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Sacramento Utility to Join EIM; Other BANC Members May Follow

By Robert Mullin

The Sacramento Municipal Utility District (SMUD) announced on Friday it will begin negotiations with CAISO to join the Western Energy Imbalance Market, and other members of the Balancing Authority of Northern California (BANC) may follow.

BANC said a cost-benefit analysis with the Western Area Power Administration's Sierra-Nevada Region (WAPA-SNR) determined that some of its six members would benefit from joining the EIM.

"We also view the EIM as a tool to help us integrate increasing penetrations of

Continued on page 3

Mexico's Grid Operator to Explore Participation in EIM (p.5)

Judge Rules in Favor of ATC in Wildlife Hospital's Tree-Cutting Case

By Amanda Durish Cook

A Wisconsin wildlife hospital and refuge lost its case against American Transmission Co., as a judge decided that the company has the right to remove trees from the sanctuary's property.

Walworth County Judge Daniel Johnson ruled against Fellow Mortals Wildlife Hospital in Lake Geneva, Wisc., following a four-day trial. Johnson ruled that ATC had the right to cut any trees in the 50-foot easement that in the company's "reasonable opinion" could pose a threat to its 138-kV line in the future.

"So if the tree can grow tall enough that it reaches the lines even 50 years from now, it could come down," said attorney Robert Kennedy, who represented the hospital.

Kennedy said this likely means the end for the sanctuary's "Grandfather Spruce," an

Grandfather Spruce | *Fellow Mortals*

estimated 100-year-old Norway spruce, that had only been periodically trimmed since the easement was granted. (See *Wildlife Refuge Preps for Trial Against ATC Clear-Cut*.)

But ATC spokeswoman Jackie Olson said the company has not yet formulated a tree-

Continued on page 31

RTOs Brief FERC on Winter Preparations

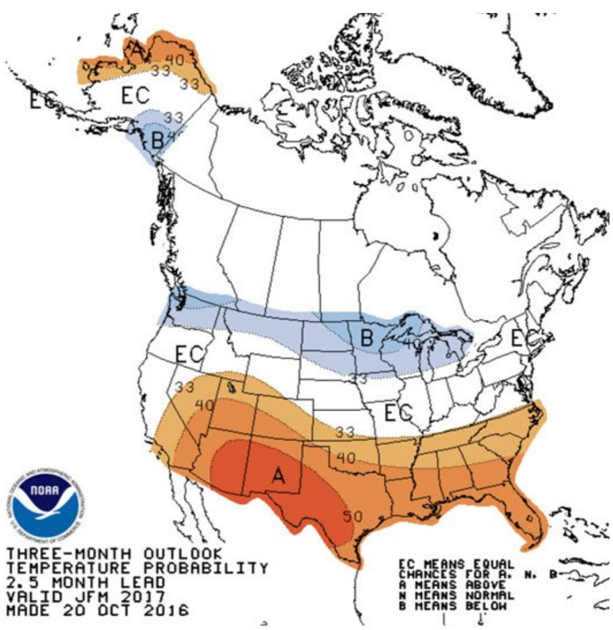
ISO-NE Concerned About Future

By Michael Brooks

WASHINGTON — Grid operators assured FERC last week they are confident in their ability to maintain reliability this winter, reporting improvements in gas-electric coordination and monitoring technology.

ISO-NE is making no promises beyond this winter, however, citing concerns over generation retirements and setbacks to efforts to improve New England's stressed natural gas infra-structure.

Continued on page 2



OPSI 12th Annual Meeting

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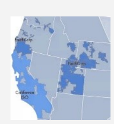

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RTOs Brief FERC on Winter Preparations

Continued from page 1

It was the second panel on winter preparedness that the commission has convened since the polar vortex of 2014, when frozen coal piles, poorly winterized natural gas plants and other problems idled scores of generators in PJM and the Northeast.

The panel featured the same lineup as last year, except for PJM Vice President of Operations Mike Bryson, who took the place of former COO Mike Kormos, now with Exelon.

After the RTOs' presentations, FERC staffers also professed confidence in a presentation of their Winter 2016-17 Energy Market Assessment.

The National Oceanic and Atmospheric Administration predicts normal winter temperatures for most of the U.S., with above-average temperatures in Alaska and the South, especially the Southwest, and below-average temperatures in North Dakota, Minnesota and northern Wisconsin. Gas storage is well above annual averages and the mild temperatures should mitigate gas constraints, staff said.

Despite the mild forecast and the unusually warm winter of 2015-16, the RTOs assured the commission that they were being proactive.

"We're giving winter preparedness the same level of enthusiasm and hyper-awareness as we have the last year … so we're certainly not sound asleep at the wheels at the heel of a mild winter," said Wes Yeomans, NYISO vice president of operations. "We have a very good memory of very cold and tight conditions."

Todd Ramey, vice president of system operations and market services for MISO, agreed. The RTO is "not taking our eye off the ball," he said.

Unique Market Enhancements

Much of the speakers' presentations covered ground familiar from last year, they admitted, but there have been a few new developments since then.

Both Yeomans and Bryson said their organizations had hired staff from the natural gas industry to support their control rooms in winter gas-electric coordination. Yeomans said the new hires "help us understand the gas commercial dynamics."

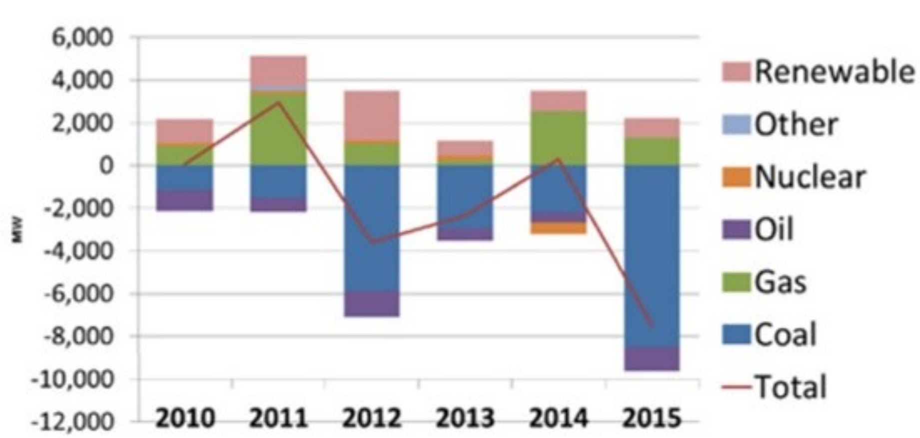
Bryson said the person PJM hired "is very helpful to us, because he speaks gas, and we don't."

"It's amazing because while we knew he was going to be a good hire, he has provided a lot of insight into the way the gas pipelines [and local distribution companies] think and it forces us to rethink our approach in some ways," Bryson said.

Yeomans also said the Northeast gas pipeline system is displayed on a large video board in the NYISO control room, with pipelines under operational flow orders brightly lit, which he said enhances operators' awareness. SPP's Bruce Rew, vice president of operations, also highlighted his control room's visualization technology, the Macomber Map, which depicts the transmission system geographically with power flows and constraints. (See *ERCOT, SPP Collaborate to Improve Visualization Tool*.) The map can also overlay weather systems with the grid, keeping operators aware of potentially hazardous conditions.

Ramey devoted much of his presentation to MISO's new ramping product. The service

Continued on page 26



Historical year-over-year electric capacity change | *FERC*

CAISO NEWS

Sacramento Utility to Join EIM; Other BANC Members May Follow

Continued from page 1

variable renewable energy resources in the future," Jim Shetler, BANC's general manager, said in a statement.

The joint powers agency said it will seek an arrangement allowing it to phase in members who want to join the EIM. Any agreement must recognize "the unique situation faced by the BANC members as public power entities and their existing arrangements," the agency said.

SMUD would be the first BANC member to participate. The utility expects $2.8 million in yearly net benefits from transacting in the market — a figure that nets out the estimated $6.7 million in implementation fees and $2.6 million in annual operations costs.

In a presentation to its board of directors last week, SMUD management said EIM participation will improve the region's renewable integration, potentially reduce reliance on gas-fired generation and provide "many of the benefits of regionalization while preserving [local] control over resources."

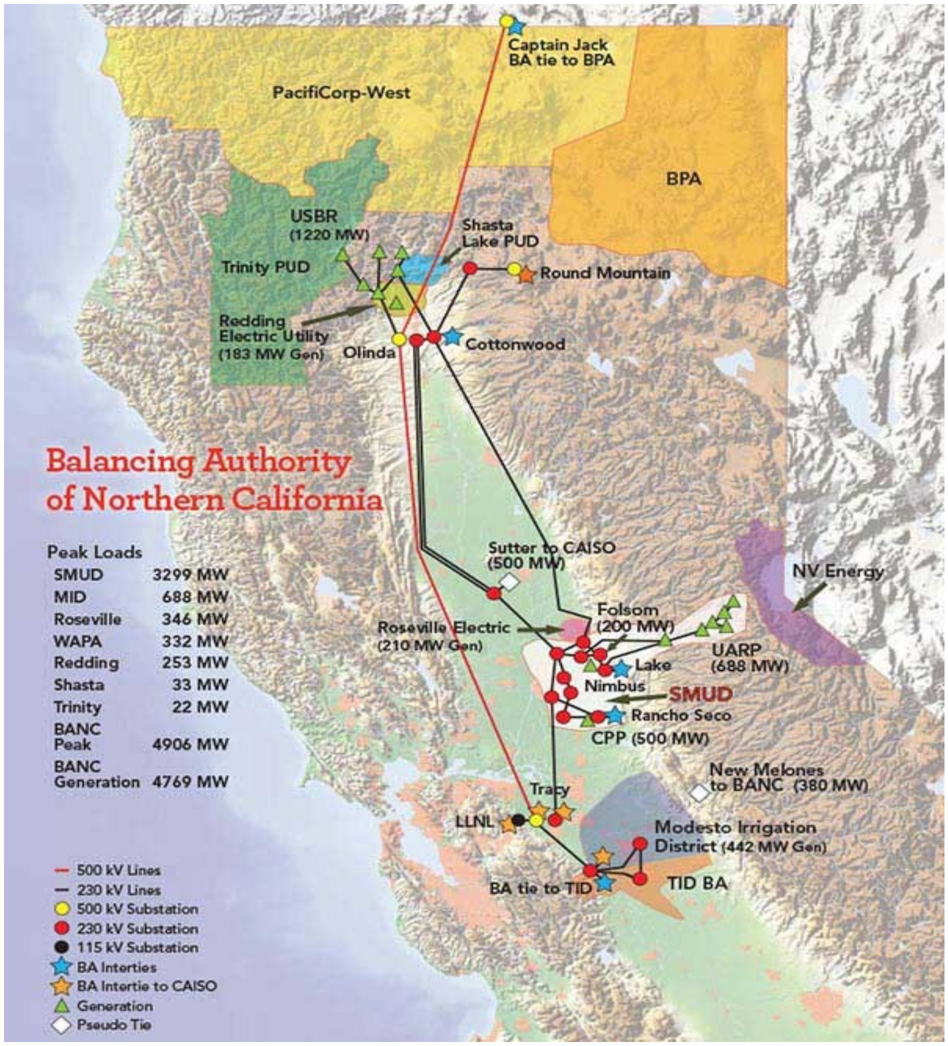
"We view this is an extension of our existing market engagement with the CAISO," said SMUD CEO Arlen Orchard. "SMUD also believes this further demonstrates our commitment to collaboratively work with California entities to help achieve the state's energy and environmental goals."

SMUD operates under an agreement that enables the utility to bid power into CAISO through a single hub in which one proxy price is selected to represent all connection points between the two areas. The ISO entered into a similar agreement with WAPA last year.

"We are extremely pleased to see a major regional public power utility like SMUD step forward to engage in the EIM," CAISO CEO Steve Berberich said.

In addition to SMUD, BANC's members are the Modesto Irrigation District, the cities of Redding, Roseville and Shasta Lake, and the Trinity Public Utility District.

The joint powers agency's footprint extends from Modesto, Calif., to the Oregon border and includes a portion WAPA's transmission grid and the U.S. Bureau of Reclamation's



The footprint of the Balancing Authority of Northern California extends north to south from the Oregon border to Modesto, and east to west from Sacramento to the Sierra Nevada range. | *BANC*

hydroelectric resources in California. The agency's members also control capacity on the California-Oregon Intertie, one of two high-voltage transmission lines linking California with the Pacific Northwest.

Founded 70 years ago, SMUD serves 1.4 million people, making it the sixth largest municipally owned utility in the country and the second largest in California, behind the Los Angeles Department of Water and Power.

BANC, which began operations in 2011, is the third largest balancing area in California and the 16th largest of the 38 balancing areas in the Western Electricity Coordination Council. Created as an alternative to CAISO, BANC is responsible for balancing load among its members, as well as coordinating system operations with neighboring balancing areas. BANC contracts with SMUD to perform day-to-day balancing functions.

BANC's announcement came three days after Mexico's grid operator said it will explore EIM participation for Baja California Norte, a region already interconnected with CAISO. (See related story, *Mexico Grid Operator to Explore Participation in EIM*, p.5.)

The current EIM members are Arizona Public Service, NV Energy, PacifiCorp and Puget Sound Energy. (See *Arizona Public Service, Puget Sound Energy Begin Trading in EIM*.) Portland General Electric is slated to join the market in October 2017, followed by Idaho Power in April 2018.

More Work Needed on Western RTO Proposal, Stakeholders Say

By Robert Mullin

CAISO's latest draft of governing principles for a Western RTO is an improvement, but more changes are needed to win approval from regulators in the states in which PacifiCorp operates, speakers at a California Energy Commission (CEC) governance workshop said Monday.


Edmonds

"Our states are very sensitive to the perception that California can swing a veto," PacifiCorp Transmission general counsel Sara Edmonds said.

Edmonds was referring to a provision that would institute load-weighted voting on the proposed Western States Committee (WSC) — the body comprising representatives from states considering participating in a future RTO. (See Latest Proposal Fills Out Western RTO Governance Plan.)

Veto Rights

As currently conceived, the voting rule — which requires any initiative be approved by 75% of voting members representing 75% of load — would not only prevent California from ramming through favored policies, but also permit that state to singlehandedly block any measures with which it disagrees.

"Ultimately, why we came to this [voting model] is that it gives some power to the weight of load, but gives all parties the ability to block a vote," said Stacey Crowley, vice president of regional and federal affairs at CAISO. "It really does drive consensus."

"I also understand that [weighted voting] is very important to California," Edmonds said, noting that her company will seek to obtain feedback from state utility commissions on the issue.

"I can tell you that a weighted voting model that gives California veto power will be problematic," said Jennifer Gardner, an attorney for Western Resource Advocates (WRA), a Colorado-based environmental group that supports the ISO's bid to regionalize the Western grid. (See Q&A: Western Resource Advocates Sees Benefits from Western RTO.)

In an alternative voting proposal submitted to the CEC last month, WRA pointed out that California would represent 76% of the load in an expanded ISO in which PacifiCorp was the only service area outside the current footprint. Including Arizona Public Service and NV Energy would still leave California with a 61% share, which would fall to a slim majority of 52% with the addition of Portland General Electric, Puget Sound Energy and Idaho Power.

Tiered Voting

WRA's proposal: a tiered voting process in which every state would hold one vote under most circumstances and the WSC would attempt to work toward consensus. For issues where consensus voting might be difficult, other rules would apply, such as majority voting for day-to-day decisions and two-thirds majority voting for amending bylaws.

Load-weighted voting could apply for decisions related to the WSC's areas of "primary authority" — tariff revisions that currently fall under the remit of state regulators. The weighting would be simplified so that any state with more than a 50% of the RTO's load would wield two votes, while all others would get one. Gardner noted that the New England States Committee on Electricity follows a similar practice.

"What's really important with that group is that they achieve all of their decisions based on consensus," Gardner said. "If not, they revert to voting based on load."


Florio

The California Public Utilities Commission's Mike Florio said he was "taken aback" by the WSC's limited role in the initial development of the resource adequacy and transmission access charge rules for an RTO.

"I think the counting rules [for resource adequacy] should be uniform for all the states," Florio said. "That's why it's something that should fall to the Western States Committee."

The ISO has played its strongest role with local resource adequacy, but the process is still in play for flexible capacity, Florio said.

"There is a significant role for the states there that hasn't been outlined to date," he added. "I'd think the states would want to have some kind of backstop role."

Clarity on Roles


Hapner

"I think we need to get much more clear on the very specific roles between the ISO board and the WSC — and versus the WSC," said Dede Hapner, vice president of FERC and ISO relations with Pacific Gas and Electric.

