisdiction over distribution."

Petricoff said energy officials are going to get much more creative in the coming years as "even the fundamentals of power" will be altered. "We're in a decade of change," he said.



MISO Directors Back Capacity Auction Filing

By Amanda Durish Cook

After a brief discussion, the Markets Committee of the Board of Directors last week approved MISO's forward auction proposal. The RTO expects a FERC filing in three weeks.

Director Baljit Dail said there was no reason not to go ahead with the filing date. "I think it was a very good piece of work," he said.

MISO hopes the auction will ensure adequate capacity resources in Illinois and other retail-choice areas in the RTO's footprint, most of which have traditional monopoly utility structures overseen by state integrated resource planning.

Director Michael Curran said he is "comfortable" with MISO's plan for serving both structures. "I take a lot of comfort in the ability to look at metrics and adjust. I think as a community, MISO has adjusted a lot over the years, and it makes us successful," Curran said.

Curran also thanked Independent Market Monitor David Patton for his recommendations and his "viable" alternative proposal. "I think he created a lot of healthy contention," he said. Patton, who favors a prompt auction, has been sharply critical of MISO's plan, calling it "fundamentally unsound."

(See [MISO Backs Forward Auction Plan, Rejects Prompt Proposal](#).)

Director Phyllis Currie asked MISO staff how stakeholders view the proposal. Jeff Bladen, executive director of market services, said that while some stakeholders wanted more time for discussion, the majority "ultimately concluded they've had enough. ... There remains some disagreement, as is expected in processes like these; consensus is nearly impossible to reach. The details of proposals like these are always ripe for disagreement." (See "MISO to Move Ahead with Brattle Demand Curve for Forward Auction," [MISO Resource Adequacy Subcommittee Briefs](#).)

Bladen also said a "clear majority" of stakeholders agree that a problem exists in MISO's retail-choice areas. He also pointed to the two years spent on the proposal. The RTO used 2015 to define the problem and gather ideas from members and the Monitor and worked to refine the proposal over 2016.

A few stakeholders, however, used the meeting's public comment period to express concern.

David Sapper, representing the Transmission-Dependent Utilities sector, said MISO has only released draft — and not final — Tariff language. "With all due respect, I still think there's some uncertainty on the

proposal," Sapper told the board.

Jim Dauphinais, counsel for Illinois Industrial Energy Consumers, agreed: "There are just going to be some details that have to be worked out by FERC."

Curran asked about MISO's ability to adjust the auction after it is fully implemented in 2019. Bladen said the RTO could consider changes as soon as the transitional auctions planned for 2018.

Dail asked if MISO was confident in The Brattle Group's modeling, which left out MISO South. Bladen said while MISO South was "not explicitly modeled, it was implicitly modeled" through "stress tests" of various levels of non-merchant offers into a hypothetical forward auction.

Currie asked if the modeling anticipated future transmission additions. Bladen said while specific transmission projects or transmission topology changes weren't modeled, greater and reduced import/export transmission capability was analyzed.

Director Paul Feldman asked if PJM's forward auction might inform MISO's, and if the RTOs plan to schedule their auctions at the same time. Bladen said he wasn't sure how the auctions would interact because MISO was still so early into the process. "We've got some time ahead of us for coordination with PJM. I'm not in a position to recommend something now," he said.

Reliability Subcommittee Briefs

MISO: Cross State Air Pollution Rule less Onerous

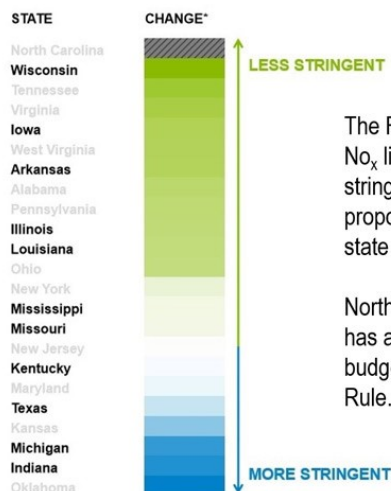
MISO says it will have an easier time than expected complying with EPA's Cross State Air Pollution Rule (CSAPR) because the final regulations are less stringent than the draft rule.

MISO Policy Studies Lead Jordan Bakke said a lot of the compliance conclusions that were made in MISO's first study on the CSAPR have become "less relevant." (See "MISO Releases EPA Air Pollution Rule Study and CPP Paper," [MISO Planning Advisory Committee Briefs](#).)

"From our reading of it, I think we can say we're okay. There are other rules out there that are bigger changes," Bakke told the Reliability Subcommittee.

The long-delayed CSAPR is aimed at reducing power plant emissions that contribute to ozone and fine particle pollution that is transported across state lines. Finalized in 2011, it was overturned by an appellate court in 2012 and restored by the Supreme Court in 2014. EPA says the rule, which takes effect in May, will reduce summertime emissions of nitrogen oxides from power plants in 23 states.

Of the 11 MISO states affected by the rule, Bakke said, Iowa and Arkansas now have the toughest road to compliance as their NO_x budgets were tightened. MISO's [analysis](#) also



The Final Rule's seasonal NO_x limits are overall less stringent than originally proposed, but individual state impacts may vary.

North Carolina no longer has a seasonal NO_x budget under the Final Rule.

CASPR final rule updates (*percentage change in reference to proposed budget) | MISO

Continued on page 10



FERC Orders MISO to Levy Interconnection Fees Equally

By Amanda Durish Cook

FERC last week rejected MISO's attempt to exempt external generators from interconnection milestone payments, saying the fees should be applied equally to all classes of customers ([EL16-12, et al.](#)).

MISO had exempted from its M2 milestone payments external network resource interconnection service (E-NRIS) customers and NRIS-only customers. NRIS allows a generator to deliver power over MISO's grid with the same rights as any other network resource. E-NRIS service allows generators outside the RTO to participate in capacity auctions and deliver their output into the system.

MISO said the M2 payment should not be assessed to E-NRIS customers because it is intended to deter speculative projects and is refunded once a generator begins commercial operations. E-NRIS customers are either in-service, under construction or have an executed interconnection agreement with the transmission provider to which they

directly interconnect.

MISO's position was challenged last year by EDF Renewable Energy, E.ON Climate & Renewables North America and Invenergy, which contended the RTO's policy created a competitive disadvantage for new internal generation, which is required to make the milestone payments.

FERC responded to the complaint in April by implementing a Section 206 proceeding and requiring MISO to justify its position. (See [FERC Orders MISO to Charge Uniform Interconnection Fees.](#))

In its order last week, FERC said MISO's defense that the M2 milestone payment was only needed to deter speculative projects was unconvincing.

"To the contrary, we find that the reduction of late-stage terminations and the resultant restudies, as well as the mitigation of potential cost increases to lower-queued customers due to any restudies, are equally important goals of the M2 milestone payment," the commission said.

"We find that it is just and reasonable that all interconnection customers post the M2 milestone payment in order to protect other customers from the potential harm that any interconnection customer may cause by a late-stage withdrawal," it added.

FERC gave MISO 30 days to make the Tariff changes and set an April 5, 2016, refund date.

The order came as MISO plans to file its revised interconnection queue process. If approved, queue changes will take effect in January. (See [MISO: Stakeholders Behind 2nd Queue Reform Attempt.](#))

In a separate order, the commission also rejected MISO's request for rehearing on the basis that existing and external customers are not "similarly situated" to other interconnection customers and forcing them to pay the milestone payment would be fraught with "practical difficulties" ([EL15-99, et al.](#)). FERC said its April order "only found that it may be unduly discriminatory to exempt existing generators" and did not constitute a final determination, so it could not be challenged.

Reliability Subcommittee Briefs

Continued from page 9

found that Michigan and Indiana now have more stringent seasonal NO_x targets.

The RTO is sticking to its initial assessment that its states' 2017 seasonal NO_x budgets can be met through redispatch, although regional NO_x emission trading is expected to be needed beyond next year.

Bakke said utilities can take advantage of underutilized emissions controls. Bakke also said utilities could install new controls. "That is the most comprehensive way to comply, but it has the most lead time and the most cost," he said.

"We in the planning department have looked at this and made some suggestions, but now it's before you," Bakke said.

The Reliability Subcommittee sent the CSAPR issue to the Steering Committee to downgrade its urgency.

MISO Speeds Up Creation of Pseudo-Tie Congestion Management Process

MISO has proposed a pseudo-tie congestion management process that involves pre-assessment and evaluation stages before pseudo-tie registration is granted. The proposal would be implemented before year-end.

"There's an urgency in this because we really need these processes in place for reliability," MISO Senior Director of Regional Operations David Zwergel said.

During the 2015/16 planning year, MISO had only 155 MW of generation pseudo-tied into PJM and most of it was near the seam. MISO now has about 2,000 MW of generation pseudo-tied into its eastern neighbor and much of the generation and load being served is far from the RTO's seam, resulting in local congestion.

MISO is proposing a new four-step process before activating new pseudo-ties:

- MISO and a neighboring reliability coordinator determine which operational studies are needed;
- MISO and the attaining RTO establish tests to identify market-to-market flowgates using a generation-to-load distribution factor. If the attaining RTO's results vary from MISO's by more than 2%, the pseudo-tie is denied;
- MISO works out a reimbursement agreement if a pseudo-tie implementation cost allocation is needed; and
- An asset owner and a MISO local balancing authority agree to install metering to record pseudo-tie flows as required by MISO rules.

MISO's Kyle Abell said the RTO plans to provide Business Practices Manual and Tariff language in November, with plans for a FERC filing in December. It is asking stakeholders for feedback on the proposal by Oct. 28.

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Board Favors Pay Raise, Change to Director Independence Requirements

By Amanda Durish Cook

Members of MISO's Board of Directors last week expressed support for increasing their pay and relaxing their independence requirements, saying the changes were needed to ensure the RTO can attract strong candidates.

Directors at an Oct. 14 conference call of the board's Corporate Governance and Strategic Planning Committee indicated support for MISO's proposal to prune the current two-year pre- and post-service prohibition on affiliations with RTO members, affiliates and market participants.

MISO first proposed reducing the prohibitions in August with three options: eliminating the rule entirely, reducing it to one year, or reducing the pre-service restriction to one year and eliminating the post-service one. The directors chose the third option.

The board had postponed action on the service restrictions at its September meeting. (See "For Now, MISO Bylaw Changes Minimal," *MISO Board of Directors Briefs*.)

MISO Managing Senior Corporate Counsel Corrie Bilke said the pre-service restriction in MISO's *Principles of Corporate Governance* is in line with other RTOs, but only MISO mandates a post-service restriction.

"Initially I was in favor of a post-service restriction, but after reviewing [other RTOs], I'm comfortable with eliminating the

post-service restriction," Director Phyllis Currie said.

"We are competing for talent. It seems like we shouldn't place ourselves at a competitive disadvantage," Director Paul Feldman said. He also said MISO should include language forbidding sitting board members from engaging in job interviews with prohibited entities.

