RTO Insider

Your Eyes and Ears on the Organized Electric Markets

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

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FERC Could Face Months with 3 Commissioners

By Tom Kleckner

DES MOINES, Iowa — With the U.S. Senate bolting from D.C. on Friday for a five-week recess, it's becoming apparent that FERC will be operating with only three commissioners until at least well into September, according to a lawyer with the agency.

Patrick Clarey, a FERC attorney and liaison to SPP, told stakeholders July 29 that a lack of paperwork from the White House suggests the commission may be at "three [commissioners] for a bit."

FERC will soon find itself two short of a full panel when Commissioner Cheryl LaFleur, who has been on the commission for nine

Cheryl LaFleur, FERC | © *RTO Insider*

years, retires at the end of this month. (See *FERC Heaps Praise on Departing LaFleur*.) The fifth seat has been open since the death of Commissioner Kevin McIntyre in January.

The vacancies have drawn the attention of Sen. Joe Manchin (D-W.Va.), ranking member of the Energy and Natural Resources Committee. In a statement released by his press secretary July 30, Manchin urged the Trump administration to simultaneously nominate

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SPP's Brown to Retire as CEO in 2020

Will End 35 Years with RTO, 16 as CEO

By Tom Kleckner

DES MOINES, Iowa — Nick Brown remembers clearly back to 1985, when, as a young planning engineer, he took a leap of faith and joined an Arkansas company called Southwest Power Pool as Employee No. 7.

Back then, SPP was a much smaller regional organization and had yet to be incorporated. The Nebraska utilities had not joined, the Integrated System hadn't been integrated and operations in Arizona were unthinkable.

"I just jumped at [the opportunity]," Brown said. "A lot of people thought I was crazy for … joining an organization that was not even incorporated at the time. It didn't exist."

On July 30, Brown, 60, told SPP's Board of Directors he will be retiring after almost four decades in the electric industry and 35 years with the RTO, 16 as its CEO. His retirement will become effective in April 2020, by which time SPP will be a reliability coordinator and offering market services to companies in the Western Interconnection. (See *SPP on Track for WECC RC Certification*.)

Nick Brown (left) confers with board Chair Larry Altenbaumer during a break. | © *RTO Insider*

Brown was elected CEO in December 2003, replacing John Marschewski. Since then, he has overseen the organization's recognition by FERC as an RTO and the implementation of balancing and wholesale day-ahead markets. He has also focused the company on expansion into the Dakotas and as far west as Wyoming and Montana. SPP has invested nearly $10 billion in transmission facilities, and its footprint now extends to 14 states.

When the RTO was finally incorporated as a nonprofit in 1994, Brown notarized the legal documents. It still represents an important event to him.

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RTO Insider LLC
10837 Deborah Drive
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In this week's issue

Counterflow

By Steve Huntoon

NRDC Prescribes More Carbon Emissions

By Steve Huntoon

As in bridge, let's review the bidding.

The Natural Resources Defense Council attacked PJM,[1] accusing it of suppressing renewable resources relative to other RTOs, wasting billions of consumer dollars in the process and contending, in effect, that a cheap and reliable zero-carbon future could be ours if entities like PJM would just mend their evil ways.

My responding column showed that reality is different.[2] PJM hasn't obstructed renewable resources and, in fact, is outperforming its RTO brethren given the renewable cards the region was dealt. PJM's capacity market (like other RTO capacity markets) doesn't save uneconomic coal plants, doesn't impose excessive costs on consumers, doesn't suppress renewable resources and is a bulwark against bailout claims for uneconomic coal units that should retire.

NRDC ostensibly replied to my column.[3] Not, mind you, to address much of what I said. NRDC basically changed the subject. But its new claims are no more valid than the ones it made before, and its policy prescription is bigly counterproductive.

Natural Gas Plants Do the Heavy Lifting in Carbon Reduction

NRDC's first new claim is that all retiring coal plants should be replaced with renewable resources because natural gas units won't help reduce carbon emissions.

Specifically, NRDC says that carbon (CO_2) emissions will "plateau" if coal units are replaced with natural gas units, basing this on a claim that in PJM, carbon emissions increased in 2018 relative to 2017.[4]

In fact, carbon emissions per megawatt-hour in PJM *decreased* from 948 pounds in 2017 to 925 in 2018, another decline continuing the downward trend that I discussed in my column. This downward trend is shown in the graph below.[5]

Let's look at that graph for something else: the decline in carbon emissions from the advent of the capacity market until now, going from about 1,225 pounds/MWh in 2008 to about 925 pounds/MWh in 2018, a reduction of 300 pounds/MWh.

Here's a pop quiz question: How much of that 300-pounds/MWh reduction is attributable to wind and solar generation?

a. 90%

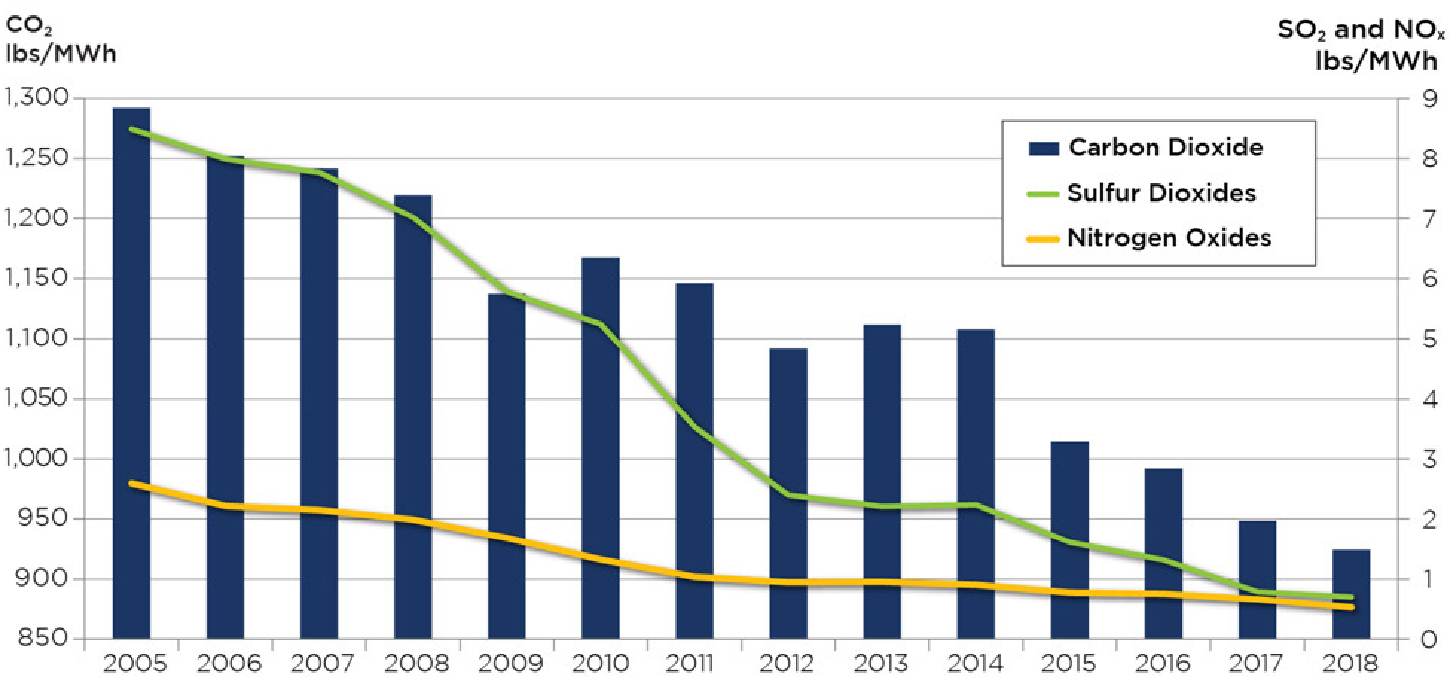
b. 50%

c. 10%

The answer is c, only 10% of the reduction is attributable to wind and solar generation.[6] The reality is that new natural gas plants, and higher dispatch of gas plants generally, are responsible for 90% of the carbon-emission reduction in PJM.

This reality makes perfect sense. Remember that we're not replacing average coal units with average natural gas units; we're replacing old, inefficient coal units with new, efficient natural gas units. So it's not just the rule-of-thumb 50% reduction in carbon; it's more like a 65% reduction in carbon, along with a staggering 97% reduction in nitrogen oxides (NO_x) and a 99.8% reduction in sulfur dioxide (SO_2).[7]

Natural gas plants do the heavy lifting.



PJM says its percentage of renewable energy, while small, is growing. | *PJM*

Counterflow

By Steve Huntoon

The PJM Capacity Market Works to Reduce Carbon Emissions

NRDC's second new claim is that the PJM capacity market is flawed because the RTO could procure the targeted level of resources at a much lower price than it does.

NRDC gives a graphic example with a hypothetical clearing price of about $60/MW-day at the target reserve margin. NRDC's example has the fatal flaw of its supply curve *not actually intersecting the demand curve at that price.*[8]

So it's not a clearing price at all. ECON 101: Clearing price is where the supply and demand curves intersect. NRDC creates a fantasy.

In practical terms, NRDC is saying that PJM should procure the target reserve margin for about $60/MW-day — when the cost of new entry is about $300/MW-day.[9]

Under NRDC's approach, new entrants would never recover the CONE. They will know that. *Ergo*, no new entry.

The inefficient old coal units would no longer be forced out by new, efficient natural gas plants. The coal plants hang on and continue polluting. Except for the small contribution from renewables discussed above, PJM's downtrend trend in carbon (and other pollutants) would come to an end.

Does that sound good to you? ■

[1] https://www.utilitydive.com/news/comparing-americas-grid-operators-on-clean-energy-progress-pjm-is-headed/557994/.

[2] https://rtoinsider.com/counterflow-scary-wrong-139476/.

[3] https://rtoinsider.com/pjm-market-design-hurting-clean-energy-140043/.

[4] NRDC claims "carbon pollution in the region (and nationwide) increased year over year in 2018." This is true (barely), but only in a literal sense because of an overall increase in PJM generation in 2018 relative to 2017.

[5] https://www.pjm.com/-/media/committees-groups/task-forces/cpstf/20190726/20190726-item-06b-renewable-portfolio-standards-pjm-eis-and-generation-attribute-tracking-system.ashx (slide 3).

[6] Wind and solar generation accounted for 2.8% of total PJM generation in 2018, http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2018/2018-som-pjm-sec8.pdf (page 356). So without that 2.8%, the 925-pounds/MWh emission rate in 2018 would have been about 950 pounds/MWh, which would have been a reduction of 275 pounds/MWh from the 2008 level. So wind and solar are responsible for a 25-pounds/MWh reduction, and natural gas plants — new plants and higher dispatch generally — are responsible for a 275-pounds/MWh reduction.

[7] Using the Energy Information Administration's eGRID data available here, https://www.epa.gov/sites/production/files/2018-02/egrid2016_data.xlsx (PLNT16 tab, columns PLCO2RTA, PLNOXRTA, PLSO2RTA), for a sample of five new natural gas plants (Newark, Woodbridge, Panda Liberty, Panda Patriot and Brunswick County) and five recently retired coal plants (Will County, Conesville, J.M. Stuart, Miami Fort and Bruce Mansfield).

[8] Please note that what NRDC calls "Huntoon's Alternative Supply Curve" actually does intersect with the demand curve, at a clearing price of about $300/MW-day.

[9] The estimated net cost of new entry for the overall PJM region was about $320/MW-day in the last capacity auction. Estimated net CONE in the next auction is about $260/MW-day. Competitive markets continue to drive down costs.

FERC/Federal News

FERC Could Face Months with 3 Commissioners

Continued from page 1

two individuals, one Republican and one Democrat, to fill the empty seats.

"FERC was established as a five-member commission and has historically operated above the political fray," the statement read. "In today's changing energy environment, it has never been more important to the security of our nation to maintain this precedent. I urge President Trump to nominate two individuals … so the Senate can consider and confirm them together in the bipartisan manner that has become the norm and restore a fully functioning commission."

The White House has yet to submit a nominee replacing McIntyre. FERC can have no more than three commissioners from the same political party, with the president's party holding the advantage. Traditionally, the Senate caucus for the party not holding the White House recommends its party's nominations to the president, who usually complies.

The commission will continue to have a quorum with Chairman Neil Chatterjee and

Sen. Joe Manchin | © *RTO Insider*

Commissioner Bernard McNamee, both Republicans, along with Democratic Commissioner Richard Glick.

Chatterjee has the most seniority, having been confirmed in August 2017. He became chairman last October, when McIntyre had to step down as his illness worsened. Glick was confirmed in November 2017 and McNamee last December.

FERC operated without a quorum for six months in 2017 before the confirmation of Chatterjee and Robert Powelson, who left the commission in August 2018. ■

CAISO/West News

CPUC Program 'Runs Afoul' of PURPA, Court Rules

By Robert Mullin

In a decision that could boost small solar development in California, a federal appeals court last week struck down a state program that sets the terms by which investor-owned utilities must contract with alternative energy suppliers.

The *decision* by the 9th U.S. Circuit Court of Appeals found California's Renewable Market Adjusting Tariff (ReMAT) program violates the Public Utility Regulatory Policies Act by capping the volume of energy that utilities must purchase from qualifying facilities and setting contracts at a market-based rate rather than one based on a utility's avoided cost. The ruling affirmed a district court opinion.

