RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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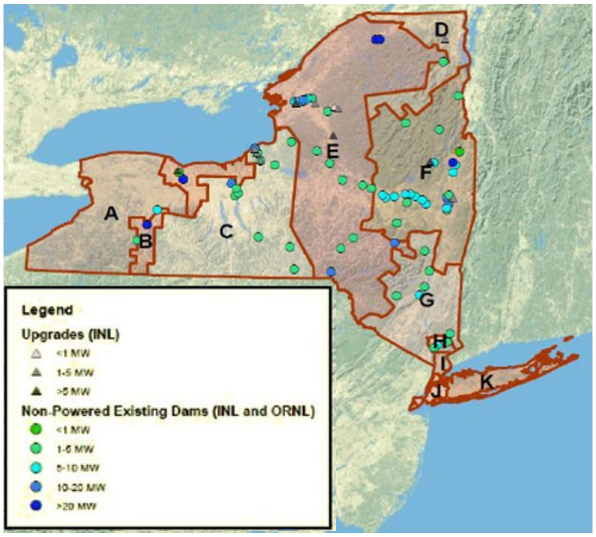
NYPSC: Minimal Cost to Meet 50% Renewable Goal

'Uniquely Favorable Environment' for Shift

By William Opalka

New York consumers will see little change in their electric bills as the state switches to renewable energy resources at an accelerated pace, according to a study released by the Public Service Commission on Friday.



Potential small hydropower sites *Source: NYPSC*

The Clean Energy Standard cost study puts a price tag on the state's goal of generating 50% of its electricity from renewable resources by 2030.

"New York can meet its clean energy targets with less than a 1% impact on electricity bills (or less than $1 per month for the typical residential customer) in the near term and shows net positive benefit of $1.8 billion by 2023," the study says. "… The current combination of low energy prices, low interest rates and available tax credits presents a uniquely favorable environment for near-term investment into renewables."

The net benefit includes EPA's "social cost of carbon" — an estimate of climate change

Continued on page 25

Idaho Power Inks Agreement to Join Western EIM

By Robert Mullin

Idaho Power on Wednesday signed an agreement with CAISO to become the sixth utility to join the western Energy Imbalance Market (EIM).

The Boise-based company, which serves about 525,000 customers in southern Idaho and a portion of eastern Oregon, expects an April 2018 start date, pending approval from federal and state regulators.

Inclusion of Idaho Power would bring an additional 4,800 miles of transmission into the EIM while improving the market's access to an area of Wyoming that renewable developers — including EIM member PacifiCorp — seek to tap for wind projects intended to serve the West Coast.

"The market already has proven itself to increase network efficiency, lower costs and encourage cleaner energy into the power

Continued on page 2

Artificial Island Cost Increase Could Lead to Rebid

By Suzanne Herel

VALLEY FORGE, Pa. — PJM planners are rethinking a piece of the Artificial Island project, a move that could alter its scope and possibly require the RTO to solicit new bids under FERC Order 1000.

The move comes after Public Service Electric and Gas submitted estimates that nearly doubled the cost of its section of the stability fix from $137 million to $272 million. (See *Cost Estimate of PSE&G Portion of Artificial Island Fix Doubles to $272M*.)

"We are looking at options to mitigate the cost," Steve Herling, PJM vice president of planning, told the Transmission Expansion Advisory Committee on Thursday.

PJM has been working with PSE&G and consultants to analyze the cost estimates and design, and their work is nearly done, said Paul McGlynn, PJM general manager of system planning.

The project involves building a 230-kV transmission line from the New Jersey complex housing the Hope Creek and Salem nuclear reactors under the Delaware River to Delaware. Calls for proposals went out three years ago.

After a long, contentious process, LS Power won the job of building the line, largely because of its promise to cap construction costs at $146 million.

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Idaho Power Inks Agreement to Join Western EIM

Continued from page 1

grid," CAISO CEO Steve Berberich said in a statement. "With each new entrant, the market will only multiply those benefits."

Idaho Power service territory *Source: Idaho Power*

CAISO launched the EIM in November 2014 in partnership with the Portland-based PacifiCorp, which operates more than 16,000 miles of transmission spanning 10 states. Unlike in an RTO, the EIM's transmission-owning entities retain operational control over their assets, while member generators participate in the real-time market on a voluntary basis.

Nevada-based NV Energy joined the EIM in December 2015, broadening the market's footprint and filling a transmission gap between load centers in California and generating resources located in the PacifiCorp East (PACE) balancing area. (See *NV Energy has Smooth EIM Integration, CAISO Says*.)

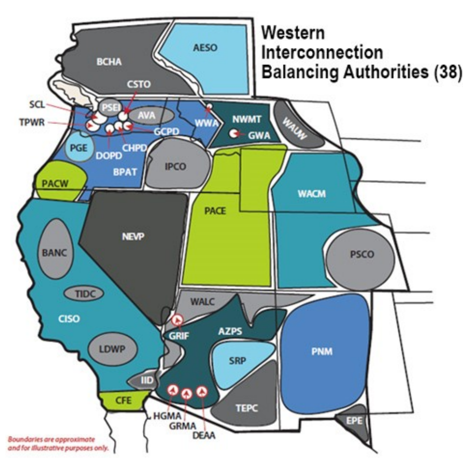
"With the entry of NV Energy, [CAISO] transfer capacity with PACE has gone from around 200 MW to 571 MW," Eric Hildebrandt, CAISO director of market monitoring, said during an April 6 Regional Issues Forum held in Portland. "This has really been a game changer."

Idaho Power's membership could provide a similar — if more limited — enhancement to the market. The utility's service territory sits adjacent to both the NV Energy and PACE balancing areas, providing increased transfer capability with the remote northeastern corner of PACE, the wind-rich area of western Wyoming.

Although wind developers see the region as a promising source of wind exports, transmission constraints — and California's restrictions on renewable imports not delivered directly into an in-state balancing area — have impeded development of large-scale projects to serve California. Idaho's entry into the EIM, along with possible ISO membership for PacifiCorp, could open the door for development as CAISO's boundary effectively extends eastward, expanding RPS eligibility for a larger pool of resources.

In a deal that seemed to anticipate yesterday's announcement, Idaho Power and PacifiCorp last year swapped $43 million in Idaho and Wyoming transmission assets, reallocating ownership of lines and equipment designed to move power westward from the massive Jim Bridger coal-fired generating plant. One result of the deal: PacifiCorp gained access to an additional 200 MW of "dynamic service" out of western Wyoming, short-term transfer capability that facilitates integration of variable renewable resources. For its part, Idaho Power expected the new arrangement to boost its transmission revenues, reducing the company's revenue requirement from ratepayers.

Two other Northwest utilities will precede Idaho Power into the EIM. Washington-based Puget Sound Energy is scheduled to join this October, followed by Portland General Electric in October 2017.



Source: Western Electricity Coordinating Council

CAISO NEWS

PacifiCorp Offers Lessons for Future EIM Participants at Forum

By Robert Mullin

PORTLAND — PacifiCorp says future participants in the western Energy Imbalance Market (EIM) should benefit from early lessons the company learned in its efforts to integrate its real-time operations with CAISO.

The EIM got off to a rocky start in November 2014 as transmission constraints between California's and PacifiCorp's balancing areas produced price discrepancies that consistently required out-of-market mitigation measures. That issue was resolved by NV Energy's entry into the market last December, which significantly improved transfer capacity among the regions.

During the first public meeting of the EIM Regional Issues Forum at Bonneville Power Administration offices Wednesday, PacifiCorp staff discussed the challenges and benefits of joining the EIM.

"The first thing I would say is PacifiCorp had the honor of doing this first," said Sarah Edmonds, PacifiCorp Transmission vice president and general counsel. "Luckily, a lot of those bumps in the road have been addressed."

A New Language

Edmonds said prospective EIM participants will first need to grasp a new lexicon. "The EIM and the ISO have a whole new set of acronyms that you have to know," she said.

The second piece of advice: Look at your maps.

"The West is very special," Edmonds said. "It has all kinds of special arrangements that are grandfathered in. Go talk to your neighboring balancing areas."

Stuart Kelly, PacifiCorp vice president of major project delivery, said one of the biggest challenges concerned what data to exchange with CAISO, especially data that relate to market settlements.

"Not just the output [to CAISO], but the input back into your system," he said. Kelly encouraged participants to meet with CAISO staff early in the integration process to learn how the ISO settles transactions.

"I think most operations are not set up to handle the rapidity [of the EIM] and the settlement process," Edmonds added, noting that dispute rights over energy transactions have time limits. For that reason, an EIM participant must streamline its procedure for generating "shadow settlements" — the participant's own payout estimates from a transaction — which can differ from those ultimately provided by the ISO.

The settlement process affects not only an EIM members such as PacifiCorp but also non-affiliated utilities within an EIM balancing area that must rely on PacifiCorp to facilitate their EIM transactions. Clay MacArthur, assistant vice president of power marketing and contracts for Deseret Power, said settlement delays have caused problems for his Utah-based electric co-op.

"When you go into nine months and longer [for some settlement data], some of the market signals you thought you would get, you don't get on a timely basis," MacArthur said. He added that settlement statements from PacifiCorp at times provide either too much or too little data, requiring the utility to "reverse engineer" the documents to determine what they mean.

"We recognize there are improvements to be made in our settlements," Edmonds said.

Better Visibility, More Discipline

Joining the EIM also presents new challenges for physical operations.

Describing his company as "a little bit of a problem child" because it operates two balancing areas, PacifiCorp's Kelly stressed that EIM participants must ensure their network models can be exported to CAISO to facilitate integrated operation.

"If you've got [variable energy resources] in your portfolio, you have to get a handle on your forecast," he said. "The challenge will be predicting when you have some kind of ramp." Kelly said CAISO's forecasting model was better than what PacifiCorp had previously relied upon.

Kelly also described outage management under the EIM as "a whole new language" that his company had to get right in order to coordinate schedules with the ISO. He pointed out CAISO's requirement that it be notified of any system upgrades three months in advance.

"What the EIM requires is a level of discipline in those areas that you have never experienced," Edmonds said.

That discipline appears to be spilling into neighboring Northwest balancing areas, whose system operators must coordinate with EIM participants.

"I think the implementation issues are getting simpler," said Russ Mantifel of BPA's transmission and policy group. "Right now I think we've now proved a concept to use EIM to move megawatts that can be scaled up. I think there's increased visibility and control."

Edmonds called visibility into neighboring balancing areas "one of the iterative, evolving parts of the EIM."

Bidirectional Learning

Lessons from the EIM have not been a one-way street, according to forum participants.

"On the other side of the equation, the ISO is learning its own form of Western multiculturalism," Edmonds said, noting that CAISO must deal with the capabilities of other areas while maintaining its own balancing area. "There's a bilateral need to understand each other and each other's lexicons."

"A lot of these matters are very complex," said energy consultant Tony Braun, an EIM Transitional Committee member. "You can't know how complex until you're in them."

Despite the complexity, Kelly said PacifiCorp recovered its integration costs within the first year of operation because of the increased efficiency of the market.

"After seeing the benefits, I would encourage others to join," he said. He also pointed to what he called NV Energy's "seamless" integration into the market late last year. (See *NV Energy has Smooth EIM Integration, CAISO Says*.)

"We could not have gotten there as easily as we did — and it was not easy — if not for PacifiCorp having problem-solved a year before," NV Energy attorney Lauren Rosenblatt said.

ISO-NE NEWS

Massachusetts Raises Net Metering Cap, Cuts Payments

By William Opalka

Massachusetts Gov. Charlie Baker signed a bill Monday that raises the net metering cap for solar energy systems while cutting payments to some solar owners by 40%.

The caps were raised from 4% to 7% of peak load for privately owned systems and from 5% to 8% for municipally owned installations. Single-phase systems below 10 kW and multiphase systems below 25 kW — such as residential rooftop arrays — will be exempt from the cap and reduced payments. Government systems will continue to receive full payment.

The increase comes as one local distribution company, National Grid, has already met its cap and another, Eversource Energy, was approaching its limit.