Bilke said three MISO sectors that responded to a call for feedback on the proposed changes were supportive. After all members have weighed in on the changes through stakeholder meetings, the entire board will review the proposal at its December meeting.

MISO Proposes Upping Director Compensation

The committee also voted to approve a proposal by a consulting firm to increase board member compensation by \$4,000 annually.

"We want to remain competitive in our compensation of board members," MISO Vice President of Human Resources Greg Powell said.

Willis Towers Watson recommended increasing the director retainer from \$55,000 to \$89,000 while eliminating meeting fees for the first six scheduled board meetings and two annual strategic



MISO Board of Directors at its September meeting in St. Paul, Minn. | © RTO Insider

retreat meetings.

The firm also recommended eliminating board committee fees in return for a \$9,000 committee retainer for the first six meetings with compensation of \$2,000 for each additional meeting.

MISO should keep its director and committee chair retainers at \$15,000 and \$7,500, respectively, Willis said.

Board members' total compensation would increase to \$116,000 from \$112,000. Committee chairs would be paid \$124,000, up from \$120,000, and the board chair would be boosted to \$131,000 from \$127,000.

Under MISO's Transmission Owners Agreement and bylaws, the consulting firm's recommendations will be enacted unless two-thirds or more of the members vote to reject them. No date has been set for a vote.

Reliability Subcommittee Briefs

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MISO Retires CIP User Group

MISO's proposal to retire its Critical Infrastructure Protection User Group met with no stakeholder resistance. MISO's Amanda Bragg said the group was formed three years ago to discuss industry trends and compliance with NERC's Critical Infrastructure Protection (CIP) standards.

"Over time, the number of attendees has dwindled," Bragg said.

Bragg also said group discussions have

begun "naturally" merging CIP compliance with general information security. She said MISO plans to discuss the issues at security and compliance summits in the spring and fall, which it hopes will draw a bigger crowd.

Solid Reliability in August and September

MISO's Steve Swan said the RTO's reliability, markets and operational functions performed well during higher-than-average temperatures in August and September.

Average load in September was 78.8 GW, compared to last September's 79-GW

average. Load peaked on Sept. 6 at 115.1 GW.

In August, load exceeded 110 GW for 56 hours, compared to only six hours in August 2015. Average August load was 88.1 GW, 4 GW higher than a year earlier. Load peaked on Aug. 4 at 119.3 GW. Swan reported August temperatures averaged 3 to 4 degrees higher than the last three years.

"Consistent with higher loads, lower winds and stable fuel prices," MISO said, real-time prices increased \$1.02/MWh in July and \$2.20/MWh in August versus 2015. Gas prices at the Chicago citygate averaged \$2.75/MMBtu, \$0.11/MMBtu less than August 2015.

— Amanda Durish Cook



NYPSC Refines Community Aggregation Program, Rejects Opt-In

By William Opalka

ALBANY, N.Y. — New York regulators on Thursday refined their rules on how municipalities can aggregate customers to purchase gas and electricity and rejected a request that the program abandon its opt-out structure (14-M-0224).

The New York Public Service Commission's Community Choice Aggregation program is part of the state's Reforming the Energy Vision initiative to encourage the greater use of cleaner and distributed energy resources. The CCA was approved in April, building on a pilot program that was still being organized but did not fully launch until June. (See [NYPSC OKs Municipal Aggregation for Energy Purchases](#).)

Opt-In vs. Opt-Out

The commission rejected complaints that the CCA program is premature. "Given the potential benefits of CCA programs, and the continued operation of retail energy markets while the commission considers further action, delaying the authorization of CCA programs is unnecessary and even potentially harmful," the order said.

Thursday's order denied National Fuel Gas Distribution's request to switch the CCA from an opt-out to an opt-in process. The company said the PSC should require customers to opt into the program because uncertainty exists over the development of the retail market.

In an opt-out program, all customers are enrolled and, after an outreach program run by the municipality is launched, customers

are required to notify it if they want to remain with the host utility.

"If we required opt-in, we'd be killing this idea before we gave it a fair chance to succeed," Commissioner Gregg Sayre said at the PSC's Thursday meeting.

"Our experience in the retail market and in other states is that the opt-out is necessary for CCA programs to be successful," Assistant General Counsel Ted Kelly said. New Jersey's aggregation program failed to gain traction until it switched from the opt-in model, he said.

New York City Wins Clarification

The commission also granted New York City's request for clarification that the original order did require the CCA to be implemented citywide. The commission agreed with the city that rolling out a new program in large geographic areas with dense populations would prove unwieldy, allowing the city to introduce the changes in stages.

The PSC said the CCA order was intended to provide municipalities flexibility. "Allowing municipalities to implement CCA programs on a partial or phased basis is consistent with this design. Municipalities may choose a partial or phased approach as a pilot of CCA, to manage the implementation process given a large geographic footprint or overlapping jurisdictions, or for another reason beneficial to their program," the commission said.

The commission also clarified that each implementation plan submitted by a municipality or CCA administrator will be open to public comment and said utilities can ex-

"If we required opt-in, we'd be killing this idea before we gave it a fair chance to succeed."

Gregg Sayre, NYPSC

clude customers' phone numbers from data sent to municipalities, bowing to privacy concerns. The PSC said a multicounty CCA has been proposed by the Municipal Electric and Gas Alliance to eventually serve roughly 500,000 residents in 11 counties from the Finger Lakes to the Hudson Valley.

Westchester Pilot Operating

Meanwhile, the state's first pilot program, by Sustainable Westchester, has been operating for three months, officials said.

The pilot, dubbed Westchester Power, has about 91,000 customers in more than 20 municipalities. Westchester Power has negotiated to buy electricity at a bulk, fixed price and started enrolling customers in June.

LuAnn Scherer, acting director of the PSC's Office of Consumer Services, said the commission asked Consolidated Edison to provide an early glimpse of consumer reaction. The company sampled about 1,500 customers. While savings are not guaranteed, customers have saved an average of \$10/month in the pilot program, Scherer said.

She said the program has received 14 complaints, mostly related to customers misunderstanding some line items on their new utility bills.

"One of the lessons is that municipalities are going to have to do more for customer education," Scherer said.

Sustainable Westchester's first report to the PSC is due in June 2017.

"It's early, but at least we know we're headed in the right direction," PSC Chair Audrey Zibelman said.

Commissioner Diane Burman — who opposed the original CCA order, saying a statewide rollout was premature — abstained Thursday. "While my concerns still are there, I do embrace working through them in a robust way on the work ahead," she said.



NYISO NEWS



Public Citizen Challenges NY Nuclear Subsidy, FitzPatrick Sale

By William Opalka

Consumer advocate Public Citizen on Tuesday protested Entergy's proposed sale of the James A. FitzPatrick nuclear plant to Exelon, saying the companies' FERC application failed to include information about the state subsidy that makes the transaction possible ([EC16-169](#)).

Public Citizen says omission of the subsidy makes the application incomplete. It also said the subsidy itself distorts the New York market and violates the NYISO Tariff.

Entergy had said it would close FitzPatrick in the spring, until Exelon came to the plant's rescue this summer. (See [FitzPatrick Sale Filed with New York Regulators](#).) The \$110 million sale was dependent on the New York Public Service Commission's adoption of the zero-emission credit subsidy that pays upstate nuclear generators for their carbon-free attributes. (See [New York Adopts Clean Energy Standard Nuclear Subsidy](#).)

"Exelon's application to acquire FitzPatrick

must be considered incomplete because, inexplicably, it fails to incorporate any mention or analysis of New York's proposed ZEC payment subsidy scheduled only for FitzPatrick and for both of Exelon's two in-state nuclear facilities. This payment subsidy, estimated at a total of \$8 billion in six two-year increments, will significantly distort the NYISO energy and capacity markets and fundamentally alter the economics of Exelon's power generation operations in NYISO, including FitzPatrick," Public Citizen wrote.

"We believe the structure of the ZEC may conflict with elements of the NYISO ... Tariff, particularly FERC's mandate for incentives through the NYISO installed capacity market," the protest continued.

"While the ... proponents claim the ZEC is designed to combat climate change, a realistic analysis shows that the primary purpose of the ZEC is to keep select economically uncompetitive nuclear power plants operating, regardless of the impact on greenhouse gas emissions. And the state's decision to discriminate between different nuclear generating stations for

reasons other than climate change or the environment further complicates the true purpose of this expensive ZEC subsidy," Public Citizen says.

Entergy's downstate Indian Point facility, which is not financially stressed, is not currently eligible to participate in the ZEC program.

Opponents of the subsidy say it will cost ratepayers up to \$8 billion over its 12-year life. Supporters say the state will enjoy a net economic benefit when it is calculated using the federal social cost of carbon analysis.

Public Citizen wants FERC to declare the application incomplete, require a market analysis that incorporates the full impact of ZECs and determine if the subsidies conform with FERC rules.

Public Citizen was the only party to file responses to the application before the comment deadline expired Oct. 10, except for U.S. Rep. John Katko (R-N.Y.), who sent a [letter](#) to FERC urging action on the deal. Katko, whose district includes FitzPatrick, said the plant provides more than 600 jobs and is "a vital part of the region's economy."

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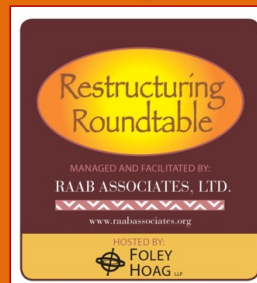
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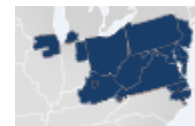
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PJM Considering Injection Rights for Demand Response

By Rory D. Sweeney

VALLEY FORGE, Pa. — PJM is considering giving demand response participants injection rights in its effort to expand distributed energy resources' access to wholesale markets.

The effort is being overseen through special Markets and Reliability Committee sessions that began in April. At the most recent session last week, PJM officials discussed what they called "demand response with injections," a practice ISO-NE has been using since last year.

DR resources eligible to inject past their meters would have to do so without creating problems for the distribution system. To avoid double counting, DR resources would not receive payments for regulation or synchronized reserves if they are reducing their energy bills through net energy metering (NEM).