Hapner said the most recent governance proposal provided a larger role for the WSC than the previous version and that industry participants must think about areas where the committee could trump the board.

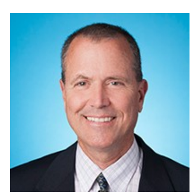
"How much will be acceptable to the FERC?" she asked.

Hapner also advocated for the creation of a "transitional" WSC to begin quickly addressing issues of concern to participating states.

Concurring with that view was Rachel Gold of the Large-Scale Solar Association.

"Seating the WSC earlier — even in informal fashion — will be important to getting to 'yes' here," she said.

Other Western states would likely want to weigh in on rules around resource adequacy and greenhouse gas accounting, Gold noted.


Gendron

Mark Gendron, vice president of power services at the Bonneville Power Administration, had a similar take. While his agency was pleased with the proposal's attention to complex technical issues such as resource adequacy, it thinks it will take time to work through those matters.

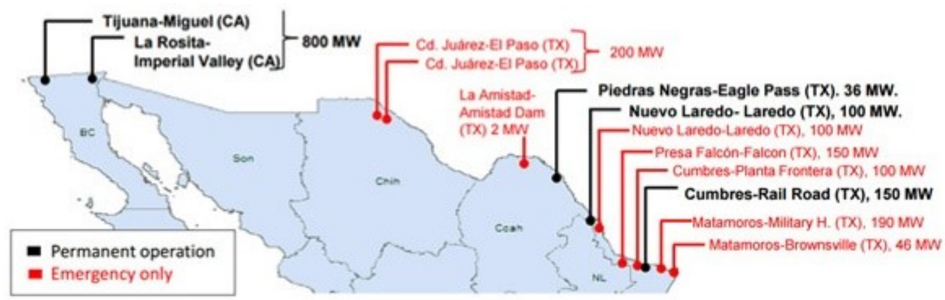
"We're concerned that some of the decisions on some of these technical issues could be made prior to the [seating of the] new board and Western States Committee," Gendron said.

Continued on page 5

CAISO NEWS

Mexico's Grid Operator to Explore Participation in EIM

By Robert Mullin



The isolated Baja California Norte region's only transmission interconnections are to the north - with California. | *Mexico Ministry of Energy*

An isolated area of Mexico's grid already interconnected with California could become the first non-U.S. participant in the Western Energy Imbalance Market.

El Centro Nacional de Control de Energía (CENACE) — Mexico's grid operator — and CAISO today announced an agreement to explore the benefits of having the Baja California Norte region join the West's only real-time energy market.

While the region has no transmission connections with Baja California Sur or Mexico's mainland grid, it boasts two 230-kV links with California through the Imperial Valley and Otay Mesa substations. Those lines, known as Path 45, provide about 800 MW of transfer capacity.

"CENACE's Baja California Norte participation in the Western EIM will enable it to benefit from the savings that a large geographic region can offer," CAISO CEO Steve Berberich said in a statement.

Baja already hosts natural gas-fired generation built in part to serve California's market, including Sempra Energy's 625-MW Termoelèctrica de Mexicali and Intergen's 1,100-MW La Rosita. Deliveries into Imperial Valley can serve San Diego County via the 500-kV Sunrise Powerlink, which was energized in 2014.

The region also has promising potential for wind energy, which is increasingly valuable to California as the state seeks to balance its solar-heavy portfolio in pursuit of a 50% renewable standard. Sempra's Energía Sierra Juárez, a 155-MW wind farm completed near the U.S. border last year, operates under a 20-year power purchase agreement with San Diego Gas and Electric.

"Mexico has had a long, productive relationship with the ISO as we coordinate the management of our interconnected electricity grids," CENACE General Director Eduardo Meraz said. "It is only logical for CENACE to carefully consider Baja California Norte's participation in the Western EIM, with its promises of lower-cost electricity and increased renewable integration."

Mexico's energy policy requires the country to generate 30% of its electricity from hydro and other renewable sources by 2021, a mandate that increases to 35% in 2024.

Legislation enacted in 2014 named CENACE the nationwide grid operator and partially deregulated Mexico's power sector, allowing for expanded private sector participation. The agency, which manages the nation's wholesale electricity market, operates more than 33,000 miles of high-voltage transmission.

The recently expanded EIM has four members operating in eight U.S. states: Arizona Public Service, NV Energy, PacifiCorp and Puget Sound Energy. (See Arizona Public Service, Puget Sound Energy Begin Trading in EIM.)

More Work Needed on Western RTO Proposal, Stakeholders Say

Continued from page 4

Potential Shortcoming

Robert Cromwell, director of power contracts and resource acquisition at Seattle City Light, pointed out a potential shortcoming in the ISO's decision to make the WSC a body of general state representatives rather than regulators: Utility commissions might still have to weigh in on whether they could fulfill a WSC decision based on their own state laws.

The panelists found some positives in the latest proposal as well.

"We have repeatedly requested that consumer and environmental advocates be separated [in the Transitional Committee guiding development of the RTO]," Gardner said. "We appreciate CAISO taking our concerns."

PacifiCorp's Edmonds supported the proposal's creation of a Nominating Committee and Approval Committee to select members of the final RTO board — the latter of which would comprise WSC members.

"The current revised proposal appears to shift more responsibilities to states, and I know our states are looking at this," Edmonds said.

Edmonds also noted that the fleshed-out proposal deferred fewer governance design details to the Transitional Committee, calling that a "good thing."

Florio and Gendron both complimented the proposal for emphasizing that the WSC should be a collaborative body.

"I think the emphasis on a collaborative, consensus-based process is appropriate," Florio said.

Hapner supported the proposal's shorter transition to seating a final board and agreed with the redistribution of sector representation on the Transitional Committee, which folded generators and marketers into the independent power producers sector and created an exclusive grouping for end-use consumer advocates.

"The consensus seems to be that we're making progress, but there's still a lot of work to be done," concluded CEC Chair Robert Weisenmiller.

CAISO NEWS

CAISO Planners Looking Ahead to Summer 2017 Solar Eclipse

By Robert Mullin

"This is a unique event that we don't get to deal with on a day-to-day basis."

Amber Motley, CAISO

CAISO is seeking stakeholder input on how to respond to a solar eclipse that will significantly curtail output from California's growing solar generation portfolio next August.

"It will not be a total eclipse [in California], but it will affect what solar production we have in California," Jim Blatchford, an ISO senior advisor for short-term forecasting, said during a Oct. 20 call to discuss the issue.

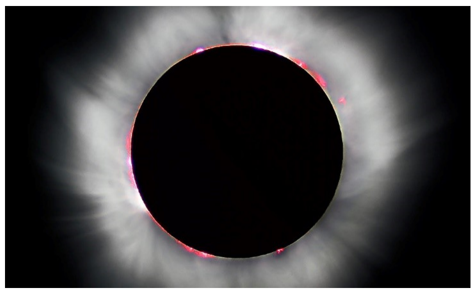
The state will begin experiencing the effects of the Aug. 21, 2017, eclipse at about 9 a.m. PT, just as solar output is ramping up to its mid-day peak.

CAISO expects output to drop at an average rate of 46 MW/minute, from 6,603 MW to 2,828 MW at 10:22 a.m., when the eclipse reaches its totality.

"This is just for large-scale utility solar — not behind-the-meter," Amber Motley, manager of short-term forecasting at the ISO, pointed out.

By that time, the sun will be completely obscured south of Portland, Ore., while California's San Juaquin and Coachella valleys — both key solar producing regions — will see coverage of around 76% and 62%, respectively. Utility-scale solar output is forecast to be about 5,050 MW below what it would otherwise be without the eclipse.

The loss of output will require steady ramping from other generation sources to cover the 3,775-MW difference between the 9 a.m. peak and the 10:22 a.m. trough.



As the eclipse begins to pass, solar output is projected to increase at a rate of 56 MW/minute until noon — nearly four times the norm for that time of day. That will require a sharp downward ramp of other resources.

Motley noted that the ISO has not calculated the eclipse's effect on California's rooftop solar — currently estimated to be at about 5,000 MW — but expects that variable will be factored into the load rather than generation forecast.

CAISO must also focus on the impact of the eclipse on the Western Energy Imbalance Market. Arizona Public Service, NV Energy and PacifiCorp have a combined 3,270 MW in utility-scale solar and 816 MW in rooftop installations.

Arizona and Nevada will not be as affected as PacifiCorp's sprawling territory, Blatchford noted. Utah alone will experience a 70% reduction in radiance.

The ISO is looking for advice from European electricity planners, who experienced a similar event last year. The planners increased reserves, made strategic use of pumped storage, limited planned outages and reduced DC line capacities between different regions. Germany procured twice its normal level of regulation reserves, while Italy curtailed PV production ahead of the eclipse.

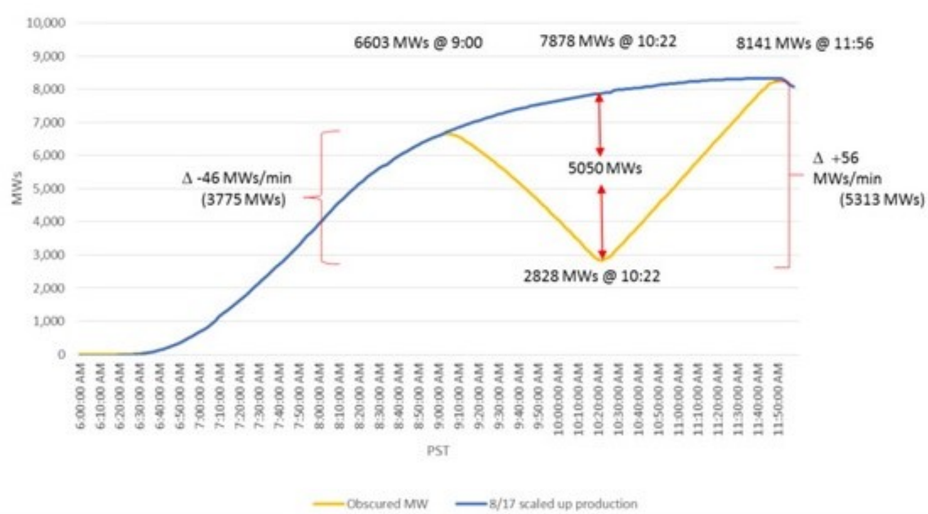
"They were going to lose 90 GW, so they had a lot riding on this," Blatchford said. "They did a very good job there, I thought."

In light of Europe's success, CAISO is hoping to develop a plan that encompasses the West at large. The effort would take up several possible mitigation measures, including cooperation with the Western Electricity Coordinating Council, gas-electric coordination, use of flexible ramping and hydroelectric resources, EIM transfer capability, reserve procurement and development of special operating procedures for the event.

"I think we have a lot of market products that we can use … and help with the coordination of this event," Motley said.

Stakeholders are asked to provide feedback on potential measures by Nov. 3. The ISO expects to develop an eclipse mitigation procedure early next year, with publication of a final plan targeted for March.

"This is a unique event that we don't get to deal with on a day-to-day basis," Motley said.



During next summer's eclipse, solar output in CAISO's balancing area is expected to decline from 6,603 MW to 2,828 MW in fewer than 90 minutes, followed by an even sharper upward ramp as sunshine reemerges. | *CAISO*

CAISO NEWS

FERC Rejects CAISO Refunds over Must-Offer Charges

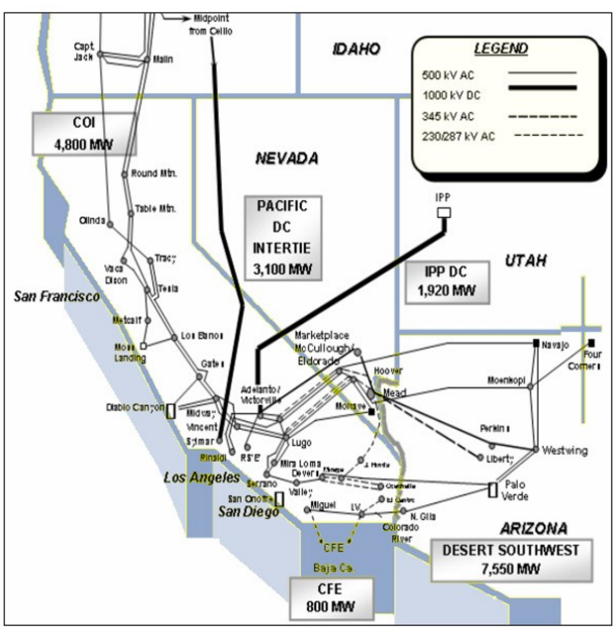
By Robert Mullin

FERC on Thursday rejected CAISO's effort to refund $220 million to scheduling coordinators that the ISO said were misallocated payments to generators operating under must-offer obligations.

The decision rendered moot a complaint filed by energy retailers that contended that the refunds were unjustified because they had not been specifically ordered by the commission (EL14-67, *et al.*).

While the ISO's refund report did not specify the beneficiaries of the refunds, other documents related to the proceeding indicate that a portion of the payments were likely destined for Southern California Edison customers in light of a previous FERC decision to reallocate must-offer costs associated with a transmission constraint within the utility's service territory to all load in CAISO's SP-15 zone.

At issue was a May 2004 Tariff amendment that changed the allocation of minimum load costs — fuel costs associated with keeping a unit running at minimum levels — for must-offer generation to more accurately reflect cost causation.



CAISO sought to issue refunds - in part - because of FERC's decision to reclassify the benefits of must-offer generation located south of the Lugo substation, within Southern California Edison's service territory. | *California Energy Commission*

Under the design, CAISO allocated minimum load compensation costs to load-serving entities based on whether the generators had primarily fulfilled local, zonal or system reliability requirements.

FERC approved most of the amendment two months later, but the cost allocation provision — which had been contested by Pacific Gas and Electric — was subject to modification and rehearing, with a refund date set for July 17, 2014.

In December 2006, the commission mostly affirmed the reasonableness of the allocation provision, but it found that the South of Lugo Transformer Path in Southern California should be classified as a local — rather than regional — constraint. FERC ordered the ISO to allocate must-offer start-up and emission costs in the same manner as minimum load costs and determined that wheel-through transactions should be excluded from the allocation.

Southern California Edison protested the reclassification of the South of Lugo constraint as local, an argument with which the commission later agreed in a 2007 rehearing. The cities of Anaheim, Azusa, Banning, Colton and Riverside, in turn, contested that decision, but the D.C. Circuit Court of Appeals denied their petition for review in 2013.

Later that year, CAISO submitted to FERC a report outlining refunds the ISO intended to issue based on the reallocation of must-offer costs stemming from the prior rulings. Issuing the refunds would require the ISO to levy surcharges on scheduling coordinators that paid too little in order to make whole those that paid too much.

Shell Energy North America and the Alliance for Retail Energy Markets — representing Constellation NewEnergy, Direct Energy and Noble Americas Energy Solutions — contested the surcharges, saying that they were effectively retroactive rate increases

Transmission line leading to the Lugo substation | *Edison International*

not authorized by FERC. They also argued that, when the commission requires refunds, "its normal practice is to expressly order that refunds be made within a specified time and that a refund report be filed," neither of which occurred. In any case, FERC was not obligated to require refunds in this case, they said.

Those contentions found support in the commission's decision last week.

"CAISO's filing of the refund report is not tied to any commission compliance directive in this proceeding," the commission wrote. "While the commission initially accepted CAISO's filing subject to refund, at no point did the commission direct CAISO to make refunds or file a refund report."

The commission also found that the ISO at no time overcharged its customers and that it had appropriately revised its Tariff on compliance so that a just rate was allocated to customers on a going-forward basis.

Furthermore, the commissioners pointed out that none of its prior orders stated that the ISO had failed to follow any directives by not issuing refunds.

"Even if it were arguably unclear whether refunds should have been ordered for past periods, we note that neither CAISO nor any other party sought rehearing or clarification of the orders in this proceeding on this issue," the commission said.

FERC went on to state that "surcharging of market participants was improper for any past periods" and that its power to order refunds is "discretionary" under the Federal Power Act.

The commission said the complaint by the alliance and Shell "has been rendered moot as a result of our rejection of the refund report."

CAISO NEWS

FERC Eliminates West-Wide Must-Offer Rule

By Robert Mullin

FERC last week eliminated the must-offer obligation in effect throughout the Western Electricity Coordinating Council region since the tail end of the California energy crisis of 2000-2001.

"In light of the passage of time and significant improvements to California's wholesale electricity markets over that time, the must-offer requirement established for the WECC in 2001 produces little or no benefits today," the commission wrote (EL27-16).