The bill grandfathers those systems connected under the lower cap for 25 years. Going forward, owners of new projects will be paid at 60% of the retail rate.

The bill also allows utilities to apply to state regulators for "a monthly minimum reliability contribution" — a fixed charge from the owners of solar systems.

The level of payments has been a sticking point for various stakeholders. (See *New England Stakeholders Debate Solar Subsidies*.)

The state's business lobby blasted the compromise, saying it will continue to raise costs and that the exemption for public systems is merely an example of "taking care of your own."

"The bill will not save ratepayers money and will not bring our program in line with other states. In fact, the bill will add $8 billion to the cost of energy over the next 10 years — 2 cents/kWh for residential customers and 1.6 cents/kWh for commercial and industrial customers," the Associated Industries of Massachusetts said.

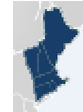
The Sierra Club also found fault with the bill, especially the lower payments that will be made to community solar or similar projects meant to benefit lower-income residents. "The bill as it stands sends a clear message that Massachusetts is not a safe place to invest in solar, even though it's a clean energy resource that has brought increased economic investment and jobs to the state," it wrote.

The solar industry claims 15,000 employees in Massachusetts, many of whom were laid off after legislators and the governor were unable to agree on a bill at the end of last year.

"The [bill] will put solar workers back on the job and enable more families and communities to save with solar, and for that we thank the hard work and perseverance of House and Senate leadership and all the Conference Committee members. However, we are concerned about some of the tough choices in this short-term compromise and hope to remedy them in future sessions," said Sean Garren, Northeast regional manager for Vote Solar, an organization that promotes solar power as a way to fight climate change.

Garren and other advocates expect the higher cap to be reached as soon as the end of this year, forcing legislators to address the issue again.

ISO-NE NEWS



Eversource CEO Retiring; CFO Named Replacement

By William Opalka


May

Eversource Energy CEO Tom May will retire in a month and be replaced by current CFO Jim Judge, the company announced Wednesday.

May, 68, will become board chairman after the company's annual shareholders meeting May 4 in Boston. Under the succession plan, Judge will join the board next month and become chairman at Eversource's annual meeting in 2017.

May and Judge have worked together for 38 years. For the past 22 years, before and during a series of mergers, May has been CEO of Boston Edison, NSTAR and Northeast Utilities, which was renamed Eversource Energy in 2015. (See *Northeast Utilities Rebranding as Eversource Energy*.)

NSTAR and Northeast Utilities merged in 2012 to create an electric and gas utility company in Connecticut, Massachusetts and New Hampshire with 3.6 million customers and a market capitalization of $18 billion. The company has joint headquarters in Boston and Hartford.

"Tom May has been an extraordinary leader for more than two decades as chief executive. He has delivered superior results in every category — customer, financial, operations, safety and community," Sanford Cloud, lead trustee of the board, said in a statement.


Judge

Judge will remain in his role as Eversource CFO until a successor is named.

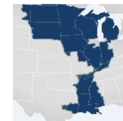
Besides pursuing growth and acquisitions, May has become known for forging partnerships with developers to propose controversial projects that would bring fuel resources into New England.

In 2008, NSTAR and Northeast Utilities formed a joint venture, Northern Pass Transmission, to import Canadian hydropower supplied by Hydro-Quebec through New Hampshire. That project, vehemently opposed by some environmentalists and natural gas generators, is currently undergoing site evaluation by state officials. (See *Committee Rules Northern Pass Application Complete*.)

Eversource also has a 40% stake in the proposed $3 billion Access Northeast natural gas pipeline with partners Spectra Energy and National Grid. The pipeline would run through New York, Connecticut, Rhode Island and Massachusetts. (See *Algonquin Submits Pre-Filing Request for Access Northeast Pipeline*.)

Pipeline plans have generated controversy as some state regulators have endorsed a regional plan to have funding come from electricity customers. (See *Massachusetts Regulators Endorse Pipeline Contracts*.)

MISO NEWS



Stakeholders Provide Ideas on Incorporating Storage

By Amanda Durish Cook

As MISO contemplates expanding its definition of demand response resources to include medium-term energy storage, some stakeholders are asking the RTO to think more broadly about how storage technologies can participate in its markets.

MISO defines medium-term as any storage technology that can sustain output to the grid for four hours.

The RTO is challenged by how to accommodate four-hour capacity offers in its markets, as well as how to create a system of capacity credits and performance and must-offer obligations, Yonghong Chen, MISO principal advisor of market development and analysis, told the Market Subcommittee last week.

"These issues need to be thought through carefully," Chen said.

MISO staff are discussing including medium-term storage in the DR resource-type II dispatch model, which facilitates offers into the markets for energy, regulation, spinning and supplemental reserves. Staff say they need more clarification on whether storage can be integrated under current market rules.

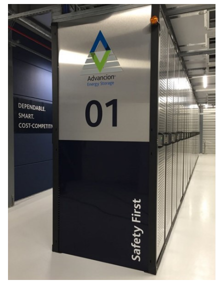
'Formidable Task'

The Minnesota Energy Storage Alliance (MESA) says removing market barriers to energy storage is a "formidable task."

"Our generation mix in MISO is evolving and energy storage technologies are becoming cost-effective in many applications," MESA wrote in comments to the RTO. "MISO needs to keep pace with market changes in order to meet its obligation to provide unbiased regional grid management and open access to transmission facilities for [storage] projects."

MESA contends that storage can cut consumer costs by storing "otherwise curtailed generation." Storage should not be relegated to ancillary services, the group says, but could be dispatched — then redispatched — to supply grid services for more efficient generation. MESA thinks storage could be classified as both a generation and transmission service, and it encouraged MISO to develop new compensation mechanisms, such as CAISO's flexible ramping product.

John Fernandes, director of policy and market development for Renewable Energy Systems Americas, also cautioned against strictly classifying storage as either generation, transmission or load.



Source: AES Energy Storage

"Such a practice could risk restricting a single storage plant from providing services across these operational buckets, thereby reducing the benefit realized by the system and limiting the ability to make a sound business case for storage development," Fernandes said. He said that recognizing the fluidity of storage should not require significant Tariff changes.

Revenue Incentives

Manitoba Hydro said emerging storage technologies will require revenue incentives.

"If wind and solar dominate new resource development, storage will be increasingly needed, but, in the absence of an adequate revenue stream for storage resources, there may well be a market failure to supply them," the company said.

The Energy Storage Association also sought more detail on how energy storage can participate in the MISO markets.

MISO said it would consider implementing a cost of new entry for storage, "similar to what is done for capacity resources."

The New Orleans City Council said MISO's January storage presentation posed several questions. (See *MISO: Energy Storage Could Work into Existing Market Structure Next Year*.)

"It may be difficult to prioritize actions needed to provide truly technology-agnostic products and operations when stakeholders cannot clearly identify barriers that storage developers and market participants face," the council noted. Council members asked MISO to draft a storage issues statement.

Invenergy — which operates 68 MW of battery storage in PJM's frequency regulation market but none in MISO — said the RTO has yet to clearly define the market need for storage. "Energy storage, and more specifically battery storage, is not the same as traditional generation and it should not be modeled or studied in the same way," wrote Nicole Luckey, Invenergy manager of Midwest regulatory affairs.

Valy Goepfrich, WPPI Energy's vice president of operations and analytics, said MISO's suggested timeline on storage policy seemed reasonable and agreed that storage issues should be considered on a cost-benefit analysis.

Broader Discussion Sought

Chen said MISO is debating setting up an energy storage task force.

"Some of these issues are beyond the [Market Subcommittee]," he said. "I think we need a broader policy discussion."

MISO must also determine whether storage will be used behind-the-meter to offset load, which wouldn't require the RTO to manage the state of charge — a measure of a battery's capability, akin to a fuel gauge — or if storage is placed in-front-of-the-meter, injecting into the system and requiring MISO to manage the state of charge.

Beyond incorporating medium-term storage, MISO also needs to decide if storage requires its own resource definition.

Chen said further market enhancements needed to incorporate storage might be recommended for MISO's Market Roadmap process.

"Nothing's off the table from my understanding," said Jeff Bladen, MISO's executive director of market design. "We just want to understand the implications."

MISO staff this month will seek MSC advice on near-term clarification and present near-term proposals to the subcommittee. Next month, staff will begin drafting a white paper, which could propose Tariff or Business Practices Manual revisions. MISO hopes to present a final near-term storage proposal to stakeholders in late summer or fall.

MISO NEWS

MSC Briefs

MISO will not Add 5-Minute Schedule Programming Software

MISO will not build an application programming interface (API) to provide five-minute schedule data to customers.

"MISO is not recommending to pursue this function at this time," MISO's Matt Schingle said during an April 5 Market Subcommittee meeting.

At the December MSC, Kansas City Power and Light requested creation of an API to retrieve market participants' physical schedules from webTrans or the e-tag system.

Schingle said too few stakeholders wanted the change for it to be cost-effective. "This year, there's not enough flex in the budget for this kind of cost," he said. MISO's vendor estimated the API would cost $150,000 to develop.

Schingle said the raw data is already available through customers' internal market software, although MISO does not provide a function allowing customers to retrieve schedule profiles.

MISO Moves Ahead on PJM CTS; Monitor Slams PJM Fees

MISO could begin publishing monthly price forecasts for MISO-PJM Coordinated Transaction Scheduling (CTS) as early as May 13, according to Beibei Li of MISO's market evaluation and design team.

Designed to reduce uneconomic power flows, CTS will allow traders to submit bids that would clear only when the price difference between MISO and PJM exceeds a threshold set by the bidder.

Li said MISO expects to publish the final CTS price forecast report template by April 22 and is seeking MSC feedback by April 19.

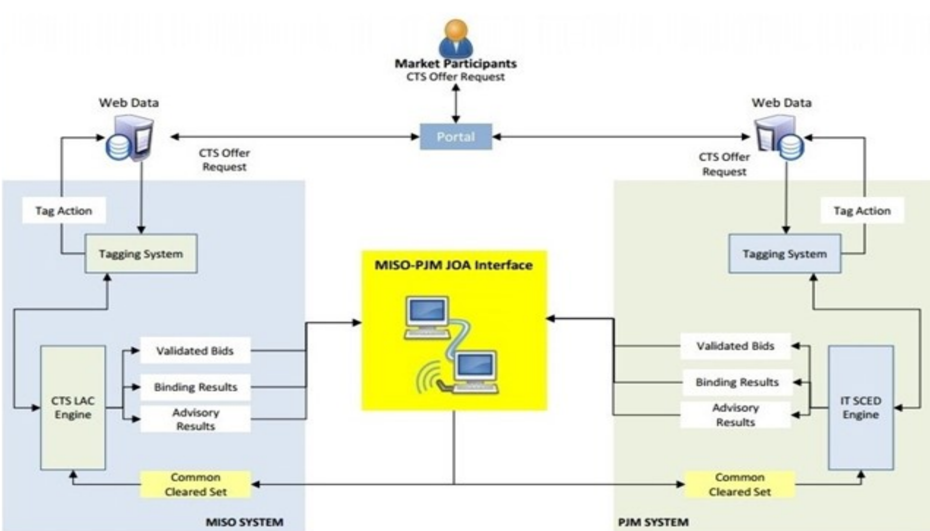
Dave Johnston of the Indiana Utility Regulatory Commission asked if CTS transactions would be subject to uplift. Li said MISO did not believe that uplift charges would apply.

CTS came under criticism in a recent Independent Market Monitor quarterly report, with Monitor David Patton contending the program is currently "accomplishing very little" because of poor forecasting and fees imposed by PJM. Patton said PJM's charges at the seams were similar to MISO's revenue sufficiency guarantee payments.

While Patton said the Monitor supports MISO's FERC filing to add CTS to its Tariff (ER16-533), his group filed comments asking the commission to require that PJM eliminate all uplift charges. MISO has already proposed excluding charges such as the revenue sufficiency guarantee and revenue neutrality uplift.

Patton said CTS is "much more liquid and effective" without uplift charges, as illustrated by trading across NYISO's seams with ISO-NE and PJM.