Accounting, Jurisdictional Questions

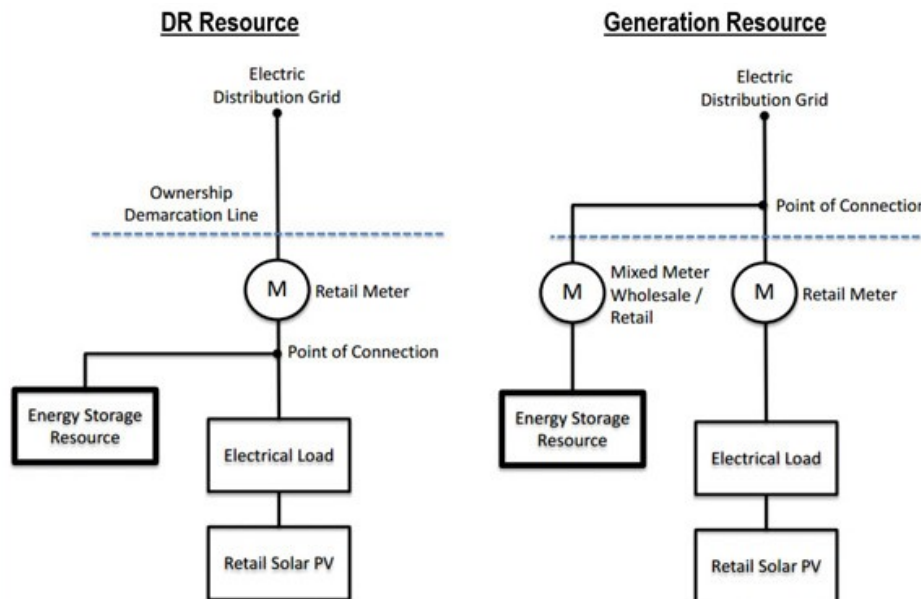
Allowing DR injections raises jurisdictional and accounting questions, PJM said. If DR is treated as a non-wholesale energy injection akin to NEM, "does the DR resource get paid LMP and keep the NEM credit? Does PJM adjust the energy payment to the DR resource to reflect NEM credit? Does the [load-serving entity] keep the cost reduction?"

PJM's Aaron Berner also reviewed the small generator interconnection process and whether the alternate queue for small projects should be eliminated or modified. The proposals, presented by Berner, included an alternative queue process designed to reduce the study and review times as well as a reorganization of grid-upgrade cost allocations for projects costing less than \$5 million.

The sessions are in response to a problem

"I can see DER participating in PJM as the next wave of a resource that at some point is going to reach critical mass."

Dave Pratzon, consultant



PJM's interconnection rules restrict DER system designs and limit their full capability use. | A.F. Mensah

statement brought by battery storage system designer A.F. Mensah, which was approved by stakeholders in February. (See "Faster Path to Market for Distributed Resources to be Studied," PJM MRC & Members Committee Briefs.)

In the problem statement, A.F. Mensah outlined the limitations created by PJM's current market participation rules that require battery systems to commit to a single purpose rather than provide multiple services. To participate in PJM's markets, versatile resources like battery systems must choose to interconnect either as a generation resource through the RTO's standard queue or as a DR resource.

Cost Prohibitive

The standard queue is cost prohibitive, requiring a long review and analysis process, along with requirements to install redundant equipment that increase each project's

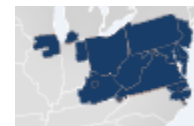
complexity and cost. Additionally, that path limits storage systems to participating in the wholesale market, so retail customers with small-scale renewable systems, such as rooftop solar or residential-size wind turbines, have to account for each system separately and can't store renewable power created now to offset demand later.

However, the DR pathway only allows resources to offset their owners' current demand, which negates renewables' ability to provide power to the grid when they are producing more than the system owner needs.

"Distributed resources are often installed as part of a wider behind-the-meter system, which includes solar panels that produce more power than consumed by the load on an instantaneous basis," A.F. Mensah wrote in the problem statement. "The provision limits the DR value opportunity based on the amount of instantaneous load, which therefore severely limits the value the DR resource can provide to the market."

PJM's issue charge set up the special MRC sessions in acknowledgement of no other cross-committee forum existing to address the topic.

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Monitor Says FERC Erred in PJM FTR Ruling, Seeks Rehearing

By Rory D. Sweeney

PJM's Independent Market Monitor asked FERC on Friday to reconsider its "flawed" ruling on PJM's financial transmission rights market, saying it "contradicts the fundamental purpose of returning congestion revenues to load" ([EL16-6-001, ER16-121](#)).

"A consistent theme of the Sept. 15th order is the unsupported view that load must provide guaranteed and risk-free funding of FTRs as a hedge against day-ahead congestion, and that this is somehow in the interest of load," the Monitor wrote in its rehearing request. "This approach, favored by the financial participants who own most FTRs, is not consistent with the reason that FTRs exist and has no basis in market logic."

The commission's order rejected PJM's proposal to reduce Stage 1A infeasible auction revenue rights by increasing its zonal load forecast growth rate, saying the change would result in unnecessary transmission projects because it would rely on outdated source and sink points. The commission also rebuffed PJM on its plan to eliminate the netting of negative ARR in a portfolio against positive ones.

FERC also ordered PJM to allocate balancing congestion to real-time load. It gave the RTO until Nov. 14 to submit a compliance filing. (See [FERC Finds PJM ARR/FTR Market Design Flawed; Rejects Proposed Fix.](#))

An FTR entitles its holder to credits based on locational price differences in the day-

Item	PJM Modification	FERC ruling	FERC reasoning
Stage 1A	Escalate stage 1A 10 year load growth rate to 1.5% such that upgrades are triggered prior to observing material impacts as a result of infeasibilities	Rejected, instead required (1) PJM to remove historical paths that are inactive and (2) PJM to develop a just and reasonable method of allocating Stage 1A ARRs based on source points that reflect actual system usage	(1) PJM proposal may artificially introduce upgrades outside of RTEP process (2) Inactive historical generator to load paths do not reflect actual system usage
Portfolio Netting	Eliminate netting to address any cross-subsidization	Rejected	Current netting provisions are just and reasonable
Balancing Congestion	Allocate to Real Time (RT) load and exports	Agreed, Pro-rata allocate to RT load and exports	Cost Causation Principle

FERC order on PJM FTR changes | PJM

ahead energy market when the transmission grid is congested. FTRs can be purchased or converted from ARRs, which are allocated to network and firm point-to-point customers.

The Monitor's request argues that FERC departed from precedent and contradicted earlier orders in striking balancing congestion from the FTR definition.

"Elimination of the total congestion revenues rule means that load-serving entities will be forced to pay to make up the difference when congestion revenues paid to FTR holders are in excess of the total congestion revenues collected," the Monitor said. "This requires load to pay total congestion, including day-ahead and balancing, and then pay balancing again when it is negative. This is not consistent with the objective of the FTR/ARR design, which is to return conges-

tion revenues to load."

The Monitor described FERC's ruling on portfolio netting as "unexplained" and said it "fails to address extensive arguments and examples that show the portfolio netting rule does result in cross subsidies." The netting rule should be eliminated, the Monitor argued, because it "provides unjustified subsidies to participants holding FTRs with negative target allocations."

It also challenged the commission's determination that the Stage 1A allocation rule is necessary, saying it "avoids addressing the actual problem: the complete disconnect between the allocation of ARRs and actual system usage." The Monitor said "the entire concept of generation to load paths is archaic, reflecting the contract path approach to physical transmission rights prior to the introduction of market."

PJM Considering Injection Rights for Demand Response

Continued from page 14

'Next Wave'

"I can see DER participating in PJM as the next wave of a resource that at some point is going to reach critical mass," said Dave Pratzon, who consults for generators and energy marketers. "It's going to have to be dispatchable. PJM's going to have to know its output. I think that part of the work of this group has to be forward looking."

PJM also presented its initial considerations on the topic, suggesting there could be a hybrid rule. Calling it "demand response with injections," PJM's Andy Levitt said ISO-NE instituted a similar rule in 2015 that allows load to "go negative" — i.e., inject excess generation into the grid. This model would necessitate changes to accounting and settlement procedures to ensure participants are paid appropriately.

PJM staff asked if stakeholders would allow them to focus on one issue, such as allow DR injections for ancillary services, so as to not overload the committee and "boil the

ocean," as MRC secretary Dave Anders put it. Stakeholders, however, didn't want the other issues to be forgotten and said ancillary services might be one of the harder issues to address.

"I don't think this is a quick one that we can overlook in a hurry," FirstEnergy's Bruce Rimmel said. "It complicates itself quickly."

PJM staff are analyzing the feedback from the meeting and will be presenting recommendations on how to proceed. The next meeting on the issue is scheduled for 9 a.m. Nov. 22 at PJM's Conference and Training Center.

GRAIN BELT EXPRESS CLEAN LINE

GRAIN BELT EXPRESS CLEAN LINE TRANSMISSION PROJECT *Notice of New Open Solicitation Window*

On October 13, 2016, Grain Belt Express Clean Line LLC ("Grain Belt") will begin accepting new and updated transmission service requests in its open solicitation for capacity on the proposed Grain Belt Express Clean Line transmission project (the "Project").

The Project is a proposed approximately 780-mile, multi-terminal ± 600 kV high-voltage, direct current (HVDC) transmission line and associated facilities. The Project will originate near the Spearville 345-kV substation in Ford County, Kansas, and will terminate near the Sullivan 765-kV substation in Sullivan County, Indiana, where it will be capable of delivering 3,500 MW of power. There is also an intermediate converter station located near the Maywood 345-kV substation in Missouri, where the Project will have the capacity to deliver up to 500 MW of power. The associated facilities will include transmission facilities to connect the converter stations to the existing transmission grid and a collector system comprised of alternating current transmission lines to connect generators to the western terminus of the line. Grain Belt expects to commence construction of the Project as early as 2018 and place the Project in service in 2021. Additional information about the Project is available at www.grainbeltexpresscleanline.com, and the original Notice of the Open Solicitation is available at: http://www.grainbeltexpresscleanline.com/sites/grain_belt/media/docs/Grain_Belt_Express_Open_Solicitation_Notice.pdf.

In this window, Grain Belt is accepting requests for service from Kansas to Missouri. Grain Belt may conduct subsequent windows or additional open solicitation processes for the Project in the future. Grain Belt intends to allocate up to 100% of the Project's capacity to customers through an open and transparent solicitation and capacity allocation process. This process will be conducted pursuant to the FERC Policy Statement issued on January 17, 2013, *Allocation of Capacity on New Merchant Transmission Projects and New Cost-Based, Participant-Funded Transmission Projects*, 142 FERC ¶ 61,038. On May 8, 2014, FERC issued an order conditionally authorizing Grain Belt negotiated rate authority under this Policy Statement.

Parties interested in submitting transmission service requests (TSRs) should send notice to Capacity@CleanLineEnergy.com. Following confirmation of intent to participate, an updated TSR will be provided. The due date to be considered in the first phase of this window is November 4, 2016. Grain Belt will then evaluate TSR forms according to the criteria described below. Participants may request preliminary meetings to discuss transmission service request considerations.

Interested parties should contact Eleanor Elbert at the contact information set forth below in order to participate in the open solicitation process.

Eleanor Elbert
Capacity@CleanLineEnergy.com
c/o Clean Line Energy Partners LLC
1001 McKinney Street, Suite 700
Houston, Texas 77002
832.319.6336

Grain Belt will use the following customer selection criteria as initial screening factors in this window in order for participants to be considered for the ranking and negotiation process: (1) first mover status (willingness to transact early in the project's development cycle) and (2) creditworthiness.