FERC implemented the obligation in June 2001 in response to what it called "serious market dysfunction" in California — the effort by some of the region's generators to withhold power supplies to drive up prices in the now-defunct California Power Exchange. The rule required most generators serving California to offer all capacity not already committed under bilateral agreements into the state's real-time market.

Last week's order also ended a requirement that public and nonpublic utilities post a daily log of available capacity on their websites, as well as to a site hosted by the Western Systems Power Pool (WSPP).

The commission also rejected a request by the Edison Electric Institute to retroactively relieve affected industry participants of costs related to the posting requirement, instead affirming Feb. 24, 2016, as the refund effective date — days after FERC initiated a Section 206 proceeding to explore eliminating the must-offer obligation. (See *FERC Likely to Eliminate Must-Offer Rule for West*.)

While EEI did not specify an alternative date, it contended that the posting requirement became unduly burdensome once California's market had undergone substantial changes and that FERC should therefore "grant such further and other relief as to the posting requirement that the commission deems necessary or appropriate."

The must-offer and posting requirements were originally slated to expire in September 2002, but FERC subsequently extended the rules for an unspecified period of time until "long-term market-based solutions" could be fully implemented.

In eliminating the obligation, the commission cited numerous changes to California's markets over the years, including CAISO's development of LMP-based day-ahead and real-time energy and ancillary services markets, a day-ahead residual unit commitment process, local market power mitigation measures, reduced reliance on spot markets, and the state's resource adequacy program.

"These market design improvements have contributed to a well-functioning CAISO market," the commission wrote, adding that the electricity supply outlook for the West has "significantly improved."

The commission noted that its ruling only dealt with rules stemming from the energy crisis. This was in response to Pacific Gas and Electric's argument that termination of the obligation should not be construed as limiting the need for a must-offer requirement for resource adequacy capacity in the CAISO-run Energy Imbalance Market or new ISO transmission owners.

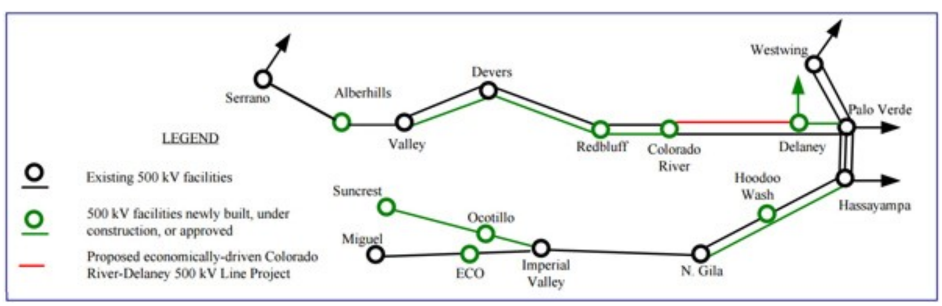
"We are not prejudging any future must-offer proposals related to the Energy Imbalance Market or to new transmission owners joining CAISO," the commission affirmed.

FERC Grants TransCanyon 9.8% ROE for CAISO Projects

FERC last week approved a settlement allowing independent transmission developer TransCanyon to collect a 9.8% base return on equity for any projects it builds under CAISO's FERC Order 1000 competitive solicitation process (ER15-1682).

TransCanyon asked the commission last May for a 10.6% ROE if it were selected to build and operate a 115-mile, 500-kV transmission segment linking Southern California Edison's Colorado River substation with Arizona Public Service's Delaney substation. The commission set the request for hearing and settlement procedures in July 2015.

CAISO ultimately awarded the economically driven $300 million Delaney-Colorado River project to a joint venture between Abengoa and Starwood Energy.



TransCanyon submitted its original request for a CAISO base return on equity during the competitive solicitation for the Delaney-to-Colorado River transmission project, which was awarded to another developer. | *CAISO*

Still, last week's order will enable TransCanyon to incorporate the 9.8% ROE into its transmission owner tariff's formula rate template — the basis for calculating a yearly transmission revenue requirement to be included in the ISO's transmission access charge.

Participants in the settlement were SoCalEd; the cities of Anaheim, Azusa, Banning, Colton, Pasadena, Riverside and Santa Clara; the California Department of Water Resources; the M-S-R Public Power Agency; and Modesto Irrigation District.

TransCanyon is a joint venture between Berkshire Hathaway Energy, which owns PacifiCorp and NV Energy, and Pinnacle West Capital's Bright Canyon Energy. Arizona Public Service is Pinnacle's primary subsidiary.

— Robert Mullin

CAISO NEWS

FERC OKs Natural Gas Index for CAISO

By Robert Mullin

FERC last week approved CAISO's use of a natural gas price index included in temporary Tariff provisions the ISO implemented last spring in response to the closure of the Aliso Canyon storage facility (ER16-1649).

The ISO revised its index rules to ensure gas-fired generators in Southern California accurately reflect their fuel costs in the event that pipeline restrictions imposed following the loss of Aliso Canyon caused market volatility.

Prior to the revision, the ISO Tariff required gas generators to base the fuel component of their day-ahead unit commitment costs on the previous day's day-ahead gas index published by the Intercontinental Exchange (ICE).

The updated rule allows those generators to instead use a same-day index produced by ICE by 9 a.m. PT, just before the ISO's day-ahead market run. ICE's "official" same-day index is typically posted at 11:30 a.m.

CAISO reasoned that a shorter time lag between the publication of the index and the submission of day-ahead energy bids would reduce the likelihood that generators could lose money under unexpected tight supply conditions by gas price spikes revealed after the market run.

The commission's June 1 order approving the Aliso Canyon response plan accepted the new index with the qualification that it must be shown to conform to FERC's policy statement on natural gas price formation, which outlines standards for trade data reporting. (See *FERC Approves CAISO's Aliso Canyon Response Plan Ahead of Summer*.)

In August, CAISO asked FERC to extend a previous waiver and allow it to continue using the new index provisions. While the ISO said it could not state that the index conformed with the policy statement, it noted that the volume-weighted average price ICE makes available before 9 a.m. is calculated in the same way as the official index published later in the morning.

In its decision last week, the commission agreed with the ISO's assessment, pointing out that ICE is a FERC-approved index developer and that the new index meets the minimum threshold for trading volume.

"Based on CAISO's representations that the volume-weighted average price is generated by ICE between 8:00 a.m. and 9:00 a.m. PT, we expect that the new index, which will include trades between 5:00 a.m. and at least 8:00 a.m. PT, will have sufficient activity to conform to the liquidity requirements of the policy statement," the commission concluded.

Tariff provisions related to the Aliso Canyon response plan are set to expire at the end of November, but CAISO this month asked the commission to extend most the measures for an additional year. A decision on that request is pending. (See *CAISO Seeks to Extend Aliso Canyon Gas Rules Through Winter*.)

ISO-NE News

FERC Sides with ISO-NE in Capacity Dispute with NYISO

By Michael Brooks

New resources that clear ISO-NE's Forward Capacity Auction will be able to begin supplying capacity earlier than the usual three-year lead time under a package of Tariff revisions approved by FERC last week (ER16-2451, AD16-26).

The changes are intended to enhance liquidity in the RTO's capacity market: Resources that are completed prior to the beginning of their commitment periods would not have to sit idle until then. Under the revisions, filed by ISO-NE in August, qualified resources could participate in the RTO's reconfiguration auctions and begin supplying capacity as soon as four months after they clear the FCA. Imports would be allowed to begin as soon as one year after the FCA.

That last provision did not sit well with NYISO, which had asked FERC to delay the revisions by one year.

The ISO said it did not object to the revisions themselves, but it worried that they would negatively affect capacity prices in its own market because of a single power plant, Castleton Commodities International's Roseton 1. The 1,242-MW duel-fuel generator, located 43 miles north of New York City in NYISO's capacity import-constrained G-J locality, is committed to supply about half of its capacity to ISO-NE for the 2018/19 and 2019/20 periods. Under the revisions, Roseton would be able to supply capacity beginning next June for the 2017/18 delivery year.

NYISO said this could increase costs to New York consumers by as much as $341 million. Under current ISO rules, when a resource is committed to export capacity, it is treated as if it no longer exists when the ISO runs its own, one-year forward auction. If Roseton decides to participate in ISO-NE's 2017/18 commitment period, NYISO would procure unnecessary replacement capacity, as Roseton would still be providing reliability services for the G-J zone, the ISO argued.

Market Monitor David Patton identified the problem in his 2015 State of the Market report, recommending that NYISO act quickly to recognize the reliability value of generators in import-constrained zones to avoid a rise in capacity prices. NYISO is currently hammering out Tariff changes and hoped to file them so they were in place before the beginning of the 2018/19 period.

FERC, however, said it was "not persuaded that the potential behavior of New York suppliers provides a sufficient basis to reject ISO-NE's filing in this case."

"Deferring the effective date of an otherwise just and reasonable proposal would be inconsistent with the notice provision in Section 205 of the" Federal Power Act, it added.

The commission ordered NYISO to make an informational filing by Nov. 4 addressing its progress in finalizing its Tariff revisions.

FERC Again Rejects Dominion Bid for ISO-NE Auction Resettlement

By William Opalka

FERC on Thursday denied Dominion Resources' request for rehearing of an order rejecting its challenge to ISO-NE's 2016 Forward Capacity Auction over a paperwork error that excluded capacity from its generating plant in Providence, R.I. (EL16-38-001).

The commission on May 2 denied most of Dominion's February complaint about ISO-NE's decision to block new incremental capacity from an upgrade to the company's Manchester Street Station from participating in FCA 10 in February. The three-unit generator boosted its summer capacity by 21 MW to 477 MW.

In September 2015, ISO-NE approved the additional 21 MW for the auction. But the RTO later disqualified the additional capacity because Dominion failed to submit a "composite offer" linking the new capacity and the existing capacity at the plant.

The deadline for composite offers was Oct. 9, 2015. Dominion filed its complaint with FERC just days before the FCA in February.

Manchester Street Station | *Dominion*

The commission rejected the complaint in May, finding that the company had received adequate notice of the RTO's filing requirements in October and November. The commission directed ISO-NE to revise its Tariff to provide greater clarity but denied Dominion's request to resettle the auction as if the company's additional capacity had participated.

"We are not persuaded by Dominion's assertion that the commission erred in determining that ISO-NE did not violate its Tariff and was therefore mistaken in finding that resettlement was not required," FERC wrote last week. "It would be contradictory to find that ISO-NE's Tariff was unjust and unreasonable because it failed to provide notice of the filed rate, while also finding that ISO-NE violated the filed rate."

FERC's May order did find that ISO-NE's tariff was "unclear regarding the process for new incremental generating capacity and existing generating capacity at the same resource to participate in the FCA."

ISO-NE responded with proposed Tariff changes under which it would automatically match new summer incremental generating capacity with excess existing winter qualified capacity at the same resource.

But the commission ordered the RTO on Aug. 30 to further amend its Tariff to automatically match new winter incremental capacity with excess existing summer qualified capacity at the same resource. "We find that there is no reason to limit, based on season, the automatic matching of new capacity with excess existing capacity," the commission said (ER16-2126).

ISO-NE's second compliance filing is due by the end of October.

ISO-NE NEWS

Briefing on ISO-NE Study Focuses on Energy Revenues, Storage, RPS

By William Opalka

WESTBOROUGH, Mass. — ISO-NE's latest briefing on its ongoing economic study focused on the shortfall of energy market revenues, prospects for storage and the ability to meet increased renewable portfolio standards.

Planners told the Planning Advisory Committee on Wednesday that uplift and capacity revenues will become increasingly important because energy market revenues will be insufficient to support any form of new generation in 2025 or 2030, the two time horizons in the draft study.

"Additional revenue from other sources will be needed to support new resources, as the energy market contribution isn't sufficient to cover fixed costs," said Michael Henderson, director of regional planning and coordination at ISO-NE.

The economic study is simulating five scenarios related to the changing mix of the New England power fleet as the states move to decarbonize the power sector. (See *5 Resource Scenarios Presented to ISO-NE Planning Advisory Committee*.)

In the simulations, energy market revenues are below annual carrying charges for all new generation resources, including wind, solar photovoltaic, natural gas combined cycle and combustion turbines. Units would recover some costs through energy market revenues plus uplift, the study says. Resources also would need "significant revenues" from the capacity market, Henderson added.

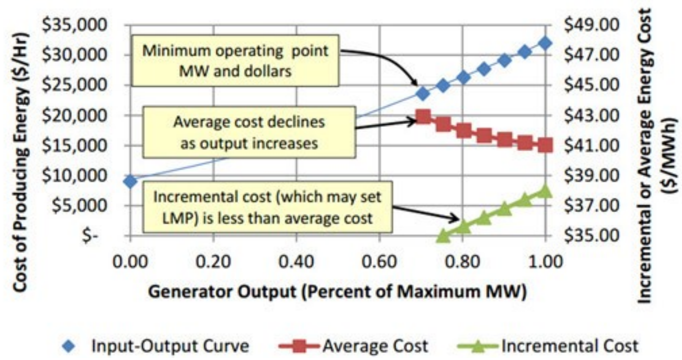
The study says the shortfall results because cheap gas-fired units typically set LMPs and higher-cost resources are rarely on the margin.

Another factor is low- or no-cost resources. The region is experiencing little or no load growth as the states have made significant commitments to behind-the-meter solar resources and energy efficiency. Wind and PV that aren't behind the meter are price takers.

Uplift would be highest in 2025 under scenario 2 — in which all additional capacity needs, including retirements, are met with new renewable and clean energy resources, including nuclear power — hitting almost $179 million assuming no transmission constraints.

The lowest uplift — $88 million — is under scenario 5, in which RPS requirements are met by resources interconnected to the system, under construction or approved as of April 1, 2016, with alternative compliance payments used to meet any remaining RPS requirements. Retired units would be replaced with combined cycle plants to meet installed capacity requirements.

In 2015, uplift payments to resources operated out of merit — typically to ensure power system reliability — totaled $119 million, 2% of the total energy payments of $5.9 billion, according to Internal Market Monitor's 2015 Annual Markets Report.



Comparison of input-output, average cost and incremental cost | *ISO-NE*

Energy Storage

The study found that net revenues for energy storage increase along with more production by renewable resources.

Net revenues would be highest under the "RPS-plus scenario," which assumes additional renewable and clean energy resources above existing RPS requirements. Annual net revenues — revenue from generation minus the cost of storing energy — are projected to total more than $12 million in 2025 under the scenario, assuming no transmission constraints.

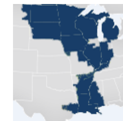
By contrast, storage would show negative net revenues of $1.5 million under scenario 5.

Increasing RPS

The study finds that scenarios 1, 2 and 3 all can meet the projected growth in the new RPS target for 2025 (8,069 GWh) and 2030 (10,806 GWh), although scenario 1 barely meets the 2030 target under a constrained transmission system.

Meeting the RPS targets under scenarios 4 and 5 would require the addition of more renewable resources, imports, alternative compliance payments or reducing RPS targets by adding energy efficiency and behind-the-meter solar.

MISO News



Last-Minute Changes to MISO Forward Auction Plan Renew Calls for Filing Delay

By Amanda Durish Cook

MISO announced on Friday it had changed four elements of its proposed forward capacity auction, prompting renewed calls from some stakeholders to delay a FERC filing planned for Nov. 1.

RTO officials — who described the changes as a "refinement" to a "limited set of design elements" — insisted the filing will be made as scheduled.

On an Oct. 21 Resource Adequacy Subcommittee conference call, MISO revealed it had adopted the Independent Market Monitor's suggestion to incorporate a pivotal supplier test in the forward auction for the RTO's retail-choice regions.

Officials also said they will include a three-year forward peak load contribution calculation and modify the design's materiality test, congestion calculation and cost allocation.

Pivotal Supplier Test

The pivotal supplier test would allow the Monitor to identify resources inside or outside MISO's footprint that are large enough to affect market outcomes. Suppliers identified as pivotal would be subject to the RTO's existing physical and economic withholding provisions.

Dynegy's Mark Volpe said that while the Monitor "should certainly suggest marketing monitoring measures," the pivotal supplier test had not been explored in the stakeholder process and was not simply a "tweak." He asked for a conference call with the Monitor prior to Nov. 1 to discuss the test. MISO staff said that was unlikely to happen.

Congestion Charges

Under other changes, MISO would allocate congestion charges resulting from the clearing of infeasible resources to buyers rather than sellers as originally proposed. Officials said the change was made to avoid discouraging sellers' participation in the auction and to align the cost allocation with other FERC-approved capacity markets.