"We're hoping that FERC reads our filing and orders PJM to eliminate all charges," he said.



CTS overview *Source: MISO*

The Monitor is also working with MISO and PJM to develop proposals for firm capacity delivery as an alternative to pseudo-tying resources to PJM, Patton said.

"I continue to be amazed that PJM thinks this pseudo-tie requirement is necessary," he said. "They're not thinking of what's best for the Eastern Interconnect."

MISO will pseudo-tie about 2,000 MW of new generation into PJM for the 2016/17 planning year and more than 2,500 MW during the next two planning cycles. Only 155 MW of new generation was pseudo-tied in the 2015/16 planning year.

Need for 30-Minute Reserve Product Questioned

MISO is revisiting the merits of developing a 30-minute reserve product despite stakeholder questions about the need for the requirement.

The RTO is reviving the idea because natural gas generators are being used increasingly as baseload resources, rather than just meeting peak demand.

MISO has assigned the project "medium" priority on its Market Roadmap, with evaluation expected to be complete by the end of the third quarter, according to Leonard Ashley of MISO's market evaluation and design team. He said the project would emerge as a major market implementation if developed.

The 30-minute reserve product would be designed to respond to a large loss of generation within a constrained area, said Jeff Bladen, executive director of market design. He said the product was a "necessary evolution of market design" and could address systemwide reliability instead of local reliability.

Bill SeDoris, director of MISO integration for Northern Indiana Public Service Co., asked if the issue could be solved simply with use of an increased reserve requirement.

"That's one way to do it," MISO's Kevin Larson responded. "I don't think that's the most economic way to do it."

Bladen said the RTO's initial assessment shows that creating a 30-minute reserve is less costly than carrying additional spinning reserves or regulation reserves.

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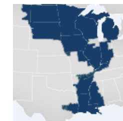
MISO NEWS



Wabash Valley Acquires Struggling Peabody Energy's Share in Prairie State

FERC last week approved Wabash Valley Power Association's acquisition of a 5% interest in two 800-MW coal-fired units at the Prairie State Energy Campus for $57 million — less than a quarter of what seller Peabody Energy paid (EC16-62).

Wabash Valley, an Indianapolis-based generation and transmission cooperative, said the transaction will add 83 MW to its 1,105 MW of generation capacity, most of which is in MISO.

Peabody Energy, which had paid $246 million for its share in Prairie State, agreed to sell to Wabash Valley following a competitive bidding process, part of a restructuring that has resulted in the sales of almost $500 million in assets since last year. Nevertheless, Peabody, the world's largest private-sector coal company, said last month it may have to file for bankruptcy protection because of its inability to meet debt payments.

The city of Martinsville, Va., a customer of American Municipal Power, which has a 23% interest in Prairie State, filed a comment expressing concern that the sale would diminish the value of the southwestern Illinois facility and result in increased rates for its customers. The city said the sale price values the facility at about 80% less than the indebtedness for which the communities are liable under their power sales agreements.

The commission declined Martinsville's request to conduct an inquiry into whether the sale would create a hardship for the communities paying debt service, saying it was outside the scope of its merger review authority. In addition, the commission said that the commenters "fail to explain [how the sale] might result in increased rates for wholesale customers."

— Amanda Durish Cook

FERC Rejects Challenge to Michigan Wind Farm's GIA

FERC last week rejected Michigan Electric Transmission Co.'s rehearing request regarding a western Michigan wind farm's interconnection agreement with MISO (ER16-33-001).

The April 6 order concerns Consumers Energy's 100-MW Lake Winds Energy Park, which went into operation in 2012. METC argued that the generator interconnection agreement was executed in violation of MISO's queue procedures and FERC Order 2003, which standardized interconnection agreements.

Lake Winds is interconnected to power lines that were classified as state-jurisdictional distribution facilities when it went into operation. Last April, FERC granted Consumers' request to reclassify those lines to commission-jurisdictional transmission facilities.

METC said the order created a "jurisdictional loophole in the commission's interconnection rules" because it permitted a wholesale generator to follow state interconnection procedures.

"What METC argues is a 'loophole' is a description of the jurisdictional boundary between federal and state interconnection rules, including Order No. 2003," FERC wrote in rejecting its request.

FERC also said Order 2003 doesn't apply to the MISO and Lake Winds GIA. "Order No. 2003 did not govern the interconnection of the Lake Winds facility in 2012, and therefore MISO's queue procedures implementing Order No. 2003 similarly did not govern the project's interconnection at that time," the commission wrote.

METC had argued that the commission's determination that Lake Winds' interconnection was not subject to Order 2003 was arbitrary and capricious.

— Amanda Durish Cook

MSC Briefs

Continued from page 7

Thomas Sikes of WPPI Energy asked if MISO could replicate its 2013 report that concluded a short-term reserve product was unnecessary.

Ashley said MISO is just beginning to evaluate the project, and conceptual design wouldn't start until late this year.

"We didn't mean to give the impression that the ship has been built and set sail. … We definitely haven't made the decision that a 30-minute product is the way to go," Ashley said.

FTR Working Group may be Absorbed by MSC

Brad Arnold, chair of the Financial Transmission Rights Working Group, said his group is considering merging with the Market Subcommittee due to light agendas and infrequent meetings. The group last met Jan. 8.

Arnold said the working group would meet to discuss possible 2016 initiatives and figure out if there are enough to justify the group's existence.

MISO to Hold August Market Symposium

Bladen reported that MISO would hold a first-ever market symposium Aug. 18-19. Bladen said the symposium would center on two main themes: shifting environmental regulations (Day One) and the future of distributed resources (Day Two). He said the symposium will be "taking the temperature" of the industry by bringing in experts from around the country to speak.

Registration instructions will be posted sometime this week.

The MSC also approved the Seams Management Working Group's largely unchanged charter.

— Amanda Durish Cook

NYISO News

NRC Backs Indian Point in Dispute with NY over Containment Test

By William Opalka

The Nuclear Regulatory Commission last week approved Entergy's request to extend the time between leak tests at the Indian Point power plant to 15 years instead of 10.

NRC on Tuesday affirmed a decision by the federal Atomic Safety and Licensing Board to extend the time between tests of the containment buildings surrounding Indian Point's reactors. The commission approved a methodology for such extensions in 2008.

Entergy requested an extension for Indian Point's Unit 2 in December 2014, prompting the state to intervene in May 2015.

The state had said Entergy's petition "should be denied because it involves a significant safety and environmental hazard ... and fails to demonstrate that it will

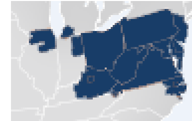
provide reasonable assurance of adequate protection for the public health and safety as required by ... the Atomic Energy Act."

The ASLB denied New York's petition, saying the state had failed to demonstrate that the commission ignored its own safety requirements. "We find that New York has not demonstrated that the board either made an error of law or abused its discretion in declining to admit New York's contentions," NRC wrote.

The last test at Unit 2 was done in 2006 and, under prior NRC schedules, was to be performed last month. However, following the NRC ruling, the test will now be done in 2021.

New York Gov. Andrew Cuomo has said the plant should be closed because of its proximity to New York City. He has also ordered multidepartment investigation of the plant after a series of incidents in recent months, including two unplanned outages and the discovery of elevated levels of tritium in test wells at the plant. (See NRC: No Further Leakage at Indian Point.)

PJM NEWS



Environmental Group Urges Ill. Legislators to Save Nuclear Plants

By Suzanne Herel

A coalition of scientists and environmentalists last week published an open letter to Illinois legislators, urging them to keep all of the state's nuclear plants operating for their full lifetimes.

The appeal lent support to legislation that would shore up Exelon's struggling Byron, Quad Cities and Clinton nuclear plants with $300 million per year that would be paid by Commonwealth Edison and Ameren ratepayers.

"One study found that world nuclear energy has prevented an average of 1.8 million premature deaths from fossil fuel pollution and could prevent up to 7 million additional ones in the future," said the letter, posted on the site of Environmental Progress Illinois. The group was founded recently by Michael Shellenberger, a former anti-nuclear activist who now is an avid proponent. "Using the same methodology, Clinton and Quad [Cities] prevented 18,640 premature deaths from coal pollution," it said.

The state's nuclear plants are at risk, the letter continues, because they are excluded from state and federal clean energy subsidies that are available to wind and solar power. Wind and solar, which make up about 6% of the state's generation, are intermittent and wouldn't be able to replace the nuclear facilities, it said.

"One solution might be to expand Illinois' renewable portfolio standard to include nuclear energy," it said. "Such a change would allow Illinois to be more ambitious, achieving 70% or more of its electricity from clean energy."

Clinton nuclear plant *Source: Exelon*

Among those signing the letter were climate scientist James Hansen, 1976 Nobel Prize winner in physics Burton Richter and Steve McCormick, former CEO of the Nature Conservancy.

Exelon supporters introduced the proposed Low Carbon Portfolio Standard in February 2015, and the company said it would close the three plants unless legislators acted before their summer break (HB3293, SB1585). When the bills languished, Exelon pulled back from the threat, saying, "We remain open to participating in any and all discussions designed to enact a legislative package."

In late summer, Exelon nuclear units cleared capacity worth $1.6 billion in PJM's first auctions under its new Capacity Performance model. Among the plants that cleared were Quad Cities, obligated to run through May 2018, and Byron, committed to run through May 2019. Following the auctions, CEO Chris Crane said the company would defer a decision about the plants' closure for another year.

In November, Crane said that Quad Cities was breaking even, but on a fourth-quarter earnings call in February, he said that it was projected to drop back in the red as a result of low energy price forecasts. It and Clinton are still at risk of being closed, he said.

Exelon supporters introduced the portfolio standard on the heels of a dueling measure, the Clean Energy Jobs Bill (SB1485, HB2607). That bill, which is supported by environmental and consumer advocates and Chicago Mayor Rahm Emanuel, would benefit energy efficiency and wind and solar power.

Exelon's ComEd also proposed legislation that contains initiatives the company said will "strengthen the security and resiliency of the grid, the construction of microgrids, community solar projects and the expansion of energy efficiency programs" (HB3328, SB1879).

There has been no action on any of the bills since October.

Asked last week about the status of its legislation, Exelon spokesman Paul Adams said, "Exelon, ComEd and [supporters of the Clean Energy Jobs bill] are in the midst of ongoing conversations to drive toward a comprehensive energy policy for the General Assembly to consider. Those conversations have been productive and have focused on common interests among the various groups toward an integrated low carbon energy future that fairly serves all customers, encourages economic growth and creates jobs."

Dominion: Tx Project Should be Regionally Allocated

Dominion Resources is asking FERC to rehear two related February decisions in which the commission reversed a previous order and ruled that transmission projects that solely address a transmission owner's local planning criteria are not eligible for regional cost allocation (ER15-1387).

In its first application of the rule, FERC said Dominion was solely responsible for the cost of its $160 million, 500-kV Cunningham-Elmont rebuild (ER15-1344). (See *FERC Does 180 on Local Tx Cost Allocation in PJM*.)

Dominion also has filed a protest of PJM's compliance filing, which FERC required in its February determination.

The company requested that FERC rule on the rehearing request at the same time it decides on PJM's compliance filing.

Also asking for rehearing are Old Dominion Electric Cooperative, LSP Transmission Holdings and ITC Mid-Atlantic Development.

Meanwhile, PJM requested a clarification on how it should apply the new methodology to certain projects in its Regional Transmission Expansion Plan.

In its rehearing request, Dominion argued that its proposal has regional benefits and is unlike 98% of Form 715 projects whose costs are designated to the local TO because they deliver only local benefits.

"The other 2% have had their costs allocated at least 50% regionally because they belong to a cost allocation class previously determined to have regional benefits," it said. "Nothing about the 98% statistic explains why such projects no longer have regional benefits."

— Suzanne Herel

PJM News

OC Briefs

Plan: Continue Cold Weather Testing, End Compensation for CP Participants

PJM is proposing to continue winter testing but stop compensating Capacity Performance players for it.

Operating Committee Chairman Mike Bryson said the idea is that those participants would be expected to factor the cost into their offers.