"The district court observed that 'despite the complex regulatory and factual background' in this case, 'the key legal issues turned out to be straightforward.' We agree," Judge M. Margaret McKeown wrote in the appellate panel's opinion.

The case arose when Winding Creek Solar, a QF seeking to develop a 1-MW solar facility in Lodi, Calif., contested the ReMAT program, which the California Public Utilities Commission implemented in 2013 to set a market-based rate for energy generated by QFs.

After Winding Creek unsuccessfully challenged ReMAT at FERC, it filed suit in the U.S District Court for the Northern District of California, which issued a summary judgment in favor of the company but declined to grant its preferred remedy of receiving the initial $89.23/MWh contract price offered under ReMAT at the program's inception. The QF then appealed that decision to the 9th Circuit for further review.

'Essentially an Auction'

The legal questions over ReMAT came down to its design, which was intended to bring an element of competition to QF contracting while providing suppliers with access to a market.

Under the program, QFs in a given utility service territory are placed into a queue on a first-come, first-served basis. Every two months, in what the court described as "essentially an auction," the utility offers to contract with QFs at the front of the queue at a predefined price. QFs are free to accept or reject the contract, and those choosing the latter can hold their place in the queue until the next round of offerings two months later.

The CPUC caps the volume of energy the state's three large investor-owned utilities must buy through the program at 750 MW, which is divided among the IOUs based on their share of peak load. Each utility is additionally allowed to subtract from its share any energy that it purchases under other CPUC programs.

The Winding Creek facility would be sited in the territory of Pacific Gas and Electric, which is obligated to purchase about 150 MW of energy under ReMAT, divided equally among "baseload," "non-peaking as-available" and "peaking as-available" generation. Winding Creek falls under the last category.

The court pointed out that PG&E is obligated to purchase no more than 5 MW of energy from each category over a two-month period, allowing it to halt contract offers after reaching the caps.

The ReMAT program also functions as a kind of dynamic price-setter for QF contracts. While the CPUC initially set a QF contract price of $89.23/MWh for peaking as-available generation, ReMAT prices can adjust every two months based on the willingness of QFs to accept contracts at the price offered during the previous bidding interval. If QFs collectively offer less than 1 MW of energy during a two-month period (and there are at least five unaffiliated QFs in the queue), the price rises for the next interval; if QFs supply more than 5 MW, the price declines. In cases when QFs supply 1 to 5 MW, the price remains unchanged. Prices adjust based on a formula provided by the CPUC.

When Winding Creek was accepted into the ReMAT program in 2013, it was not placed near the top of the queue and did not receive the initial $89.23/MWh price. By the time it received an offer in March 2014, the contract price had fallen to $77.23/MWh, which the developer rejected because it could not operate the facility at that price.

Two Wrongs

The 9th Circuit first took issue with ReMAT's cap on the amount of energy utilities must purchase from QFs, calling it impermissible because it violates PURPA's "must-take" provision.

"As a result [of the cap], a utility could purchase less energy than a QF makes available, an outcome forbidden by PURPA," the court found.

The court further determined that ReMAT's

| © RTO Insider

pricing scheme "runs afoul" of PURPA's requirement that utilities contract with QFs at their avoided cost rate (ACR). While acknowledging that state agencies have flexibility in calculating that rate, the court said "the ReMAT price, which is arbitrarily adjusted every two months according to the QFs' willingness to supply energy at the predefined price, strays too far afield from a utility's but-for costs to satisfy PURPA."

The court went on to reject the CPUC's argument that its other PURPA program, known as the "Standard Contract," provides QFs a sufficient alternative to ReMAT. While that program offers an ACR based on a six-variable formula, the court found that three of the six "are impossible to determine at the time of contracting."

"The Standard Contract violates PURPA because it fails to give QFs the option to calculate avoided cost at the time of contracting," the court said.

The court pointed out that PURPA mandates that QFs be given a choice of calculating the avoided cost at either the time of contracting or time of delivery.

"The bottom line is that two wrongs don't make a right. Because neither option offered by the CPUC is PURPA- compliant, California's regulatory scheme is pre-empted by federal law."

But the appellate court also did not provide full satisfaction to Winding Creek, agreeing with the lower court's decision that it would not be offering "equitable relief" by granting the QF a contract at ReMAT's initial $89.23/MWh price.

"Indeed, it would be inappropriate to order a non-party to contract with Winding Creek under a modified version of the very program the court had just determined to be pre-empted by federal regulation," the court found. "It is not the court's job to fashion a new contract to Winding Creek's liking." ■

CAISO/West News

Rising Solar Boosts EIM Q2 Benefits to $86M

By Robert Mullin

CAISO secured the largest chunk of the Western Energy Imbalance Market's $86 million in gross benefits during the second quarter as the solar-heavy ISO exported nearly 2.16 million MWh to its neighbors during the period — more than seven times the volume of the market's next biggest exporter.

The quarterly benefits *report* released by CAISO on Wednesday showed the market's estimated benefits rose 21% compared with a year earlier and just slightly from the first quarter. (See *Cold Forces NW to Dip More Deeply into EIM as Avista Joins*.)

The report illustrates a continuation of a trend in which CAISO exports large amounts of surplus solar energy to fellow market participants during the spring as California demand recedes because of mild weather. The ISO's exports were up nearly 14% compared with the second quarter of 2018. (See *EIM Benefits Surge to $71.2M in Q2*.)

But despite that boost in exports, CAISO's benefits declined by almost 16% year over year to $23.53 million, the result of competition from lower-priced exports. The Arizona Public Service balancing authority area (BAA), which also boasts strong solar capacity, saw its net exports surge by more than one-third to 305,752 MWh, while its overall benefits declined slightly to $8.55 million.

The EIM defines benefits as cost savings from serving load, increased merchant profits and the avoided curtailment of surplus low-cost renewable energy.

Following the pattern of previous springs, PacifiCorp once again absorbed the largest share of the cheap power, taking about 1.88 million MWh of net imports into its PacifiCorp-East (PACE) and PacifiCorp-West (PACW) BAAs, up 27% from a year earlier. The utility's benefits surged 30% to $15.15 million.

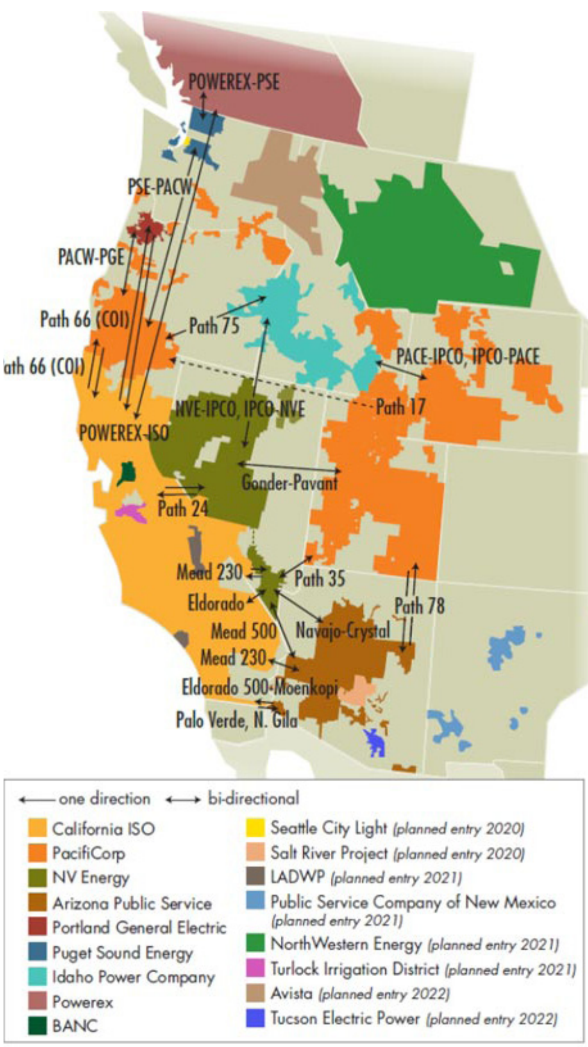
Powerex doubled its year-over-year net imports to 360,341 MWh, signaling that a relaxation of EIM local market power mitigation rules — which had previously forced the hydro-rich company to bid energy into the market when it actually intended to buy — had freed its hand to engage in its customary practice of buying heavily during periods of oversupply. (See *CAISO Board OKs Market Power Mitigation Remedy*.) The Canada-based marketing arm of BC Hydro saw its benefits jump 37% to $3.06 million.

Portland General Electric earned the third-largest share of market benefits at $10.89 million, followed by the EIM's newest member, Balancing Authority of Northern California at $8.81 million. Trailing APS in the benefits roundup were Idaho Power ($8.33 million), NV Energy ($4.62 million) and Puget Sound Energy ($3.06 million).

NV Energy maintained its position as the BAA with the largest volume of wheel-through transfers at 659,897 MWh (far outpacing its combined 382,167 MWh of exports and imports), followed by APS at 514,915 MWh and PACW at 252,686 MWh, showing the various paths California's solar exports followed to serve the coal-heavy PACE territory.

The EIM helped its participants avoid curtailment of 132,937 MWh of renewable energy during the quarter, displacing about 56,897 metric tons of CO_2 emissions. The market has reduced CO_2 by 403,546 metric tons since 2015.

The ISO estimates the EIM has yielded $736.26 million in gross benefits since it was launched with PacifiCorp as its first member in November 2014. Future participants include Salt River Project and Seattle City Light, scheduled to join in April 2020; Los Angeles Department of Water and Power, NorthWestern Energy, Turlock Irrigation District and Public Service Company of New Mexico (2021); and Tucson Electric Power and Avista (2022). ■



Path	Estimated Max Capacity (MW)
Path 24 *(west to east)*	100
Path 24 *(east to west)*	35-90
Eldorado	797
Path 35 *(west to east)*	580
Path 35 *(east to west)*	538
Gonder-Pavant	130
PACW to PGE	320
Path 66 *(ISO to PGE)*	627
Path 66 *(PGE to ISO)*	296
Path 66 *(ISO to PACW)*	331
Path 66 *(PACW to ISO)*	432
Path 17	0-400[1] [2]
PSE to PACW	300
Eldorado 500-Moenkopi	732
Palo Verde, N. Gila	3,151
Path 78 *(PACE to APS)*	625
Path 78 *(APS to PACE)*	660
Navajo-Crystal	522
Mead 500	349
Mead 230 *(APS <–> ISO)*	236
Mead 230 *(ISO to NVE)*	3,443
Mead 230 *(NVE to ISO)*	3,476
IPCO to PACW (Path 75)	1,500
PACW to IPCO (Path 75)	400-510
PACE to IPCO	2,557
IPCO to PACE	1,550
NVE to IPCO	262
IPCO to NVE	390-478
Powerex <–> PSE	150
Powerex <–> ISO	150

[1] Is an optional path available for PACE-PACW EIM transfers and th capacity is a subset of PACE-IPCO/IPCO-PACE and Path 75 capaci

[2] When in use, the available capacity on PACE-IPCO/IPCO-PACE a Path 75 will be subsequently reduced by the used amount on Path 1 and not double counted.

Current as of July 2019

Map shows the transfer paths available among Western EIM participants | *CAISO*

ISO-NE News

NE States See Mixed Results on Energy Policy

By Michael Kuser

BOSTON — Fifty power industry participants gathered at the law offices of Brown Rudnick on Thursday to hear the Northeast Clean Energy Council (*NECEC*) provide updates on new energy legislation — or a lack thereof — in all six New England states.

The discussion illustrated the uneven — if not divergent — development of clean energy goals in a region tightly knit together by a common grid.

Here's some of what we heard.

Frustration in Montpelier


Olivia Campbell Andersen, REV | © RTO Insider

Olivia Campbell Andersen, executive director of *Renewable Energy Vermont*, said 40% of members in her state's House of Representatives were new this term, with every committee getting new leadership, which hindered lawmaking.

"We all thought that 2019 would be the year when everyone comes together on climate," Andersen said. "Throughout the session, both the public and members had high expectations, which were not really met by the leadership, notably" House Speaker Mitzi Johnson.

The legislature's climate caucus grew, but it was difficult to turn that interest into action with so many new members and "a big learning curve," she said.

Andersen highlighted "exciting news on the renewable electricity space, with the first expansion of net metering," but nonetheless she said "we ended the session with a lot of frustration amongst those freshmen members."

The largely unchanged state Senate didn't share those challenges, she said.

Sea Change in Maine


Marty Grohman, E2Tech | © RTO Insider

Marty Grohman, executive director of the Environmental and Energy Technology Council of Maine (*E2Tech*), a clean energy advocacy group, referred to a "sea change up there in Maine" and said "passivity is not an option."

Clean energy issues have come to the fore since Democratic Gov. Janet Mills was elected last fall, said Grohman, a former state legislator.

"*LD 1711* [An Act To Promote Solar Energy Projects and Distributed Generation Resources] is a really significant piece of legislation that's going to move the needle in Maine for years to come," Grohman said. "As a person who has worked in the large rooftop solar industry, there's a pretty big procurement for commercial and industrial solar here that has a pretty aggressive structure for those types of larger ... distribution warehouse, shopping mall-type installations."

Grohman also highlighted the passage of *LD 1430*, which clarifies the rules around business equipment and property tax exemptions for renewable energy installations, as well as "a significant reform" of Maine's renewable portfolio standard.