Participants that satisfy the selection criteria will then be ranked according to the following ranking criteria for purposes of phasing negotiations: (1) level of creditworthiness; (2) early commitment in the Project's development cycle; (3) Project risk-sharing through phased deposits or similar financial commitments during the Project's development cycle; (4) ability to assist with the Project's development needs; (5) longer term of service; (6) larger capacity reservation; (7) ability to access Project converter stations; (8) completion of generation development milestones or evidence of need for Project capacity (as appropriate); (9) commercial operation date for generation or timing of transmission service commencement date; and (10) material price terms. There will be time-defined, phased negotiation windows, with the first phase commencing in the fourth quarter of 2016.

Advertisement



SPP Panel OKs Changes to Competitive Transmission Process

By Tom Kleckner

LITTLE ROCK, Ark. — SPP’s Strategic Planning Committee on Thursday endorsed the Competitive Transmission Process Task Force’s recommendations for improving the competitive solicitation process for transmission projects under FERC Order 1000.

SPP’s first run-through of its transmission owner selection process resulted in the award of a competitive project, only to have the project’s notice-to-construct (NTC) withdrawn in July because of falling load projections.

The task force recommended raising the minimum threshold for competitive projects from \$100,000 to \$3 million, seating the selection panel sooner and requiring it to quickly publish its selection criteria. It also said SPP should allow restudy requests before an NTC is issued. The SPC unanimously approved all the recommendations.

The SPC also approved using a consistent

template for annual transmission revenue requirement (ATRR) responses, based on the expected rate recovery under the SPP Tariff.

Much of the remaining work will be handed off to other stakeholder groups and SPP legal staff, who will draft the revision requests, revise business practices, prepare FERC filings and revise the ATRR template. The finished products are scheduled to be brought to the Markets and Operations Policy Committee in January.

The task force’s chair, Bill Grant of Southwestern Public Service, said the group discussed a higher threshold before settling on \$3 million. SPP Director Harry Skilton proposed a \$5 million threshold, with the idea that FERC would accept a lower number.

“The risk in starting out with a high number is that FERC flat out rejects it and sends it back to you,” Sunflower Electric Power’s Tom Hestermann said.

Board Chair Jim Eckelberger said he was comfortable with the lower \$3 million threshold, assuming it’s “defendable.”

“I think that number is defendable, because that’s what we’re going to spend just to seat the [selection] panel,” Grant said, referring to the \$300,000 projection to train and seat the industry expert panel (IEP). A company bidding on competitive projects is required to put down 10% of the project’s cost — \$300,000 for a \$3 million threshold.

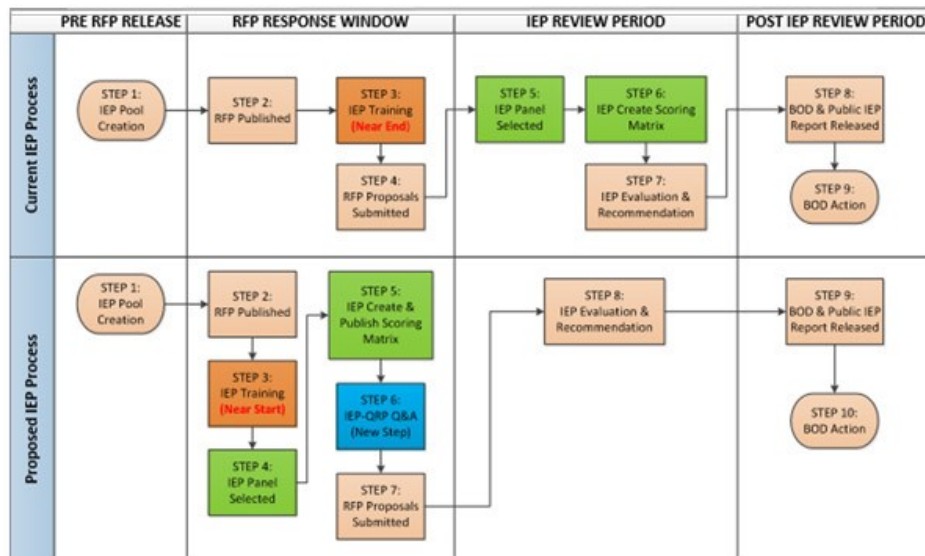
Grant said seating the IEP early in the solicitation process and requiring the panel to publish its scoring criteria as early in the process as possible would allow transmission companies to submit more focused bids, reducing potential cost variances.

The task force determined developing “a more robust” ATRR template that includes special modeling needs for various business models would negate the need for a standard, regionwide formula rate. The template will include incremental costs specific to the RFP project.

“My biggest concern is not the highway projects this will be applied to. My biggest concern is with the byway projects,” Grant said. “When you evaluate based on incremental basis, everyone’s on the same playing field.”

The withdrawal of the NTC on SPP’s first Order 1000 project, a 115-kV line from Walkemeyer to North Liberal in southwest Kansas, led to the recommendation that the solicitation process be suspended to allow for re-evaluations in the case of a significant load change. (See [SPP Cancels First Competitive Tx Project, Citing Falling Demand Projections.](#))

“Under the Tariff, the developer had to get an NTC before it could be re-evaluated,” Grant said. “If there’s been a substantial change, we don’t want to have to wait to go through the RFP process and get an NTC.”



*Proposed changes are policy impacting and require Oversight Committee Approval.
*Proposed changes do not require any Tariff or governing document changes.

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SPP Moves to Head off KCP&L Measure on Tx Cost Shifts

By Tom Kleckner

LITTLE ROCK, Ark. — Kansas City Power & Light's proposal for addressing cost shifts led to a free-wheeling discussion on transmission pricing and the unintended consequences of proposed Tariff changes at SPP's Strategic Planning Committee meeting Thursday. It ended with the committee agreeing to defer action pending an alternative proposal by the RTO.

Revision request [RR172](#) would create a process for determining where to place a new SPP transmission owner's facilities and how to submit the owner's annual transmission revenue requirement (ATRR) or formula rate to FERC for inclusion in the Tariff. It would also create a 365-day review period before the new TO could seek FERC approval of its revenue requirement.

The committee accepted SPP CEO Nick Brown's suggestion to allow staff to propose "straw" Tariff language or a business practice and bring it back to the SPC in January. "Staff certainly has a decade and a half of dealing with this issue on a case-by-case basis," said Brown, adding staff would take stakeholder input into consideration and support both that recommendation — "based on experience, FERC precedent and what we believe is the best overall solution" — and why it didn't recommend alternatives.

At the same time, several stakeholders will continue work on the revision request.

Sponsor Surprised

Denise Buffington, KCP&L's corporate counsel and director of energy policy, said she was surprised the request came before the SPC, complaining she wasn't notified or given a chance to present the revision request to the committee.

Buffington said the proposal was a response to her company having been "blindsided" by SPP's decision to put the City of Independence, Mo., in its transmission pricing zone.

"That was a \$4.6 million cost shift to our customers," she said. "Our main concern is the historic cost of entities paid for by historic customers. We're more than willing to share in the costs of anything that's planned for and goes through the SPP

process. What we think is patently unfair is for someone to build out their system and then come to SPP and socialize the costs."

Heather Starnes, counsel for the Missouri Joint Municipal Electric Utility Commission (MJMEUC), spoke for the non-jurisdictional and smaller entities, which could face harmless obligations should they be placed in an existing transmission zone as a sub-zone. She noted forcing smaller TOs into their own pricing zones can cause difficulties, using City Utilities of Springfield's struggles with SPP's highway/byway cost allocation as an example.

"If [a city] had transmission facilities and decided to put them under SPP's Tariff, SPP would look at the size of the load and, based on internal criteria, decide whether it goes into a new zone or an existing zone," Starnes said. "If it's placed in an existing zone, [the city] would be required [under the proposed revision] to hold everyone else in that zone harmless."

'What's the Benefit?'

"If the small entities have to bear the entire cost of their ATRR and then [base-plan funding], what incentive is there for these small entities to join SPP if it only adds obligations, including losing functional control of their facilities?" Starnes asked. "What's the benefit?"

"This is a cost shift, or a question of who bears what costs," said Oklahoma Gas & Electric's Jake Langthorn. "There are many areas where we'll have the question come up over which zone should pay. I think it's time to see how a postage-stamp rate affects everyone. If we had it, frankly, most of these problems would disappear."

On Monday, a still-frustrated Buffington said SPP "hijacked" the stakeholder revision-request process by pulling RR172 from the Regional Tariff Working Group and placing it on the SPC's agenda. She said



KCP&L's Denise Buffington | © RTO Insider

KCP&L, as the sponsor, was not given the opportunity to present the revision request to the committee, and that the background document prepared by SPP staff only included comments from South Central MCN, one of seven opponents to the proposal, and none from its three supporters.

"No one else was given that opportunity," said Buffington, noting the RTWG's minutes do not indicate a vote sending RR172 to the SPC. "This whole process runs counter to the existing revision-request process."

SPP did not respond to a request for comment Monday on Buffington's complaints.

Buffington said she would work with Starnes and ITC Holdings' Marguerite Wagner to revise the revision request. "I don't think we're that far apart," she said, reserving her right to bring new language back and rebut staff's proposals to the SPC in January.

"This is the kind of discussion I was hoping we would have at this level," said South Central MCN's Noman Williams. "In my view, it's a change of policy ... [that] needs to be done. We need to come together and define the policy as a group."

"This still leaves us options to consider how this might be resolved," SPP Director Phyllis Bernard said, tossing out postage-stamp rates as one alternative. "These are conversations we've been having as of late, but it hasn't made it to the table or in the record, but I think it's reaching critical mass."



SPP MOPC Rejects Z2 Waivers; Task Force to Consider Process Improvements

By Tom Kleckner

LITTLE ROCK, Ark. — SPP stakeholders once again took up the issue of Z2 credit-able transmission upgrades last week, and once again, the discussion was lively.

The Markets and Operations Policy Committee last week endorsed a recommendation by the Z2 Task Force to “follow the Tariff” and reject requests that \$114.1 million in directly assigned Z2 network upgrades be allocated to SPP’s base plan. The motion to reject the waiver requests passed with 83% support.

The long-running issue also was a subject of discussion before the Strategic Planning Committee on Thursday.

The task force was asked by the Board of Directors to review requests from members who SPP staff said didn’t qualify for waivers from \$36.9 million in directly assigned upgrade costs. The group was also asked to review another \$77.2 million in direct costs from members who didn’t request waivers, while addressing “equity concerns” for both groups. (See “Z2 Task Force Rejects Waiver Requests,” *SPP Briefs*.)

The task force rejected the waivers by an 8-4 vote, with four abstentions.