After some members questioned that plan, Bryson said he would take their comments back to PJM for further discussion.

The cold weather testing for 2015/16 yielded little in the way of useful data because the winter was so much warmer than the previous season, PJM's David Schweizer told the committee. (See "Cold Weather Testing Cheaper, Longer than Previous Year," *PJM Operating Committee Briefs*.)

"We don't have much of a story to share here. It was an oddball winter," he said. "It's hard to draw any conclusions."

Phasor Data Quality Task Force Sunsetted, Issue Moved to SIS

Members voted to sunset the Phasor Data Quality Task Force and transition the issue to a quarterly special session of the Systems Information Subcommittee.

"We'd like to continue to discuss the issue, but it's not necessary to have a whole task force," PJM's Suzie Fahr said.

The special session will tack on about two hours quarterly to an SIS meeting, she said.

The task force was created under the SIS in December 2013 to improve the quality of synchrophasor data so that it could reliably be integrated into operational decision-making.

Since the group's inception, the error rate of synchrophasor production data has shrunk from 14.35% to 2.45%.

PJM to Study Frequency Response for FERC Inquiry

PJM is conducting an internal analysis in response to FERC's Feb. 18 notice of inquiry regarding frequency response, Eric Hsia told the committee. (See *FERC Seeking Comments on Primary Frequency Response*.)

The commission is seeking comment on whether new or existing resources should be required to have frequency response capabilities. It also wants to know the nature of frequency response compensation within the market optimization process.

PJM will present the results of its review at the May OC meeting.

Hsia said most resources that don't provide frequency response are 10 MW or less and lack governors. Often these are distributed resources.

Operating Review Shows Perfect Dispatch Saved $33M YTD

A review of operating metrics showed that perfect dispatch has saved $33 million so far this year, with cumulative savings of $1.2 billion since the program was implemented in 2008.

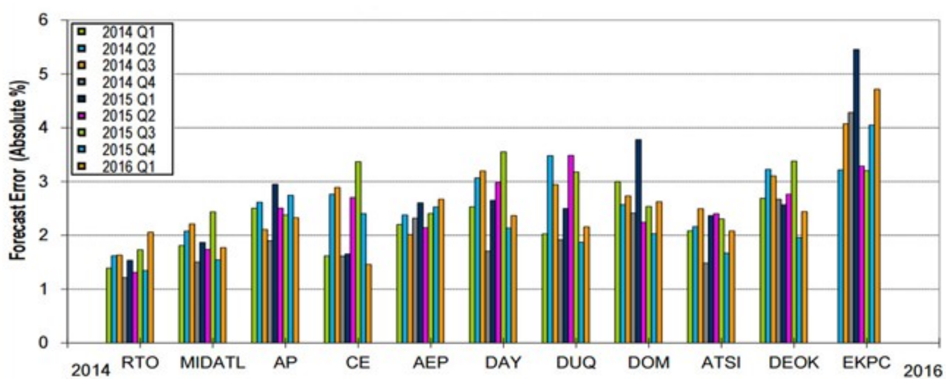
Perfect dispatch, designed to measure how well PJM commits combustion turbines, is the hypothetical least production cost commitment and dispatch — what PJM would spend if it knew and could control all system conditions in advance.

The perfect dispatch rate this year through March was 83.92%.

The average load forecast error performance for March was 1.71%, within the goal of 3%. For the first quarter, all zones had errors below 3%, excluding East Kentucky Power Cooperative, which was above 4.5% (see chart below).

The average forced outage rate through March was 3.48%, or 6,252 MW, with the total rate at 13.15%, or 24,743 MW.

— Suzanne Herel



Peak load average forecast error by zone *Source: PJM*

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PJM News

MIC Briefs

No Glitches in Switch to Earlier Day-Ahead Deadline

VALLEY FORGE, Pa. — PJM moved the day-ahead energy market offer deadline to 10:30 a.m. from noon without incident April 1, PJM's Adam Keech told the Market Implementation Committee Wednesday.

"We didn't have many people complaining, 'We missed the window,'" he said.

Offers were cleared in 2.5 hours on average, within the desired three-hour window. It helped that system load was light, he said.

Commented Independent Market Monitor Joe Bowring: "We did notice that the liquidity of the gas market had not shifted to earlier in the morning just yet."

But when he asked members if anyone else had observed the same, no one spoke up.

The scheduling change aims to better align the gas and electric markets. (See *PJM Moving on Day-Ahead Schedule Changes*.)

Members Endorse New Way to Measure Emergency DR

Members unanimously endorsed changes in how demand response is measured and verified in emergency situations.

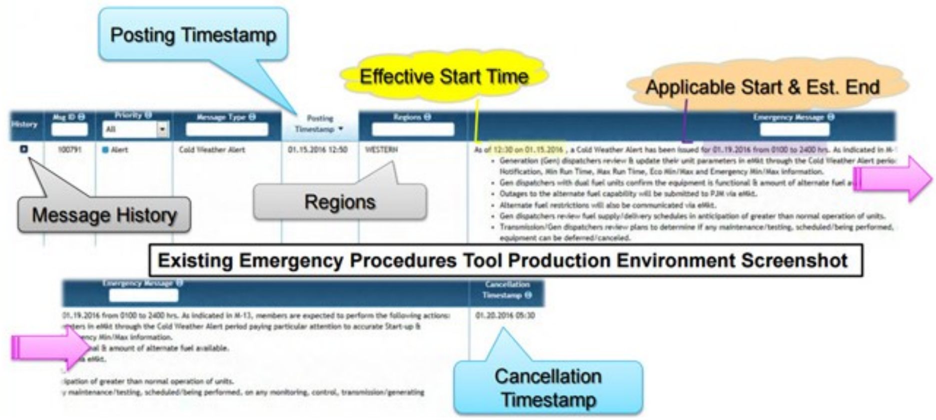
Existing procedures, which use the hour before an event as the default customer baseline (CBL), can be inaccurate in the early morning or on days with multiple dispatches, PJM's Pete Langbein said. It also can require a cumbersome administrative review process.

The new method changes the emergency energy default CBL from the hour before to the current default economic CBL.

It also eliminates the ability to create an economic registration after the fact and use the CBL to settle the event.

The new process is expected to measure energy load reduction more accurately and be consistent with the calculation of non-summer compliance under the new Capacity Performance model.

The changes were ready to be implemented in 2014, but PJM held off until the Supreme Court ruled that DR would remain in the energy market. (See *Supreme Court Upholds FERC Jurisdiction over DR*.)



Source: PJM

Allocating Spot-in Service for NYISO Imports to be Studied

With seven abstentions, the committee approved a problem statement and issue charge to study how to improve the process of allocating spot-in transmission for energy imports from NYISO.

Vitol's Joe Wadsworth, who presented the proposal, said the timing of the markets and the first-come-first-serve method of reserving spot-in transmission make it difficult for participants to efficiently schedule such imports.

PJM opens the window to reserving next-day spot-in service at 9 a.m., but NYISO doesn't release its day-ahead market results until at least 9:35 a.m. and sometimes as late as 11 a.m., Wadsworth said.

Thus, participants who use spot-in transmission to compete on near-term import supply opportunities at the seam may have to reserve the service before they find out what has cleared in NYISO, he said.

Spot-in is free but limited in quantity, and there is no priority for participants who have cleared the NYISO market.

"If you can't get spot-in transmission for your imports, then your day-ahead transactions can be curtailed, and suddenly you may have exposure to real-time prices," he said.

Work on the issue is expected to take six to nine months.

No one voiced similar concerns with MISO at the meeting.

Changes to Emergency Procedures Tool Coming in May

Members received an update on PJM's emergency procedures, which are changing because of the June 1 implementation of Capacity Performance.

Initial adjustments will be visible in the online emergency procedures tool on May 5 so they may be used for the summer emergency procedures drill, which is scheduled for May 10.

More changes will come on May 26. They include new fields, tabs, timestamps and flags giving members information on performance assessment hours.

Also new is a "deploy all resources" action for emergency events that occur without warning as opposed to evolving over time. The purpose of the action is to instruct members to dispatch all generation resources and implement load reductions immediately.

24-hour Max Run Time Parameter Set for June 1

PJM intends to implement a maximum run time parameter value of 24 hours June 1 for all generation resources except for pumped hydro power and market sellers who believe their resource cannot meet that value.

Documentation to that effect must be submitted to unitspecificpls@pjm.com by April 20.

Supporting documents must include original equipment manufacturer specifications of unit constraints.

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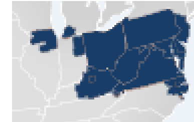
PJM News



PC/TEAC Briefs

Stricter Rules Proposed for Queue Submittal Process

VALLEY FORGE, Pa. — Interconnection customers would be required to provide more documentation earlier to ensure consideration of their projects under proposed changes to the queue submittal process.

The recommendations came out of the Earlier Queue Submittal Task Force, which was convened after current rules — which charge nonrefundable fees that escalate later in the queue window — were found to be ineffective in incenting earlier applications. (See "Still Searching for Ways to Incent Early Project Submissions," *PJM Planning Committee Briefs*.)

Early on, the task force decided that it would have little luck trying to change human behavior and instead focused on the objective of being able to start building models for the projects, PJM's Dave Egan said.

The thinking led to a number of proposed changes.

Currently, queue priority is assigned based on the date the application and deposit are submitted, and supporting documentation is not required. Under the new rules, priority would not be secured until all required elements of a project, including site control, were submitted.

PJM would perform a deficiency review only after all the elements, aside from site control, were in hand.

Applications would have to clear their deficiencies by the close of the queue window or be terminated. PJM would codify in the Tariff that it has five business days to review a deficiency response.

Project deposits would become chargeable immediately upon application, and instead of socializing the cost of applications that fail to clear their deficiencies, PJM would charge the customer.

Instead of having a different fee structure for large generation and small generation, the nonrefundable amount would be 10% of the overall fee for all projects, and the refundable portion would be spent by PJM first.

PJM also proposes to move the opening of queue windows to April from May and to October from November as soon as this fall. That will improve the opportunity of generation to participate in the May Base Residual Auction, Egan said.

The Planning Committee will be asked to vote on the changes in May.

Year's First Proposal Window Draws 26 Projects

The first competitive transmission proposal window of the year drew 26 projects from seven entities.

The projects address generator deliverability, common mode outage violations and end-of-life facilities.

Three are transmission owner upgrades ranging in cost from $7.7 million to $48.5 million. Twenty-three are greenfield projects with cost estimates of $15.6 million to $111.5 million.

More details will be provided at a future TEAC meeting.

PJM collected about $190,000 to study the projects under its new proposal fee structure. (See "Two-tiered Fee Schedule for Order 1000 Projects OK'd," *PJM Markets and Reliability Committee Briefs*.)

Proposal Would Exclude TO Upgrades from Order 1000 Window

PJM is proposing to exclude certain transmission owner upgrades from the Order 1000 competitive window process. They include typical short-circuit violations and fixes to substation terminal equipment such as wave traps, current transformers and capacitors.

"We're looking at situations where the upgrade is only a modest upgrade to equipment inside a substation," said Steve Herling, PJM vice president of planning. "Our intention is to not have a window for something we know can be easily fixed."

Few baseline projects driven by short circuits have resulted in a greenfield project,

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MIC Briefs

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Max run time values will be issued by May 15.

Settlement C Discussion Terminated

Members voted to approve the Market Settlement Subcommittee's request to stop work on establishing a "Settlement C" method that would allow electricity distribution companies to resolve billing errors beyond the 60-day Settlement B time frame.

The group had been working on the issue since September.

In a subcommittee poll of 22 responders representing 119 participants, 40% voted to continue to develop a solution, while the rest chose maintaining the status quo. At the MIC, 64% voted to kill the initiative.

PJM Proposes Clarifications to Bilateral Transactions

PJM proposed revised rules regarding bilateral capacity transactions that would maintain the physical nature of the deals to ensure members' indemnification.

In such transactions, a seller transfers capacity to a buyer but retains the obligation for performance. (See "PJM Proposes Clarifications to Capacity Bilateral Transactions," *PJM Market Implementation Committee Briefs*.)