The RTO also said it will limit congestion charges in the forward auction to situations in which constraint changes lead to a less than one-day-in-five-years loss-of-load expectation. MISO's prior draft allowed congestion charges to occur anytime a locational constraint binds and proved more restrictive under the forward auction than the prompt Planning Resource Auction. The change will maintain the relationship between the variable reliability target and the quantity of capacity procured for competitive retail demand, MISO said.

Consumers Energy's Jeff Beattie noted that MISO's retail-choice areas are "heavily interconnected" and said he doubted the new cost allocation would ever occur.

Jeff Bladen, executive director of MISO market services, agreed that new congestion costs would only occur under "extreme circumstances" when incremental resources are need to step in for megawatts that cannot be delivered.

"In a sense, it's a replacement charge because the constraints modeled need to be changed," Bladen said. He said the charge is needed because MISO "can't guarantee feasibility three years into the future." He noted that ISO-NE, NYISO and PJM use a similar method.

Peak Load Contribution

The addition of a peak load contribution calculation was intended to "alleviate retail customer risk from their purchase/offer obligations" in the forward auction against any PLC changes that take place in the PRA, MISO said.

Bladen said the PLC provides "equal footing between demand and supply resources that enter into the forward auction."

Materiality Test

The materiality threshold determines whether local resource zones will be included in the forward auction. It will be used in Michigan and Wisconsin, where the zonal boundaries traverse state lines.

The original proposal would have determined materiality based on the potential impact of competitive retail demand on the systemwide LOLE and could change from year to year.

Under the revision, MISO would determine materiality based on the greater of the LOLE impact and a fixed percentage (0.5%) of the systemwide planning reserve margin requirement.

MISO said the change provides a "reasonable balance" between reliability and certainty.

Filing Delay Sought

Several stakeholders asked for a delay in the filing to better understand the latest changes.

"This congestion charge is just not clear yet," Indianapolis Power and Light's Ted Leffler said.

Minnesota Public Utilities Commission staffer Hwikwon Ham said he wasn't yet comfortable with wording on the Tariff changes.

RASC Chair Gary Mathis said if the subcommittee demanded a filing delay, it would only be taken under advisement by MISO. The next scheduled meeting of the RASC will be held on Nov. 2, a day after MISO's projected filing date.

Bladen said MISO is "very proud of how the proposal has evolved and the balance it strikes."

"Thanks for your comments and contributions," he said.

MISO News

Co-ops, MISO & SPP Urge FERC Restraint on Refunds from Nonpublic Utilities

By Amanda Durish Cook

Rural Electric Cooperative line workers in Oklahoma | *Rural Electric Cooperative*

Electric cooperatives accused FERC on Friday of overstepping its authority by opening proceedings that could force refund obligations on nonpublic utilities, while MISO and SPP asked the commission to let them work out the issue in stakeholder proceedings.

At issue are FERC's July orders opening Section 206 proceedings in MISO and SPP (EL16-91 and EL16-99). FERC said that it may be unjust and unreasonable for the RTOs to exempt nonpublic transmission owners from the refund requirements it mandates for public utilities. (See *FERC: MISO, SPP Need Refund Requirements for Nonpublic Utilities*.)

NRECA's Argument

Tracy Warren, senior communications officer at the National Rural Electric Cooperative Association (NRECA), said the proceedings amount to a "work around" for FERC to regulate electric cooperatives and nonpublic utilities that are not under commission ratemaking authority. "We believe FERC is trying to extend its jurisdiction," she said.

In its initial brief in the 206 proceedings, NRECA said a refund requirement could deter nonpublic utilities from joining RTOs. NRECA also acknowledged in its filing what it called FERC's "legitimate concern" in ensuring that MISO and SPP abide by the Federal Power Act.

"However … NRECA cautions the commission against threatening the progress made in transmission-owning [nonpublic utilities] becoming members of MISO and SPP. … Maintaining their non-jurisdictional status is critical for [nonpublic] cooperative utilities deciding whether to join an RTO," NRECA wrote.

Although FERC acknowledged in the proceedings that it cannot directly order refunds from nonpublic utility transmission owners that have joined RTOs, it suggested SPP and MISO could indirectly enforce refunds. NRECA, which represents more than 900 nonprofit rural electric utilities, said the measure would force co-ops and municipal utilities to "volunteer" to pay revenue refunds if they want to recover transmission revenue requirements.

"Long-standing interpretations of the Federal Power Act confirm that the majority of our members lie outside FERC's ratemaking and refund authority; yet with these proceedings, FERC is working to undermine those interpretations," NRECA CEO Jim Matheson said in a statement. "By pushing to alter the limits of its jurisdiction over rates for services provided under the tariffs of MISO and SPP, FERC actions could have a chilling effect on efforts to encourage market participation by nonpublic utility transmission owners. FERC has long acknowledged co-op and municipal participation as critical to the success of RTOs."

Matheson said RTOs should work with stakeholders to develop solutions on how to make refunds more equitable. If FERC insists on requiring refund provisions for nonpublic utilities, NRECA said, it should limit the commitments to transmission service costs and leave out revenues from "participation in other markets or services."

Other nonpublic utilities — Hoosier Energy Rural Electric Cooperative, Sunflower Electric Power, Mid-Kansas Electric, Nebraska Public Power District and Midwest Energy — also filed initial briefs cautioning FERC against mandating refunds.

SPP and MISO: Let Stakeholder Processes Work

In their briefs, MISO and SPP asked FERC to let them seek a consensus solution in their stakeholder processes.

SPP said FERC should avoid "mandating prescriptive revisions," saying the RTO's staff and stakeholders are in the best position to address the "complex legal and operational issues" involved.

The RTO admitted that it has struggled with the refund discrepancy. "The disparity in refund obligations between public utility and nonpublic utility transmission owners has presented legal and administrative difficulties for SPP and other RTOs in the past. SPP welcomes the commission's focus on this issue," SPP wrote.

MISO similarly asked that its staff and public and nonpublic transmission owners be allowed to revise refund rules on a "consensual basis through an open process."

The RTO said it could run into legal difficulties if FERC orders a specific Tariff revision, because it is legally bound to not only its Tariff, but also its Transmission Owners Agreement.

"To the extent the commission decides to impose any refund commitment requirements, merely directing MISO to revise its Tariff, without considering corresponding revisions to the Transmission Owners Agreement, could expose MISO to legal challenges or require it to take positions on matters that potentially could fall within the purview of its owners," MISO said.

The RTO also said any steps FERC takes should protect MISO's status as a revenue-neutral entity.

Reply briefs in the proceedings are due Nov. 18.

MISO News

Xcel Ups Cost on MTEP 16's Lone MEP Project

MTEP 16 Report Advances

By Amanda Durish Cook

The length of MISO's lone market efficiency project for 2016 will have to be extended, increasing its cost by as much as one-quarter and reducing its benefit-cost ratio.

Xcel Energy said the estimated cost of the Huntley-Wilmarth 345-kV project has jumped by $20 million from the original $81 million as a result of having to reroute the line to bypass the Mankato, Minn., area.

MISO staff told the Oct. 19 Planning Advisory Committee meeting that the new benefit-cost ratio on the project may be as low as 1.5-to-1, down from the original 2-to-1.

MISO Senior Manager of Competitive Transmission Administration Brian Pedersen said the original line length was estimated at 38.5 miles. It's unclear how many miles the reroute will add to the project, which is slated for completion in 2022.

Putting aside misgivings about the cost increase, a majority of PAC sectors approved a motion recommending that the 2016 Transmission Expansion Plan report proceed to the System Planning Committee of the Board of Directors for consideration. After that, the report will go before the Advisory Committee and Board of Directors for approval in December. (See MTEP 16 Proposes 394 Projects at $2.8 Billion.)

In a first round of feedback on MTEP 16, stakeholders urged MISO to competitively bid the line, despite Minnesota's right-of-first-refusal statute, which would designate the project to Xcel.

"This is an issue we see no matter who does it," an Xcel representative told stakeholders. "It's still an urban area; it still needs to be addressed. This is the difference between the planning estimate and what the route actually is."

Hwikwon Ham of the Minnesota Public Utilities Commission "strongly" urged Xcel to come before the state's Department of Commerce — which advocates to the PUC on behalf of consumers — to discuss the change.

Steve Leovy of WPPI Energy asked why MISO had not presented a more accurate cost estimate when it initially rolled out MTEP 16.

John Lawhorn, senior director of policy and economic studies at MISO, said the RTO does "the best job it can."

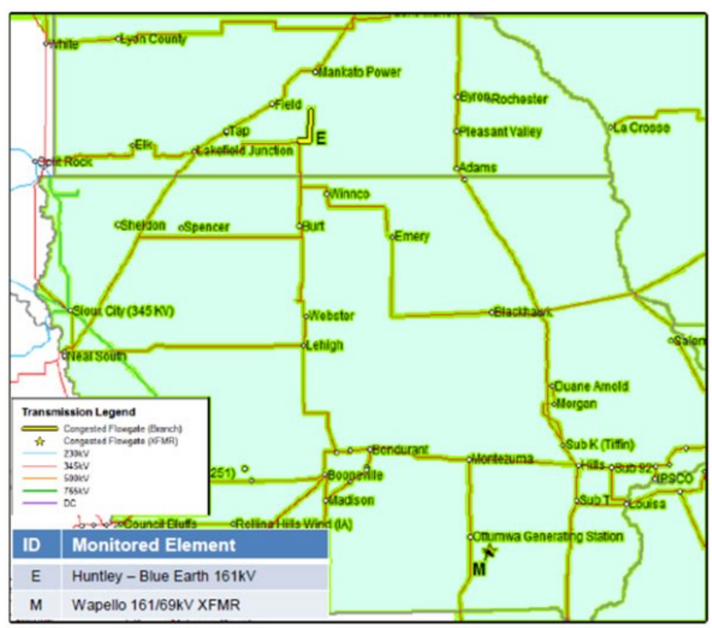
"Cost estimates and actual costs can vary, as you know, so we have variance analysis built into our Tariff," Lawhorn said.

"We constantly hear MISO pushing openness in the process, and here it is again that we don't have all the details. At a minimum, an MTEP report should at least present the best cost estimate possible," said George Dawe, vice president of Duke-American Transmission Co.

However, Ham said he was pleased that Xcel came forward with the increased price before MTEP 16 is approved. "I'm happy to see this number came in ahead of time," he said.

The MTEP report says the Huntley-Wilmarth project will give load more access to lower-cost generation because it "completely mitigates" congestion on the Huntley-Blue Earth 161-kV line near the Iowa-Minnesota border. The line has been stressed by large amounts of wind capacity and low-cost coal generation in northern Iowa.

"Further worsening congestion is the increase in wind capacity in Iowa that is assumed over the next 15 years," the report says. "Finally, expected coal retirements near the Minneapolis/Saint Paul area such as Sherco 1, Sherco 2 and Clay Boswell 3 tend to increase the need for power to flow from northern Iowa to the Twin Cities via the Lakefield to Wilmarth 345-kV path. As a result, for the loss of this high-voltage transmission path, the low-voltage parallel path of Huntley to Blue Earth 161-kV becomes congested."

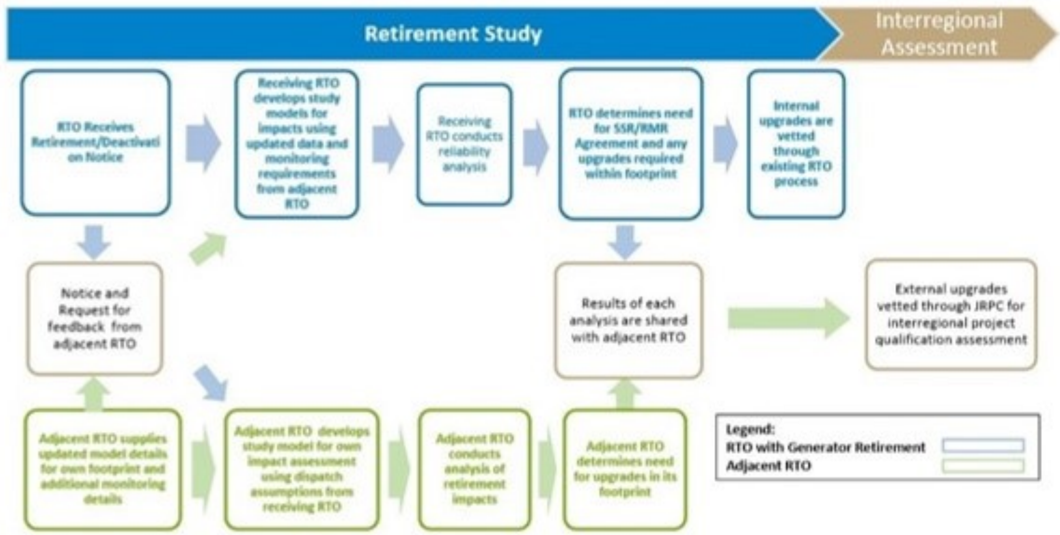


Iowa/Minnesota top congested flowgates | *MISO*

MISO NEWS

MISO Outlines Retirement Coordination with PJM

By Amanda Durish Cook



MISO/PJM retirements and deactivation coordination | *MISO*

MISO and PJM will have 65 days to evaluate the impact of generator retirements under joint operating agreement language drafted to comply with a FERC directive.

The subject of a briefing at MISO's Reliability Subcommittee meeting last week, the JOA language requires the RTOs to notify each other of retirements and exchange the most up-to-date modeling data.

The results of the retirement impact studies and possible transmission upgrades will also be shared. Projects in one RTO that have benefits or impacts in the neighboring RTO will be evaluated by the Joint Regional Planning Committee and the Interregional Planning Stakeholder Advisory Committee (IPSAC).

Alternatives to transmission upgrades will include market-to-market coordination to use external resources, as well as operating guides and procedures involving the adjacent RTO.

In response to a complaint by Northern Indiana Public Service Co., FERC required the RTOs to file language coordinating their generator retirement studies and dispatch assumptions by Dec. 15, 2016 (EL 13-88).

The commission cited NIPSCO's testimony that PJM used unrealistic dispatch assumptions in its study of the retirement of the Crawford and Fisk generating plants in the Commonwealth Edison territory, "which caused PJM to fail to identify required upgrades and masked potential problems within MISO, including overloads on NIPSCO's system." (See *FERC Orders Changes to MISO-PJM Interregional Planning*.)

Joe Reddoch of MISO's System Support Resource Planning Group said MISO focused on appropriate communication between the RTOs and reviewed its existing retirement process to make sure it was still relevant.

Reddoch commented on the 65-day deadline for evaluating retirements.

"Currently, it's more or less open-ended. We don't necessarily have a deadline to get back to them with study results that would factor into their retirement studies," Reddoch said.

He added that supplying such information would be more vital to PJM, which — unlike MISO — cannot force generators to stay online as must-run resources.

Reddoch said transmission projects the RTOs identify as a result of their analyses might not be detailed or polished.

"Each RTO would conduct a retirement analysis to determine the impacts to their system and possible transmission projects. We won't necessarily have those projects defined," he said.

Reddoch said MISO would look to PJM's information to update its modeling information, but directly involving PJM staff in retirement decisions would be too complex. "They won't necessarily be involved in study scope discussions," he said.

In comments to MISO, NIPSCO said it was generally supportive of the proposed changes, but it asked the RTOs to devise a timeline for retirement studies that is similar to MISO's multistep interconnection queue studies. MISO responded that an interconnection format isn't feasible because its generator retirement studies are "conducted on an *ad hoc* basis," and studies can vary.

NIPSCO also asked MISO for examples of how identified transmission projects become approved under the new process. MISO said the issue would be discussed at a future IPSAC meeting.

Reddoch asked for stakeholder input by Nov. 1 and said MISO would share final JOA language at the Nov. 15 Joint and Common Market meeting with PJM.

"Currently, it's more or less open-ended. We don't necessarily have a deadline to get back to them with study results that would factor into their retirement studies."

Joe Reddoch, MISO

MISO News

Planning Advisory Committee Briefs

Wind Advocates Stage 11th Hour Protest to Queue Reform Filing

Wind advocates and other stakeholders predicted last week that MISO's proposed changes to the interconnection queue process will face challenges before FERC.

The stakeholders made their comments at the Oct. 19 Planning Advisory Committee meeting, two days before MISO's filing Friday.

Omar Martino, director of transmission strategies with EDF Renewable Energy, said the new three-phase queue could make the process even longer.

Great River Energy engineer Michael Steckelberg said the three-phase approach guarantees "built-in restudies."

Tim Aliff, MISO's director of reliability planning, said the majority of stakeholders preferred the three-phase queue over a shorter, two-phase queue.