“We didn’t look at each waiver request, but we looked at the principles and the methodologies to ensure we were treating everyone equitably,” said the task force’s chair, Kansas City Power and Light Director of Energy Policy Denise Buffington. “This kind of validates where we were in July. [Z2] is like a tug of war, where both sides have excellent points and you can empathize with both, but the flag barely moves. That’s why you saw the voting the way it is, and it’s why our recommendation is to stay the course.”

“We keep using this phrase ‘equitably,’ but it’s important to look at what equity means in this respect,” Oklahoma Gas & Electric’s Jake Langthorn said. “If the only way to resolve this is to take money from OG&E customers to give it to other customers, we simply cannot agree.”

“The reason [the motion] was characterized as ‘following the Tariff’ is because most of us believe that’s the way it ought to be,” OG&E’s Greg McAuley said.

Under Attachment Z2 of the SPP Tariff,

staff was to assign financial credits and obligations for sponsored upgrades. Years of not applying credits dating back to 2008 have complicated the task of trying to accurately compensate project sponsors and claw back money from members who owe debts for the upgrades.

‘But-For’ Test

“Every time we have a conversation on this, we get more information,” Buffington told the SPC. “The thing that was new to a lot of members is that the ‘but-for’ test is not a true ‘but-for’ test; it’s a 3% [usage] threshold. ... People were confused about what ‘but-for’ meant under the Tariff.”

SPP’s “but-for” test requires interconnection customers to fund transmission improvements that would not be required but for their additional load. The test is triggered by a 3% increase on a line’s directional flow in the same direction as the power flow that caused the upgrade.

Dogwood Energy’s Rob Janssen was among those who asked for certainty from SPP. “The nature of the ‘but-for’ test and how it’s being applied should result in a clear statement that makes everyone comfortable,” he said.

“It would be nice to say we have a well-oiled machine going forward,” Southwestern Public Service’s Bill Grant said during the SPC meeting. “I can’t comfortably say that today.”

Prescott’s Complaint

Among those hoping for a waiver was Zachary David Wilson, an attorney representing the southwestern Arkansas city of Prescott. Wilson came to the MOPC to complain about an email he recently received from American Electric Power’s Southwestern Electric Power Co., saying the city owed \$303,000 in assigned costs under a 2009 contract with AEP.

“We had a conference call with some of the [SWEPCO] lawyers to try and make some sense out of this,” Wilson said. “We would like time to investigate.”

The committee rejected the waiver request in a vote separate from the task force’s recommendation.

AEP can still use SPP’s transmission-dispute process to address Prescott’s complaint, or it can take the issue to FERC, as can other members contesting their Z2 costs or trying to gain their overdue compensation.

“Where are we going?” AEP’s Richard Ross asked during the SPC’s discussion on whether to solve Z2’s problems within SPP or at FERC. “If what we decided [Tuesday] is the course of action, I don’t think we’re going to end up solving it here. Once we enter the dispute process, my expectation is staff is not going to satisfy any of the claims folks have on their disputes, and it’s going to proceed very quickly to FERC.”

“I don’t think we can do anything about the past ... people can file at FERC,” said SPC Chair Mike Wise, of Golden Spread Electric Cooperative. “I’m concerned with how we deal with this going forward.”

Process Improvements

The SPP board is expected to act on the waivers next week. After that, the task force will begin working with staff on improving the entire process.

Meanwhile, staff said it has completed its second processing run of historical costs, from March 2008 through June 2016. The results, shared with members last month, identified \$183.1 million in total credits to be collected.

A third historical data processing run through August was completed Oct. 14, with results distributed to members Wednesday. The data will be used for the November invoices that will capture the complete historical period and September.

Asked whether SPP could guarantee the numbers would not change in the final invoices, the RTO’s lead regulatory analyst, Charles Locke, told the MOPC, “There are no guarantees in Z2.”



Grant



Locke



SPP MOPC Rejects Change to Transmission Billing Dispute Procedures

By Tom Kleckner

LITTLE ROCK, Ark. — Bowing to arguments from the Public Power sector, the SPP Markets and Operations Policy Committee on Wednesday rejected a rule change that would have allowed transmission owners to collect interest in billing disputes, even if they lose.

SPP's current Tariff language allows a transmission customer to pay the amount it is disputing into an escrow account, where it is held until the dispute is settled. The interest earned on that account is then paid to the winning party.

The proposed change would have allowed SPP to pay the disputed amounts to TOs while the dispute is underway, and then collect the disputed funds back from the TOs if the customer won its case. However, the customer would not recover the interest.

Attorney Heather Starnes, representing the Missouri Joint Municipal Electric Utility Commission (MJMEUC), said the Tariff change ([RR132](#)) would be unfair to trans-

mission customers and would not incent use of the dispute resolution process. She also challenged forwarding disputed funds to non-jurisdictional entities, questioning SPP's ability to claw back the funds.

"This is a win-win for the TO," Starnes said. "It gets the disputed funds, gets to use those funds and earn interest on them, and even if the TO loses the dispute, it has still gotten the use of and interest on those funds for the time period in which the dispute is unresolved."

The measure was opposed by Flat Ridge 2 Wind Energy, MJMEUC and several other public utilities: the City of Independence, Kansas Electric Power Cooperative, Kansas Power Pool, Municipal Energy Agency of Nebraska and the Oklahoma Municipal Power Authority.

SPP supported the revision, saying the changes would align with the Integrated Marketplace's transmission-settlement process and be easier for staff to administer.

"Administrative efficiency and/or matching up the marketplace and transmission-billing dispute processes are not sufficient justifications for destroying the independent and

balanced dispute process currently in place," Starnes said in her comments against RR132. "SPP having to manage the escrow accounts created incentive for it to work diligently to get disputes resolved."

"This seems to me to be a solution in search of a problem," Midwest Energy's Bill Dowling said.

SPP is one of two RTOs still using FERC's *pro forma* tariff language, meaning any revisions to that language must meet a different burden of proof than normal Tariff revisions, Starnes said.

"SPP would have to have proved that RR132 and its process revisions were equal to or better than the FERC *pro forma* tariff language," she said.

It was a surprising turnaround. The proposal had cleared the Regional Tariff Working Group in April with only two abstentions.

Only Oklahoma Gas & Electric opposed the MOPC's rejection of the revision request. There were three abstentions.

Staff assured members that transmission-revenue funds won't be commingled with Attachment Z2 funds.

MOPC Briefs

AEP Project's 41% Overrun Approved

LITTLE ROCK, Ark. — The SPP Markets and Operations Policy Committee endorsed a 41% increase in a delayed 345-kV project along the Red River in southeastern Oklahoma as reasonable and reset the project's baseline.

American Electric Power was supposed to have upgraded a pair of substations and built 76 miles of transmission line between Valliant, Okla., and a substation outside Texarkana, located on the Texas-Arkansas border, for \$131.7 million. That total has grown to \$185.8 million following a two-year delay attributed mostly to weather. The project was supposed to be energized in October 2014, but that date has now slipped to December 2016.

AEP's Brian Johnson said the company was late to notify SPP of the delay because of internal communication problems between



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project management and those reporting costs. He said the company didn't realize how far the project was outside its bandwidth until July, calling the situation "embarrassing."

The company attributed 51% of the cost overruns to extensive flooding along the 76-mile route. The project was also hampered by siting problems and a landowner group's opposition. "It was a combination of everything," Johnson said.

The Project Cost Working Group, which reviews projects when updated cost estimates fall outside a 20% bandwidth, passed the recommendation on to the MOPC with a no vote from Kansas City

Power & Light and two abstentions.

SPP Regional Entity: Wind Farms not Meeting New Standards

SPP Regional Entity General Manager Ron Ciesiel said wind farms unfamiliar with new NERC standards for reactive power, voltage controls and frequency caused a spike in reported reliability violations during the third quarter.

There were 71 violations of the [MOD-025-2](#) (Verification and Data Reporting of Generator Real and Reactive Power

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Capability and Synchronous Condenser Reactive Power Capability), [PRC-019-2](#) (Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection) and [PRC-024-2](#) (Generator Frequency and Voltage Protective Relay Settings) standards, most of them by individually registered wind farms.

“The only good news is they aren’t operating problems,” Ciesiel said. He said the violations resulted from wind generators’ lack of awareness with the new standards’ implementation plan and a shortage of third parties to conduct testing. Only 40% of the generation units covered by the new standards had their capability tested or settings verified by July 1, when the standards took effect, Ciesiel said.

The RE expects to report more than 200 violations this year, a number it hasn’t topped since 2011.

Ciesiel [said](#) 33 new or revised standards will take effect over the next 12 months.

Members Vote to Cancel 69-kV line in West Texas

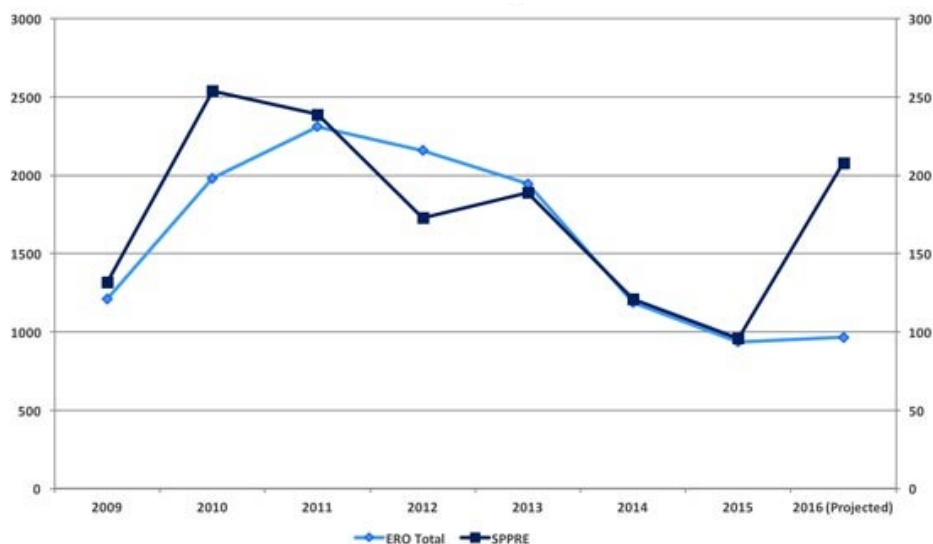
The MOPC approved staff’s recommendation to withdraw a notice-to-construct (NTC) for the Hobart City-Roosevelt Tap-Snyder 69-kV line in West Texas, based on the availability of an AEP operating guide that can mitigate the congestion through pre-emptive redispatch.

The project was one of five withheld from the 2016 Integrated Transmission Plan (ITP) Near Term portfolio to determine whether they were needed to solve Scenario 5, which assumes renewable energy operating at 100% capacity.

Staff found while there have been 17 hours of congestion in the area since 2014, the 2017 ITP 10-year study indicated there were no congestion hours or future needs for the project, which had an estimated cost of \$31 million.