The proposal assigns bonus payments to the buyer in proportion to the megawatts transacted. It also requires that any replacement transactions entered into by the seller be traceable. Therefore, this would not be able to be done in an incremental auction.

"If they went into an incremental auction to do this, all the parties would lose the visibility of who now is [providing the capacity that was] originally part of the bilateral," Assistant General Counsel Jen Tribulski said. "We thought that these transactions would be best served if the seller was able to replace them, but not by an incremental auction."

The clarifications will require a Tariff change.

— Suzanne Herel

PJM NEWS

PC/TEAC Briefs

Continued from page 13

said PJM's Mark Sims, who plans to present proposed changes on a first read next month at the Planning and Markets and Reliability committees.

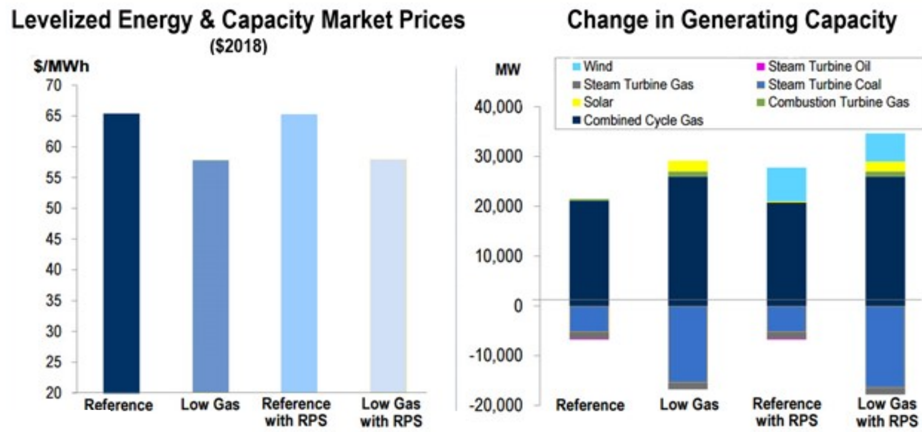
Reference Model for CPP Study Introduced

PJM introduced the reference model it will use to study the economic and reliability implications of the Clean Power Plan.

The initial review will look at the next 20 years and provide potential scenarios driven by policy, regulation and the market. (See *PJM to Proceed on CPP Study Despite Supreme Court Ruling*.)

The study was requested by the Organization of PJM States.

At Thursday's Transmission Expansion Advisory Committee meeting, PJM also presented results of sensitivities conducted on the reference model that assumed state renewable portfolio standards and gas prices averaging $3.43/MMBtu through 2037. (The reference case assumes an average of $5.14/MMBtu.)



PJM's energy and capacity prices and its generation mix would be affected by differing Clean Power Plan scenarios. *Source: PJM*

Among the key observations, PJM found that high capacity prices will allow natural gas combined cycles to enter the market despite low energy prices, while coal and nuclear resources will increase their dependence on the capacity market to recover their costs.

Wind and solar will be able to grow in a low-gas-price environment as long as renewable portfolio standards are enforced. PJM also predicts that lower gas prices will result in a reduction of carbon emissions through increased retirements of coal plants and the entry of new gas combined cycle plants.

PJM expects to release a final report by the end of May.

— Suzanne Herel

Artificial Island Cost Increase Could Lead to Rebid

Continued from page 1

LS Power: 'Nothing Has Changed'

"From LS Power's standpoint, we're committed to working with PJM and looking at these alternatives," Vice President Sharon Segner told the committee. "Our cost cap remains the same. Nothing has changed."

PSE&G was assigned the tasks of expanding the Salem substation and building a static VAR compensator (SVC) at New Freedom. PSE&G's work is considered an upgrade and does not include a cost commitment.

Pepco Holdings Inc. was tapped to oversee interconnecting the new substation to the existing Red Lion-Cartanza and Red Lion-Cedar Creek 230-kV lines in Delaware. (See *PJM Staff Picks LS Power for Artificial Island Stability Fix; Dominion Loses Out*.)

Herling said planners now are considering a new configuration that would terminate the transmission facility at Hope Creek instead of Salem. The buildings abut each other, and Hope Creek would give contractors more room to work, Herling said. However, unlike Salem, it is not on the water, where the horizontal directional drilling to bring in the line would end.

Overhead construction is not an option because of existing 500-kV lines, he said, so the line would have to be buried. But the drilling is not precise; it would have to be done in a wide sweep around the Salem substation, Herling said, or vaults would have to be built.

Timeline at Risk

Any significant change to the plan will affect the timeline, he said. "It could take another year, putting the system at risk," he said.

There's also the chance that altering the configuration would end up being just as expensive or simply move the cost from PSE&G's end over to LS Power's portion. Expense will have to be weighed with constructability and risk, Herling said.

"Clearly, this is a change in scope for LS Power and PSE&G," Herling said. "We're still looking at process implications."

In an interview, Herling said if that change in scope is challenged, FERC could rule that the project needs to be rebid.

PJM will be reviewing the project with the Board of Managers, which meets next week, but will not be making a recommendation.

"The board may give us more things to go look at," he said. "We will be working this as quickly as we possibly can to have the board make a decision."

The project has been controversial not only among the companies that vied for the contracts, but as well as with regulators and consumer advocates in Delaware and Maryland, where most of the cost would be assigned.

In response to complaints, FERC suspended the project's cost allocation pending additional review, which included a technical conference in January (EL15-95). (See *Commenters: DFAX Cost Allocation Inappropriate*.)

SPP News

SPP Leapfrogs ERCOT with 48.32% Wind Penetration Mark

The wind energy records continue to fall in the Southwest, with SPP setting a new wind penetration peak of 48.32% at 2:02 a.m. April 5. That led the RTO to tweet it had set "a new record for all North American ISO/RTOs," as the mark bettered ERCOT's wind penetration high of 48.28%, set March 23.

Last week's record came when SPP's load was approximately 21,600 MW, with wind accounting for about 10,430 MW. The RTO's wind peak remains 10,783 MW, set March 21. SPP's previous wind penetration high was recorded March 7 at 45.1%.

SPP's vice president of operations, Bruce Rew, has said he expects SPP to cross the 50% threshold this year. He noted the RTO has added 5,130 MW of wind energy to its footprint over the last year — 900 MW coming from the Integrated System — and that SPP is now seeing the full impact during the low-load, high-wind spring months.

Rew told the Board of Directors in January that SPP can handle wind-penetration levels of up to 60% with additional transmission and monitoring tools. (See "Wind Study, Capacity Margin Work Nears Completion," *SPP Board of Directors/Members Committee Briefs*.)

The RTO has about 12,400 MW of installed wind capacity, with another 33,800 MW in development.

Z2 Task Force to Present Final Recommendations

The Z2 Payment Plan Task Force will present two options for resolving the oft-delayed Z2 crediting issue during this week's Markets and Operations Policy Committee meeting in Santa Fe, N.M.

The Z2 project dates back to 2008 as a result of years of incorrect credits for transmission upgrades.

SPP CEO Nick Brown acknowledged stakeholder frustrations over their inability to get an idea of their liabilities or credits during January's board meeting, telling members, "Z2 will be the focus of the organization this year." (See "Brown: Finishing Z2 Crediting Project RTO's Top Priority," *SPP Board of Directors/Members Committee Briefs*.)

The Z2 task force has developed two plans for market participants to pay off their liabilities: a level-payment option and a staggered-billing option.

The task force and the Regional Tariff Working Group both voted to recommend the level-payment option in February. Xcel Energy and Western Farmers Electric Cooperative opposed the RTWG recommendation, and Lincoln Electric System and Tenaska Power Services abstained.

Under the level-payment plan, each entity with a net payable will be given the option to pay the entire amount at once or in equal installments every three months, beginning in November, with the final installment due in August 2017. FERC's interest rate will apply to the outstanding balances.

Under the staggered-billing option, SPP would bill all entities incrementally based upon subsets of the historical period, with settlement statements issued every three months until the entire period is billed. For example, SPP could charge and credit 2008-2010 amounts in Month 1, 2011-2012 amounts in Month 4, 2013-2014 amounts in Month 7 and 2015-2016 amounts in Month 10.

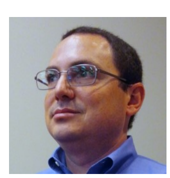
Oklahoma Gas & Electric's David Kays, chair of the RTWG, said during an April 7 teleconference that the incremental periods would be selected to "smooth out" the invoiced amounts. No interest would be included in the amounts charged.

The Z2 task force estimated last summer the total at stake is $750 million; lead regulatory analyst Charles Locke estimates it is now "north of $800 million." Locke said SPP expects to release a final amount to stakeholders in September.

"By that time, we will have worked through the settlements and be able to identify those amounts at a fairly accurate level," he said.

Seams Steering Committee Seeks 'Targeted' MISO Seam Study

The Seams Steering Committee last week agreed to pursue a targeted joint transmission study with MISO.


Kelley

David Kelley, SPP's director of interregional relations, said the RTO could improve the process by focusing on targeted areas. Although last year's comprehensive joint study identified 67 possible interregional transmission projects, SPP and MISO were unable to reach agreement on any. (See *MISO, SPP Considering Second Joint Tx Study*.)

Kelley said a narrower study could zero in on high-settlement market-to-market flowgates, the Northeast Nebraska-Western Iowa region and the new seam from the Integrated System's inclusion into SPP.

"We can look at the new footprint closer than we did last time," Kelley said. "That doesn't take a lot of time. As long as the scope isn't too broad, we can spend some time working on process improvements too. That includes staff and stakeholder time."

"We've spent a lot of time and effort and money, and there's not a lot to show for it," OG&E's Jake Langthorn said. "I'm not sure we need to do a [comprehensive study] every year if that's the case."

SPP and MISO are still gathering written stakeholder feedback from last month's Interregional Planning Stakeholder Advisory Committee meeting. MISO's IPSAC members will vote on a potential joint study April 20.

The Joint Planning Committee, comprising Kelley and MISO's Eric Thoms, manager of planning coordination and strategy, will consider all written feedback and each party's IPSAC recommendations before determining whether to begin a second study. The JPC will have 45 days from MISO's April 20 meeting to make a decision.

Kelley said SPP has also proposed a targeted study along its seam with Associated Electric Cooperative Inc. He said the study's scope is being revised, with the hope of beginning work in May and completing it by the end of the year. (See "SPP, AECI Begin Biennial Joint-Study Process," *SPP Briefs: State of the Market, Study w/ AECI*.)

FERC Approves SPP, MISO Revisions to JOA

FERC last week approved SPP and MISO's March compliance filings amending their joint operating agreement in accordance with Order 1000's interregional transmission coordination and cost allocation requirements (ER13-1937). The commission's April 6 order said SPP and MISO's revisions met the requirements of FERC's February compliance order.

— Tom Kleckner

FERC News

Appellate Court Upholds Order 1000 ROFR Provisions

By Rich Heidorn Jr.

A federal appeals court Wednesday unanimously upheld FERC Order 1000's right-of-first-refusal provisions, rejecting challenges from the MISO Transmission Owners and LSP Transmission Holdings.

The 7th Circuit Court of Appeals in Chicago ruled after consolidating a challenge by the transmission owners, who sought to preserve the ROFR in the MISO transmission agreement (14-2153), with two by LSP that contended FERC did not go far enough in injecting competition into transmission development (14-2533, 15-1316).

MISO ROFR

The three-judge panel was especially critical of the TO's challenge to Order 1000's requirement that federal ROFRs be removed from FERC jurisdictional tariffs. Invoking the *Mobile-Sierra* doctrine, the TOs said FERC should presume that their contractual ROFR is reasonable.

Posner

"But why?" Judge Richard A. Posner asked in the opinion. "The owners have made no effort to show that the right is in the public interest. Neither in their briefs nor at oral argument were they able to articulate any benefit that such a right would (with limited exceptions …) confer on consumers of electricity or on society as a whole. … Contract rights are not sacred, especially when they curtail competition."