Rhonda Peters, a consultant to Wind on the Wires, said more discussion could have resolved some of her clients' concerns, such as the timing of the site control deposit. The deposit is required at the queue's second decision point, roughly 200 days into the queue, and becomes nonrefundable if interconnection customers cannot provide a site map and proof of land-use agreements for the project area.

Aliff noted that the deposit was reduced to $100,000 from the proposed $1 million, but he said MISO would not consider wind advocates' request to delay the deposit until projects enter the definitive planning phase.

He also said it was an exaggeration that MISO's entire wind industry opposed the deposit timing — an unexpected response to a claim no one at the meeting had made.

Interconnection Process Task Force Chair Randy Oye pointed out that MISO worked for more than a year on the new rules.

"I think we really worked hard to address the issues," Oye said. "Site control was a late issue; it came up late."

Aliff said that while the proposed 460-day queue sounds long, MISO is only now getting to siting projects proposed in August 2015. "We're already a year behind on the current process," Aliff said.

MISO Proposes Joint Functional Control Agreement

MISO plans to file a joint functional control agreement with FERC to codify the process that would be used should it award a competitive transmission project to multiple entities in separate RTOs.

The agreement would be signed by all developers and makes clear that MISO will "maintain undivided functional control of all competitive transmission facilities associated with … project[s] once they are placed into service."

"One RTO couldn't do 60% of congestion management while the other does 40% control of congestion management," explained Brian Pedersen, MISO's senior manager of competitive transmission.

Once accepted by FERC, Pedersen said similar language will be included in MISO's Tariff. He also said he would return in November to present any adjustments to the agreement based on stakeholder comments. MISO is eyeing a finalized agreement by February or March and said it would be filed with FERC in either the second or third quarter of 2017.

Duff-Coleman Selection Near; MISO Contemplates Rule Changes

Pedersen said MISO is close to selecting a developer for the Duff-Coleman 345-kV project, its first competitive transmission project. (See *11 Developers Vie for MISO Duff-Coleman Project*.)

He said after the project is awarded, he would continue to return to the PAC with project status reports and updated cost estimates. Beyond that, he said MISO would take time in the first few months of 2017 to identify possible improvements to the competitive developer selection process.

"Even though there might not be a competitive project in 2017, there's a lot to contemplate," Pedersen said.

After MISO announces the Duff-Coleman winner, Pedersen said he expects there are going to be 10 developers "wanting to know why they weren't chosen."

"In January and February, what we're contemplating is having one-on-one meetings with the 10 entities that were not selected," Pedersen said.

MISO is already considering changes in the minimum project requirements for competitive transmission projects. The RTO announced at Oct. 18's Planning Subcommittee meeting that the second version of Business Practices Manual 029, which governs the requirements, will move to the PAC for approval. MISO principal adviser Matt Tackett said the BPM language will be presented and reviewed at the Nov. 16 PAC meeting. He said he anticipates final language by January with the revision implemented next spring.

"I think the general thought among stakeholders was that it was a good starting point," Tackett said of the first version of BPM 029, which was used for Duff-Coleman. The revision includes a more detailed set of ratings that projects must meet. (See "MISO Releases Minimum Requirements for Competitive Tx Projects," *MISO Planning Subcommittee Briefs*.)

PAC Could Hold IPSAC Vote Outside of Interregional Meetings

Eric Thoms, MISO manager of planning coordination and strategy, revisited the PAC to soften his stance on whether the committee sectors' vote in the MISO-SPP Interregional Planning Stakeholder Advisory Committee (IPSAC) can take place outside of the interregional meetings.

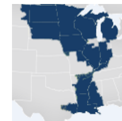
Thoms said MISO is proposing holding its end of the IPSAC stakeholder vote through either conference call or email shortly after the IPSAC to give sectors time to huddle up on issues.

"A majority of the stakeholders did not support voting at the SPP-MISO IPSAC. I think people wanted sufficient time to discuss MISO's own regional details."

Eric Thoms, MISO

Continued on page 17

MISO News



Planning Advisory Committee Briefs

Continued from page 16

"A majority of the stakeholders did not support voting at the SPP-MISO IPSAC. I think people wanted sufficient time to discuss MISO's own regional details," Thoms said.

In August, Thoms said the PAC's seven voting sectors should use MISO-SPP IPSAC meetings to decide the RTO's nonbinding IPSAC vote on study approvals or whether potential interregional projects should proceed to regional review. (See "MISO to Give PAC More Consideration in Interregional Process; Stakeholders Wary of PAC Vote in IPSAC," *MISO Planning Advisory Committee Briefs*.)

Thoms said MISO staff would advise the MISO-SPP Joint Planning Committee on the stakeholder preference to conduct voting outside of the IPSAC.

PAC Chair Bob McKee said voting changes should be memorialized in the committee's charter.

Thoms added that stakeholders' IPSAC confusion spawned in large part from FERC's directives in the Northern Indiana Public Service Co. order (EL13-88), with stakeholders not knowing if they should attend the PAC or the MISO-PJM IPSAC to get the latest details. MISO said it noticed an increase in involvement by its stakeholders at recent MISO-PJM IPSACs.

Stakeholders also asked for increased notice, updates and follow-up on IPSAC items at the PAC and the ability for PAC sectors to present their positions in the IPSACs.

MISO said it is looking for "alternative opportunities to communicate interregional planning status," including PAC presentations, newsletters and quarterly reports.

Long-Term Tx Study Scoped

MISO has finalized the scope of a study that will determine the RTO's long-term transmission needs using futures from the 2017 Transmission Expansion Plan. The RTO said in addition to the MTEP 17 futures, the study will include "economic indicators" such as historically congested flowgates.

The first detailed study evaluation will take place in MISO's Economic Planning Users Group on Nov. 11 at its Eagan, Minn., offices. (See "Long-Term Overlay Study Scoped; MISO Asks for More Responses," *MISO Planning Advisory Committee Briefs*.)

Lynn Hecker, MISO manager of expansion planning, said she would revisit the PAC with five separate updates over 2017 until the study is wrapped up in December 2017.

— Amanda Durish Cook

NYISO NEWS

Federal Suit Challenges NY Nuclear Subsidies

By Ted Caddell and William Opalka

"The ZEC program is unlawful because it operates in the area of FERC's exclusive jurisdiction, and federal law thus pre-empts it."

Despite its best efforts to avoid litigation, the New York Public Service Commission saw its Clean Energy Standard challenged in federal court Wednesday by a group of energy companies and trade groups calling the rule's subsidies to several nuclear power plants unconstitutional.

The suit, filed in U.S. District Court for the Southern District of New York in Manhattan, claims the zero-emission credits (ZECs) intrude on FERC's jurisdiction over interstate electricity transactions, asking the court to find them invalid and order the PSC to withdraw them from the CES.

The ZECs are "purely protectionist in nature, enacted for political reasons to save jobs at the subsidized generators and the property tax revenues there from," said the plaintiffs, which include Dynegy, Eastern Generation, NRG Energy and the Electric Power Supply Association.

The CES, adopted by the PSC in August, mandated that New York obtain 50% of its power from renewable resources by 2030. The ZECs were seen as a way to keep the state's nuclear plants operating while utility-scale renewables are built. The 12-year subsidies would help keep open Exelon's R.E. Ginna and Nine Mile Point and Entergy's James A. FitzPatrick plant, the sale of which to Exelon is pending regulatory approval.

When it issued its order, the PSC said it had revised it in a way that it believed would avoid legal issues that caused the U.S. Supreme Court to void a contract between Maryland and Competitive Power Ventures in *Hughes v. Talen*. (See *NY Attempts to Thread Legal Needle with Clean Energy Standards, Nuke Incentives*.) The court found the contract unconstitutional, as it was tied to prices in PJM's capacity market, over which FERC has jurisdiction. The PSC instead tied the price of its ZECs to EPA's social cost of carbon and the price of carbon allowances in the Regional Greenhouse Gas Initiative.

The plaintiffs, however, said the ZECs were still tethered to FERC-regulated wholesale energy prices and thus unconstitutional.

"Apparently recognizing that its original proposal was plainly unconstitutional under *Hughes*, the PSC staff hastily revised its recommendation in July 2016 and changed the formula for determining the amount of ZEC subsidies," they said. "Although the new formula was ostensibly based upon a federal interagency working group's 'social cost of carbon,' this was window dressing, changing the name but not the intent to replace the FERC-determined energy price with a state-determined energy price."

The plaintiffs argued that the subsidies disadvantage out-of-state generators who participate in NYISO's markets.

"The ZEC order is directly discriminatory, as only specified New York nuclear facilities are eligible to receive ZECs," they said. "Although states have the right to regulate the retail sale of electricity within their own borders, the wholesale sale of electricity involves interstate commerce, which the state may not regulate. NYISO's wholesale marketers are interstate and international in nature, as they involve the sale and transmission of energy and capacity from generators located in other states and in Canada, and the purchase of such commodities by customers in other states."

They also claimed that the ZECs could inhibit competition because they "would cause more efficient interstate generators to leave the market and discourage the entry of new competitors."

Proponents of the CES were quick to denounce the suit.

"This lawsuit, filed by gas, oil and coal generators, is blatantly putting specific business interests ahead of what is best for New York," said Gary Toth, vice chair of the County of Oswego Industrial Development Agency.

"Today's lawsuit … is wholly inconsistent with the values of the countless New Yorkers who want to achieve a clean energy future," said Ted Skerpon, chairman of the IBEW Utility Labor Council of New York.

"The bottom line here is that eliminating the nuclear provision from the CES will cause electricity prices to spike and will put thousands of New Yorkers out of work," said Gregory Lancette, president of the Central-Northern New York Building and Construction Trades Council.

"Ultimately, if upstate nuclear plants close, it is the generation facilities that burn coal, oil, and gas that will benefit from the electricity price spikes that would result," said Dave Young, president of the Rochester Building & Construction Trades Council.

Downstate Legislators Blast ZECs Again

On Monday, a group of New York City-area legislators again blasted the ZECs in a second letter sent to the PSC.

The legislators, now numbering seven, also said the PSC's response to their first letter mischaracterized their opposition. (See *New York Legislators Question Nuclear Subsidy*.) They said they support the standard's renewables goal but contend that the $965 million ratepayers will spend on the subsidies over the first two years of the program will be disproportionately borne by downstate ratepayers. They again called for the cost review of the power plants' operating costs to be made public.

"The commission has kept the cost review concealed from the public, presumably on the grounds that the costs of the nuclear plants are trade secrets, but the commission in its order acknowledged there was little competition involved," the letter states. "Upon sale of the FitzPatrick plant, Exelon/Constellation will become nearly the exclusive owner. Accordingly, there is no justification for withholding this information on the basis that the costs are protected trade secrets."

The PSC responded to the first letter by saying the benefits of low emissions are shared statewide. It also has said the move toward a low-carbon energy portfolio would suffer if the nuclear plants retired prematurely.

OPSI Annual Meeting

PJM to Seek FERC OK for Seasonal Capacity Proposal

By Rich Heidorn Jr. and Rory D. Sweeney

COLUMBUS, Ohio — PJM officials said Wednesday they will seek FERC approval of the RTO's seasonal capacity proposal despite a lack of stakeholder consensus.

The proposal, which would relax the current prohibition on seasonal resources aggregating across locational deliverability areas, received less than one-third support in a Seasonal Capacity Resources Senior Task Force poll last month. (See *No Consensus Among PJM Stakeholders on Seasonal Resources*.)

Adam Keech, executive director of PJM market operations, told the annual meeting of the Organization of PJM States Inc. that the PJM Board of Managers had approved making a FERC filing in November.

In addition to what Keech called PJM's "facilitated aggregation" proposal — which is intended to improve the ability of intermittent resources and demand response to participate in the capacity auction — the RTO also will consider changes in load forecasting and incorporating summer DR's curtailment capabilities after the auction, Keech said.

"We're looking for other ways to value seasonal resources" in addition to changes in capacity rules, Keech said. "We recognize there's more work to be done in this area."

Keech said PJM's proposal is a response to complaints that the aggregation options offered to seasonal resources under Capacity Performance rules are unworkable because of the difficulty summer and winter resources had in "finding one another" and reaching commercial agreements.

Under the proposal, PJM would match summer and winter resources, eliminating the need for commercial ties between them. Summer and winter resources would have separate six-month obligations and would not be liable for another resource's nonperformance.

The RTO's proposal also would allow resources to aggregate beyond LDA borders, with unmatched resources moving up to the next LDA level until a match is found. For example, an offer containing individual resources located in the EMAAC LDA and SWMAAC LDA would be modeled in the MAAC LDA. An offer with resources in COMED and EMAAC would be modeled

PJM's Adam Keech | © *RTO Insider*

in the "Rest of RTO." Performance penalties would be distributed evenly between the resources, no matter which failed to perform.

Measurement Rules, Injection Rights, Load Forecasting

Keech said PJM also will propose a change in how it measures winter DR, returning to the former firm service level (FSL) calculation "that is more conducive for demand response capability for industrial resources."

PJM also plans to propose that wind be able to obtain higher winter capacity injection rights, in recognition that wind farms, which are rated at a 13% capacity factor in the summer, can produce 40% of their nameplate capacity in the winter. Hydro resources "potentially" could receive higher winter injection rights as well, Keech said.

Another initiative will seek ways to better incorporate DR into load forecasts, which would reduce costs by reducing the amount of capacity procured. PJM's current method requires load reductions to be repeated for 15 years before they are reflected in the load forecast, Keech said. "There's probably some room to improve in that area," he said.

In addition, PJM is considering registering summer load curtailment capabilities after the capacity auction, which he said will borrow from its former interruptible load for reliability (ILR) program and "operational attributes" concept.

"We realize the operational flexibility value to that," Keech said, adding "the details remain to be ironed out."

Mixed Reception

The announcement of PJM's plans got a mixed reception from other speakers at the OPSI meeting.

John Farber, an analyst with the Delaware Public Service Commission, called PJM's choice "disappointing."

Susan Bruce, counsel for the PJM Industrial Customer Coalition, said the group supports PJM's filing. "We think it will help with the next auction," she said. "It's not a silver bullet though."

Katie Guerry, of DR aggregator EnerNOC, made a pitch for her company's proposal, which combined PJM's plan with a "balancing ratio" that changes how DR is valued. It won support from one-third of the task force. Keech said PJM is discussing whether to apply the balancing ratio — currently used only for generation — to other resources.

James Wilson, a consultant for state consumer advocates, said PJM's proposal falls short of his winter performance equivalents plan, which would auction "WIPES" credits that allow capacity resources to not perform in the winter. Opposed by PJM, Wilson's proposal was supported by less than a quarter of task force members.

Wilson said the 2014 polar vortex was "a real wake-up call on the value of winter capacity" and said the CP rules properly created much stronger incentives for performance.

But he said CP went in the "wrong direction" in not recognizing the seasonal nature of both capacity resources and PJM's peak loads. PJM's projected 2020 summer peak load is 20,000 MW greater than its winter peak in a 50/50 forecast — with the difference rising to 26,000 MW in a 90/10 forecast.

"PJM's reliability studies have always suggested that all of the outage risk is really in the summer, not in the winter," he said.

Wilson said his "simple simulation" found that a "full seasonal" approach would save ratepayers about $1 billion annually by

Continued on page 20

OPSI Annual Meeting

PJM to Seek FERC OK for Seasonal Capacity Proposal

Continued from page 19

procuring 20,000 MW less in winter and accommodating more participation by seasonal resources — solar, wind and DR.

He said separate summer and winter price signals "would be potentially very helpful" for both renewable developers and gas-fired generators weighing the cost of obtaining firm gas supplies in winter.

Wilson praised PJM's efforts to revise its load forecasts to recognize increasing energy efficiency. The changes reduced the forecast peak for the 2019/20 Base Residual Auction by 5,660 MW (-3.5%). (See Changes to PJM Load Forecast Cuts Benchmark Peaks.)

"But it's too soon to … conclude that we've solved the over-forecasting problem," Wilson said.

No Consensus in Task Force

The task force polled members last month on five proposed rule changes, with the most popular proposal — retaining the base capacity product for an additional year, delivery year 2020/21 — claiming 43% support. Only 48% of members who voted favored any change, while 52% chose the status quo.

Bruce Campbell of energy management company CPower said "a handful of large entities" can skew the voting in lower committees not subject to sector-weighted voting because they have multiple business units represented with stakeholder votes. "It's my opinion that that probably has happened in this case," he said.