Southwestern Public Service’s Bill Grant abstained from the vote, saying he did not want to live with operating guides forever.

The committee also endorsed staff’s recommendation to accelerate the NTC for



Reliability violations by year | SPP

an Oklahoma Gas & Electric 345-kV circuit upgrade project, but to leave a SPS 230-kV circuit upgrade in West Texas as is.

SPP staff said OG&E’s Amoco-Sundown project is necessary to meet additional congestion expected from more than 300 MW of wind energy added to the system this summer. With more wind energy on the way in Oklahoma, staff pushed the project’s in-service date to April 2018, a year earlier than originally planned.

SPP’s recent Wind Integration Study pegged both projects for further analysis. (See [Study: 60% Wind Penetration Possible in SPP](#).)

MWG Clears 15 Change Requests

The Market Working Group brought five revision requests to the MOPC, which approved all over a small handful of no votes and abstentions. The committee unanimously approved 10 more changes as part of its consent agenda.

A revision request concerning the triggering of shortage pricing ([MWG-MRR175](#)) generated the most discussion among members — some concerned over sudden price spikes, others over a lack of scarcity events. The change incorporates language to comply with FERC Order 825 by using shortage pricing for any interval in which energy or operating reserves are short during the resources’ pricing. The change applies to any shortage, regardless of the duration or its cause. (See [FERC Issues 1st RTO Price Formation Reforms](#).)

“Price spikes that occur over certain intervals can wipe out the entire day,” Nebraska Public Power District’s Paul Malone said. “There doesn’t seem to be any discussion about what can be done to mitigate this stuff. You can’t respond to a \$500 price spike over five-minute intervals.”

The MWG recommendation was pushed for approval this month because it is a compliance matter. SPP staff and the group will both continue working to improve the process.

“We’re going to go back and see if we can make it better,” said Richard Dillon, SPP’s director of market design. “Scarcity pricing ... is becoming more prevalent in the industry. We’d like to take a second look and see if we can do something better than the industry.”

“This will happen,” said AEP’s Richard Ross, chair of the MWG. “We are motivated to do something else, and staff is motivated to do something else.”

The motion passed with three no votes and two abstentions.

Golden Spread Electric Cooperative cited Order 825 in opposing a related change, ([MWG-MRR173](#)), which replaces the terms “head-room” and “floor-room” with “instantaneous load capacity.” Golden Spread said procuring rampable capacity for instantaneous load change, hourly load forecast or variable resource output through reliability unit commitment “masks shortage conditions in a manner incon-

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sistent with the requirements of FERC's shortage-pricing rule."

Other rule changes approved by the committee were:

- **MWG-MRR183:** Updates the violation relaxation limits (VRLs) operating constraint based on staff's annual analysis, allowing additional redispatch to solve cases with fewer violations. Golden Spread abstained.
- **MWG-MRR188:** Gives staff the option to include up to 100% of instantaneous load capacity (as opposed to the current 0% of capacity) in clearing the day-ahead market, an effort to minimize the gap between day-ahead and real-time energy prices. The motion received nine abstentions.
- **MWG-MRR193:** Adds rules for solar resources to the market protocols and Tariff, including incorporating a solar forecast in SPP studies, increasing the solar forecast's accuracy and including

solar resources in dispatchable variable energy resource registration. Nebraska Public Power District cast an opposing vote, contending behind-the-meter generation would be required to register in the market should their loads change and they end up injecting power onto the system.

- **BPWG-RR123:** Removes obsolete language and clarifies SPP's current practices for short-term service requests and the system impact study process.
- **MWG-MRR178:** Specifies that SPP's Market Monitoring Unit will review the costs included in each mitigated resource offer, on an ex-post basis.
- **MWG-MRR179:** Aligns the protocols with FERC-approved language ([ER15-2265](#)) ensuring long-term congestion rights are not affected by potential resource hub terminations, and that resource hubs used in bilateral contracts can't be unilaterally terminated by the hub's owner.
- **MWG-MRR181:** Corrects outdated references in the Tariff and protocols related to the allocation of annual auction revenue rights, an oversight noted by FERC ([ER16-13](#)).

- **MWG-MRR182:** Removes the term "control area," which is no longer used by SPP, from the market protocols.
- **MWG-MRR184:** Exempts resources from charges when they clear the day-ahead market with real-time meter readings of zero following either decommitment by SPP or dispatch to zero.
- **MWG-MRR185:** Clarifies which document — SPP Planning Criteria or SPP Operating Criteria — is referenced when used in the market protocols and Tariff.
- **ORWG-RR168:** Requires transmission owners to provide the highest available emergency ratings and specifies SPP's interpretation of those ratings.
- **RTWG-RR176:** Corrects and clarifies the responsibilities and requirements under the process that allows generation resources to be compensated for reactive support.
- **TWG-RR174:** Revises Attachment AQ of the Tariff to no longer require transmission customers to submit a request for changes in delivery point facilities without a corresponding change in load.

— Tom Kleckner

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Strategic Planning Committee Briefs

Task Force Works on Behind-the-Meter Generation



Heather Starnes, MJMEUC | © RTO Insider

LITTLE ROCK, Ark. — Heather Starnes, counsel for the Missouri Joint Municipal Electric Utility Commission, briefed the Strategic Planning Committee on Thursday on the work that the [Billing Determinant Task Force](#) she chairs has done in developing a business practice for behind-the-meter generation.

The task force has produced a revision request ([BRR158](#)) that sets guidelines to determine a customer's network load and define the parameters for what should be considered BTM generation.

However, the Regional Tariff Working Group remanded the change back to the task force in June to address SPP's request to delineate responsibility for reporting network load. With the consolidation of SPP's legacy balancing authorities into one, Starnes said the RTO has been having

difficulty gathering complete zonal information from the transmission zones' lead transmission owners.

"SPP's position is they would like to see something created that mimics what it did before we created the consolidated balancing authority," she said.

Under the revision, network load would include all network service, including the sum of generators' metered values behind the delivery point. If the generator's meter data is not available when it's online, network customers would use its nameplate rating.

Starnes said the task force meets later this week and hopes to send BRR158 back to the RTWG for final consideration.

LP&L Task Force Looks at Precedent

SPC Chair Mike Wise, senior vice president of commercial operations and transmission for Golden Spread Electric Cooperative, encouraged the task force studying the migration of Lubbock Power & Light's load to ERCOT to identify any strategic implications of the municipality's exit. (See [Texas PUC OKs ERCOT, SPP Studies on Lubbock Move](#).)

"This is an entirely new study process," he said.

"Certainly there are broader implications beyond just Lubbock," said Oklahoma Gas & Electric's Jake Langthorn, the Exit Study Task Force's chair. "It's kind of an absence of facts ... no one's given much more thought at



SPP's Michael Deselle and Golden Spread's Mike Wise | © RTO Insider

this point to what happens, but we'll certainly pursue that as well."

SPP and ERCOT are conducting separate studies on LP&L's proposal to move 430 MW of load into the Texas market in June 2019. The grid operators will file a joint report to the Public Utility Commission of Texas next spring, though it has yet to be determined who will pay for the studies.

"Where's Lubbock?" one member asked pointedly. PUC Chair Donna Nelson has said she doesn't believe ERCOT ratepayers should pay for the studies, a sentiment shared in ERCOT.

"I didn't get the sense from anyone in the group that SPP should pick up the costs," Langthorn said. "We believe the party that wants to get it done, Lubbock, should pick up the costs."

— Tom Kleckner

SPP Market Savings Hit \$1B Mark

LITTLE ROCK, Ark. — SPP said last week its wholesale electricity markets have reduced electricity costs by more than \$1 billion since its Integrated Marketplace became operational in March 2014.

The RTO said it crossed the \$1 billion threshold in September.

"Our markets provide tremendous value to the SPP region. That's something we've known and demonstrated since they launched," said Bruce Rew, SPP's vice president of operations, in a statement. "The billion-dollar mark is an exciting milestone, and I'm proud that we reached it so quickly."

SPP noted the milestone came just weeks before it celebrates its

75th anniversary. The organization formed in December 1941, when 11 utilities pooled resources to power an aluminum plant near Malvern, Ark., that supplied the Defense Department during World War II.

The RTO now numbers almost 100 members in all or part of 14 states.

"This is just one more example of the value that comes out of our stakeholder process," said SPP CEO Nick Brown in a statement. "We've demonstrated through decades of success that our business model is built to stand the test of time, and we'll keep on providing exceptional value and service to our members just like we've always done."

— Tom Kleckner

COMPANY BRIEFS

Swift Energy Appoints Banks as Interim CEO



Oil and gas producer Swift Energy has appointed Robert J.

Banks as interim CEO. He replaces Terry E. Swift, who retired as the company's CEO earlier this month, according to a statement.

Banks is Swift's executive vice president and chief operating officer and will continue in those roles.

Terry Swift led the company for 15 years. He succeeded his father, Aubrey Swift, who founded the company in 1979.

More: [Houston Chronicle](#)

Entergy Proposes \$1B Gas-Fired Plant for Texas

Entergy is seeking to build a \$1 billion natural gas-fired power plant to serve the Montgomery County, Texas, area beginning in 2021.

The proposed 993-MW plant would serve 27 southeastern Texas counties primarily to the north and east of Houston. Entergy hopes to begin construction in early 2019.

More: [Fuel Fix](#)

GE to Spend \$1.65B to Acquire Wind Turbine Blade Maker



General Electric announced last week that it plans to spend \$1.65 billion to acquire LM Wind Power, a maker of wind turbine blades.

The deal will accelerate growth in GE's renewable energy unit, which was established last year when the company acquired Alstom SA's power operations for \$10 billion.

LM Wind Power will run as a standalone business within the unit, the companies said in a statement.

More: [Bloomberg News](#)

Ranger Solar Takes First Steps to Develop Maine's Largest Solar Farm



Ranger Solar has signed a lease for more than 600 acres at the former Loring

Air Force Base in Maine to develop what could become the state's largest solar farm, producing up to 100 MW of electricity.

The company would like to obtain the necessary regulatory approvals and power purchase agreements to begin construction before 2019.

"We know we have a long road ahead of us, but we're committed to it. We're hoping to bring new renewable energy to the region and new economic investment to northern Maine," said Aaron Svedlow, the company's director of environmental permitting.

More: [The Associated Press](#)

Duke: Plant Operating Safely After Cooling Pond Wall Break



Duke Energy said its H.F. Lee Plant in Goldsboro, N.C., is operating safely after

experiencing a break 50 to 60 feet wide in its cooling pond wall.

The pond is about 545 acres and does not contain coal ash, Duke said in a press release. An actively used ash pond across the Neuse River is also safe, the company said.

Duke expects the event to contribute less than one inch of water to the Neuse River.

More: [Duke Energy; The Charlotte Observer](#)

Dynegy Delays Mothballing Illinois Power Plant Unit



Dynegy has delayed mothballing Unit 1 of its Baldwin power plant in Illinois after scoring a winning bid in the Illinois Power Authority capacity auction

held in late September.