The TOs contended that their ROFR was not intended to prevent competition but to give MISO power to require TOs to build needed facilities in their service territories. "But that makes no sense," the court said. "Had there been no intention or expectation of competition, there would have been no need for a right of first refusal."

Baseline Reliability Projects

In the second case, LSP asked the court to overturn FERC's decision to allow a TO the right to build any baseline reliability projects whose costs are allocated to that company's territory alone and not subject to regional cost allocation. FERC justified this exception on the grounds that requiring competition on such projects — which often require quick turnarounds — could lead to delays because of the time required to conduct bidding and the potential for litigation by losing bidders.

LSP said reliability projects covering more than one pricing zone should be considered regional and thus open for competition.

"But a transmission facility is not regional for purposes of cost allocation if all its costs are allocated to the pricing zone in which it is located," the court said. "A right of first refusal would be problematic, therefore, only if the benefits of a baseline reliability project were largely or entirely realized in pricing zones other than the one in which the project was to be built."

State ROFRs, Entergy

LSP raised a related complaint in the third suit, challenging FERC's decision to treat the entire Entergy footprint — Texas, Arkansas, Louisiana and Mississippi — as a "local" area not subject to competition and regional cost allocation.

"The vast region covered by Entergy's multiple operating companies hardly complies with the usual understanding of 'local,'" the court acknowledged. "But 'local' need not retain its usual understanding when used to designate the service area of a giant electrical transmission entity. It is a relative term; New York City is a huge city yet as a matter of scale is 'local' relative to New York state, or to the Northeast. Entergy's retail distribution service territories can be said to be 'local' for a different reason: the separate operating companies actually operate as one and have so operated for more than 50 years."

LSP also challenged FERC's approval of MISO rules implementing Order 1000, including its rules for evaluating competitive bids, which consider not only the project's estimated cost but also its design and the quality of the bidder's management.

The court rejected LSP's desire to make cost the primary criteria for selection, saying, "There is no indication that any of MISO's criteria favor incumbent developers over nonincumbent ones who have demonstrated an equal ability to execute a project effectively."

The judges also upheld MISO's acknowledgment of state ROFRs, over which FERC has no jurisdiction. LSP cited a Minnesota law that grants an incumbent TO the right to construct, own and maintain any lines that connect to the TO's system.

"It would be a waste of time for MISO to conduct a protracted competitive bidding and evaluation process when the incumbent transmission company has a right of first refusal conferred by state law," the court said.

The 7th Circuit's ruling is the second to uphold Order 1000's removal of federal ROFRs, following one by the D.C. Circuit Court of Appeals in August 2014 that consolidated more than a dozen cases. (See *FERC Order 1000 Upheld*.)

There are at least six pending cases involving compliance by PJM, Columbia Grid, ISO-NE, SPP and WestConnect in the D.C. Circuit and the 5th Circuit, according to FERC.

"The [transmission] owners have made no effort to show that the right [of first refusal] is in the public interest. ... Contract rights are not sacred, especially when they curtail competition."

Judge Richard Posner, 7th Circuit Court of Appeals

STAKEHOLDER SOAPBOX

FERC's Artful Balance: Price Formation and Consumer Protection that Works

OPINION

By Joel Yu and Christopher Hargett

A $1,000/MWh energy market offer cap in organized wholesale electric markets regulated by FERC has served as an effective customer protection for more than 15 years.[1]

Only once has an operational constraint resulted in legitimate energy offer spikes to levels near or above $1,000/MWh in some regions: the polar vortex in winter 2013-14.

In response, regional market operators scrambled to initiate measures modifying the existing cap so that generators could recover legitimate costs if it happened again.

When FERC initiated proceedings to improve price formation in organized electric markets, with due consideration of the $1,000/MWh cap, stakeholders began debating. Almost two years later, they still are, raising numerous concerns over any changes to the existing offer cap.[2]

In a September 2015 "Stakeholder Soapbox," Consolidated Edison highlighted two principles to consider in reforming this important customer protection. First, the $1,000/MWh energy market offer cap plays a critical role in mitigating potential market power abuse. Second, the markets must also appropriately compensate generators for their performance in extreme conditions.

FERC's Offer Cap Rulemaking is Responsive to Stakeholder Concerns

In its January 2016 proposed rule, FERC strikes a balance giving careful consideration to customer interests in the pursuit of uniform, transparent and efficient energy market pricing.

The proposed rule allows energy offers in excess of $1,000/MWh to set market clearing prices only when underlying costs have been verified *before* the start of the market clearing process. Offers not verified before the start of the market clearing process would be ineligible to set market clearing prices, though legitimate costs could be recovered through out-of-market payments based on an after-the-fact review.

Over the past two years, Con Edison has advocated that the $1,000/MWh offer cap is a critical "fail-safe" consumer protection against potential market power abuse when markets may not be functioning competitively, due to either high load or other system conditions.

Likewise, NYISO's Market Monitor states that "prices are generally more sensitive to withholding and other anticompetitive conduct under high load conditions" due to the scarcity of marginal suppliers.[3] Experience has demonstrated this when both electric and gas systems are experiencing high demand conditions.

FERC addressed this concern by proposing to maintain the $1,000/MWh offer cap on market-based offers. By requiring pre-verification of underlying costs when offers exceed the cap, the proposed rule should help protect consumers against high energy prices due to anti-competitive supplier conduct.

Specifically, this proposal protects consumers from potential attempts to exercise market power in either the electric or natural gas markets. This is especially so because natural gas is an increasingly dominant fuel for electric production and typically marginal when electric demand exceeds base load. With its robust enforcement authority for both commodities, FERC can provide additional customer and market power protection.[4]

Con Edison and others have supported out-of-market payments for generators needing to recover marginal costs in excess of $1,000/MWh, while acknowledging FERC's goal of making energy market pricing more transparent and efficient.

By allowing cost-based offers to exceed $1,000/MWh subject to verification, FERC provides generators with assurance that even during rare circumstances, such as the polar vortex, costs can be recovered through market clearing prices or out-of-market payments.

Thus, the proposed rule strikes an appropriate balance between customer and supplier interests.

FERC Establishes an Effective Framework for Organized Markets to Develop Regional Implementation Rules

Con Edison, along with numerous other stakeholders, also cautioned against any proposal that would create disparate offer caps among neighboring organized markets given potential unintended and harmful impacts across seams.

Sensitive to this concern, FERC's proposal will apply the new offer cap construct uniformly across the markets. While specific regional implementation may vary to address regional differences, FERC's proposed framework provides for regional price differences driven by system constraints, not by variations in regional offer cap rules.

FERC's proposal sets out clear policy objectives and rationale for the revised offer cap construct. It is a good and fair solution. Con Edison encourages FERC to adopt its proposal without significant alteration or delay.

Christopher Hargett and Joel Yu are senior policy advisors at Con Edison. Subsidiaries Con Edison Company of New York and Orange and Rockland Utilities are transmission owners within NYISO. A subsidiary of Orange and Rockland Utilities, Rockland Electric, is a transmission owner within PJM.

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[1] See FERC's NOPR, Docket RM16-5, 154 FERC 61,038 (January 21, 2016) at p. 55.

[2] Currently, the energy market offer cap does not allow offers exceeding $1,000/MWh to set market clearing prices, except in PJM where the offer cap was recently raised to $2,000/MWh.

[3] *2014 State of the Market Report for the New York ISO Markets*, Potomac Economics, May 2015, p.17.

[4] See Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

Stakeholder Soapbox

If you'd like to contribute an op-ed article, email the editor at rich.heidorn@rtoinsider.com.

Advertisement

Company Briefs

CEO Flexon: AEP Icing Dynegy out of Plant Sales


Flexon

Dynegy CEO Robert Flexon says that American Electric Power is blocking companies that opposed its controversial power purchase agreement before the Public Utilities Commission of Ohio from bidding on power plants that AEP is trying to sell.

Flexon told *Columbus Business First* that Dynegy can't get its foot in the door to bid on power plants that AEP is selling because Dynegy opposed AEP's successful campaign to win regulatory approval for the PPA. "The funny thing there is AEP has specifically excluded anybody that dare speak against them in Ohio," Flexon said.

PUCO recently allowed AEP's distribution companies to enter into power purchase agreements with several of the company's power plants, providing them with guaranteed income supported by ratepayers. AEP meanwhile is trying to sell several other plants not included in the PUCO ruling. AEP spokesperson Melissa McHenry said the company wouldn't comment on plant sale details.

More: *Columbus Business First*

Southern Co.'s Kemper CCI Plant Costs Up — Again

The price of Southern Co.'s much-delayed Kemper clean coal power plant rose by $18 million in February, the company reported in a Securities and Exchange Commission filing.

The increase puts the total cost of the coal gasification plant in eastern Mississippi at $6.6 billion, three times the original estimate. Southern Co. subsidiary Mississippi Power previously said the Kemper plant would be in service by the third quarter of this year.

More: *Atlanta Business Chronicle*

KCP&L to Purchase Power From 2 Missouri Wind Farms

Kansas City Power and Light announced it will purchase power from a pair of wind farms that are now under construction in northwest Missouri.

Under the 20-year deal, KCP&L will buy from NextEra Energy's 200-MW Osborn wind farm, scheduled to be completed by the end of the year, and Tradewind Energy's 300-MW Rock Creek wind farm, which is expected to be in service by September 2017.

Courtney Hughley, a spokesperson for KCP&L, said the goal is to use wind power and energy storage to eventually replace base load generation from coal-fired plants like Iatan in northwest Missouri.

More: *KCUR*

US Rating Agencies Give LP&L Positive Reviews for Bonds

Lubbock Power & Light said last week it has received high bond ratings from all three major U.S. financial rating agencies, placing the municipal electric utility in a strong financial position as it moves forward with its transition to the regional grid.

If the utility ties into ERCOT, LP&L will issue bonds to pay for transmission lines needed to connect the city to the larger electrical system. The utility said its capital improvement projects will focus over the next three years primarily on getting its internal system ready to make the transition.

LP&L said Standard & Poor's Rating Services gave it a "AA-" rating, Moody's Investor Services assigned an "A1" rating and Fitch Ratings gave an "A+" rating.

More: *A-J Media*

Luminant Completes Acquisition Of 2 NextEra Gas Plants

Luminant completed its purchase of two combined cycle natural gas plants from NextEra Energy after receiving approval from the Public Utility Commission of Texas.

The Dallas-based generation company announced the $1.3 billion deal late last year. The 1,912-MW Forney Power Plant east of Dallas and the 1,076-MW Lamar Power Plant in northeast Texas are both located in ERCOT.


Forney Power Plant *Source: NextEra Energy*

More: *Luminant*

AES Settles Dominican Coal Ash Birth Defect Suit

AES has settled a case in which it was accused of allowing a generator in Puerto Rico to dump 57,000 tons of coal ash in the Dominican Republic, where it allegedly caused birth defects in three children who were born without limbs.

Their families sued for about $30 million in damages in Delaware, where AES is incorporated. The terms of the settlement were not disclosed.

AES, which operates in 18 countries, agreed in 2007 to pay $6 million to settle a separate coal ash dumping suit in the Dominican Republic.

More: *Bloomberg*

SolarCIty Hires Ex-FERC Chair as Chief Policy Officer


Wellinghoff

SolarCity has hired Jon Wellinghoff, former FERC chairman, as the company's chief policy officer. Wellinghoff will advise the company on state and federal regulatory policy and regulatory affairs.

"I've devoted my career to advocating for the electricity consumers," Wellinghoff said in a company statement. "And from my review there is great benefit to those consumers from distributed solar generation — clearly numerous studies have

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demonstrated it benefits all ratepayers, even those who don't install panels on their roof."

Wellinghoff is replacing John Stanton, who held the position for the past seven years and helped recruit Wellinghoff to the company.

More: *Solar Industry Magazine*

FirstEnergy Investing $48M In Pa. Substation Upgrades

FirstEnergy said it will spend $48 million to upgrade a substation in Wampum, Pa., as part of a reliability improvement project.

The company will install automated voltage-regulating equipment "designed to respond to real-time electrical conditions, boosting or reducing voltage as needed to maintain consistent levels on the regional transmission network." The work will also include transformers, capacitor banks, circuit breakers and other equipment.