"There's lot in the energy efficiency world, too, in Maine," he said. "We are net receivers in [the Regional Greenhouse Gas Initiative], so we have some dollars coming in, and that goes to energy efficiency."

Stranger Things


Dan Bosley, NECEC | © RTO Insider

Former Massachusetts Rep. Dan Bosley, now NECEC's government relations executive, said it was "a strange year" in Rhode Island.

"First, there were changes in the leadership of the Energy Committee," Bosley said. "There was a mini speaker fight, and most progressives, which included the energy chair, did not vote for the speaker, and so were replaced with people who did ... and there seems to be some tension between the administration and the legislature ... which slowed things down."

NECEC observed a trend of partial progress and consolidation of effort this year around its priorities for the state, Bosley said.

One House of Representatives bill (*H5789*), for example, pitted clean energy advocates against conservationists who condemned the loss of open green space to solar farms throughout the state.

"The renewable energy siting and land use bill was a comprehensive bill that spun off from the permitting process — how communities want [their own] process, and we wanted one siting process for the entire state," Bosley said.

"Unfortunately, even though the Senate passed a trimmed-back ... version, it wasn't taken up in the House. The same thing happened with virtual net metering," he said. "Fortunately, a lot of work has been done, so that when lawmakers return for the second year of the biennium, a lot of these bills will get done."

'Veto Palooza' in New Hampshire


Madeleine Mineau, CleanEnergyNH | © RTO Insider

Madeleine Mineau of advocacy group *Clean Energy New Hampshire* said her state saw the majorities in both legislative chambers flip from Republican to Democrat, but it kept the same governor, Republican Chris Sununu.

"That's a little bit of an unusual situation for New Hampshire to have Democratic majorities on the House and Senate, and we are more used to having divided government going the other way around," Mineau said.

There was enthusiasm to introduce a lot of bills that would pay for renewable energy and efficiency, and her organization tracked about 40 bills this session while keeping an eye on the budget, she said.

The bills covered "a broad array of topics, from our renewable portfolio standard to net metering, low- and moderate-income community solar, municipal aggregation, street lights, energy storage, electric vehicles, energy efficiency and building codes," Mineau said.

"Some bills made it through, some didn't, but we are in the middle of veto palooza," she said. "We're up to 41 vetoes at this point, and there's still about 60-ish bills that are making their way to the governor, so we're expecting more vetoes to come."

The vetoed bills include HB 365, which would increase the size of projects that can participate in net metering up to 5 MW.

"We went through this last year with Senate Bill 446, which aimed to do the same thing, which was vetoed, and the veto override came short by a handful of votes," Mineau said. "There was really strong bipartisan support

ISO-NE News

for this bill during the session, so we're hoping that that means there's a good chance to have a successful veto override."

Other vetoed bills include Senate Bill 72, which would eliminate "REC sweeping," a regulatory loophole that allows electricity producers to sweep up unregistered renewable energy credits without having to pay for them.

"We have a credit calculated for unregistered RECs that get credited for free to everyone that has an RPS obligation, and it's really driving down demand, especially for our solar RECs," Mineau said.

"In past years, the free credit for these unregistered RECs has been bigger than the total obligation, so it's made it hard to find a buyer for a solar REC in New Hampshire, and if you can, the value is really low," she said.

Sununu also vetoed SB 168, which would have increased the obligation for solar RECs in the state's RPS.

The legislature will likely schedule two veto override session days next month, Mineau said.

Lawmakers overrode the veto of a biomass bill last year, which offered three years of support for six biomass electric plants in the state. The measure was then taken to FERC as a violation of the Federal Power Act, where it remains at the moment, she said.

The Bay State Buy

Bosley said that after a slow start, the Massachusetts legislature held 12 hearings related to clean energy bills, but in eight different committees, and NECEC filed testimony on multiple bills.

NECEC is particularly interested in House Speaker Robert DeLeo's GreenWorks legislation (*H3987*), which authorizes the state to borrow $1.3 billion and spend $100 million a year over a decade to combat various effects of climate change, particularly in coastal areas.

"The GreenWorks bill is important for several reasons," Bosley said, including its provisions to spend $100 million for municipal microgrids, $125 million for electrification of municipal fleets and charging infrastructure, $20 million for local sustainability measures, $50 million in low-interest loans for resilience projects, and $30 million for EV rebates.

The second important bill, *S10*, provides about $137 million for climate change adaptation infrastructure spending, he said.

"Our advice is to combine the two bills, because a billion dollars doesn't go as far as you think," Bosley said.

Peter Rothstein, NECEC | © *RTO Insider*

NECEC President Peter Rothstein said he represented the organization on the Massachusetts Global Warming Solutions Act Implementation Advisory Committee, which is examining all the structures needed to advance aggressive clean energy goals.

Rothstein said the majority of the committee is pushing to have the studies currently underway examine a scenario of net zero greenhouse gas emissions by 2050 in addition to the state's current goal of an 80% reduction by that year, "with the expectation that that's going to be part of the debate."

Nutmeg Promises

Michael J. Martone, Murtha Cullina | © *RTO Insider*

In Connecticut, *HB 5030* would have prevented the sweeping of $50 million from the energy efficiency fund, but it did not pass in the General Assembly session that ended May 5; however, Gov. Ned Lamont committed not to raid the fund, said attorney Michael J. Martone of law firm *Murtha Cullina*.

"The Assembly passed two major pieces of energy legislation, the first of which, *HB 5002*, started out as the Green New Deal and morphed into the omnibus renewable energy fund," Martone said.

The bill expanded the virtual net metering cap from $10 million worth of credits to $20 million, extended the outright zero-emission REC two years and called for a study of the use of solar near state highways, he said.

"The most controversial piece of the bill allows the EDCs [electric distribution companies] to own energy storage, and the generation community was absolutely off the charts with this," Martone said. "It came out at the very last minute. Typically in Connecticut, you have public hearings prior to bills moving forward. This issue did not have a public hearing ... and the generators felt that this was allowing the EDCs to get back into generation."

The legislature saw the difficulty, he said.

"They felt that this was allowing for resiliency, and there was no intent to give the EDCs an open field run," Martone said, "but the fact of the matter is the section reads: 'Nothing in this section shall be interpreted to prohibit or limit the ability of an EDC from building, owning or operating an energy storage system.' So it remains to be seen where this is going to go."

The most important piece of the bill is its requirement for a study of distributed energy, he said. The tight time frame in the bill calls for the Public Utilities Regulatory Authority to get back to the Energy and Technology Committee by July 1, 2020.

"I can't stress enough that if you do business in Connecticut, this is the road, this is what will determine where we go from here," Martone said.

The other big piece of legislation, *HB 7156*, authorizes the state's Department of Energy and Environmental Protection to procure 2,000 MW of offshore wind by 2030 and requires a solicitation of at least 400 MW this year, he said.

"It's a fast track," Martone said, with a request for proposals coming out Aug. 15, bids due Sept. 30 and contracts to be announced in November.

Ambitious Empire

Jeremy McDiarmid, NECEC vice president for policy and government affairs, talked about New York's new law, the Climate Leadership and Community Protection Act (*A8429*), signed by Gov. Andrew Cuomo on July 18.

"This bill codifies into statute a number of Gov. Cuomo's clean energy goals, but it also incorporates a lot of environmental justice commitments that have often not been as prominent in clean energy legislation," McDiarmid said.

The new law mandates 70% of the state's electricity be generated by renewable resources by 2030, sets an offshore wind energy goal of 9 GW by 2035, aims to make the electric system carbon-neutral by 2040, doubles distributed solar generation to 6 GW by 2025 and calls for 3 GW of energy storage by 2030. (See *Carbon Pricing Study Navigates Shifting NY Landscape*.)

"There is a follow-on effect with other states ... New York is setting the bar pretty high," Grohman said.

"Realistically, nothing this ambitious is going to happen in New Hampshire anytime soon," Mineau said. "The concern would be how much is this going to cost us, and climate science is not a generally accepted fact at our State House. If climate change is mentioned at a hearing, the hearing becomes a debate about whether or not climate change is real." ■

ISO-NE News

Eversource Earnings Go South on Northern Pass

By Michael Kuser

Eversource Energy's earnings fell sharply last quarter after the company was forced to write off $204 million from its investment in the failed Northern Pass transmission project — but its fortunes are looking more promising offshore.

The company last week *reported* second-quarter earnings of $31.5 million ($0.10/share), compared with $242.8 million ($0.76/share) in the same period a year ago.

"The Northern Pass impairment was a difficult step for us to take given the economic and environmental benefits the project could have brought to New England, but it does not take away from the fact that 2019 has been very positive for Eversource," CEO Jim Judge said in a statement.

Excluding the impairment, Eversource earned $235.9 million ($0.74/share) in the quarter.

The company's transmission segment, excluding the impairment, earned $117 million during the period, compared to $112.7 million a year earlier, while the distribution segment took in $105.4 million, up from $101.3 million.

Offshore Wind Looks Bright

New York last month awarded Eversource and its partner Ørsted an 880-MW contract for the offshore Sunrise Wind joint venture.

The company is targeting an in-service date of 2024 and signed a memorandum of understanding with Consolidated Edison and the New York Power Authority on the related transmission facilities, CFO Phil Lembo told analysts during a *call* Thursday.

The companies also jointly own the 130-MW South Fork project, 30 miles off Montauk, Long Island.

In Rhode Island, state regulators in June approved a 400-MW contract for a portion of the companies' offshore Revolution Wind project. Connecticut regulators had previously approved a separate 200-MW contract for the project and are reviewing a deal for another 104 MW, Lembo said.

He noted that Massachusetts issued its second offshore wind request for proposals of at least 400 MW in May.

"But as they did in the first RFP, they said bidders can also offer up to 800 MW or as little as 200 MW of offshore wind," Lembo said, adding that Eversource and Ørsted are developing and refining appropriate bid strategies for both Massachusetts and Connecticut, which is seeking another 2,000 MW of OSW by 2030.

Massachusetts lawmakers passed a bill Wednesday that lifts the price cap on OSW solicitations for one year, which prior legislation had mandated must get progressively cheaper.

"For this upcoming solicitation, the cap in Massachusetts is removed, and I think that's just recognition that there's many things that they hadn't thought of at the time when the cap was instituted, but they still are focused on cost going forward," Lembo said.

State Updates

Lembo said the company is also focused on grid modernization in Connecticut, awaiting a decision by regulators on advanced metering infrastructure. The state's legislature clarified existing statutes to explicitly allow regulated utilities to build and operate energy storage facilities that can be shown to benefit customers, he said.

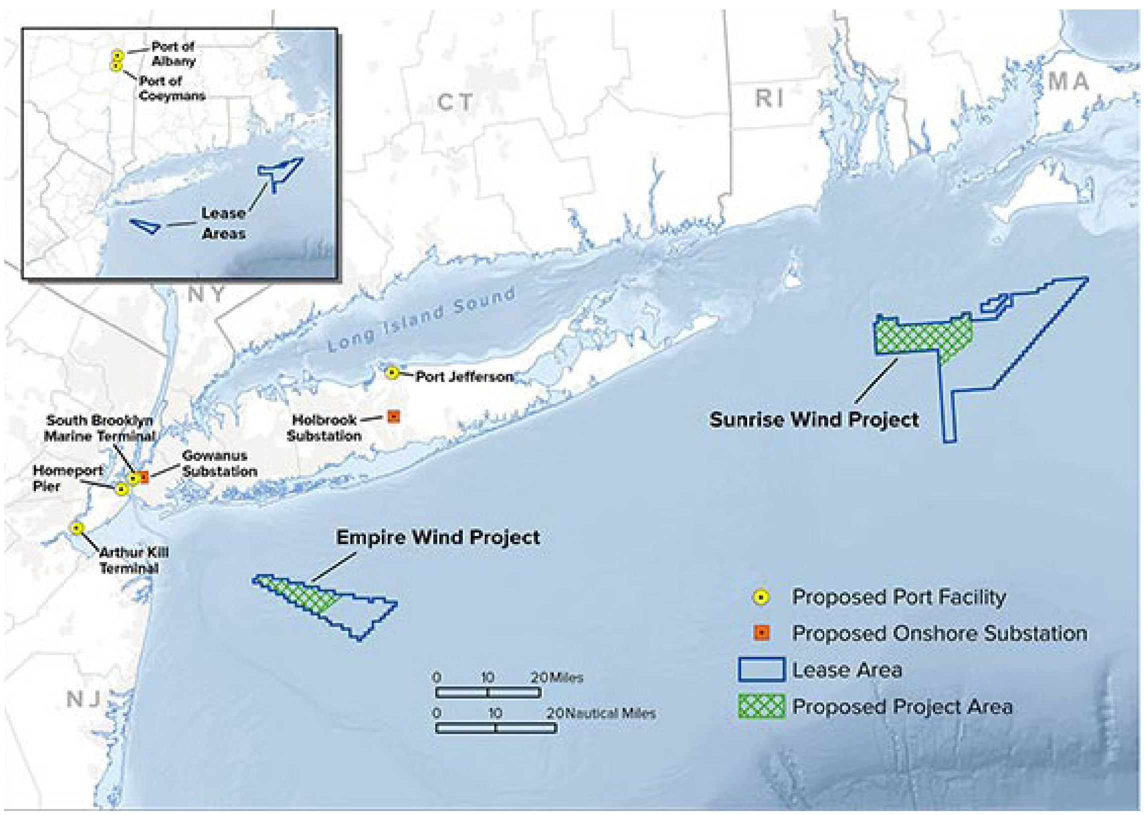
Connecticut is also in the process of raising the number of commissioners on its Public Utilities Regulatory Authority from to five, Lembo noted.