Unit 1 was scheduled to go offline on March 31, 2017, but will now remain in operation through September 2018. Unit 3 is scheduled to be mothballed on Oct. 17.

More: [The Randolph County Herald Tribune](#)

Alpha Sells Eastern Ky. Mine to Kingdom Coal



Coal company Alpha Natural Resources has sold one of its two

remaining Eastern Kentucky mines to Kingdom Coal, a subsidiary of Keystone-Kingdom Resources.

Kingdom has expressed interest in restarting the mine, which Alpha shut down in July, said Alpha CEO David Stetson in a statement.

Alpha had 11 mines in Eastern Kentucky in 2012. It announced last month that it would shut down its last active mine — Sidney Coal's Process Energy — in November.

More: [Lexington Herald-Leader](#)

NIPSCO Forecasts 24% Rise in Customer Heating Bills



Northern Indiana Public Service Co. customers should

brace for a 24% rise in their winter heating bills, based on the utility's forecast last week.

NIPSCO indicated that although higher natural gas costs are the primary driver of the hike, its gas infrastructure modernization plan is also a contributing factor.

On the same day as NIPSCO's announcement, the U.S. Energy Information Administration predicted utility bills would increase an average of 22% across the nation this winter for households using natural gas.

More: [The Times](#)

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NRC Report Card Lists Cybersecurity, Licensing, Inspection Concerns

By Ted Caddell and Rich Heidorn Jr.

WASHINGTON — The Nuclear Regulatory Commission's Inspector General last week issued his annual report on the agency's most serious management and performance challenges, highlighting concerns over cybersecurity, reactor inspections and licensing.



The report, which summarizes previous audit findings, noted that "challenges do not necessarily equate to problems."

"These challenges represent what [the Office of the Inspector General] considers to be inherent and continuing program challenges relative to maintaining effective and efficient oversight and internal management controls," IG Hubert T. Bell said. "As a result, it is likely they will continue to be challenges from year to year."

In addition to regulating about 100 commercial nuclear power generators and 31 research and test reactors, the commission is responsible for overseeing the safe use of radioactive materials used in medicine, academia and industry.

The IG cited the "increasing risks" to the security of NRC information systems and urged the agency to continue its efforts to develop new regulations for the "unique requirements of decommissioned nuclear power plants, which present different

security considerations than operating plants."

Bell cited concern over the commission's Network Security Operations Center (SOC), staffed mainly by contractors, which is responsible for ensuring the security of the agency's networks and monitoring it for suspicious activity. The commission's contracts do "not clearly define SOC performance goals and metrics" and different departments work with different security function descriptions, the IG said.

The result, as detailed in an audit in January, is confusion among NRC staffers and contractors about which policies and responsibilities govern the security work protecting NRC computer systems.

Another audit in March found the commission failed to collect identification cards from one-third of the 1,452 employees and contractors it terminated from 2014 through November 2015. "As a result, there is a risk of unauthorized physical access to NRC and other federal facilities," the IG said.

The report also cites the IG's second review of NRC's response to the Reducing Over-Classification Act of 2010, which was enacted over concern that excessive classification increases information security costs and improperly limits public access to information.

The IG found that the commission had implemented the recommendations from a 2013 audit and said a review of NRC classification actions from April 2013

through January 2016 "revealed no systematic misclassification." However, it said the agency "lacks a cohesive approach to records management of classified information" and has not reviewed classified records for disposition and declassification as required.

Other previous findings cited by the IG included:

- A call for improving NRC's licensing of Advanced Passive 1000 (AP1000) pressurized water reactors, a new design for which operators have never been licensed. Four AP1000 reactors are under construction in the U.S. and about 70 licensed operators will be required by 2020.
- A risk of inconsistent reactor inspections because of a lack of clarity in the definition of mandatory and discretionary inspection procedures.
- A finding that NRC lacked "a well-structured approach" for enforcing regulations governing the conditions under which licensees may make changes to their facilities or procedures, and conduct tests or experiments, without prior NRC approval.

Weaknesses in NRC's process for determining the significance of reactor inspection findings. The IG said the the agency has not regularly evaluated resources needed for its Significance Determination Process workflow and has not communicated clear expectations to employees.

FEDERAL BRIEFS

Army Corps Seeks Review of Tribal Involvement in Dakota Access



The U.S. Army Corps of Engineers is holding off on work for the \$3.8 billion Dakota Access oil pipeline in southern North Dakota while it examines whether to reform how tribal views are considered for such projects.

Last week, the corps issued a joint statement with the Justice Department and Interior Department calling upon pipeline owner Energy Transfer Partners to voluntarily stop work on private land around Lake Oahe. The statement came in the wake of a ruling by the D.C. Circuit Court of Appeals that allowed construction after the Obama administration halted it.

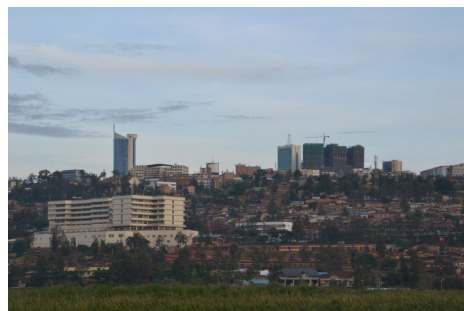
Officials "look forward to a serious discussion ... on whether there should be nationwide reform on the tribal consultation process for these types of infrastructure projects," the statement said.

More: [The Associated Press](#)

Countries Close Deal Phasing out HFCs

At a summit in the Rwandan capital of Kigali on Saturday, more than 150 countries sealed an agreement to phase out the use of hydrofluorocarbons (HFCs), potent greenhouse gases used as refrigerants.

Under the agreement, most developing countries will be required to begin their plans by 2019 and freeze their HFC levels by 2024. Developed nations, including the



Kigali, Rwanda

U.S., will be required to begin by 2024. The European Union adopted a measure to reduce its HFC emissions in 2014.

HFCs were designed to replace chloro-

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FEDERAL BRIEFS

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fluorocarbons, which were phased out under the 1987 Montreal Protocol because of the damage they caused to the ozone layer. Secretary of State John Kerry hailed the Kigali agreement as a “monumental step forward” and said it would avoid as much as a half degree Celsius of global warming.

More: [Financial Times](#); [The Guardian](#)

US Gov't Makes Largest Renewable Purchase Yet

The U.S. federal government made its largest ever purchase of renewable energy Friday when it signed a power purchase agreement for the 150-MW Mesquite 3 solar power station in Maricopa County, Ariz. The power from the desert solar array

will supply one-third of the power demands of 14 naval installations in California, including San Diego's naval base and the Marines' Camp Pendleton.

The Navy will buy the power at a fixed price for 25 years from owner Sempra Energy. “To me, the essence of solar power is, you know what the price of the fuel is going to be for the next 25 years, or more,” said Dennis McGinn, the Navy's assistant secretary for energy, installations and environment. “It's going to be reliable, it's going to be cheaper than what we're paying for brown power and it just diversifies our energy sources for these bases.”

The Energy Department says the growth of large-scale solar plants in the Southwest is a result of \$4.6 billion in investments it made as part of the stimulus legislation passed in the wake of the 2008 financial collapse.

More: [The Washington Post](#)

Bay Appoints Suzanne Krolikowski as FERC ALJ

FERC Chairman Norman Bay on Monday announced the appointment of Judge Suzanne Krolikowski as an administrative law judge.

Krolikowski has served as an ALJ for the Social Security Administration since June 2015. She received her bachelor's in civil engineering from the Massachusetts Institute of Technology and her law degree and a master's degree in ecology from the University of North Carolina at Chapel Hill.

“I am pleased to welcome Judge Krolikowski to FERC,” Bay said. “Her legal and technical background and experience is impressive and will [be] an asset to the FERC bench.”

More: [FERC](#)

STATE BRIEFS

ARIZONA

Judge Recommends Pause To TEP's Rooftop Solar Plan



An administrative law judge has recommended that state regulators defer approval of Tucson Electric Power's plans to expand company-owned solar energy programs pending findings of a separate proceeding on the value of rooftop solar.

As part of a renewable energy plan filed last year, TEP wants to expand a program in which it installs solar panels on the roofs of customers who pay a flat monthly fee for power. It also seeks to build neighborhood-scale solar farms and offer nearby customers the power at a flat rate.

Judge Jane Rodda found that expansion should wait until the results of technical studies and potential modifications to net metering tariffs are known.

More: [Arizona Daily Star](#)

SolarCity Spent \$140K on Corporation Commission Election



SolarCity last week disclosed that it has spent \$140,000 on an independ-

ent campaign to re-elect Republican Bob Burns and elect Democrat Bill Mundell to the Corporation Commission.

The commission is expected to decide as early as 2017 the rate structure for utility customers who generate some of their own power through solar. The disclosure comes as the commission debates whether to force Arizona Public Service, which is fighting net metering in the state, to disclose how much it spent to influence the election of two Republicans to the commission. Burns has issued a subpoena to APS for its records, but the state attorney general has said that would require a majority vote from the commission.

Mundell and fellow Democrat Tom Chapin have said they would deliver the necessary votes if elected. But Mundell last week lamented the spending on both sides. “I wish everyone would stay out of the race,” he said.

More: [Capitol Media Services](#)

CALIFORNIA

SoCalGas Down to Final Safety Tests at Aliso Canyon

Southern California Gas is nine safety tests away from reopening its Aliso Canyon natural gas storage facility in Los Angeles,

which it shut down in October 2015 following a massive methane leak.

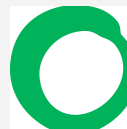


The state Division of Oil, Gas and Geothermal Resources must approve the company's safety testing of 114 wells at the facility before SoCalGas can request authority to resume injecting fuel into the field.

Twenty-seven wells have passed all safety tests, nine await results and 78 are temporarily out of operation, according to a report issued by SoCalGas in early October.

More: [Reuters](#)

Enviros May Receive \$72K Award in San Onofre Case



Environmental group Friends of the Earth could receive \$72,000 for participating in the investigation of the San Onofre nuclear plant failure, making it the most recent recipient of so-called “intervenor” funds. If approved by the Public Utilities Commission, the award would be significantly less than the \$483,503 the group sought.

The commission has awarded more than \$600,000 to participants in the case, which

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STATE BRIEFS

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is the subject of a criminal investigation into improper contacts between regulators and utility executives.

The intervenor compensation program awards money to groups that contribute meaningfully to commission decisions. The program is funded by utility companies, which pass the cost along to customers.

More: [The San Diego Union-Tribune](#)

'Wiring Error' Blamed for Flare-Off at Torrance Refining



A "wiring error" associated with an ongoing equipment upgrade project in the South Bay has been blamed for a flare-off last week at Torrance Refining and a power outage affecting some 100,000 Southern California Edison customers.