The new equipment will be installed on a football field-sized parcel next to the existing Hoytdale substation. The work is expected to be done by early June.

More: *Crain's Cleveland Business*

Duke Energy Christens 2nd Largest Solar Farm in NC

Duke Energy activated a 65-MW solar farm last week, which it says is just the beginning of an investment of $500 million in solar energy in North Carolina.

The 850,000-panel solar farm in Warsaw, Duplin County, is the second largest in the state and the largest in Duke's solar fleet, said David Fountain, North Carolina president of Duke Energy.

Fountain said that Duke has several other solar projects in North Carolina that are in the process of being completed.

More: *WITN*

Report: Ameren Pursuing Westar

Westar Energy is the target of a potential acquisition by Ameren and a group of investors, Bloomberg reported last week. Ameren is reportedly working with an investor group that includes Borealis Infrastructure Management and the Canada Pension Plan Investment Board, Bloomberg said, quoting people familiar with the matter.

Westar, Kansas' largest electric utility, has hired Guggenheim Partners to represent it in talks, Bloomberg said. Initial bids for the utility, which has a market value of about $7 billion, are due this week.

More: *Bloomberg*

Federal Briefs

FERC Auditors Flag Duke For $130 Million in Merger Costs

FERC auditors say Duke Energy improperly classified up to $130 million in costs from its merger with Progress Energy, calling for the company's wholesale customers to get refunds of up to $1.3 million.

The auditors say the refunds are due only to wholesale customers, including other electric utilities or those that used Duke's transmission system. Retail customers are not affected, according to the company.

Although the company disputed three of the auditors' eight findings, it will not challenge the audit. A company official promised a "refund analysis" within 60 days and will then issue the rebates.

More: *Greensboro News & Record*

Inhofe Calls for NRC Chief To Cut Agency Inefficiencies

Sen. Jim Inhofe invoked 20th century history lessons when he called for Nuclear Regulatory Commission Chairman Stephen Burns to cut waste and inefficiency, just as former Chairman Shirley Ann Jackson did during her reign in the 1990s.

"It appears that many of the inefficiencies that plagued the NRC in the 1990s have returned," Inhofe said during a hearing on NRC's fiscal year 2017 budget request. He said Jackson, back in her day, held stakeholder meetings to help identify areas that needed improvement.

"The nuclear industry once again faces challenges in the market place and, once again, the need for the NRC to be an objective, safety-focused and responsive regulator is imperative," Inhofe said.

More: *Morning Consult*

McCarthy: Tougher Regs Will Drive Sustainable Development

EPA Director Gina McCathy says that new rules governing methane emissions in the oil and gas industry will help drive development in those sectors and not retard exploration.

"Moving on [methane] will reaffirm our leadership on climate," she said in a speech in Canada. "It also will happen to make sure that our ability to continue to rely on fossil fuel will be done in a way that is sustainable as well."

EPA has formulated rules to cut methane emissions by up to 45% from 2012 levels. The new rules covering oil and gas development are due out this spring.

More: *The Hill*

Virgin Islands AG Subpoenas CEI Records

Walker

As part of an expanding investigation into whether fossil fuel companies illegally worked to undermine climate change research, the attorney general of the U.S. Virgin Islands is subpoenaing records of the Competitive Enterprise Institute, a conservative think tank.

Attorney General Claude Walker is seeking 10 years' worth of communications, emails, statements and drafts from 1997 to 2007. Several states and other parties are seeking similar documents from energy companies to determine whether they undermined climate science.

Walker's subpoena is among the first

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directed at a third party such as CEI. The institute said it will fight the subpoena.

More: *Inside Climate News*

Solar Farm Planned for NJ Naval Weapons Station

The U.S. Navy plans to erect 32.8 MW of solar panels on six sites across 227 mostly forested acres at Naval Weapons Station Earle in New Jersey.

Environmentalists oppose the project because trees will need to be cleared. The activists also recently fought a 21-MW solar facility approved for 90 wooded acres at an amusement park in central New Jersey.

The project does not require an environmental impact report, nor does it need to be approved by the local planning board, because it is at a federal military facility. The Navy aims to procure or produce half of its land-based energy from alternative sources by 2020.

More: *Asbury Park Press*

US Civil Rights Commission To Join NC Coal Ash Fray

The chairman of the U.S. Commission on Civil Rights told a crowd in Walnut Grove, N.C., that he supports their fight against Duke Energy's plans to dispose of coal ash.


Castro

"It's happening in North Carolina, it's happening in Alabama, it's happening in Waukegan, [Ill.,] it's happening in Chicago," Martin Castro said about coal ash storage and disposal issues. "There's something wrong with the system, and we need to figure out how we can change that system."

Castro's comments came during an advisory panel hearing on the possible dangers of coal ash on community water supplies. Walnut Cove is near Duke's largest coal ash basin, which holds 12 million tons of coal-combustion byproduct.

More: *Winston-Salem Journal*

State Briefs

CALIFORNIA

CAISO Warns of Possible Summer Blackouts Because of Aliso Canyon

The inactive Southern California Gas Aliso Canyon underground gas storage facility this summer could cause energy shortages and imperil electric reliability, according to CAISO and other agencies.

The storage facility, which was shut down after leaking 100,000 metric tons of gas this winter, represents more than 64% of SoCalGas' storage capacity, according to a report issued by CAISO, the Energy Commission, the Public Utilities Commission and the Los Angeles Department of Water and Power. The facility supplies fuel to 17 gas-fired power plants that account for about 70% of generation capacity in the region. It won't be returned to service until later this year.

"Aliso Canyon plays an essential role in maintaining both natural gas and electric reliability in the greater Los Angeles area," the agencies said in a statement. "As a result, the facility's limited current operations create a distinct possibility of electricity service interruptions in the coming summer months."

More: *Power Magazine*

CONNECTICUT

Cyber Fears Prompt Call For Utility Meetings


Malloy

A Public Utilities Regulatory Authority report released last week lays out plans to strengthen the cybersecurity of water, gas and electricity systems in the state through voluntary, cooperative efforts with utilities.

Gov. Dannel P. Malloy said the new PURA report offers "a road map to support cybersecurity defenses" for utilities. The report calls for annual closed-door meetings with utilities to review and improve cybersecurity measures.

Electricity, water and gas utilities agreed to participate in the annual reviews, according to the report, but telecommunications companies have balked, fearing the process could lead to more state regulation.

More: *Hartford Courant*

ILLINOIS

Ameren Electric, Gas Customers to See Lower Rates

Ameren Illinois is expected to submit a service delivery plan this month that will decrease 2017 rates by $14 million, the fourth decrease since 2011 when the state's Energy Infrastructure Modernization Act was adopted.

The utility said natural gas customers also should see a drop in the supply portion of their bill beginning this month because of a nearly 4-cent reduction in the per-therm cost of the fuel.

More: *Belleville News-Democrat*

MAINE

Misery Ridge Wind Turbines Fought Amid Bankruptcy Fears

An opposition group said that uncertainty over embattled SunEdison's financial future is reason to stall the company's plan to erect a wind turbine project in the state.

SunEdison, whose bankruptcy is reported to

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be imminent, has not yet filed a site application for a 26-turbine wind farm in Misery Ridge, but it placed meteorological towers at the site last year to measure conditions.

"We felt it was important to get it out there and let everyone know that there could be some serious problems if SunEdison goes bankrupt," said Richard McDonald, a member of the steering committee for the Moosehead Region Futures Committee.

More: *Portland Press Herald*

MARYLAND

New Law Forces State to Reduce Greenhouse Gas Emissions

Hogan

Gov. Larry Hogan last week signed a bill that will require Maryland to reduce its greenhouse gas emissions.

The law, which takes effect Oct. 1, reauthorizes the 2009 Greenhouse Gas Reduction Act, which compels the state to reduce emissions to 25% below 2006 levels by 2020.

It also added a new target: 40% below 2006 levels by 2030.

More: *The Washington Post*

MASSACHUSETTS

Man Charged in Power Line Plot

A 61-year-old man faces terrorism charges in U.S. District Court after authorities found several incendiary devices attached to National Grid high-voltage power lines, including one that started a brush fire. The lines carry power to Greater Boston from Canada.

Danny M. Kelly was held without bail after police found a note on one of the power poles that demanded that National Grid help the author persuade the judicial system to pay him back for the "damage they did to my family." Kelly was convicted a decade ago of cutting telecommunications cables in five towns.

Authorities said that the bombs contained thermite, which could be used to cut through metal.

More: *The Boston Globe*

MICHIGAN

Temporary Wind Data Towers Now Require Visible Markings

A new state law will require visible markings on temporary meteorological towers used to gather data for wind energy projects, which critics say can be quickly erected and are difficult for low-flying pilots to see. The National Transportation Safety Board reports three fatal aircraft collisions with such towers since 2003.

As of May 30, any tower 50 feet or taller will be covered by the law. Previously, towers under the 200-foot federal threshold were exempt from a requirement for orange-and-white obstruction markings.

"We are very pleased the governor and Legislature passed this law quickly," said Mike Trout, Aeronautics Commission director. The towers "can be very problematic for agricultural, balloon and helicopter pilots to see."

More: *MLive*

MISSOURI

Senate Considers Formula Ratemaking Bill

A utility-supported bill that would change how investor-owned electric utilities are regulated has advanced to the floor of the Senate for debate. The "21st Century Grid Modernization and Security Act" uses formula ratemaking and would weaken state utility regulators' authority in rate-setting.

Ameren argues the bill would provide predictable rate increases that are needed to quickly recoup investments in the aging electric grid. Several large industrial customers oppose the bill, saying the new system will cause rates to rise beyond projections.

Illinois passed a similar set of rules in 2011.

More: *St. Louis Post-Dispatch*

MONTANA

Governor: New Owners For Troubled Colstrip Plant

Bullock

Gov. Steve Bullock said April 5 he is forming a working group to explore an ownership change for three of the four units at Washington's 2,100-MW Colstrip power plant, one of the nation's largest coal-fired power complexes. The plant faces pressure from competitive market forces and the increasing cost of regulatory compliance.

The units are now owned by Avista, NorthWestern Energy, PacifiCorp, Portland General Electric, Puget Sound Energy and Talen Energy. Washington state has passed a law that would allow PSE to set aside money for the closure of Colstrip's two oldest units, built in the 1970s.

More: *The Associated Press*

NEBRASKA

State Lawmakers Beat Filibuster, Advance Wind Energy Bill

State lawmakers have advanced a bill that will remove a requirement that wind energy developers need a power purchase agreement in place in order to serve out-of-state markets. Advocates say the measure will encourage more private development of wind farms that would otherwise go to other states.

Opponents tried to halt the proposal by arguing it would only help prop up an

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industry that relies on federal tax subsidies. But supporters said it would boost development that would generate tax revenue and lease payments for state residents.

The state ranks third nationally in the intensity of its winds, but lags most surrounding prairie states when it comes to installed wind-generating capacity. The proposal would liberate wind developers from having to arrange a power purchase agreement with out-of-state electricity buyers before getting approvals for wind projects aimed at serving regional markets.

More: *Omaha World-Herald*

NEW HAMPSHIRE

Senate Leader Opposes Kinder Morgan Pipeline

Morse

Republican Senate President Chuck Morse is taking a stand against Kinder Morgan's Northeast Energy Direct pipeline project, citing what he called the company's dismissive attitude to the state's regulatory authority.

"Given that there are pipeline projects being proposed in New England that provide similar benefits to New Hampshire with far less impacts, I believe that the NED pipeline, as currently proposed, is not the best project to address our current energy market problems," he wrote in a recent letter to the chairman of the Public Utilities Commission and the state commissioner of environmental services.

Morse told the *New Hampshire Union Leader* his decision was prompted by Kinder Morgan's letter to FERC reminding the agency that any restrictions imposed by the state would be pre-empted by federal law. The proposed pipeline would carry natural gas from Pennsylvania to New England, with an 80-mile route across the state.