OPSI Annual Meeting

Who Decides? OPSI Panel Highlights Blurred Jurisdiction on Tx

By Rory D. Sweeney

From left to right: Craig Glazer, PJM; Sharon Segner, LS Power; Jodi Moskowitz, PSEG; Josh Burkholder, Transource; Robert Weishaar, PJM ICC. | *© RTO Insider*

COLUMBUS, Ohio — PJM's Craig Glazer opened a panel on controlling transmission project costs at last week's annual meeting of the Organization of PJM States Inc. with a tongue-in-cheek game show: "Who Does What?"

The series of multiple-choice questions he presented highlighted the lack of clear authority throughout the transmission-development process, with state regulators, RTOs and FERC all potentially playing a role.

Who decides which of three cost-capped transmission proposals — differing on what costs are covered and what are excluded — is the best for ratepayers? Who enforces the cost cap after an award?

"There are no clear answers," said Glazer, PJM's vice president of federal government policy. "This is about one of the fuzziest areas we've got."

That set the stage for a dialogue on transmission planning that spanned two panels and more than three hours of discussion. The first panel tiptoed around the troubled Artificial Island project to debate the advantages and challenges of cost caps. (See PJM Board Halts Artificial Island Project, Orders Staff Analysis.)

The second panel focused on FERC's recent decision to investigate how supplemental projects are awarded. It pitted incumbent transmission owners against independent transmission developers and the customers who pay to use their networks in debating how receptive TOs should be to outside opinions on how to manage their assets. (See FERC Orders PJM TOs to Change Rules on Supplemental Projects.)

FERC Policy Statement?

Sharon Segner of LS Power, who sat on both panels, outlined her argument in detail. She started by campaigning for FERC to issue a policy statement defining the elements of cost caps, contrasting it with nonbinding cost estimates.

It was a reprise of arguments the company made in comments filed earlier this month following a FERC technical conference on Order 1000 (AD16-18). (See Five Years Later, FERC Takes Another Look at Order 1000.)

Segner said cost-containment proposals must be specific about what costs are covered and what are excluded, including legal caveats. And those promises must be incorporated into the designated entity agreement and rate case to ensure enforceability, she said.

"A PowerPoint proposal, in our view, is not a cost-containment proposal. It has to be clear, and the legal language has to be clear as well," she said. "The selection process should fairly and truly weight the cost-containment proposal."

Cost Caps Impractical

Jodi Moskowitz of Public Service Enterprise Group said cost caps make sense in theory but can be challenging in implementation. First, she said, the 45 days PJM has given bidders to respond to solicitations is not enough time to develop accurate cost estimates.

She also raised the issue of permitting delays, citing the Susquehanna-Roseland reliability project that PSEG built with PPL. It took four years to win National Park Service approval for a crossing through the Delaware Water Gap National Recreation Area even though it was completely within an existing right of way, she said.

"The challenges associated with these large, linear projects is intense," she said, noting that "the cheapest project may not provide the overall best value to customers."

She pointed out that FERC, in its acceptance of PJM's Order 1000 compliance filing, rejected a cost-cap proposal, noting that many of the issues involved with project development are out of the developer's control.

"Competitive transmission — we struggle with that term," she added, questioning whether competitive developers' designs are equal to her company's standards. "We only have one grid."

Risk Premium

Josh Burkholder of Transource Energy, a joint venture of American Electric Power and Great Plains Energy, said proposals that offer both guaranteed cost caps and significant cost savings are "too good to be true."

"This has me scratching my head, because if risks are truly transferring [from customers to the developer], you would expect there to be an associated risk premium."

In response to that pressure, his company attempted to share the cost risks with its construction vendors, equipment manufacturers and companies acquiring rights of way.

"That process has been very, very challenging," he said. "There are risks that our suppliers are just flat-out not interested in taking. They have plenty of work that they can do without assuming a lot of new risks."

Including its risk premium in its Artificial Island bid made it uncompetitive, he said.

Attorney **Robert Weishaar**, who represents the PJM Industrial Customer Coalition, said Order 1000 "has yet to deliver tangible benefits."

Continued on page 22

OPSI Annual Meeting

Role, Value of Financial Trading Debated by OPSI Panel

By Rory D. Sweeney

COLUMBUS, Ohio — Three economists, two lawyers and an electrical engineer walk into a bar...

Actually, they appeared on stage here for the latest installment in PJM's ongoing debate over the role and value of financial transactions.

Independent Market Monitor **Joe Bowring** and the Massachusetts Institute of Technology's John Parsons, both economists, explained to the annual meeting of the Organization of PJM States Inc. why they are critical of PJM's current system for auction revenue rights and financial transmission rights.

Parsons cited the Monitor's finding that PJM load has lost out on $1.7 billion in unreturned congestion surpluses over the past five years. That total, an average of almost $335 million a year, represents the difference between what load paid for ARRs and FTRs and what was returned to it. (See Table 13-37 in the Monitor's second-quarter State of the Market report.)

Harvard economist **William Hogan**, whose theories have provided the basis for the structure, said he's not sure of Bowring's math, but he said it fails to capture all the dynamics of the system.

Dynamic Efficiency

Hogan said ARRs and FTRs were not designed to return congestion revenue to load as Parsons and Bowring contend, but to solve the "dynamic efficiency" problem — a way to hedge congestion costs in recognition that physical transmission rights are impossible under an open access transmission system. "If you want to have open access and nondiscrimination [in an electricity transmission system], this is the only way to do it," he said.

PJM's system is designed so demand customers pay their LMPs and power generators are paid their own LMPs. Load overpays by design, and the surplus in those congestion payments is supposed to be returned to load customers through FTRs

Continued on page 23

Who Decides? OPSI Panel Highlights Blurred Jurisdiction on Tx

Continued from page 21

"We think FERC needs to redouble its efforts to provide clear directions to RTOs on how … to fully implement Order 1000 and deliver on its promises," he said.

Weishaar also said FERC should eliminate rate incentives — such as those for RTO participation and independent transmission companies — in Order 1000 projects. "This is competition," he said. "There are no regulatory incentives in competition."

Supplemental Projects

In the second panel, Exelon's Gloria Godson and Bob Bradish of AEP passionately defended transmission owners' authority to manage their assets without second-guessing.

"I have a good relationship with some of my neighbors. Some of them, I really don't like the way that their doors look. I think that they should change their doors, but I have never gone over to my neighbor and said, 'You know what? I'm going to take down your door and change it,'" Godson said. "You just don't do that to someone else's assets. It's just not courteous. It's not nice!"

"We have a set of standards," Bradish added. "We're certainly happy to sit and debate standards, but we don't want someone's opinion to substitute for 110 years of doing the work."

He called suggestions from stakeholders on what specific components to use "not helpful."

American Municipal Power's Ed Tatum said the fact that his company is helping to foot the bill is what qualifies him to be part of the decision.

And he said that bill has jumped sharply in recent years. In the earlier panel, he had pointed to a transmission expansion in Jersey Central Power and Light's territory whose costs ballooned from $22 million to $111 million once estimates had been more "fully refined," according to the presentation at the Oct. 6 Transmission Expansion Advisory Committee meeting.

"We're not asking to paint anybody's door … but what we are concerned about is what's being built and why. The reason is because we're paying for it. If we're paying for it … we should talk about it."

Segner said her company is concerned the supplemental project process allows incumbent transmission owners to win projects that should be open to competition.

She also voiced concern that the Transmission Replacement Processes Senior Task Force — which has been assigned to develop rules and review processes for "end-of-life" projects — has a flawed mission and no means to repair it.

"The solution is not more PJM slides. It's not prettier slides," she said. "There needs to be fundamental reform in the local planning process, and that's where the transparency needs to be."

TEAC Restructuring

Earlier in the panel, PJM Vice President of Planning Steve Herling explained the RTO's plans to restructure the TEAC to be more dynamic and communicative.

"We're going to be putting more and more of the material out, essentially in kind of webcasts well in advance of the TEAC meeting," he said. "Our goal is to have this material all available before we get to the TEAC or the sub-regional [Regional Transmission Expansion Plan] committees so that you can educate yourself about a particular problem, about a solution option that is out there and then engage in Q&A with PJM or with the transmission owners."

PJM's hopes to implement the changes by the beginning of the 2018 RTEP cycle, but enhancements will be rolled out as they are ready.

OPSI Annual Meeting

Role, Value of Financial Trading Debated by OPSI Panel

Continued from page 22

and their associated ARRs, Parsons and Bowring contend. ARRs are created when the rights to FTR payments are auctioned off to hedge against the variability of FTRs. It's through these markets that the differences between customers' congestion payments and the FTR/ARR offsets they receive are created.

While some FTR buyers no doubt are speculators hoping to pay less than they'll receive in congestion payments, Hogan said they are still providing fixed-price hedges to sellers looking for predictability. "The beneficiaries of the ultimate transmission congestion are the people on the load side, not the FTR holders."

Parsons countered that the system is not "confronting honestly" how random and imprecise — or "stochastic," as he put it — capacity can be on a transmission system. "The system is designed to kill two birds with one stone, but ... have you ever seen anybody who can actually kill two birds with one stone?"

'Fairy Tale'

"What you have right now is a fairy tale FTR system where rights are designed upfront, but you don't know the right capacity of the system," he continued. "You don't have a product that actually reflects the true congestion and the true capacity under a point-to-point system. It would be better to step back and structure the system so that actually reflects the true congestion revenues and risks and the true capacity and risk."

Bowring repeated his longstanding position that the benefits of financial trading to the market have not been proven — a statement that brought a scowl to the face of attorney Noha Sidhom of Inertia Power, a financial firm that trades FTRs.

The nodal concept using LMPs came about to address the inability to control the flow of electricity across the network, Bowring said. However, that's the point when explicit point-to-point contract paths — the concept on which FTRs are based — became obsolete, he argued.

Stu Bresler, PJM senior vice president for operations and markets, acknowledged that FTRs were a design choice made in 1999,

Noha Sidhom, Inertia Power | © *RTO Insider*

long before its full implications could be known.

"Joe's correct that it was a simpler time back then," said **Bresler**, the electrical engineer in the group. "The implementation of the monthly FTR auction was intended to give market participants the ability to have additional choices with what to do with their allocated rights."

The economists' theoretical debate was juxtaposed with real-world experience from Sidhom and attorney Marji Philips of Direct Energy, a load-serving entity that receives and sells FTRs.

'Load Pays'

Philips said economists' idyllic theories don't account for the vagaries of PJM's system. Despite all the modeling, market designs don't account for everything, she said, and what's left will undoubtedly follow the industry maxim that "load pays." She cited FERC's Sept. 15 order directing PJM to allocate balancing congestion to real-time load (EL16-6-001, ER16-121).

"There are causes of congestion that we don't actually have pure cost causation [for], and the new FERC order says, 'Well, let's just stick it to real-time load because we don't know where they're coming from, and we think this should be a pure product.' They have undermined the complete value of FTRs for load, which is to hedge our congestion risk," she said. "What I love is that FERC says, 'This is for load.' Not a single load entity supported it." (See *Monitor Says FERC Erred in PJM FTR Ruling, Seeks Rehearing*.)

Sidhom agreed that the market needs some tweaks, such as enhanced modeling, but insisted it provides an important service. She cited a MISO study that concluded optimizing wind into the RTO is saving consumers $316 million to $377 million annually — savings due in part, she said, to the work of financial traders. "Not bad for a 76 cents/MWh cost hedge," she said. "I think that's a great deal for consumers."

"At the end of the day," she added, "you need those FTR auctions to provide the appropriate pricing."

John Parsons, MIT, and Marji Philips, Direct Energy | © *RTO Insider*

OPSI Annual Meeting

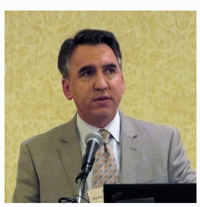
Overheard at OPSI Annual Meeting

COLUMBUS, Ohio — More than 150 regulators, PJM officials and stakeholders gathered for last week's annual meeting of the Organization of PJM States Inc. Here's some of what we heard.

Capacity Performance and Public Policy

American Public Power Association CEO **Sue Kelly**, who appeared on a panel on PJM's Capacity Performance model with Independent Market Monitor Joe Bowring and RTO officials, Calpine and two utilities, noted that it was her fourth such appearance before OPSI. As the lone critic of mandatory capacity markets, she joked, she felt like "the token Republican on MSNBC."

She said the changes going on "at the end of the grid," such as solar and demand response, are going to make CP "outmoded." It "does not meet public-policy goals. It wasn't designed to meet public-policy goals," she said.



PJM General Counsel **Vince Duane** said there are "a whole host" of "entirely valid" public-policy goals that PJM must balance in its designs. "So it's not a question of which policies are more important," he said. "There's a lot of evidence out there that we've done the design job very well."

The focus needs to be on developing the flexibility for states to make policy goals while ensuring the viability of CP, he said.

He said it's a "gross over-reading" of the Supreme Court's Hughes v. Talen ruling to believe that any state subsidy would interfere with wholesale markets. (See *Supreme Court Rejects MD Subsidy for CPV Plant*.) "We can't let the markets be used to obscure and disenfranchise the political process," he said.

Bowring repeated his concerns that competitive markets are threatened by state-subsidized generation, as proposed in Ohio. "There is a line, and the line has to do with price formation and the integrity of the market," he said. "To the extent that the line isn't drawn, then the markets won't survive."

Kelly said the Hughes case gives states and public power utilities "a lot of options" for implementing public policies without violating federal jurisdiction. "I don't think we should just count on that court case to squash all of this. I think it would be much better if we collectively work this out than go back to the Supreme Court three more times," she said.

Is the Coal-to-Gas Switch a Good Thing?

Lathrop Craig of Public Service Enterprise Group asked if a market dominated by gas, supported by renewables and experiencing major declines in coal "still makes a lot of sense" and whether a unit's value to the market should rely on something other than its lack of emissions.

Bowring wasn't in favor of what he described as subsidizing old units "because you don't like where the market's going."

"I don't think that's a good idea," he said.

Kelly raised concerns about relying too heavily on gas. "It's kind of like dating your first husband — you have bad memories," she said. "I have memories of gas at $3.50. I have memories of gas at $14.50. I have memories of having my contract ripped up by FERC and having to go out and replace all that.

"Things are great till they're not great," she added, citing concerns that fracking is causing earthquakes in Oklahoma and a rise in demand for LNG could boost gas prices.

Renewables on the Rise

In another panel, stakeholders discussed how state renewable portfolio standards are the largest driver of the surge in renewables on the grid. PJM's **Chantal Hendrzak** outlined several initiatives the RTO is undertaking, including developing wind and solar forecasts and researching better integration of renewables and battery storage, to ensure that "when renewables come on the system, no matter how they come on the system, that we can reliably integrate them."

The industry has moved quickly to implement states' renewable portfolio standards, said Exelon's Bill Berg. "Some of the lofty goals passed a few years ago now seems within reach," he said.

Market Monitoring Meeting

As usual, the conference ended with OPSI's Market Monitoring Advisory Committee's meeting — an annual check-up on the status of relations between the Monitor and PJM.

Bowring said his "overall" relationship with PJM "is good," but he noted one exception. He said the "very public" disagreement over how the Monitor interacts with PJM has resulted in "pretty tough filings back and forth on the hourly flexibility proceeding." (See *PJM Attempting to Usurp Market Mitigation Role, Monitor Says*.)

Virginia State Corporation Commissioner Mark Christie commended Bowring, while noting that "not everyone agrees with" him.

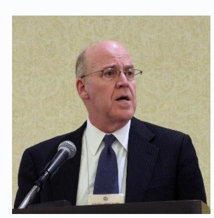
"It is really all about making sure the markets are as efficient as possible, and we've always viewed the Independent Market Monitor as critical to that," Christie said. "We certainly respect his honesty, his talent, his willingness to tell it like it is, like he sees it. Those who disagree can disagree."

PJM Board Chairman Howard Schneider interjected, "We agree with that 100%."

Earlier, Schneider had announced board member Susan Riley as the new chair of the Competitive Markets and Governance Committee, which oversees the engagement between PJM and the Monitor. Riley assured the audience that the committee has regular contact with Bowring, and he has unfettered access to bring issues to the board.

"Each issue that he raises is, in fact, researched with PJM, with Joe, with Joe's staff, and we try to arrive at resolutions we can — more times than not — agree on," she said. "The working relationship has evolved and grown over the past nine years, and I would say from where I sit that it's working very well right now."

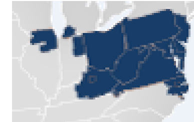
Bowring agreed.



American Municipal Power's **Ed Tatum**, who asked the only question during the brief meeting, appreciated the collegial tone. "The troubles are over. The waters are more still, and that's good," he said.

— Rory D. Sweeney

PJM News



FERC Rejects Standards of Conduct Finding for PPL

By Rich Heidorn Jr.