Torrance Refining was shut down and partially evacuated, according to the Torrance police and fire departments.

Power was restored to the affected customers in parts of Gardena, Hawthorne, Hermosa Beach, Manhattan Beach, Redondo Beach and Torrance.

More: [CBS Los Angeles](#)

Committee Recommends Monterey County Join Power Collaborative



Monterey County's alternative energy and environmental committee took initial steps last week to take local control over electric power purchasing from Pacific Gas and Electric and promote renewable energy.

The committee recommended that its Board of Supervisors sign a resolution to join the Monterey Bay Community Power agency. The agency calls for a collaborative, including Santa Cruz, Monterey and San Benito counties, which would combine their purchasing power to increase renewable energy in their portfolio and use savings from lower-cost power to invest in renewa-

ble energy projects.

If the board approves the resolution, the county could start developing a governing joint powers authority agreement and address financing.

More: [Monterey Herald](#)

ILLINOIS

Villages Agree to Joint Defense, Confidentiality for Power Line Fight



Five villages bordering the Elgin-O'Hare Expressway are fighting a proposed Commonwealth Edison power line project and have agreed to individually approve a joint defense and confidentiality agreement.

Leaders in Schaumburg, Elk Grove Village, Hanover Park, Roselle and Itasca claim that the West Central Reliability Project, which calls for a transmission line stretching about 9 miles between substations in Bartlett and Itasca, would lower property values and create unpleasant views without serving their residents and businesses.

ComEd spokesman David O'Dowd said he wasn't familiar with any precedent for similar agreements.

More: [Daily Herald](#)

ICC Report: Residents Overpaid \$125M for Power



Residents overpaid more than \$125 million for power for the 12 months ending in May 2016, according to an annual report issued by the Commerce

Commission.

Residents of municipalities that contracted with alternative electrical suppliers other than Ameren and Commonwealth Edison rarely saved money.

Customers who used alternative carriers overpaid an average of \$57 more per year, compared with rates offered by ComEd, the report found. Ameren customers using alternative providers largely broke even

depending upon where they lived in the state.

More: [Illinois News Network](#)

MASSACHUSETTS

Convanta to Receive \$562K to Upgrade Facility



Covanta will receive \$562,000 in Pittsfield Economic Development funds to upgrade its solid waste-to-energy and recycling facility to meet state and federal environmental standards and remain profitable.

The Pittsfield City Council approved the funds to pay for a state-mandated recycling enclosure and upgrades to Covanta's fossil fuel boiler.

Covanta, which had announced in July that it planned to close the facility, will sign a four-year contract extension with the city until June 2020.

More: [The Berkshire Eagle](#)

MINNESOTA

Regulators Approve Shutdown of Xcel's Coal-Fired Generators



State regulators approved last week Xcel Energy's plans to shut down its coal-fired Sherco plant by 2026 but rejected the company's plan to build a large gas-powered generation plant on the site as a partial power replacement.

The Public Utilities Commission asked Xcel to explore renewable energy options in conjunction with its proposed gas plant. The commission also told Xcel to consider more demand-side management.

The Sherco plant generators are the state's largest emitters of greenhouse gases.

More: [Star Tribune](#)

MISSOURI

PSC Approves Ameren's Community Solar Proposal

Community solar took a step forward last week when the Public Service Commission approved Ameren's proposal to build one, and possibly two, 500-kW solar arrays,

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STATE BRIEFS

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which could provide residential and small business customers with up to half their energy.


Ameren has indicated that it will not begin construction on the first array until it is fully subscribed.

"I think it sends a very good signal to industry and consumers that utilities are starting to invest more in renewable energy, and are allowing customers to invest in it also," said Caleb Arthur, chief executive officer of Missouri Sun Solar and president of the Missouri Solar Energy Industries Association.

More: [Midwest Energy News](#)

NEVADA

Switch Again Seeks To Bypass NV Energy

 Data company Switch filed a September application with the Public Utilities Commission seeking to bypass middle-man NV Energy when it powers a new industrial center it is building in Storey County.

Switch wants to go competitive and have a choice in the energy market, according to Adam Kramer, executive vice president of strategies.

The company, which powers all its facilities with 100% renewable energy, is presently in litigation against the Public Utilities Commission and NV Energy over a ruling denying its application two years ago to leave the utility.

More: [KARNV](#)

Voters Seek to Invalidate Energy Choice Ballot Question

Two voters filed suit in Carson District Court to invalidate a ballot question intended to deregulate the state's energy market regardless of whether voters approve retail choice on Nov. 8.

The question "directs the Legislature to enact legislation providing for the establishment of an open, competitive electricity market by not later than July 1, 2023."

The lawsuit claims that the ballot question improperly binds the Legislature and governor by mandating they enact specific

legislation.

More: [Lahontan Valley News](#)

NEW YORK

Protesters Spend 16 Hours in Pipeline

Four protesters carrying food, water and sleeping bags locked themselves inside the Algonquin Incremental Market Project pipeline for 16 hours last week at a worksite near the Indian Point nuclear power plant.

The protest, which coincided with Columbus Day (or Indigenous Peoples' Day), showed solidarity with groups like the Standing Rock Tribe, which is protesting the Dakota Access oil pipeline.

More: [The Journal News](#)

Regulators Predict Decrease in Natural Gas, Energy Prices

State regulators predicted natural gas and electricity will be cheaper this winter compared with recent years.

The average residential electric customer will pay 14% less than the five-year winter average, while gas bills will be 10% less, according to an analysis by the Public Service Commission.

Notwithstanding, the commission predicts heating bills will be slightly higher this winter compared with last year because of last year's unseasonably warm weather.

More: [The Journal News](#)

TEXAS

Solar Poised to Create Peak-Hour Price Drop

Developers are expected to build some 4 GW of commercial-scale solar panel capacity in the state by the end of the decade, up from 559 MW this year, according to a report issued last week by Bloomberg New Energy Finance.

The report predicts that by 2020, solar power will cause a \$2.58/MWh price drop during peak hours in the state's west hub.

"Just having this new influx of daytime energy production is going to bring down energy prices on average during the day," said Nicholas Steckler, an analyst at BNEF.

More: [Bloomberg](#)

UTAH

Regulators Approve \$15.6M Decrease for Electricity Customers



The Public Service Commission approved a \$15.6

million rate decrease for Rocky Mountain Power's electricity customers after the utility beat forecasted fuel and electricity costs. The overall rate decrease is 0.8%, which includes about \$6.84 in annual savings for a typical residential customer.

More: [Daily Herald](#)

VERMONT

Iberdrola Offers to Pay for Favorable Wind Project Vote

Iberdrola Renewables has offered to pay 815 registered voters in two towns \$14.1 million over 25 years if a wind project consisting of 24 turbines that would generate 82.8 MW of power wins voter approval on Nov. 8.

Iberdrola is seeking to build the state's largest wind project on land spanning Windham and Grafton.

The offer does not violate state law, said Michael O. Duane, senior assistant attorney general. "The proposal doesn't say that the funds go only to those people who signed a sworn statement that they had voted for it," he said.

More: [The New York Times](#)

WASHINGTON

Voters Consider Carbon Tax on Polluters

For the first time in the U.S., state residents will vote in November on whether to levy a carbon tax on polluters for the greenhouse gases they produce.

The proposed tax would start at \$15/ton beginning in July and jump to \$25 in 2017. Incremental increases would follow.

More: [The Christian Science Monitor](#)

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WISCONSIN

Judge Hears Challenge to New ATC Power Line



A La Crosse County judge heard arguments last week on whether to uphold state approval of a high-voltage power line with a \$580 million cost that will be passed on to

MISO ratepayers.

The 180-mile line is a joint venture of American Transmission Co. and several regional utility companies. It was not presented to the state as a project necessary to meet supply demand, but rather as one that would make the electric grid more resilient and ultimately save ratepayers millions of dollars.

The town of Holland argues the project violates state law because the need for it was not established, the environmental review was insufficient and existing poles should be used to route it through the town.

More: [La Crosse Tribune](#)

PUCO Rejects FirstEnergy's \$558M Rider, OKs \$132.5M

Continued from page 2

"In this long-awaited and complicated decision, PUCO missed a critical opportunity to seriously focus FirstEnergy on the more diversified, cleaner energy future that tens of thousands of customers wrote the commission asking for," said Dan Sawmiller, senior representative for the Sierra Club's Beyond Coal campaign in Ohio.

"A few months ago, FirstEnergy took an important step in moving beyond coal when it announced closure of four units at its

Sammis coal plant. With PUCO's decision now issued, we hope to be able to work with FirstEnergy to accelerate its path beyond coal and nuclear and toward new investments in clean energy, energy efficiency and other modern grid initiatives like infrastructure for electric vehicles."

IPPs Weigh in

The Alliance for Energy Choice, an organization funded by independent power producers, said FirstEnergy is still getting a good deal at ratepayers' expense.

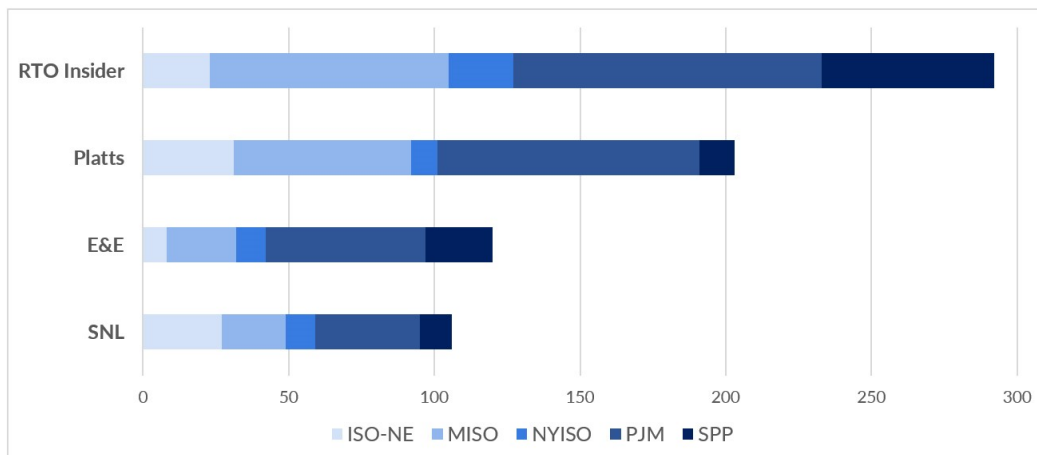
"The PUCO once again granted the utility's request for more money with no corresponding benefit to customers," Alliance spokesman and former PUCO Chair Todd Snitchler said. "Businesses and families will again be required to pay more for the same service they already receive with only a hope that customers will gain an upgraded grid if and when the utility elects to do so."

"FirstEnergy should simultaneously be required to file a distribution rate case to document the need for, and amount of, a true grid modernization program," Snitchler said.

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