"So right now, we believe [grid modernization] is certainly one of the issues that is on the front burner of the agenda at the PURA, but it's hard to say precisely when we expect it ... we do expect it to come out this year," he said.

In Massachusetts, the company is on pace to complete a $45 million capital program to install more than 3,500 electric vehicle charging ports by the end of next year, Lembo said.

"We are poised to propose a similar electric vehicle charging program in Connecticut, pending guidance from regulators on a broader review of grid [modernization]," he said.

Call transcript courtesy of Seeking Alpha. ■



This map shows the lease areas of the two offshore wind projects awarded by New York on July 18: the 816-MW Empire Wind and 880-MW Sunrise Wind. | *NYSERDA*

ISO-NE News

NEPOOL Participants Committee Briefs

DA Generation Meets 99.8% of Peak Load for July

ISO-NE COO Vamsi Chadalavada told the New England Power Pool Participants Committee that average day-ahead cleared physical energy during peak hours for July was 99.8% of forecasted load, up from 99.1% during June. "As far as I can recall, that's about the highest that we've seen over the past few years," he said. [Editor's Note: Chadalavada approved his comments for publication after the PC meeting.]

The RTO prefers to fill its projected load through day-ahead awards because they maximize flexibility and minimize costs. Once the day-ahead market closes, the RTO's choices are reduced because long-lead-time generators may not be available, resulting in greater reliance on more expensive, fast-start generators.

Daily net commitment period compensation (NCPC) payments for July were $2.7 million, up $1 million from June. Chadalavada said the payments were mostly the result of high loads in the Southeast Massachusetts/Rhode Island area and transmission outages on two 345-kV lines in Southern Maine.

Chadalavada said the SEMA/RI commitments are the result of a lack of a large generator in the load zone following the retirement of the Pilgrim nuclear plant.

"The need for second contingency protection in SEMA/RI is higher at loads greater than 20,000 MW," he said.

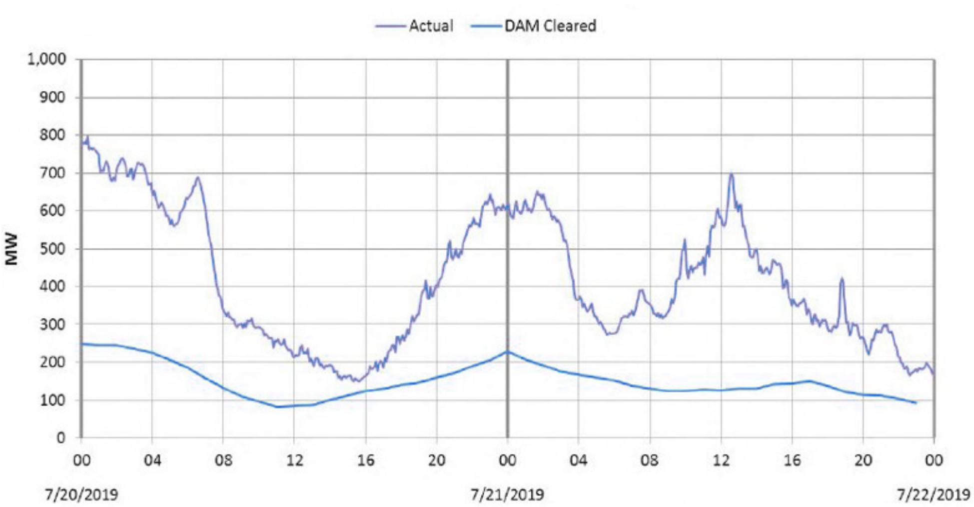
Chadalavada also discussed the July 20-21 heat wave, which resulted in peak loads of more than 24,100 MW for the hour ending 18:00 on both days. The peak for the month, however, came July 30, when load hit 24,300 MW at HE 18:00.

Chadalavada said actual conditions on July 20 were close to the weather forecasts from the day before, but the weather forecasts the RTO relies on overestimated July 21 dewpoints by 3 to 4 degrees, representing 800 to 1,000 MW of load.

About 2,000 MW of generation self-scheduled on July 20 and 400 MW on July 21 to perform "Claim Capability Audits." There also were some hours of negative prices in Northern Maine driven by New Brunswick imports and wind generation.

That, combined with deviations from day-ahead interchange and wind production schedules, resulted in LMPs ranging from $20 to $60/MWh.

On July 20, there were "substantial amounts of energy in real time that were not part of the day-ahead clear. So, the combination of all of these factors led to lower LMPs than maybe one would expect for a hot weekend," he said.



Wind production - July 20 to 21, 2019 | *NEPOOL*

Chadalavada also reminded stakeholders of a public *meeting* Sept. 12 in Boston on *Regional System Plan 19*. Stakeholder *comments* on the plan will be reviewed by the Planning Advisory Committee on Thursday.

PC OKs Revisions to Import Capacity Rules

The PC on Friday approved changes to the requirements for submitting external transactions for capacity imports, a move that ISO-NE said will streamline the procedure and align it with its Pay-for-Performance program.

The committee approved without opposition revisions to Market Rule 1, Manual M-11 (Market Operations) and Operating Procedure 9 (Scheduling and Dispatch of External Transactions), as recommended by the Markets Committee at its July 8-10 meeting. (See *NEPOOL Markets Committee Briefs: July 8-10, 2019*.)

The committee also approved revisions to OP-5 (Resource Maintenance and Outage Scheduling) over the objections of numerous generators, including Calpine, Dynegy and FirstLight Power. The changes, which were recommended by the Reliability Committee at its July 16-17 meeting, cleared the PC with 71.6% support. (See *NEPOOL RC/TC Briefs: July 16-17, 2019*.)

The changes to MR 1 and OP-9 were prompted by a new Enhanced Energy Scheduling (EES) software platform scheduled for implementation by October. They also include clean-ups to remove outdated provisions relating to coordinated transaction scheduling (CTS) and dynamic scheduling.

The RTO identified four primary changes:

- Day-ahead and real-time energy offers will no longer have to be submitted with the same transaction;
- A day-ahead transaction will not be required when the interface's import transfer capability is zero;
- Real-time transactions will no longer be required for capacity that wheels through NYISO to a CTS interface; and
- All capacity imports backed by an external resource will have the same requirements pertaining to resource outages (i.e., to notify ISO-NE of outages and comply with the

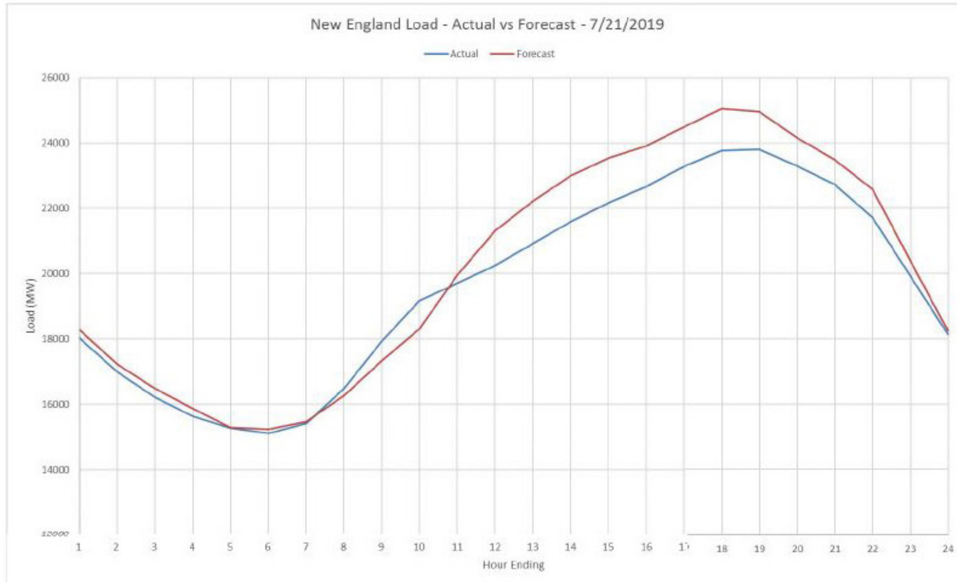
ISO-NE News

requirements of the native control area).

The RTO said the revisions to OP-5 are conforming changes to align with the revised market rule language for capacity imports. They will require market participants to notify the RTO if there is a reduction in capability that impacts the capacity supply obligation of the import resource(s).

Brett Kruse, vice president of governmental and regulatory affairs for Calpine, reiterated his previous opposition.

"We do not believe that external capacity should be counted as capacity unless it's a specific generator with some form of firm point-to-point transmission or some other firm transmission product to ensure deliverability," Kruse said in a statement he approved for publication after the PC meeting. "So even though that's been longstanding [policy] — we allow that kind of stuff in New England — we'll always vote against that."



Sunday, July 21, 2019, forecast vs. actual load | *NEPOOL*

Consent Agenda

The committee also approved several measures on its consent agenda during its *meeting*, which lasted less than an hour.

- Revisions to MR 1 and Tariff section 1.2.2 requiring solar resources to provide meteorological and operational data to support forecasting. It also consolidates in MR 1 the wind data forecasting requirements, which will be moved from Tariff Schedule 22.
- Revisions to OP-8 to delete obsolete NERC provisions and align the procedure with Northeast Power Coordinating Council Directory No. 5.
- Revisions to OP-13 and Appendix B to simplify references and make minor clarifications to terminology regarding under-frequency load shedding (UFLS) islands. Also clarifies compensatory load shed requirements and incorporates references to NERC's regional reliability standard for under-frequency set points.
- Revisions to OP-16 Appendix K regarding monthly ISO-NE updates and quarterly transmission planner updates to the short-circuit base cases. Reorganizes the document regarding generators and transmission owners.
- Revisions to OP-2 Appendix C regarding the provision of contact information in requests for electronic copies of the equipment maintenance request form.
- Revisions to OP-24 reflecting the change in Appendix C. The original diagram of relay outage locations was replaced with a list of transmission facilities for which TOs are reporting protection settings, characteristics, failures or degradation.
- Revisions to OP-12 and Appendix D to clarify local control center actions for providing voltage schedules to generators.
- Revisions to section I.2.2 of the Tariff to incorporate definitions for interconnection reliability operating limit (IROL) and system operating limit (SOL). ■

— Rich Heidorn Jr.

NEPOOL Markets Committee Briefs

Assessing ESI Risk Premiums

The New England Power Pool Markets Committee last week continued to discuss impact assessments of ISO-NE's proposed energy security improvements (ESI).

Analysis Group's Todd Schatzki gave a *presentation* on additional preliminary results of a study on the risk premium on day-ahead energy option offers, as well as on two scenarios for the winter of 2025/26: a current market rules case, and one reflecting proposed ESI rules and expected market responses. (See "Assessing ESI Impacts," *NEPOOL Markets Committee Briefs: July 8-10, 2019*.)

Unrecovered cost of actions taken to secure energy inventory will be compared to the change in net revenues associated with taking each action, Schatzki said, reading from the slides.

The risk premium depends on factors that affect the riskiness of the option position, including the expected marginal cost of production given a resource's fuel inventory; the option strike price; and LMP volatility.

The analysis will consider three different winter scenarios for model year 2025/26: mild (based on 2016-17), moderate (2017-18) and severe (2013-14).

Analysis Group's production cost model does not capture every market feature, such as congestion; commitment/start-up and min-load costs; and full EIS calculations, he said.

Schatzki said the results provide reasonable estimates of impacts, although they are preliminary, with some ESI elements and assumptions still being refined.

Analysis Group will present preliminary scenario results this month, and respond to stakeholder feedback and present a draft report in September, ahead of the RTO's planned October compliance filing with FERC. In July 2018, the commission ordered ISO-NE to file a proposed market solution to its fuel security needs by Oct. 15, 2019 (EL18-182). (See *FERC Denies ISO-NE Mystic Waiver, Orders Tariff Changes*.)

Margin for Uncertainty

ISO-NE Principal Analyst Andrew Gillespie gave a *presentation* providing additional detail on energy imbalance reserves (EIR) and replacement energy reserves (RER), two of the three day-ahead energy call options being proposed.

EIR awards will fill "known and needed" energy, akin to energy to meet demand in real time. RER and generation contingency reserves (GCR), the third call option, will supply energy that might be needed if a major contingency occurs, the equivalent to operating reserves in real time.

Combined, the three provide the "margin for uncertainty" in an increasingly energy-limited system, Gillespie said, referring to the presentation.

The RTO plans to allow imports across external interfaces to receive EIR awards, but imports would not be permitted GCR or RER awards because Northeast Power Coordinating Council standards require balancing authorities to provide its reserves using its own resources.

The RTO said resources with an EIR award should expect to be committed to meet the forecast for the next day.

"A unit with an EIR option awarded to meet the day-ahead forecast energy requirement should expect to receive a commitment instruction, which would be consistent with its start-up and notification times," it said. "But it might not always be committed, if it has only an EIR option award, that is, if it has no day-ahead energy schedule."