More: *New Hampshire Union Leader*

Senate Bill Doubles Eligible Solar Sales

The Senate approved a bill that would double the statewide quota of solar energy that utilities are required to buy from customer generators and direct regulators to modify the net-metering rules to stop cost-shifting.

House Bill 1116, which would increase the amount of solar power produced from 50 MW to 100 MW, would help the industry retain about 700 jobs, proponents said. Gov. Maggie Hassan, who has called for increasing the net metering cap, said she would sign the bill.

The bill also directs the Public Utilities Commission to develop an alternative rate that would be paid to solar generators so that the rates of nonsolar customers are not adversely affected by the shift to distributed power.

More: *New Hampshire Union Leader*

NEW YORK

Gov. Cuomo Urged To Block Pipeline

Activists led by Robert F. Kennedy Jr. protested outside the state Capitol to urge Gov. Andrew Cuomo to block a FERC-approved shale gas pipeline project by denying it state water protection permits.

The planned $750 million Constitution Pipeline, which would carry natural gas from Pennsylvania to a pipeline serving New England, needs a water quality permit from the state to move forward. FERC approved the project in December 2014 and upheld its ruling in February. (See *FERC Upholds Constitution Pipeline OK*.)

Climate change activists have mounted political pressure on Cuomo to halt the project, whose construction they say would harm the environment and whose operation would enable the consumption of greenhouse gas-emitting fossil fuels.

More: *Times Union*

Cayuga Fire Started During Plant Maintenance

A fire in the smokestack of the coal-fired Cayuga power plant outside Ithaca was contained within 90 minutes on Wednesday, causing no injuries and having no effect on power generation.

The fire broke out during routine maintenance of the plant's Unit 2 turbine, according to Cayuga Operating Co. The power plant's Unit 1 turbine remains functional. "The fire does not appear to be related to any of the generating equipment or to the power plant itself; it's something that's within the structure," Tompkins County Emergency Response Director Lee Shurtleff said.

State regulators in February rejected a ratepayer-subsidized plan to repower the coal-fired plant with natural gas. A transmission project that could imperil the plant's future was approved at that time. (See *Cayuga Coal Plant in Jeopardy*.)

More: *Ithaca Journal*

GE Installing 3 MW Of Solar Power

General Electric is installing about 3 MW of solar panels on its Schenectady headquarters and Healthcare facility in North Greenbush.

The company's new smart grid division, known as "Current, powered by GE," will install the solar panels on rooftops, car ports and on the ground. They will produce 75 million kWh of electricity over 20 years.

The two sites are among 18 GE facilities in the U.S. and Puerto Rico that are getting solar panels.

More: *Albany Times Union*

NORTH CAROLINA

Offshore Wind Farms Would Impact Beach Tourism, Study Says

A North Carolina State University economic study concludes that many tourists would be unwilling to rent beach houses if they included a view of offshore wind farms. The study from the NC State Center for Environmental and Resource Economic Policy also reports that tourists would expect to receive discounted rates if their viewshed included wind turbines.

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"There was a lot of support for wind energy, but no one was willing to pay more to see wind turbines from the beach by their vacation rental property," said Laura Taylor, the center's director. "And if turbines are built close to shore, most people said they would choose a different vacation location where they wouldn't have to see turbines.

"However, the good news is that our results also show that if turbines are built further than 8 miles from shore, the visual impacts diminish substantially for many survey respondents, and it is unlikely the turbines would negatively impact coastal vacation property markets," she said.

More: *CleanTechnica*

OHIO

Black Fork Wind Project Gets More Time for Development

Canadian energy company Capital Power has received a two-year extension from state regulators to start work on its proposed 200-MW Black Fork wind project.

The company acquired the project among 10 solar and wind developments when it bought Element Power in 2014 for $69 million.

Construction is set to start next year on the wind farm, which will be sited on 14,800 acres in Crawford and Richland counties and interconnect with the PJM grid at the 138-kV Howard substation.

More: *Renews*

OKLAHOMA

OCC to Decide Fate of OG&E's Scrubber Plans

The Corporation Commission conducted a three-day hearing on Oklahoma Gas & Electric's plan to install costly scrubbers on its 1,138-MW Sooner coal-fired plant. This is OG&E's third attempt for scrubber approval; regulators voted down two earlier attempts in December.

OG&E said its plan to install a $500 million scrubber upgrade at the twin-unit plant would ensure its customers get the benefits of low-price coal for another 30 years. If regulators grant scrubber approval, the utility would come back after the project is built to add the costs to customer bills.

More: *The Oklahoman*

SOUTH DAKOTA

TransCanada Estimates Pipeline Leak at 16,800 Gallons

TransCanada officials last week estimated that a leak in the Keystone pipeline released about 400 barrels of crude oil, or about 16,800 gallons. The cause of the leak is under investigation.

TransCanada shut down the pipeline after the leak was discovered April 2, about 4 miles from a pump station in Hutchinson County. The pipeline, with a daily capacity of about 550,000 barrels, runs from Alberta to Oklahoma. The loss of the capacity is not expected to impact the market for crude oil, which is already oversupplied.

More: *The Associated Press*

VERMONT

Tighter Renewable Siting Rules Concern Farmers

New rules proposed in the state that would grant local governments more power over siting renewable energy projects are raising concerns among farmers who think their interest in the energy projects might be diminished.

Regulations proposed in Senate Bill 230 could saddle landowners with added fees and siting restrictions for solar, wind and manure-digester projects. It will unfairly burden farmers, said Jeff Forward, board chairman of Renewable Energy Vermont, an industry advocacy group.

The renewable energy advocacy group also said that "last-minute amendments" to the bill primarily represent the interests of "a small, vocal minority of Vermonters" and "pose serious consequences for electric ratepayers and the more than 16,000 employees comprising our state's clean energy economy."

More: *Burlington Free Press*

WISCONSIN

Gov. Walker Lifts State's Nuclear Ban

Gov. Scott Walker has signed 2015 Assembly Bill 384, revoking the state's moratorium on new nuclear plants. The law orders the Public Service Commission to consider nuclear reactor construction before it can approve any new nonrenewable combustible-energy facilities.

The law revokes a 1983 state law, enacted four years after the Three Mile Island accident, which banned the state from considering new nuclear facilities until a national nuclear waste storage facility was constructed. There is still no waste repository, but nuclear advocates are renewing a push for atomic energy as a viable emission-free alternative to fossil fuel generation.

The state has one nuclear station, the Point Beach Nuclear Plant operated by NextEra Energy on Lake Michigan.

More: *The Associated Press*

NYPSC: Minimal Cost to Meet 50% Renewable Goal

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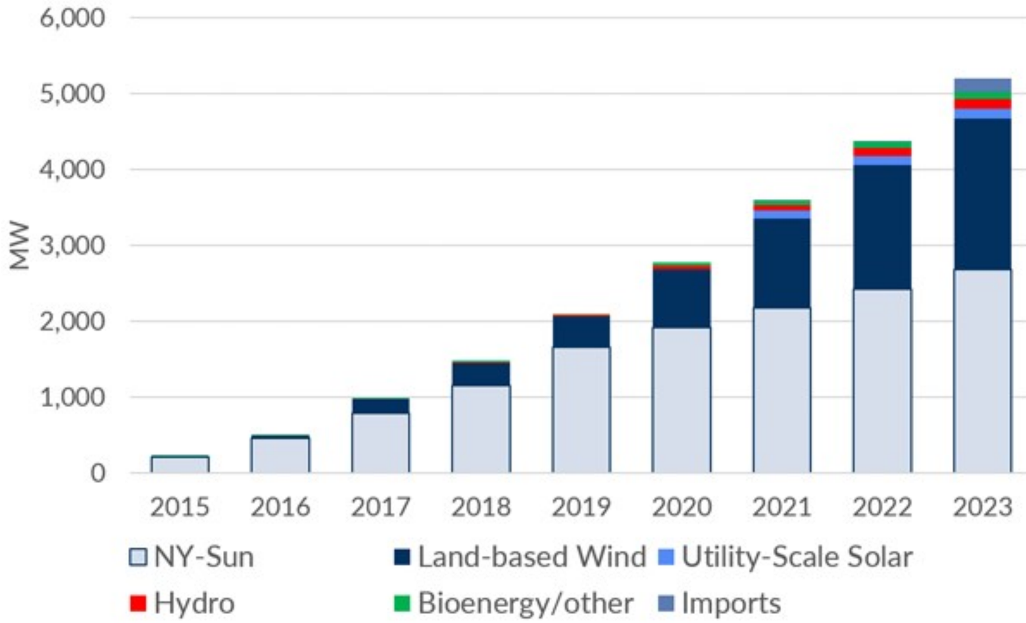
damages, including changes in agricultural productivity, human health, property damages from increased flood risk and changes in energy system costs. It is projected at about $24/MWh in 2023.

The CES is part of New York's Reforming the Energy Vision initiative to switch the state's energy generation mix to cleaner and more distributed resources. It also promotes the preservation of upstate nuclear generation during a transitional period until 2030.

The cost study builds on a white paper released in January that outlined the policy goals (15-E-0302). (See *New York Would Require Nuclear Power Mandate, Subsidy*.)



Projected Tier 1 renewable resources *Source: NYPSC*

PPAs vs. RECs

The study's base case assumes power purchase agreements and renewable energy credits would be used equally to procure the 5.2 GW of Tier 1 renewables envisioned by 2023, which would be dominated by land-based wind (38%) and solar power developed under the NY-Sun initiative (52%). By minimizing investors' exposure to commodity price risk, procuring capacity through PPAs would be far cheaper than procurement through RECs, the study said.

Changes in CES program costs as a result of energy prices would be balanced by the effect on ratepayers' overall bills. "For example, lower-than-expected energy prices could increase the CES program costs, but this would be offset by a reduction in energy bills from lower wholesale energy prices," the study says.

Nuclear Incentives

The New York CES is unique in that it promotes financial incentives to keep upstate nuclear power plants viable through 2030 to retain their carbon-free generation as the state transitions to renewable resources. (See related story, *Environmental Group Urges Ill. Legislators to Save Nuclear Plants*, p.10.)

"In addition to the cost and benefits quantified in this study, there are significant economic development benefits identified — for example, the proposal to provide new support for upstate nuclear plants would protect 25,000 direct and indirect jobs, $3 billion in direct and indirect economic activity and $145 million in state tax revenue," according to the study.

		Bill Impacts in 2023
Residential	Con Edison	$0.48/month (0.5% of bill)
	Upstate	$0.96/month (1.0% of bill)
Large C&I	Con Edison	$1,154/month (0.8% of bill)
	Upstate	$1,154/month (1.4% of bill)

The table above summarizes estimated bill impacts from Tiers 1, 2 and 3 of the CES under the base case. Bill impacts are shown in the year 2013, in real dollars (2015). 2014 upstate residential utilities' bill based on weighted average and number of customers; 2014 upstate large commercial and industrial utilities' bill based on straight average of bills. *Source: NYPSC*

Nuclear plants would be subsidized with a formula based on their costs of service. The study used a range of program costs — from $59 million to $658 million — based on low and high assumptions of the cost of generation of nuclear power and future energy prices.

Zero emission credits for nuclear plants will be based on an "open book" assessment of plants' costs. Detailed cost estimates were not published in the study "to avoid prejudicing this process," the study said.

The Upstate Energy Jobs Coalition of business, labor, economic development and other organizations reacted swiftly to the news.

"The state's analysis confirms what most of us already know, which is that the costs of allowing upstate nuclear plants, with all of their economic and clean energy benefits, to close prematurely greatly outweigh the costs of implementing the CES," said L. Michael Treadwell, CEO of the County of Oswego Industrial Development Agency. "The closure of FitzPatrick, Ginna and Nine Mile Point would be a severe blow to the economy upstate, a region that's already struggling to turn its economy around."

Entergy has said its James A. FitzPatrick plant would close despite state efforts to keep it operating. (See *New Lifeline for FitzPatrick Nuclear Plant*.) Exelon's R.E. Ginna plant is expected to close in a year once an above-market contract to keep it operating expires. (See *NYPSC OKs Ginna Deal*.)