FERC on Thursday rejected PPL's request for a finding that it is no longer covered by the commission's Standards of Conduct rules restricting communications between its transmission and marketing functions (TS16-2).

FERC's Standards of Conduct require transmission-function employees to operate independently from marketing staff to prevent preferential access to nonpublic transmission, customer or market information.

PPL contended that the rules should no longer apply to its PPL Electric Utilities subsidiary — a transmission owner and load-serving entity in PJM — because it spun off its competitive generation to Talen Energy last year. Thus, it said, it no longer conducts transmission transactions with an affiliate that engages in marketing functions.

But the commission ruled that PPL Electric continues to have a marketing function because it sells excess electricity in its role as provider of last resort for customers who don't choose a competitive retail supplier.

"The fact that PPL Electric is a 'price taker' for the balancing sales to PJM is not relevant to the determination whether sales for resale in interstate commerce are jurisdictional activities under Section 205 of the Federal Power Act," the commission said.

FERC said that the company could request a waiver from the standards by showing that it does not control its transmission system and has relinquished access to nonpublic transmission information.

But PPL spokesman Joe Nixon said the company will not seek a waiver. "Consequently, we will continue the training and other requirements imposed by FERC's Standards of Conduct to wall off transmission function information from marketing functions," he said.

FERC rejected PPL's contention that its current operations were similar to those of Hudson Transmission Partners, which the commission exempted from the standards in a 2014 order.

Hudson Partners, which owns an 8-mile long transmission line connecting PJM and NYISO, has turned over control of the line to PJM. But unlike PPL, it does not participate in any energy markets and has not obtained authority to make wholesale sales of power, FERC said.

MRC/MC Preview

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

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

Markets and Reliability Committee

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

Members will be asked to endorse the following manual changes:

A. Manual 14A: Generation and Transmission Interconnection Process. Revisions, recommended by the Earlier Queue Submittal Task Force, include: changes to the assignment of queue priority; timing, including scheduling of deficiency reviews; criteria for inclusion in feasibility studies; and fee structures.

B. Manual 14C: Generation & Transmission Interconnection Facility Construction. Revisions set technical standards for Order 1000 projects.

3. Installed Reserve Margin Study Results (9:20-9:30)

Members will be asked to endorse the 2016 Installed Reserve Margin study results. (See "More Granularity Requested on Winter Reserve Targets," *PJM Planning Committee Briefs*.)

4. Credit Subcommittee (9:30-9:40)

Members will be asked to endorse proposed clarifications to the credit policy in Tariff Attachment Q that reorganize provisions and make five minor changes to them, none of which affects credit requirements. (See "Attachment Q Modified; Credit Requirements Unaffected," *PJM Market Implementation Committee Briefs*.)

5. PJM Capacity Problem Statement / Issue Charge (9:40-10:25)

Members will be asked to approve an updated problem statement and issue charge presented by Ed Tatum, on behalf of a coalition of cooperatives and municipal utilities, regarding PJM's Reliability Pricing Model. (See *Review of PJM Capacity Market Put on Hold*.)

6. Market Implementation Committee Charter (10:25-10:30)

Members will be asked to approve the updated Market Implementation Committee charter, which removes references to working groups. (See "'Working Groups' Removed from MIC Charter," *PJM Market Implementation Committee Briefs*.)

Members Committee

Consent Agenda (1:20-1:25)

Members will be asked to endorse:

B. Tariff revisions regarding the release of capacity in the third incremental auction for the 2017/18 delivery year in response to a FERC reporting directive (ER16-532) related to excess capacity procured in the Capacity Performance transition incremental auction. (See "Proposal Chosen for Capacity Release," *PJM Markets and Reliability and Members Committees Briefs*.)

C. Operating Agreement and Tariff revisions developed by the Metering Task Force to close gaps in understanding between staff and members on metering rules. (See "No Objections to Metering Revisions," *PJM Markets and Reliability and Members Committees Briefs*.)

FERC NEWS

RTOs Brief FERC on Winter Preparations

Continued from page 2

> **"This is probably going to be my last best winter."**
>
> **Peter Brandien, ISO-NE**

holds back a portion of rampable capacity from five-minute dispatch to respond to short-term variations in load. (See *MISO Seeks to Launch Ramp Product April 1*.) "We found that to be a significant enhancement within our market design" and ensures "there is enough ramp on the system to meet future dispatch needs both known and unknown five to 10 minutes in the future," he said.

California

The closure of the Aliso Canyon storage facility following a massive gas leak continues to be a concern for California, but both CAISO Executive Director of System Operations Nancy Traweek and FERC staff told commissioners that the reduced gas capacity should not threaten electric reliability in the state.

Traweek said CAISO's increased coordination with pipeline companies and advanced planning during the summer, when the state's demand peaks, will mitigate any risks associated with Aliso Canyon.

CAISO has asked the commission to extend for an additional year temporary Tariff changes made in response to the loss of the storage facility. (See related story, *FERC OKs Natural Gas Index for CAISO*, p.9.)

She also highlighted the expansion of the Energy Imbalance Market. (See related stories, *Mexico's Grid Operator to Explore Participation in EIM*, p.5, *Sacramento Utility to Join EIM; Other BANC Members May Follow*, p.1.)

"It's exciting to see that now others in the West are benefiting from energy markets in real time and consolidated dispatch," Traweek said.

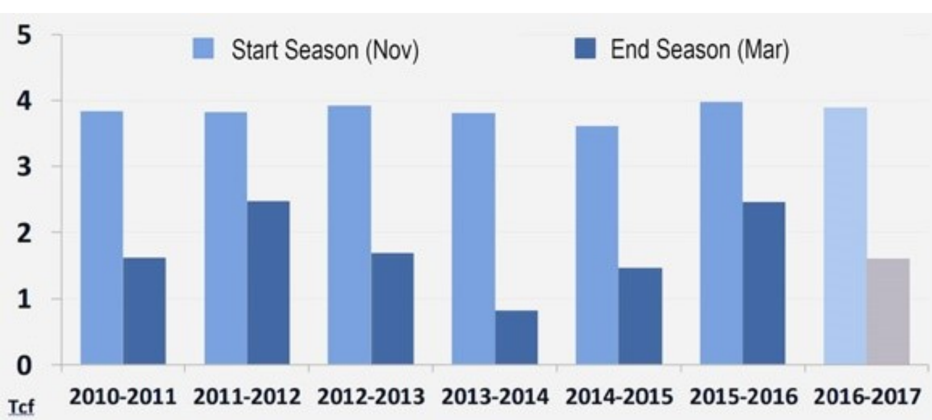
ISO-NE

Peter Brandien, ISO-NE vice president of system operations, said New England would be fine this winter but he was not so sure about future winters.

"We have some units that have indicated they're going to retire — we have those units this year," Brandien said. "So this is probably going to be my last best winter."

When the representatives were asked by Chairman Norman Bay about their overall comfort level going into the winter, all expressed optimism except Brandien, who did not directly answer the question. Instead he talked about the importance of Spectra Energy's Algonquin Incremental Market pipeline and the region's dependence on LNG imports.

Commissioner Cheryl LaFleur noticed this, asking how quickly the RTO can get an LNG delivery in the event of an emergency, such as the loss of a pipeline or nuclear plant.



Natural gas storage—historic and future | *FERC*

Brandien said that although New England has had sufficient LNG supplies in prior winters, there is no guarantee that it will receive the same amount this year. The region is supplied by three primary facilities: the Everett Marine Terminal in Everett, Mass., Canaport in New Brunswick and the Northeast Gateway off the coast of Boston. LNG ships may dock at the facilities for days without offloading their cargo if they find a better price elsewhere, Brandien said.

LaFleur also asked whether the RTO was preparing for the coming generator retirements.

"I wish I had a good answer that gave me comfort, that as the non-gas resources retire that I had some sort of magic bullet," Brandien replied. "The region doesn't seem to be motivated to go down the path to expand the gas infrastructure. They want to invest in different things, [such as] solar, offshore wind, onshore wind [and] energy efficiency."

'Cautiously Optimistic'

"The outlook for winter is cautiously optimistic, with markets well supplied for the coming season," FERC staff told the commission. "Staff will continue to monitor developments within the electric and natural gas markets, with particular attention paid to the issues at Aliso Canyon and in the Northeast."

Bay praised the efforts of the RTOs. "I think this is another example of the benefits to consumers living in a region served by an RTO/ISO," he said.

When asked whether presentations by the RTOs on winter preparations would continue every year, Bay said he found them "very informative and very helpful, and it's so helpful to hear about the different things the RTOs/ISOs are doing to help prepare for winter ..."

"Significant progress has been made [since the polar vortex], but there's always more work to be done," he said.

Company Briefs

Tesla and Panasonic May Join Forces to Produce Solar Modules

Tesla Motors and Panasonic have announced they plan to produce solar modules together if Tesla's shareholders vote on Nov. 17 to approve a $2.2 billion acquisition of SolarCity.

The companies have signed a nonbinding letter of intent under which Panasonic would make solar cells and modules at the SolarCity factory in Buffalo, N.Y. Tesla would work out a long-term deal to buy and use those solar panels in a system combining them with its Powerwall and Powerpack battery storage products. That is all contingent, however, on Tesla's acquisition of SolarCity.

Panasonic is presently spending $1.6 billion so it can produce battery cells that will be used for Tesla's Model 3 electric car and energy storage products for home and utilities.

More: *The Buffalo News*

Luminant to Shutter Texas Lignite Coal Mine

Luminant plans to shutter its Oak Hill, Texas, mine, which is one of the four lignite coal mines that feeds its Martin Lake power plant.

The company, which is Texas' largest power generator, closed three small North Texas mines earlier this year to switch from lignite to Wyoming's Powder River Basin coal.

Earlier this year, Luminant bought two major gas-fired power plants in northeastern Texas.

More: *Fuel Fix*

MGE Names Keebler as New CEO and President

Jeffrey Keebler will be taking over as CEO and president of Madison Gas & Electric on March 1, 2017. He will succeed Gary Wolter, who is retiring.

Keebler, who has been with MGE since 1995, presently serves as senior vice president of energy supply and planning.

He holds a bachelor's degree in finance and economics from the University of Wisconsin-La Crosse and a master's degree in business administration from the University of Wisconsin-Whitewater.

More: *Wisconsin State Journal*

Regulators: Empire Can't Raise Oklahoma Rates without Hearing

State regulators last week rejected a request by Empire District Electric to raise Oklahoma customers' rates to match those of Empire's Missouri customers.

The state's Corporation Commission did not rule out a rate hike, but it said Empire would have to go through a rate change hearing to establish justification.

Empire had asked for a rate increase of up to 45.37% per month per 1,000 kWh.

More: *The Miami News-Record*

Layoff Plan Set for Fort Calhoun Ahead of Shutdown

The Omaha Public Power District released a plan last week to begin reducing the number of workers at its Fort Calhoun nuclear plant in Blair, Neb., which permanently ceased operations Monday.

As part of the decommissioning, the plant will lay off about 270 workers over the next 20 months in six batches. The first round of cuts — 60 people — is scheduled for Nov. 1, while the second round is set for the first quarter of 2017. Laid off employees will be placed in career transition workshops, OPPD said.

More: *The Associated Press*

Enbridge Reduces US, Canadian Workforce by 5%

Enbridge announced last week a 5% workforce reduction across the company, amounting to the elimination of 530 jobs in the U.S. and Canada.

The company shed 370 positions in Canada and 160 in the U.S., 45 of which are in Houston.

Enbridge spokesman Michael Barnes said the cutbacks are not related to the company's plans to purchase Houston-based Spectra Energy in a $28 billion deal expected to close early next year.

More: *Houston Chronicle*

Minnesota Power Plans Shutdown Of Two Coal-Fired Generators

Minnesota Power announced last week that it will shut down two of its coal-fired generators in Cohasset by the end of 2018 as it transitions to natural gas and renewable resources.

In June, the Minnesota Public Utilities Commission ordered the utility to shut down Boswell Units 1 and 2 by 2022.

The utility has achieved a 25% renewable energy mix, beating the state's goal of 25% by 2025. It expects to reduce carbon emissions on its system by about 20% by 2020 and 30% by 2025 compared with 2005 levels.

More: *Duluth News Tribune*

MidAmerican to Reduce Its Reactive Service Rate

FERC last week approved an offer of settlement by MidAmerican Energy in which it agreed to reduce its reactive service rate from $0.18/MWh to $0.14/MWh, effective May 1, 2016. The settlement was uncontested.

More: *FERC*

Federal Briefs

FERC Chief of Staff Larry Gasteiger Leaves for PSEG


Gasteiger

FERC Chairman Norman Bay announced the departure of his chief of staff, Larry Gasteiger, last week at the commission's open meeting.

Gasteiger, whose last day was Friday, will take the role of Public Service Enterprise Group's chief of federal regulatory policy. He worked at FERC for 19 years, including as Bay's deputy director at the Office of Enforcement.

"I am personally grateful to Larry for the help he has given me over the years," Bay said. He called Gasteiger "clearly one of the most important picks I had to make when I came in as the director of [Enforcement], when I was new to FERC and I was in great need of having a Sherpa." Bay named Jamie Simler, current director of the Office of Energy Market Regulation, as Gasteiger's replacement.

More: PSEG

Cintron Named as FERC's Chief Administrative Law Judge


Cintron

Judge Carmen A. Cintron has been named as FERC's chief administrative law judge, following her service as acting chief judge since December 2015.

Cintron joined the commission as an ALJ in 1999 and was selected in September 2015 to serve as deputy chief judge.

Prior to joining FERC, she was the hearing office chief of the Atlanta North Office of Hearings and Appeals for the Social Security Administration.

More: FERC

Energy Department Plans to Build Experimental Carbon Dioxide Plant

The Department of Energy is providing $80 million to build an experimental 10-MW power plant in San Antonio that will use carbon dioxide instead of steam to generate power.

Gas Technology Institute will lead the pilot project with Southwest Research Institute serving as an equal partner. General Electric's Global Research team will also be involved.

More: *San Antonio Express-News*

Court: EPA not Properly Estimating Job Losses

EPA has not properly estimated job losses in the coal industry resulting from the Clean Air Act, a federal judge ruled last week.

The District Court for the Northern District of West Virginia ruled in favor of coal mining company Murray Energy, finding EPA has a "nondiscretionary duty" to track potential job losses and employment shifts from regulations written under the act.

"With specific statutory provisions like Section 321(a), Congress unmistakably intended to track and monitor the effects of the Clean Air Act and its implementing regulations on employment in order to improve the legislative and regulatory processes," the opinion said.

More: *The Hill*

Plaintiffs to Refile Lawsuit Blaming Fracking Industry for Earthquakes

Lawyers for two Oklahoma women will refile in state court a class action lawsuit that blames the fracking industry for the state's recent spate of earthquakes.

The plaintiffs previously filed the suit in state court, but Devon Energy removed it to federal court under the Class Action Fairness Act of 2005, prompting them to agree to a voluntary dismissal.

The plaintiffs are required by law to wait one year to refile.

More: *Forbes*

House Committee Investigating WAPA Security Breaches

A House of Representatives committee has asked the Western Area Power Administration to turn over documents by Nov. 1 relating to security breaches at the Liberty substation in Arizona.

The document request is part of the House Committee on Oversight and Government Reform's investigation spurred by a July 14 *Wall Street Journal* article describing physical intrusions at the substation, including one in which its control room was ransacked.

There have been no arrests, and security cameras mostly weren't working.

More: *The Wall Street Journal*

Interior Secretary Supports Klamath River Dam Removal

Secretary of Interior Sally Jewell sent a letter last week to FERC urging it to approve applications by PacifiCorp and Klamath River Renewal Corp. to remove four hydroelectric dams on the Klamath River.

PacifiCorp owns the dams, and Klamath River Renewal — a consortium of federal, state, tribal and local officials — wants to take ownership for the purpose of demolition.

In a measure that's considered mostly symbolic, county voters will have the opportunity to vote on Nov. 8 as to whether the dams should be removed.

More: *Herald and News*

FERC OKs $154M Budget for NERC, REs

FERC last week approved a $154.8 million 2017 budget for NERC, its eight Regional Entities and the Western Interconnection Regional Advisory Body (WIRAB) (RR16-6).

The spending plan includes $54.3 million for NERC, $99.7 million for the Regional Entities and almost $760,000 for WIRAB, which was created by Western governors to advise FERC, NERC and the West's RE, the Western Electricity Coordinating Council.

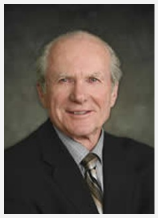
NERC's budget will increase 3.6% over 2016, while its workforce drops to about 190 full-time equivalents.