The day-ahead co-optimization will seek the most economical solution, meaning a unit that offers both energy and options could receive a day-ahead energy schedule only; an EIR award/schedule only; both a day-ahead and call option award; or no award.

The sum of any EIR option award and any day-ahead energy schedule within the same hour will be at least equal to the unit's economic minimum, and not greater than the unit's economic maximum, according to the RTO.

No M-DAM in October FERC Filing

The RTO's vice president for market development, Mark Karl, on July 29 sent a *memo* informing the MC that the grid operator will not include the multiday-ahead market (M-DAM) in its Oct. 15 compliance filing.

"The M-DAM design warrants further assessment and additional review with stakeholders before being proposed to the commission," the memo said.

"While multiple day-ahead markets may have benefits to the region as the power system continues to evolve, we believe it would be prudent to spend the remaining time ahead of the Oct. 15 filing discussing the design and impacts of the new proposed day-ahead ancillary services," Karl said.

The RTO plans to continue assessing the potential impacts of an M-DAM design and to discuss recommended next steps with stakeholders in 2020.

Time Limit on Fuel-security Resources

The RTO's director of NEPOOL relations, Allison DiGrande, and its assistant general counsel, Christopher Hamlen, led a *presentation* on proposed Tariff changes to remove the potential for a fuel-security resource to be retained in the Forward Capacity Market for more than the two-year period allowed by FERC.

The proposed revision would clarify that a resource retained for fuel security will only be retained until the end of the fuel security need.

The RTO's goal is to address reliability concerns through competitive solutions.

"When resource owners submit retirement bids and demand bids in the [Forward Capacity Auction], they are indicating their economic decision to exit the markets," DiGrande said, reading from the slides. "Out-of-market retentions should be limited in scope and timing."

Without a change, a resource retained for fuel security could be retained beyond the intended capacity commitment period, which further impacts the competitive processes in New England.

ISO-NE is requesting that the change become effective prior to the issuance of the Order 1000 request for proposals in December.

The RTO plans further discussion and final review of the proposed changes at the MC's summer meeting in New Hampshire this month. The committee is expected to vote on the proposal in September before a vote by the Participants Committee on Oct. 4. ■

— Michael Kuser

MISO News

MISO Firming up 1st SATA Ruleset

By Amanda Durish Cook

AES battery storage | *AES*

MISO is nearing its goal of an October FERC filing to solidify its first, limited set of storage-tas-transmission assets (SATA) rules.

"There's a number of complicated issues, and we can't make promises ... but I think we're making good progress," MISO Director of Planning Jeff Webb said of the filing target during an update at a Reliability Subcommittee meeting Thursday.

Webb said MISO staff are currently drawing up Business Practices Manuals to pair with its Tariff filing so the rules can be implemented soon after approval.

The RTO is also promising another, more comprehensive set of SATA rules in the future that would allow for concurrent use of resources as both transmission and generation.

One Wisconsin battery project is so far striving for SATA treatment in MISO's 2019 Transmission Expansion Plan (MTEP 19). (See *MTEP 19 Could Yield First MISO SATA Project*.)

Webb said owners of storage projects selected in the MTEP will enter into transmission owner agreements and become registered TOs, if they aren't already.

MISO is holding firm that it's not yet ready for storage that can simultaneously provide transmission services and offer into the energy market.

"It's rather more complicated when it's earning two revenue streams," Webb said.

He also said MISO considers the discussion closed on DTE Energy's proposal to allow non-TOs to own and operate SATA. (See *MISO Limits Storage as Transmission Asset Ownership*.)

But Webb also called MISO's filing a "placeholder" for a more exhaustive approach that allows electric storage to function as both transmission and energy. For now, though, the aim is to "keep it simple," prohibiting SATA from participating in markets, thus drawing a line between how storage is treated under FERC Order 841 and how it will be considered as transmission in the MTEP study process.

Energy storage in Minnesota | *Connexus Energy*

"We're trying to get to a place where, yes, you may have a battery in MTEP ... and be able to also earn market revenues," Webb told stakeholders. "We fully expect that will be the end result."

WEC Energy Group's Chris Plante asked how MISO will account for the limited, three to four hours of discharge that batteries can provide in reliability planning.

Webb said the duration of storage discharge will be a key consideration in the transmission planning process.

"If we don't have the confidence that a storage device can ride through a peak load period, we just wouldn't pick it," Webb explained.

Customized Energy Solutions' David Sapper said he still wasn't convinced that a storage device managing transmission constraints won't have impacts on the energy market.

"It is important to establish what it should and shouldn't be used for," Webb responded.

MISO will hold final stakeholder discussions on its SATA filing at Planning Advisory Committee meetings on Aug. 14 and Sept. 25. ■

MISO News

MISO Reliability Subcommittee Briefs

MISO Says Winter Standards Reasonable

CARMEL, Ind. — At first blush, MISO agrees with FERC's recent recommendation that NERC develop cold weather reliability standards — but it is still reviewing the commission's report and the possible implications.

Mike McMullen, MISO | © *RTO Insider*

"We do consider it a fair report, with reasonable recommendations," MISO Reliability Subcommittee liaison Mike McMullen told stakeholders at last week's RSC meeting.

"It's relatively new out there, so MISO is still evaluating," he added.

Among other recommendations, FERC called for new studies that emulate a realistically stressed grid, better communication on the effects of ambient temperature on generation and transmission lines, improved freeze protection measures on generation, and clearer emergency protocols around MISO's regional dispatch transfer limit between its Midwest and South regions. (See *FERC Orders Cold Weather Reliability Standard*.)

The commission issued the recommendations after investigating an atypical cold snap in MISO South on Jan. 17, 2018, that led to higher-than-expected demand and caused MISO and SPP to seek voluntary load reductions, nearly forcing load shedding. (See related story, *"RTO Applauds FERC, NERC Report on Cold Weather Event," SPP Board of Directors/MC Briefs*.)

MISO to Share Cyberattack Data with Feds

MISO is now operating under new *rules* that will allow it to share nonpublic data with the federal government if it finds itself or its members under a cyberattack.

The RTO last year proposed to share more information on significant cyberattacks with the Department of Homeland Security and other federal governmental agencies when it deems it appropriate. (See *MISO Tariff Changes Target Cybersecurity Data Sharing*.) FERC approved the new data-sharing strategy in June, despite Exelon's contention that MISO should specify the types of attacks and narrow the federal agencies receiving reports (*ER19-875*).

MISO Director of Incident Response and Systems Recovery David Rosenthal said in spring that the RTO anticipates using the information-sharing protocol "rarely, if ever."

Executive Director of Controls and Engagement Joe Polen told the RSC on Thursday that MISO will only share data on a limited basis and that only its corporate information security officer or cyber director can make the determination.

"We don't share that information unless we absolutely have to," Polen explained. "MISO hopes to never need to use the additional data-sharing practices."

Polen also said MISO can terminate the agreement with Homeland Security at any time.

Northern Indiana Public Service Co.'s Bill SeDoris asked whether members will be notified if MISO shares their information.

"If we do have an event where we have to share information, we will contact the members and let them know what was shared," Polen responded.

However, MISO legal staff at the meeting said there may be some instances where DHS may want the RTO to delay notifying members for a reasonable period while it investigates and addresses a cyber threat.

MISO Reworking Outage Penalty Conditions

MISO is putting a finer point on the penalty exemption policy under its stricter generation outage scheduling rules.

In June, MISO pitched a plan to exempt resources from accreditation penalties if the length of a submitted outage remained within 10% of the originally scheduled outage window, providing wiggle room to either reduce or lengthen outages. (See "Outage Exemption Talk Ongoing," *Stakeholders: MISO System Fix Too Late for Summer*.)

MISO will now allow outage reductions of up to 20% of the original window without triggering a full revaluation of the outage's impact on expected capacity margins. Those seeking to increase the length will be required to submit an entirely new outage request.

The penalty exemption rules are part of a new policy requiring generators to schedule planned outages 120 days in advance in order to be categorically exempt from possible accreditation penalties; the new process was approved by FERC in late March (*ER19-915*).

Continued on page 15

MISO News

Xcel Earnings Call Focuses on Clean Energy

By Tom Kleckner

Xcel Energy stressed its renewable credentials Thursday following the *release* of its second-quarter earnings, detailing recent developments that will lessen its reliance on fossil fuels.

"We are excited by the opportunity to create a cleaner sustainable energy future for our customers," CEO Ben Fowke said during a conference call.

In July, the company filed with the Minnesota Public Utilities Commission its Upper Midwest resource plan, which calls for the retirement of the King and Sherco 3 coal plants, extending the life of the Monticello nuclear plant to 2040, and the acquisition of a combined cycle natural gas facility and construction of another. The plan would also add 4 GW of solar and 1.2 GW of wind energy as a replacement for the closed plants, putting its Northern States Power Company-Minnesota subsidiary on a path to be 100% carbon-free by 2050.

Xcel's Hale Wind Project | *Xcel Energy*

A second Xcel subsidiary, Southwestern Public Service, energized the 478-MW Hale Wind Project on time and under budget, the company said. Another wave of renewable projects is expected to be completed between 2019 and 2021. In Colorado, the legislature passed a bill that will allow Public Service Company of Colorado to pass on the cost of its plans to reach 80% and 100% carbon-free electricity by 2030 and 2050, respectively.

The positive news was offset by Xcel's earnings, which fell 7 cents short of Zacks Equity Research's expectations. The company reported earnings of $238 million ($0.46/share), a drop from last year's $265 million ($0.52/share).

Executives blamed the showing on unfavorable weather and increased depreciation, interest, and operating and maintenance expenses.

Fowke said the company is still "well positioned" to deliver earnings at or above the midpoint of its 2019 guidance range of $2.55 to 2.65/share. "We are very confident we will deliver on our financial objectives as we have in the past," he said.

Investors reacted positively, driving Xcel's stock price up $1.91 to $60.76. ■

MISO Reliability Subcommittee Briefs

Continued from page 14

Shift operator Trevor Hines said more members have been in contact with MISO to discuss the nuances of their planned outages since the outage rules were enacted.

Trevor Hines, MISO | *© RTO Insider*

"We have been receiving more calls and communications, and we recommend those continue as you approach situations that you need help with. … Those calls have gone very well the last few months," Hines said.

2 Emergency Warnings in June

June was mostly cooler than usual for MISO, although the South region experienced tight operating conditions and near-emergency calls twice during the month.

Average load for the month was 77.8 GW, lower than the 84.5-GW average a year earlier. The 107.8-GW monthly peak set on June 27 also fell far short of last June's 121.6-GW peak. During a July Informational Forum, Rob Benbow *said* average temperatures for the month were lower than normal and 8 degrees lower than in June 2018. Lower loads and fuel prices brought average prices down to $23.07/MWh, 27% year-over-year decrease.

MISO said its reliability, markets and operational functions performed well over the month.

However, MISO issued a maximum generation warning for South on June 3 when load and forced outages crept upward and transmission outages stranded some generation. South was also the subject of a separate maximum generation alert on June 20, again prompted by forced generation outages and transmission outages from storms the night before.

"We were able to manage our way through those conditions," Benbow said.

MISO has issued real-time generation notifications three months in a row, including a May maximum generation emergency declaration, a June maximum generation warning and conservative operations instructions during a mid-July heatwave.

During the RSC meeting, WPPI Energy economist Valy Goepfrich asked MISO to begin distinguishing in its reports the locations of its maximum generation notifications, based on the Midwest, South or footprint-wide regions.

Telephones and Hot Topics

MISO may change its control room phone system and is asking members for their recommendations and experiences with their own systems. The RTO is circulating a nine-question *survey* to members to collect information on other phone plan options.

Finally, MISO's upcoming Hot Topic discussion during September Board Week in St. Paul, Minn., will focus on transformative changes taking place in the energy industry and how the RTO could ease the transition for its member companies. Members are expected to bring their ideas on what future services they may require of MISO during the Sept. 18 conversation.

Director of Market Strategy and Design Scott Wright said he believes the talk will in part center on the trends MISO laid out in its first Forward Report issued earlier this year. (See *New MISO Report Starting Point for Major Grid Change*.) He said he expects to hear conversation on the need for improved ramp capability, increasing two-way power flows on distribution — and possibly transmission — systems, and how MISO can best manage transactions between the wholesale and retail level. ■

— Amanda Durish Cook

MISO News

Missouri Investigating Self-scheduling in MISO, SPP

By Amanda Durish Cook

Missouri regulators are wrapping up a probe into the self-commitment and self-scheduling of generation into wholesale energy markets, questioning whether the practice is good for customers.

Though the Missouri Public Service Commission might take steps to begin curbing the investor-owned utility practice of self-scheduling resources in MISO and SPP, regulators so far have not suggested any action, instead labeling the *investigation* opened in June as a simple fact-finding mission. The commission said it's currently examining whether the practice benefits or harms ratepayers.

The PSC also directed the state's utilities to explain their approach to resource bidding and how they decide between self-scheduling and bidding into the market (*EW-2019-0370*).

Commission staff will file a report on their findings no later than Aug. 16.

Comments on the docket have so far fallen along predictable lines, with utilities defending self-commitments as necessary for the health of fossil-fueled resources, and environmental nonprofits criticizing the practice as a means to keep uneconomic coal plants operating.

For Reliability

Ameren Missouri said that while it self-commits several of its units in MISO at minimum output levels under the RTO's must-run commitment mode, it does not self-schedule its units' dispatch.

The utility explained it self-commits its coal fleet when those units will be expensive to restart, are being tested or to stave off forced outages or higher maintenance costs because of inefficient unit cycling. The company also pointed out its Callaway Nuclear Energy Center must remain online, so it designates the nuke as a must-run resource.

Ameren said MISO probably experiences more self-commitments than SPP because it has more nuclear generation in its footprint.

Kansas City Power & Light similarly claimed its fossil units are only self-scheduled in SPP for "safety, reliability, economic and environmental compliance reasons." It must sometimes manage the number of thermal cycles for the sake of a plant's longevity or run a steam-fired power plant to maintain reliability during cold weather, it said.

"SPP's market model isn't always able to consider risks to KCP&L customers' reliable power supply," the utility said.

KCP&L said it also self-commits for compliance and post-outage testing, to keep wind generation economic and to commit units with start-up times greater than 24 hours, something SPP doesn't currently offer.

"The SPP market model does not currently do a good job committing large, baseload units with long lead times, large start-up costs and long minimum run times," KCP&L said.

Ameren raised a similar complaint with MISO's day-ahead market algorithm, saying the limited, 24-hour advance economic evaluation is inadequate for making decisions on generation with long lead times that can also become worn out by cycling.

MISO — which has long kicked around the idea of implementing a multiday market — recently announced it will roll out a new and comprehensive multiday operating margin forecast — although it will not tie financial commitments to the new forecast. (See "MISO Eyeing 6-Day Margin Forecast," *MISO Market Subcommittee Briefs: July 11, 2019*.)

Ameren said it strives to sell energy into the market only when it stands to benefit customers, but that it also must take unit longevity into account when making commitment decisions.

Wasteful?

Renewable energy advocates Advanced Power Alliance (APA) and Clean Grid Alliance (CGA) pointed to a spring Grid Strategies *report* that concluded self-scheduled resources should be brought into the organized markets. The report estimated self-scheduled coal plants caused excess fuel costs of at least $85 million in PJM and $127 million in MISO in 2017. The groups also cited 2018 Union of Concerned Scientists *research* that estimated coal generation self-scheduling in PJM, MISO, SPP and ERCOT *places* a $1 billion burden on ratepayers annually.

APA and CGA said self-scheduling and self-commitments muddy the intended transparency of RTO markets, adding self-scheduled generation is "often less responsive to market prices" and can increase prices passed on to consumers when other market generation is available at a lower cost.

"The issue before the commission in this case goes directly to the heart of market activity within MISO and SPP. The self-commitment and self-scheduling of generation can undermine the transparency created by these markets, as well as the overall goal of producing a reliable and economic generation commitment and dispatch that is good for consumers," the groups said.

"It is no secret coal generators nationwide have struggled to remain economically competitive, which has a detrimental effect on ratepayers," the Sierra Club commented. "Excessive and unwarranted self-generation by these same generators could compound the negative economic effects on ratepayers."

The environmental group urged the PSC v to compel utilities to provide the same, detailed reasons behind the instances of self-commitment and self-scheduling they provide to MISO and SPP. ■

Callaway Nuclear Energy Center | *Fluor*

NYISO News

NYISO Management Committee Briefs

Carbon Study Delay to Include New Energy Law

The Analysis Group will delay the release of a carbon pricing study previously expected to be completed this month in order to perform additional analysis at the request of the NYISO Board of Directors, CEO Rich Dewey told the Management Committee on Wednesday.

The board wants to ensure the study captures all the impacts of the Climate Leadership and Community Protection Act (*A8429*) signed by New York Gov. Andrew Cuomo last month, Dewey said.

The new law requires 70% of the state's electricity to be generated by renewable resources by 2030, nearly quadruples the state's offshore wind energy goal to 9 GW by 2035 and targets making the electric system carbon-neutral by 2040. It also doubles distributed solar generation to 6 GW by 2025 and targets deploying 3 GW of energy storage by 2030. (See *Carbon Pricing Study Navigates Shifting NY Landscape*.)

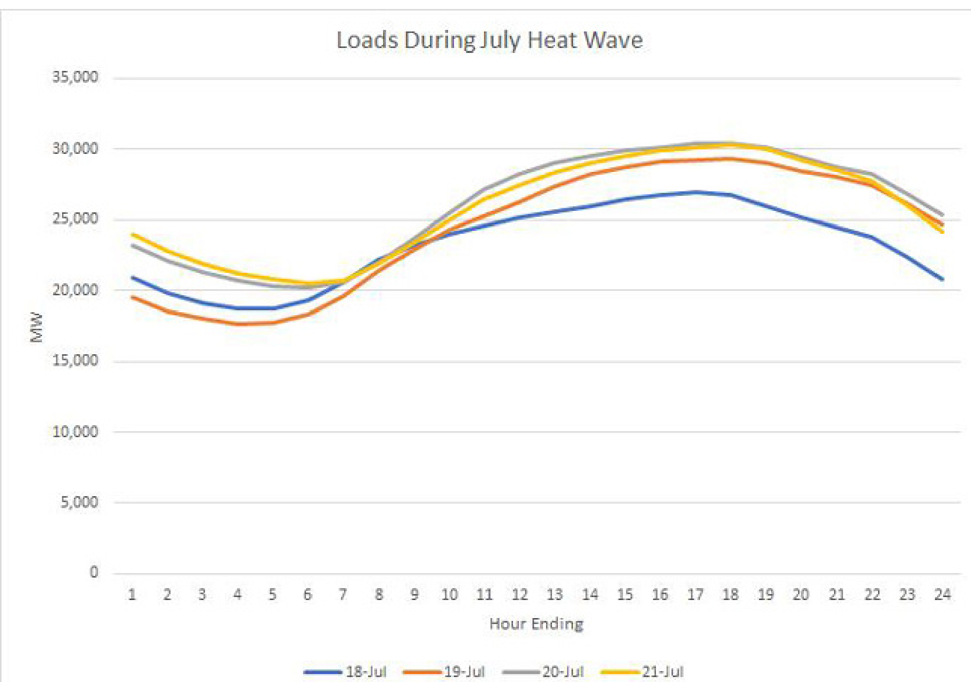
Several stakeholders pressed Dewey on whether completion of the study is now open-ended or whether it would be delayed a few weeks or six months.

Dewey confirmed the study will be delivered within a few weeks, then taken to the board before being delivered to stakeholders, which he promised to make happen "as soon as possible, because I understand the intense interest for stakeholders."

"Our carbon pricing proposal is the most effective way to meet the state's clean energy goals," Dewey said. "We won't do it without the state on board, but we don't have a deadline, except for the NYISO budget," adding the ISO will decide on related funding in the six weeks remaining before its 2020 budget and project portfolio finalized.

A *study* released last month by the nonprofit Resources for the Future (RFF) indicates a $63/ton carbon price could drive clean energy penetration to as high as 64% of the state's resource mix by 2025, "well on the way" to the 70% requirement for 2030. (See *Study: Carbon Adder Supports NY Clean Energy Goals*.)

In response to a question from the MC, Dewey said NYISO does not plan to bring the RFF study to the stakeholder group, explaining that an earlier version "was in front of stakeholders about a year ago."



NYISO's load has topped 30,000 MW on five days so far this summer. The peak so far came on Saturday, July 20, when load reached almost 30,400 for the hour ending 17:00. It "would be unique and unusual" if a Saturday remains the peak, the ISO said. | *NYISO*

Generation and Tx Perform Well in Heat

New York's generation and transmission infrastructure performed well during the July 18-21 heat wave, Operations Vice President Wes Yeomans said.

"Heat indexes in New York state were very high over those days," Yeomans said. "So far, this summer we've had five days over 30,000 MW ... and so far the peak load was on a Saturday, which would be unique and unusual if it holds."

NYISO said in May that it expected to have adequate resources on hand this summer to meet slightly above-normal demand, with 42,056 MW of capacity available to meet a forecasted peak of 32,382 MW. (See *NYISO Reports Grid Ready for Summer*.)

The ISO's projected summer peak is 1.5% above the 10-year average and exceeds last summer's actual peak of 31,861 MW, recorded on Aug. 29 (and the 2017 peak of 29,677 MW), but it is down from the 2018 peak forecast of 32,904 MW.

Yeomans said that since adding low-voltage facilities, "there have been far fewer out-of-merit actions in western New York."

No New Cost-of-service Study

As it has in the previous two years, the MC voted not to conduct a new cost-of-service study later this year that would have informed a decision on whether to modify the 72% withdrawals/28% injections cost allocation formula in *Rate Schedule 1* (RS1).

NYISO staff recommended a new study in order to consider the impact of the most significant market design changes to be implemented since 2005, including the integration of renewable resources, the adoption of a distributed energy resource roadmap and the effort to integrate and optimize energy storage.

The current RS1 allocation, with rebates provided for recoveries from non-physical transactions, is based on a consultant study that garnered about 67% support from the MC in July 2011 and was scheduled to be effective for a minimum of five years, from January 2012 to December 2016. ■

— Michael Kuser

NYISO News

Con Ed Earnings Drop; Blackout Fines Loom

By Michael Kuser

Customers wait outside the 21 Club on 52nd Street during the July 13 blackout in Manhattan. | *Marianne O'Leary*

Consolidated Edison's second-quarter *earnings* fell by 19% to $152 million ($0.46/share) compared to the same period last year, despite an increase in revenue.

The utility's adjusted earnings for the quarter were $189 million, excluding mark-to-market impacts and tax equity investments of its Clean Energy Businesses.

Con Ed brought in $2.744 billion for the quarter, a 1.8% increase over the $2.696 billion last year. But the increase was tempered by a 0.7% increase in expenses, as depreciation and amortization, operations and maintenance, and tax expenses all increased.

The company reaffirmed its previous $4.25 to $4.45/share forecast of adjusted earnings — even as it prepares to pay a $5 million "negative revenue adjustment" in the third quarter as a result of the July 13 Manhattan blackout under the reliability performance provisions of its electric rate plan. Attributed to failed relay systems, the blackout affected about 72,000 customers on the West Side of the island. The event prompted New York Gov. Andrew Cuomo to question the future of Con Ed's license to provide electric service to the city. (See *Con Ed: Failed Relay Protections Caused NYC Blackout*.)

A heat wave over the following weekend kept the utility on the hot seat after power outages hit 50,000 customers in New York City and Westchester County on July 21. The utility also cut service to 30,000 customers in Brooklyn that day to prevent equipment damage. The combined outages led New York Mayor Bill de Blasio to join Cuomo in pondering a future without Con Ed. (See *High Temps Put Con Ed on the Hot Seat Again*.)

The New York Public Service Commission and the Northeast Power Coordinating Council are investigating the July 13 event, and the PSC is also investigating the other outages last month. The company said it is unable to estimate the amount or range of possible additional losses related to the other outages.

"Our commitment to serving our customers remains paramount, and we regret the distress experienced by those impacted by recent power outages," CEO John McAvoy said in a *statement* announcing the earnings. ■

PJM News

Study Challenges PJM Energy Storage Rule

By Christen Smith

A new study has concluded that PJM's proposed 10-hour rule for energy storage resources (ESRs) participating in the capacity market is "unnecessary and unduly restrictive."

Astrapé Consulting released the *analysis* July 15 — funded by the Energy Storage Association and the Natural Resources Defense Council — that backs up claims from critics that PJM's plan for integrating ESRs by mandating a 10-hour continuous runtime in order to collect their full share of capacity payments will inhibit participation and make the grid's renewables expansion more difficult.

"Storage is a key technology enabling a low-carbon grid," Tom Rutigliano, a senior advocate with NRDC's Sustainable FERC Project, said in a July 15 news *release*. "This study agrees with many others in showing that batteries are an effective replacement for power plants. It also underscores the importance of FERC's commitment to ensuring that rules developed for older technologies do not become barriers to storage."

All six jurisdictional RTOs and ISOs are facing a December deadline for compliance with FERC Order 841, which requires them to revise their market participation models to allow storage resources 100 kW and larger to provide capacity, energy and ancillary services within their technical capability.

Earthjustice attorney Kim Smaczniak told *RTO Insider* in April that FERC's request for more information on PJM's storage rules — particularly whether a "capacity storage resource" is included in the definition of a "generation capacity resource" and whether one unit can serve as both — suggests the commission is "pushing back" on the 10-hour requirement. (See *FERC Asks RTOs for More Details on Storage Rules*.)

It's not yet clear how or when FERC will rule on the compliance filing, but some critics suggest an approved 10-hour rule could spur additional legal challenges.

Rutigliano told *RTO Insider* he couldn't comment on whether NRDC would be part of that battle but hoped the study results would encourage PJM to reconsider.

"We would certainly be open to PJM asking FERC to hold off for a few months so this could go back through the stakeholder process," he said.

PJM's 10-hour rule remains the highest requirement proposed among RTOs/ISOs (ER19-469). ISO-NE sought only a two-hour minimum, while NYISO proposed four. PJM says the runtime corresponds with existing reliability standards, noting that it must "remain impartial in administering the markets."

"This requires a common set of standards that provide a level playing field for all resources to fairly compete," PJM spokesperson Jeff Shields said.

'Different Needs at Different Times'

Except, critics argue, the 10-hour rule is anything but impartial.