More: *RR16-6*

STATE BRIEFS

ARIZONA

Democrats, Republican Call for Full Disclosure of APS Spending


Burns

Two Democrats on November's ballot for seats on the state's Corporation Commission have aligned themselves with a Republican incumbent in calling for full disclosure by Arizona Public Service as to whether it spent money on the 2014 elections.

Democrats Bill Mundell and Tom Chabin called for an end to "a culture of corruption" and cited alleged personal meetings between Gary Pierce, a former commissioner, and Don Brandt, president and CEO of APS and its parent company.

APS is suing Republican incumbent Robert Burns over his position to force it to make full disclosure. Notwithstanding, Brandt's company is supporting Burns' bid for re-election, according to an email Brandt sent to company employees last week.

More: *The Arizona Republic*

CALIFORNIA

SoCalEd Proposal Addresses Corona's Dwindling Electric Supply

Southern California Edison engineers and city officials met with Corona residents last week regarding a proposal to build 5 miles of medium-voltage power lines to address the region's dwindling electric supply — with one area using 92% of its energy production potential last year.

The proposal calls for primarily above-ground lines, including a 66-kV transmission line carrying power to a new substation. It also includes above-ground transmission lines that would bisect the city's center.

Construction could begin by 2019, with the lines becoming operational by 2012, according to SoCalEd's website.

More: *The Press Enterprise*

Jacumba Solar Approved to Build Solar Plant in San Diego County

Jacumba Solar last week received approval for a permit to build a 108-acre solar plant in Jacumba, near San Diego Gas & Electric's East County Substation.

The plant will use a little more than 81,000 photovoltaic panels on roughly 2,200 fixed, tilted racks to generate 22 MW, which it will deliver to SDG&E's substation through a 1,500-foot-long overhead transmission line, a press release from the San Diego County Board of Supervisors said.

County staff and proponents of the project said it would help the region meet state goals of producing one-half of all electricity from renewable sources by 2030 and cut greenhouse gas emissions.

More: *Times of San Diego*

San Diego, SunEdison Tentatively Extend Solar Panel Agreement

An October 2015 agreement between San Diego and SunEdison for installation of banks of solar panels at 25 sites across the city has been tentatively extended to at least April 2017, and possibly to June 2017, after the company failed to install a single panel. The original agreement called for installation of the first solar panels by last month.

SunEdison declared bankruptcy two months before it was supposed to begin construction and sought an extension for the first batch of projects. In July, city officials formally terminated the agreement's initial five projects.

The city declined to release the new agreement, stating that it has not yet been formally approved, but it said SunEdison agreed to compensate it for opportunity costs related to the delay.

More: *The San Diego Union-Tribune*

CAISO Flexible Ramping Product Delayed Until Nov. 1

FERC last week granted CAISO's request to postpone the start date for implementing the ISO's flexible ramping product until Nov. 1 — one month later than the original start date (ER16-2023).

CAISO last month petitioned to delay the effective date because it did not learn of the commission's approval of the product until hours after a conference call scheduled to confirm the roll-out to market participants.

The new market mechanism is designed to improve real-time integration of the increasing amount of variable renewable energy resources coming on to the ISO's system. The product will also be incorporated into the ISO-run Energy Imbalance Market.

More: *FERC Approves Ramping Product for CAISO, EIM*

CONNECTICUT

UI Customers, Environmentalists Urge Distribution Rate Reduction

While The United Illuminating Co. seeks a distribution rate increase, 16 environmental and consumer groups are urging state regulators to reduce the current fixed-rate charge of $17.25/month its customers currently pay.

In a letter to the Public Utilities Regulatory Authority, the groups noted that the monthly charge is the highest of any investor-owned electric utility in New England and urged PURA to cut it by $6 to $8/month.

Distribution charges account for 27 cents of every dollar that UI customers pay for their electricity, UI spokesman Michael West said. He said the charge allows UI to provide the level of reliability its customers have come to expect.

More: *New Haven Register*

ILLINOIS

State Sens. Continue to Push for Legislation to Save Exelon Plants


Trotter

State senators are continuing to look for ways to prevent Exelon from shuttering it Clinton Power Station and Quad Cities Generating Station nuclear power plants during the next two years.

Exelon lost $800 million on the two plants over the past seven years and announced it would close the plants after state lawmakers ended their spring legislative session without approving its proposed "Next Generation Energy Plan."

Sponsors of the legislation have been negotiating with Exelon and other interested groups, and Sen. Donne Trotter, a

Continued on page 30

State Briefs

Continued from page 29

Democrat, said he plans to use the General Assembly's fall veto session to continue pushing legislation when lawmakers return on Nov. 15.

More: The Quad-City Times

KANSAS

State Regulators: Westar-GPE Merger in Jeopardy

State regulators last week warned that the proposed $12.2 billion sale of Westar Energy to Great Plains Energy is in jeopardy if the companies don't supply additional information regarding operational savings, and what departments or functions would remain in Topeka and for how long.

The Corporation Commission said in an order that its staff or the Citizens' Utility Ratepayer Board could file for relief — which could include asking for dismissal of the merger application — if they maintain that the joint application does not adequately address the agency's merger standards.

Chuck Caisley, a spokesman for GPE and Westar, said the companies were evaluating the order and are committed to closing the transaction in the spring of 2017 as planned.

More: The Topeka Capital-Journal

LOUISIANA

10 EV Charging Stations Come to Baton Rouge

Downtown Baton Rouge now has 10 electric car charging stations, and city-parish leaders hope to have 50 stations soon as part of their effort to lure green business.

Previously, the only electric car charging stations were near Louisiana State University and in south Baton Rouge.

Entergy gave a $75,000 grant for purchase and installation of the stations.

More: The Advocate

MAINE

Stakeholders Clash over Proposal to Phase out Incentives for Solar

A proposal to phase out financial incentives for homeowners using solar panels caused a clash of viewpoints last week at a hearing before the state's Public Utilities Commission.

Residents and small-business owners said the proposal — which seeks to grandfather net-metering credits for current solar homeowners for 15 years and gradually reduce benefits for new solar owners over 10 years — would stifle solar energy's growth and already is reducing the number of installations. Representatives from utilities, government and consumer affairs testified that the current financial incentives for rooftop solar hurt other ratepayers.

Last spring, the Legislature passed a compromise solar bill following a yearlong study and negotiations among stakeholders, but it was two votes shy of overriding a veto by Gov. Paul LePage.

More: Portland Press Herald

NEBRASKA

Lincoln Purchasing Its First Electric Car

Lincoln is purchasing its first electric car for about $22,000, along with dual plug-in electric charging stations for privately owned electric vehicles for nine downtown garages. Some of the funds will come from a state grant.

There are currently 67 electric vehicles registered in Lancaster County, but the group that spearheaded the grant hopes the new charging stations will encourage more electric car purchases.

More: The Lincoln Journal Star

NEW YORK

300 Electric Vehicle Charging Stations Coming to Public Locations

Gov. Andrew Cuomo announced last week a five-year New York Power Authority contract for the installation of 300 electric vehicle charging stations at public locations across the state.

The agreement supports the governor's ChargeNY Program, which aims for 3,000 charging stations online in the state by 2018.

It also is an important step in accomplishing the state's goal to reduce greenhouse gas emissions 40% by 2030 from 1990 levels and ensure 50% of electricity consumed comes from renewable energy sources by 2030.

More: Gov. Andrew Cuomo

NYISO Report Finds 2 Localized Tx Security Reliability Needs

A new NYISO report found two localized transmission security reliability needs that will begin in 2017 — involving New York State Electric and Gas' Oakdale 345/115-kV transformer and Long Island Power Authority's East Garden City-Valley Stream 138-kV line — that require remedial action soon.

The ISO said in a press release that it will consider transmission plan updates from the transmission owners and then, if necessary, issue a solicitation for market-based and regulated solutions.

NYISO's 2016 Reliability Needs Assessment report also found that the state's bulk power system has adequate power generation resources to meet reliability needs for the next decade.

More: NYISO

OHIO

Feds Plans to Auction Gas Lease Rights for Wayne National Forest

The federal government gave notice last week that it is planning an online auction for Dec. 13 for oil and gas lease rights for Wayne National Forest, which could lead to fracking on public land.

Opponents have 30 days to file a formal

Continued on page 31

STATE BRIEFS

Continued from page 30

protest.

The land is located in the far eastern part of the forest, where there are substantial oil and gas reserves and less opposition to energy drilling.

More: *The Columbus Dispatch*

OREGON

Commission Recommends Taxpayer-Funded Solar Incentives

The Public Utility Commission voted last week to pass a recommendation to the Legislature that it consider adopting taxpayer-funded incentives for solar energy programs that all residents can benefit from, regardless of their utility provider.

The state already has several taxpayer-funded programs intended to encourage solar energy development, but some of the incentives are scheduled to end soon. There also are a small number of ratepayer-funded programs, for which customers of specific utilities pay.

The commission noted that calculating the benefits and costs of each program is difficult because projects and customers are often eligible for more than one incentive program.

More: *Portland Tribune*

PENNSYLVANIA

FirstEnergy Rate Case Settlements To Increase Residential Rates

FirstEnergy's utilities filed distribution rate case settlement agreements with state regulators last week that, if approved, would result in rate increases for residential customers.

Met-Ed customers would see an average increase of 10.7%; Penelec customers 12.8%. Penn Power 10.4%; and West Penn Power 7.2%.

The state Public Utilities Commission is expected to issue final orders on the agreements and new rates on or before Jan. 26, 2017. Pursuant to the agreement, the utilities would not file for additional distribution base rate increases in the state until January 2019 at the earliest.

More: *FirstEnergy*

VIRGINIA

Dominion Required to Increase Water Monitoring at Possum Point

As Dominion Resources works to drain and consolidate five coal ash ponds at its Possum Point Power Station in Dumfries, state regulators are demanding that it install nine additional wells on the property and test water samples from monitoring wells on a biweekly basis.

Two of the nine additional wells will be monitoring wells installed near the property's perimeter and may help detect whether groundwater from Dominion's coal ash ponds is flowing toward nearby residential wells and contaminating drinking water.

Dominion is hoping to receive a solid waste permit so that it can move all its coal ash into one pond and bury it beneath two feet of soil.

More: *Inside NoVa*

WEST VIRGINIA

Grassroots Effort Opposes Pipeline Extension in Eastern Panhandle

A grassroots effort is growing against a proposal by Mountaineer Gas Company of West Virginia to extend its natural gas distribution line by 56 miles in the Eastern Panhandle.

If approved by regulators, the pipeline project, slated to begin in 2018, would pass through Berkeley, Jefferson and Morgan counties, using buried lines 6 to 12 inches in diameter.

The state's Public Service Commission has received 70 letters in opposition, said Russell J. Mokhiber, of Morgan County USA blog, who conducted an opposition meeting last week and distributed fliers saying "just say no to the gas pipeline."

More: *The Journal*

WISCONSIN

Judge to Decide Fate of Badger-Coulee Power Line Project

A La Crosse County judge will decide the fate of a 180-mile 345-kV transmission line from the La Crosse to Madison areas.

American Transmission Co. and Xcel Energy developed the Badger-Coulee Transmission Line project in 2010, and the Public Service Commission approved it in 2015.

The Town of Holland maintains that the commission did not legally approve the project — estimated to cost about $580 million — because it did not establish a need for it.

More: *Wisconsin Public Radio*

Judge Rules in Favor of ATC in Wildlife Hospital's Tree-Cutting Case

Continued from page 1

cutting plan for Fellow Mortals. "We respect the care and commitment that Fellow Mortals has for rehabilitating wildlife. Our team is working to plan our next steps," she said.

No Precedent

At issue was a 1970 easement between the hospital's previous property owner and ATC's predecessor, Wisconsin Power and Light. Until recently, the transmission company had allowed periodic trimming of Grandfather Spruce and other trees.

The hospital filed suit after receiving notice that ATC planned to clear-cut the 50-foot easement, which Fellow Mortals said would remove screening that protects its animals from a nearby roadway.

Johnson said he regretted there would be an impact on the sanctuary, but he concluded that the issue was one of "cold, hard real estate," Kennedy recounted.

Kennedy, however, said Johnson's ruling would not set a precedent unless the case reached the appellate level.

"It's possible that other courts at a trial level might rule differently," he said, noting that many older aging easements bear language similar to the one currently held on Fellow Mortals. "It appears that ATC recognized back in the early 2000s that the easement language was ambiguous and they stopped

Continued on page 32

Judge Rules in Favor of ATC in Wildlife Hospital's Tree-Cutting Case

Continued from page 31

using that wording. All of the newer easement language is refined," Kennedy said.

"Easements like this literally allow power companies to destroy large swaths of natural forest," Kennedy added. "When you consider how many thousand miles of line ATC has and the acreage it covers, that's a vast amount of natural timber that's going down. Legislators should have looked at that and done something to protect the natural growth."

Hospital Prepares for Cutting

In response to the Oct. 13 ruling, Fellow Mortals founders Yvonne Wallace Blane and Steven Blane are working with their staff to move as many animals into the hospital as they can to shield them from the tree-cutting. "We have an order of priorities. I assume they're able to start cutting at any time," Yvonne Blane said.

Blane said Johnson visited the habitat and praised the hospital's work.

"I think the judge didn't have a choice," Blane said. "What was worked out [in the 1970 easement] is ambiguous. No one is arguing that line areas [don't] need to be safe and maintained. But after 46 years of trimming, it's a change in policy that this company is making."

Blane said the animal relocation includes capturing 39 birds that are permanent residents of the hospital's sanctuary area, including a 36-year-old great horned owl that serves as a foster parent to other orphaned owls. She also said her staff is working to release any treated animals that are ready to re-enter the wild. But she said there's not much she can do for four elderly deer that have been affected by chronic wasting disease and are permanent residents of the hospital; they will have to weather the cutting in a half-acre pen.

Blane said she was proud that the case did not provoke animosity. "ATC attorneys and staff were very respectful. Our issue is not with the people; it's with the policy," Blane said.

She said she does not rule out the possibility that the company might return to the occasional trimming schedules, leaving the trees standing. "Perhaps knowing that they can do whatever they want, someone with the ability to be harsh would be kind. They might not care about public opinion, but boy, that would make so many people happy."

Hospital's Work Continues

Blane said Fellow Mortals spent $40,000 in donations on the case and was not looking to appeal the decision. She said moving the hospital is impractical because it would cost millions. So the Blanes and their staff plan to continue their work from the current location.

"We have to adjust; we have to move on. We're not going to let us make this bitter; we're not going to stamp our feet here. We're going to show some dignity. One defeat doesn't ruin everything."

On Oct. 12, after the third day of the trial, the hospital was called to rescue an immature red-tailed hawk that had gotten caught on an Alliant Energy power line. The bird, which was suffering from hypothermia and shock, had exposed leg muscle from struggling against the pole. Blane said the bird will be in the hospital's care while the leg heals, perhaps over the winter.

CFTC Exempts RTOs from Private Rights of Action

By Tom Kleckner

The U.S. Commodity Futures Trading Commission last week unanimously issued a final order granting SPP's request to exempt certain energy transactions in the RTO from the Commodity Exchange Act (CEA) and commission regulations.

The order is similar to the commission's March 2013 ruling that provided six other grid operators with the same exemption, according to CFTC. But it also exempts those transactions from private rights of action, judicially inferred rights to relief that could have left the RTOs and their market participants as potential targets for lawsuits outside the FERC process.

The commission simultaneously amended its 2013 order to expressly exempt the six other grid operators from private actions, it said. SPP was not a party to the original order because its day-ahead market was not in operation, but it filed a "me-too" exemption in 2013 when it became apparent the market would soon be live. In response, the commission said in May that it never intended to protect the RTOs from private actions.

Sen. John Boozman (left) and CFTC Chairman Timothy Massad

The ruling was expected after CFTC Chairman Timothy Massad said in a September letter to Sen. John Boozman (R-Ark.) that he would recommend the commission provide the exemption, reversing his previous position after receiving substantial industry feedback. (See *CFTC Chair Flips on Private Rights of Action in RTO Markets*.)

Commissioners J. Christopher Giancarlo and Sharon Y. Bowen joined Massad in a *seriatim* process, in which the commissioners vote in sequence and in private, rather than at an open meeting.

Mike Ross, SPP's senior vice president of government affairs and public relations and a former six-term Arkansas congressman, guided the effort that provided 38 comments against the proposed rule to allow private actions. There were only five comments in favor.

"We're pleased with the commission's decision to keep existing exemptions in place," Ross said in response to the ruling.