"The purpose of the capacity market is to ensure reliability, not subsidize generation," Rutigliano said. "PJM's claims that it needs to purchase baseload capacity to meet very rare peak loads defies engineering reality and wastes ratepayers' money. If the capacity market is unable to recognize the reliability value of different technologies, that shows the need for market reform rather than providing any justification for discounting storage."

| IPL

Astrapé's results show that energy storage deployments of up to 4,000 MW with just four hours of duration can provide full capacity value relative to a resource without time constraints. Similarly, ESR deployments up to 8,000 MW with six-hour runtimes can replace traditional generation sources megawatt-for-megawatt with no impacts on reliability, the study concluded.

"The grid has different needs at different times," Rutigliano said. "PJM ignores that and says every plant needs to be a peaker."

PJM, however, said the study rehashes old points and suggests the organization should create an "unduly discriminatory" standard that lowers the bar for some resources and not others. It further points out that its proposal is based on a FERC-approved capacity construct and would spur innovation, not stifle it.

"Having longer duration requirements could encourage developers to make longer-lasting batteries," Shields said. "We saw the demand response industry find innovative ways to meet our standards and compete in the market, for instance."

The study further suggests that a 10-hour requirement ignores the historical reality of PJM's systemwide performance assessment periods. Since 2011, only one event lasted beyond six hours: a primary reserve warning Jan. 7, 2014, that was triggered by the polar vortex, lack of access to firm fuel and other forced outages that rendered 40 GW unavailable. Astrapé notes that these issues would not trigger battery outages and that "a system with more homogeneous resources is more susceptible to these coincident issues than one which contains more heterogeneous resources with different categories of constraints."

"While caution is warranted in using historical data to justify duration requirements since the system will be evolving, the primary takeaway is that the duration of reliability concern does not necessarily match the shape of the load," the study reads.

PJM noted that while Astrapé's conclusions are potentially "worthy of future analysis," they are "not based on an approach approved by the commission." ■

PJM News

Talen Energy to Pay $1M for Violating Clean Water Act

By Christen Smith

Talen Energy last week agreed to pay a $1 million fine after toxic waste from one of its Pennsylvania coal plants seeped into groundwater and the nearby Susquehanna River.

The settlement comes as part of a consent decree ordering the company to close and excavate its last remaining unlined coal ash pond at the Brunner Island plant in York Haven, where some 442,000 tons of combustion waste piles up each year.

"We are proud to have been able to reach an amicable settlement that will promote transparency, accountability, and, most importantly, environmental protection," said Mary Greene, deputy director of the Environmental Integrity Project. "Talen Energy deserves credit for stepping up to the plate and agreeing to measures that should significantly reduce pollution."

"Talen is committed to complying with all environmental regulations and will continue to focus on the safe, efficient and reliable operation of our plants," Debra Raggio, the company's senior vice president of regulatory and external affairs, said in a statement Wednesday.

EIP, in conjunction with the Pennsylvania Department of Environmental Protection, last year filed suit against Talen in federal court on behalf of three local environmental groups — Lower Susquehanna Riverkeeper Association, Waterkeeper Alliance and PennEnvironment — who claimed the company violated the Clean Water Act by improperly disposing of coal ash waste and polluting the Susquehanna, the Chesapeake Bay's largest tributary. The groups also appealed a state board's decision to reissue Talen's National Pollutant Discharge Elimination System (NPDES) permit.

Talen agreed to the settlement on Wednesday, which requires the company to pay the fine, clean up the offending ash pond, monitor other waste sites for pollution seepage and contribute $100,000 to fund other local projects aimed at reducing water pollution.

"This enforcement action is one of historic proportions, since it's the largest penalty ever assessed at a coal ash pollution site in Pennsylvania history," said David Masur, executive director of PennEnvironment. "We are glad to see DEP working with citizen groups to reach this important settlement for the good of the commonwealth."

Brunner Island began operating in 1961 as a coal-fired power plant. For decades, the company disposed of toxic coal ash waste in seven unlined ponds and a landfill spread across 367 acres wedged between two river tributaries known as Black Gut and Conewago creeks. Environmental groups argue the ponds allowed boron, lithium and arsenic — a known carcinogen — to seep into the groundwater, the creeks and — ultimately — the Susquehanna.

Talen discontinued using its last remaining pond in June and will accelerate plans for excavation in accordance with the settlement, disposing of all leftover waste by Dec. 31, 2031. The company must also perform regular testing to ensure the liner and leachate collection system at its landfill site remain functional. Doing so will keep the plant in compliance with its NPDES permit.

Lisa Hallowell, senior attorney for EIP, said the agreement will "reduce the impact of toxic coal ash pollution on ground and surface waters, better control the plant's wastewater discharges, ensure discharge of heated water is protective of aquatic life, and improve water quality for the Lower Susquehanna River and its tributaries."

Talen Energy agreed to pay a $1 million civil penalty for toxic waste seepage from its Brunner Island plant that polluted the Susquehanna River in York County, Pa. | *Talen Energy*

Raggio said the settlement — still awaiting approval from the U.S. District Court for the Middle District of Pennsylvania — is memorialized in the consent decree and demonstrates the company's willingness to proactively maintain compliance with its permits. Talen also converted much of the plant's output to natural gas in 2016, but the company expects it will continue burning coal for the next decade.

"In this settlement, Talen is addressing inherited legacy issues at these ash basins as we continue efforts to reduce Brunner Island's environmental footprint by utilizing natural gas and phasing out coal," she said.

"We hope more coal plants nationwide will follow this example," said Larissa Liebmann, an attorney for the Waterkeeper Alliance. "It is imperative to our nation's waterways and communities that industry not only excavate leaking coal ash basins but take additional measures to protect public health and the environment." ■

Appetite for Renewables Growing in Penn. Legislature

By Christen Smith

Democratic lawmakers in Pennsylvania appear more hungry than ever to transition the state's electricity consumption to 100% renewable energy, though it's unclear whether the current plan will make it past the General Assembly's Republican gatekeepers.

Companion proposals — *House Bill 1425* and *Senate Bill 630* — would phase out fossil fuels statewide by 2050, potentially making Pennsylvania the latest in a wave of Mid-Atlantic states to adopt aggressive clean energy targets to combat climate change. Some 21 of the 26 senators and 79 of the 102 representatives needed to pass the bills have signed on as cosponsors, including four Republicans in the Senate and seven in the House of Representatives.

"Embracing the clean energy revolution is the right thing for Pennsylvania," said Sen. Tom Killion (R), prime sponsor of SB 630. "Passing this legislation will help ensure Pennsylvanians enjoy clean air and pure water for decades to come and the corresponding economic benefits of the clean energy economy."

"When it comes to Pennsylvanians committing to a just transition to 100% renewable energy, I recommend we follow the old aphorism that 'people who say it can't be done shouldn't interrupt those who're already doing it!'" said Rep. Chris Rabb (D), prime sponsor of HB 1425. "When enacted into law, this bill will codify the goals and means by which we will make these vital aspirations a reality by 2050 — because our commonwealth's brightest future must start now. And I have 99 colleagues in the Pennsylvania General Assembly who agree that the future is green!"

Still, Rabb and Killion have some convincing left to do as the legislature's fall session nears — and even then, it will still be a heavy lift to get the bills onto the floor for a vote.

Unlike its neighbors to the east and south, Pennsylvania's natural gas production from its Marcellus Shale region thunders on and keeps energy prices so low in PJM that other generation sources seek subsidies just to keep up. The Pennsylvania Independent Oil and Gas Association (PIOGA) forecasts that shale gas will supply 30% of the nation's gas demand by 2030 and generate $1.8 billion in state and local tax revenues by next year.

State Republicans have long been champions

Proposals to transition natural gas-rich Pennsylvania to 100% renewable energy have gained 100 cosponsors in the legislature.

of natural gas — especially House Speaker Mike Turzai, the most prominent beneficiary of the industry's campaign donations, with $128,000 to his name as of the last election cycle. In June, he reiterated the caucus's commitment to capitalizing on the state's gas production, saying, "Pennsylvania has already benefited immensely from the boom in natural gas extraction, and House Republicans are dedicated to building on those gains rather than endangering them."

Turzai also frequently touts the cumulative $16.2 billion reduction in utility bills over the last decade, 30% drop in carbon dioxide emissions and tens of thousands of jobs created — all from the shale gas revolution.

Mike Straub, spokesperson for the House Republican Caucus, told *RTO Insider* on Monday that he hasn't heard anyone mention HB 1425, but that doesn't mean renewable energy isn't important to its 110 members.

"I think there's been support for renewable energy in many different forms," he said. "It's always a balancing act to ensure Pennsylvania's energy portfolio includes the right mix [of resources] that is best for consumers, employers and the economy."

While Senate Majority Leader Jake Corman (R) doesn't carry the same clout among industry donors, some 55 gas wells remain active in his district, according to state *records*. It's a tiny share — less than 1% of Pennsylvania's nearly 28,000 active wells — but large enough to give the Centre County Republican pause when it comes to proposals that might challenge its economic foothold.

As recently as June, he criticized Democratic Gov. Tom Wolf's call for a severance tax on natural gas that would replace the impact fee currently dispersed to the state's 67 counties for economic reinvestment.

Nick Troutman, spokesperson for the Senate Environmental Resources and Energy Committee, said a vote on HB 630 is unlikely in the near future.

"More discussion needs to take place on the federal and the state levels. Over the next 20 to 30 years, energy demand is expected to rise significantly, and renewable energy production is not without its challenges," he said. "We need a diverse energy portfolio, which includes fossil fuels, in our energy mix."

Political Will

Even if Republican leaders allow a vote, however, PIOGA Executive Director Dan Weaver called switching to renewables in just 30 years "impractical." He said natural gas will remain an "important" sector of the resource mix because combined cycle plants provide efficiency and reliability at a cheap price.

"Pennsylvania's businesses and families will benefit from energy production options based on market forces, and that includes obtaining more energy in the future from renewable sources," he said. "We do not support overly generous government subsidies of any kind that benefit some sources at the expense of others, nor do we support increased taxes on sources that put them at a competitive disadvantage."

David Masur, executive director of PennEnvironment, argued that the bills' collective 100 cosponsors mean it's time for "a real dialogue." He said six states have approved similar policies in the last 12 months, including "purple states" like Maine and Nevada, "paving that path for Pennsylvania to do it as well."

"When we look back on who had the political will to do what it takes to protect our planet from the far-reaching negative effects of global warming, this will be the group of legislators recognized for their work in Pennsylvania," he said. "Because the question is not, 'Do we have the technological ability, the financial wherewithal, or the work ethic to tackle climate change?' The only question is, 'Do we have the political will?'"

The House returns to session Sept. 17, though Straub said the legislative calendar is still taking shape. Some energy bills will be on the agenda, he noted, but not necessarily HB 1425. The Senate convenes the following week. ■

SPP News

SPP Promotes Veteran Execs to SVP Positions

By Tom Kleckner

SPP last week *announced* the promotions of three longtime executives to senior vice president positions, though their areas of responsibilities will not change.

Barbara Sugg (information technology and chief security officer), Bruce Rew (operations) and Lanny Nickell (engineering) were all vice presidents over their departments.

Each of the new senior vice presidents has at least 20 years of experience with SPP. Rew joined in 1990 and was one of the organization's original 14 employees, while Sugg and Nickell came on board in 1997.

CEO Nick Brown announced the promotions Thursday during SPP's customary staff meeting following the Board of Directors meeting. Brown revealed his own retirement plans, effective April 2020, during the board meeting. (See related story, *SPP's Brown to Retire as CEO in 2020*.)

"Each of these individuals has proven many times over that they possess the technical expertise, business acumen and leadership qualities that SPP needs to best serve our customers," he said in a *statement*.

"Being promoted to senior vice president recognizes the importance of and dependency on IT and cybersecurity at SPP," said Sugg, who oversees IT and telecommunications services to its members and establishes IT strategy and policies.

Rew has held several engineering and management roles at SPP, including serving as vice president of engineering. He is leading SPP's

Barbara Sugg | © *RTO Insider*

Bruce Rew | © *RTO Insider*

Western expansion — which includes contract services for reliability coordination and an energy imbalance market — and is responsible for the grid operator's market operations.

"This promotion is a recognition of the outstanding team of professionals I get the honor of leading on a daily basis," he said. "I look forward to continued success in managing the operational opportunities ahead for SPP."

Lanny Nickell | © *RTO Insider*

Like Rew, Nickell has been vice president of both engineering and operations. He is responsible for transmission planning, tracking projects costs and statuses, and administering long-term transmission service and generator interconnection processes.

"SPP and the power grid face a future full of tremendous opportunities and rapid change," he said. "It will be increasingly important for us to anticipate the exciting changes facing our industry and do so in a way that provides increased value for our members and their customers." ■

SPP's corporate campus | *Nabholz Construction*

SPP's Brown to Retire as CEO in 2020

Will End 35 Years with RTO, 16 as CEO

Continued from page 1

"It still amazes me that this organization existed for 53 years and didn't legally become a company until we incorporated," Brown told *RTO Insider*. "It's amazing how far we've come since then."

"I have great appreciation for Nick's contributions to an incredible amount of the RTO's success," Southwestern Public Service President David Hudson said. "His many years of service are remarkable."

"It's impossible to think of SPP without thinking of Nick Brown," board Chair Larry Altenbaumer said. "[SPP's] culture of collaboration was shaped and nurtured under Nick's leadership."

Mike Wise, Golden Spread Electric Cooperative's senior vice president of regulatory and market strategy, has worked with Brown for 23 years and credited his vision, leadership and focus for SPP's "great success."

"He has helped foster the organization's growth while meeting the needs of the members and focusing on end-use customers for those 35 years," Wise said. "It was his desire to have an effective stakeholder-driven culture where all members who participate have a voice.

"SPP wouldn't be here today at all in the way that it is without Nick Brown as a leader."

Brown said his decision was a mutual one between him and his wife, Susan, and not driven by SPP's recent mushrooming growth.

"I've been thinking about this for a long time. The timing was right," he said. "There's no right time. A lot of people have postulated that Nick's going to wait for this or he's going to wait for that. SPP will always be a work in progress. It didn't make sense to me to wait any longer."

He becomes the second RTO CEO to step down in the last two months. PJM's Andy Ott retired in June. (See *PJM CEO Andy Ott to Retire*.)

Outside of serving on corporate boards, Brown said he doesn't have much planned except to spend time with his four children and two grandchildren, all of whom live within 5 miles of his house.

Asked if he intended to travel, Brown said, "I've traveled almost every week for 35 years. I don't view travel as one of my retirement passions."

SPP CEO Nick Brown (left) announces his retirement as Directors Larry Altenbaumer and T. Graham Edwards listen. | © *RTO Insider*

"It's impossible to think of SPP without thinking of Nick Brown. [SPP's] culture of collaboration was shaped and nurtured under Nick's leadership."

— Southwestern Public Service President David Hudson

Altenbaumer said Brown will work with three board members to ensure a smooth transition for his successor. SPP has engaged management consulting firm Russell Reynolds to conduct a "comprehensive search" for Brown's replacement.

Brown became a vice president and corporate secretary in 1998 before assuming the CEO's role. He began his industry career with Southwestern Electric Power Co.

He holds physics and math degrees from Arkansas' Ouachita Baptist University and an electrical engineering degree from Louisiana Tech University. A registered professional engineer, a master electrician and an instrument-rated pilot, Brown is a member of several engineering, technical and professional honor societies.

"I've never regretted [my decision] for a single day," Brown told the board, Members Committee and other stakeholders. "It's been a true pleasure over the years working with many of you around the table. April 1 is next year, so don't get too excited. This organization runs through my veins; it just does."

"While we have some very big shoes to fill, we have an organization with a future that is every bit as bright and exciting as it has been," Altenbaumer said. Turning to Brown, he said, "My thanks to you for everything." ■

SPP News

SPP Board of Directors/MC Briefs

RTO Applauds FERC, NERC Report on Cold Weather Event

DES MOINES, Iowa — SPP CEO Nick Brown last week told the Board of Directors and Members Committee that a recent FERC-NERC report on a 2018 cold-weather event confirmed the RTO's position on MISO's use of its system.

"I'm very appreciative of FERC and NERC inserting themselves in what was initially described as a contractual dispute," Brown said during the July 30 meeting. "Significant clarification was needed, and we got that."

MISO uses a tie line in the Missouri Bootheel to link its Central and South regions. Under terms of a 2015 settlement with SPP, MISO is free to transfer up to 1 GW without compensating SPP and other parties, but it cannot exceed 2.5 GW or 3 GW, depending on the power flows' direction.

On Jan. 17, 2018, unusually cold weather led to numerous outages and derates in the South. Entergy alone lost 11.6 GW of capacity, leading MISO to declare a maximum generation alert for the region. During the event, MISO exceeded its 3-GW north-to-south limit by 1.3 GW.

"It was one of the most significant operating events I've seen in my career," Brown said.

SPP General Counsel Paul Suskie | © *RTO Insider*

SPP General Counsel Paul Suskie said that with the large number of contingencies on the regional grid, the *report* uses the term "N-many," something the RTO's veterans had never seen before.

FERC last September opened an inquiry, just the third it's ever conducted. It released a copy of the report, done in partnership with NERC, on July 18. (See ***FERC Orders Cold Weather Reliability Standard***.)

The report corroborates SPP's position that any energy above the 1-GW transfer limit should be non-firm and as-available, staff said. They said the report noted MISO incurred risk in assuming it could transfer more than 1 GW across the seam.

In the report, FERC staff recommended NERC develop a standard on generation weatherization, the second time it has made that suggestion.

The SPP Members Committee votes during the July 30 board meeting. | © *RTO Insider*

That work has begun, Brown said, and SPP has been asked to sponsor the effort. "We readily accept that opportunity," he said.

The report included 13 recommendations for SPP, MISO and the other parties to the RTOs' agreement (Associated Electric Cooperative Inc., Southern Co., Tennessee Valley Authority, LG&E and KU Energy, PowerSouth Energy Cooperative, and NRG Energy). Nine apply to SPP. The RTO has addressed four of them: perform periodic impact studies, analyze real-time voltage stability, conduct capacity and energy emergency drills, and consider deliverability to avoid stranded reserves. (See related story, ***"MISO Says Winter Standards Reasonable," MISO Reliability Subcommittee Briefs: Aug. 1, 2019***.)

Directors Lower Exit Fee to $100K

The board approved a Corporate Governance Committee (CGC) recommendation to lower SPP's exit membership fee to $100,000, a 67% reduction from the current level. Load-serving entities would also be subject to an additional fee based on their net energy-for-load share of the RTO's financial obligations and future interest.

FERC in April found the fee's provisions to be unjust and reasonable and a barrier to market participation by non-transmission owners. The commission directed the RTO to eliminate the fee for members who are not TOs or LSEs. (See ***FERC Tells SPP to End Exit Fee for Non-TOs***.)

The change still leaves SPP as the only grid operator with an exit fee not based on charging exiting members to cover their open market positions.

"SPP is still unique in having an exit fee. In my mind, the problem with the exit fee is it's divorced from the costs driven by membership," said Enel Green Power's Betsy Beck, referring to meeting costs and staff time.

Beck said market costs should be borne by all market participants and not just members. "I certainly agree membership is important, but as the market evolves, there need to be pathways for others interested in being engaged," she said.

"Where SPP is different [is that] membership matters," Suskie responded. "When you're a member, you truly have influence over what comes before the board."

When asked by Beck whether FERC would accept the $100,000 fee, Suskie noted that the commission approved its $300,000 fee in 2006.

"I'm sure your organization and others will protest," he said.

The board also approved a recommendation that eliminates the exit fee as part of a compliance filing and language defining LSEs and non-LSEs. Staff proposed combining existing language in different Tariff sections to define LSEs as any member that satisfies either definition.

SPP has requested a rehearing of FERC's decision but was granted a compliance extension to Aug. 1.

"By making this filing, we're not challenging the ruling," Suskie said. "We still have an obligation."

SPP News

Staff met the deadline by making the new exit fee (*ER19-2523*), compliance (*ER19-2522*) and LSE-definition (*ER19-2524*) filings.

Altenbaumer Delivers VATF, SPC Updates

Board Chair Larry Altenbaumer told the board and members they will likely see final recommendations from his Value and Affordability Task Force (VATF) during the October cycle of meetings.

He said the task force is paying special attention to "SPP's overall performance in providing value" and that it intends to bring everything together by October. "We're trying to get some consensus," said Altenbaumer, who chairs the group.

To that end, the VATF has been divided into three sub-teams that are meeting separately from the full group:

- Budget, led by Evergy's Darrin Ives, focusing on budget, staffing and IT costs;
- Process, led by NextEra Energy Resources' Holly Carias, engaged in project approval and prioritization processes; and
- Mission/Strategy/V, led by Golden Spread Electric Cooperative's Mike Wise, concentrating on organizational group efficiencies and defining, measuring and communicating affordability.

The group, which was formed in January, is finalizing its definitions of affordability and value, determining the criteria for evaluating the sub-teams' action plans, and updating communication plans on SPP's value.

Altenbaumer also updated the board and members on the Strategic Planning Committee, which he also chairs. As part of its effort to develop a strategic vision, he said, the committee has used stakeholder feedback to draft a list of strategic initiatives that SPP should "actively pursue."

Expanding the RTO's footprint and implementing the Holistic Integrated Tariff Team's (HITT) and the VATF's recommendations top the list. Other proposed initiatives include adding services within SPP, focusing on cybersecurity and addressing energy storage technologies, integrating the rush of renewable energy and exporting renewables.

"At present, SPP doesn't have a normal vision," Altenbaumer said. "This is something we'd like a new consideration for the organization."

Under its current timeline, the SPC will deliver its strategic plan to the board in July 2021.

SPP to 'Beef Up' Engineering Staff

CEO Brown said during his regular president's report that SPP has decided to "beef up" its engineering analysis staff to address the backlogged generation interconnection queue, "one of the highest areas of discontent of our members and customers."

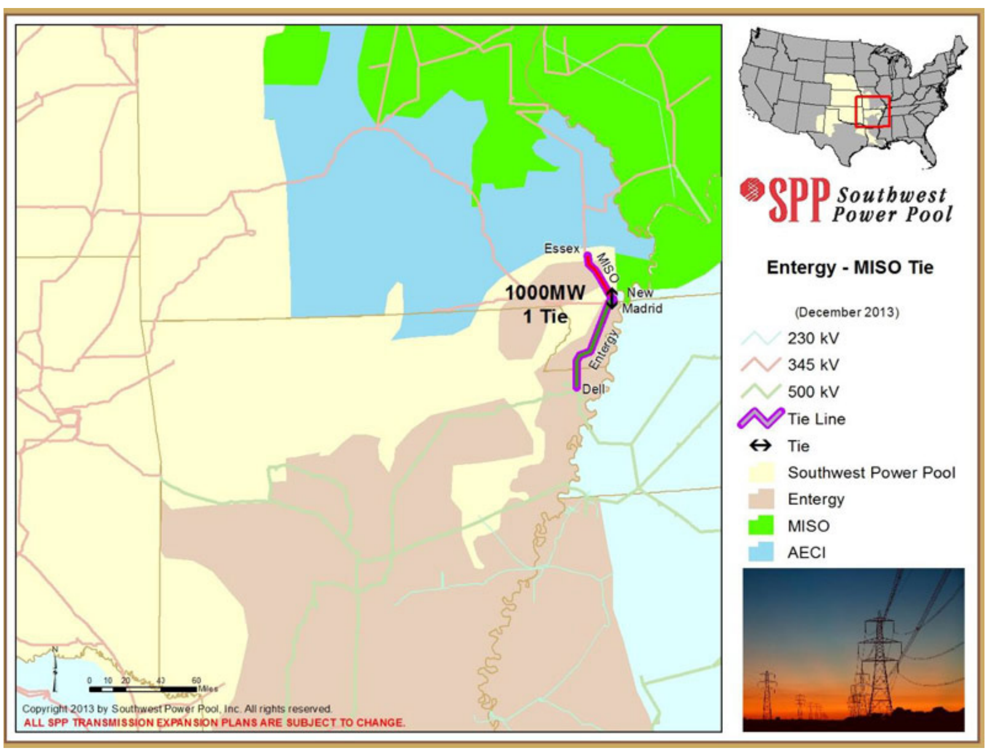
"We have begun receiving numerous letters from congressmen and governors, begging us to do more and commit more resources," Brown said.

He said recent changes to SPP's interconnection process — a new three-phase study process and changes to eligibility for financial security refunds — have given the RTO pause to "look very hard at our resources." (See *FERC OKs New SPP Interconnection Process*.)

"In this particular situation, the cost to the customer in the GI queue will go down, the administrative fee paid by members will go down [and] the administrative overhead will be spread over a larger group," Brown said.

A side benefit will be increased customer engagement, Brown said, pointing to recent turnover in the engineering group. "They would rather do the technical work they were trained to do than manage the GI queue," he said.

Brown also said the CGC he chairs will meet Aug. 22 to consider nominations for seven expiring seats on the SPC and Members, Finance and Human Resources committees. He said the incumbents had said they "desire to continue to serve" but welcomed additional nominations.



| SPP

Basin's Christensen Joins SPC

The consent agenda was passed without dissent. It will result in:

- The approval of Basin Electric Power Cooperative's Tom Christensen for the open TO position on the SPC. Christensen replaces Basin's Mike Risan, who has retired.
- The 2020 operating plan, which details SPP's planned work for the upcoming calendar year after being vetted and approved by the Finance Committee and SPC. Next year's plan focuses on providing market and reliability services in the Western Interconnection, implementing the HITT's recommendations and developing a proactive response to known and emerging cyber threats.
- Lowering a previously approved Missouri project's costs from $40.4 million to $31.6 million. Evergy's Kansas City Power & Light, KCP&L-Greater Missouri Operations and Westar Energy companies are responsible for the 345-kV voltage conversion project. ■

— Tom Kleckner

SPP News

SPP Board Approves HITT's Recommendations

Stakeholders Express Concerns over Complexity of Work to Come

By Tom Kleckner

DES MOINES, Iowa — Following two days of spirited discussion, SPP's Board of Directors on July 30 approved a package of 21 recommendations intended to integrate the expansion of renewable energy, boost reliability, and improve transmission planning and the wholesale market.

The recommendations are the product of a *final report* by the Holistic Integrated Tariff Team (HITT), created last year by the board and Members Committee to review a whole host of the RTO's models, processes and operations.

Some stakeholders pushed back against the HITT's recommendation to decouple transmission pricing zones and create new deliverability subregions, suggesting further evaluation is needed. Others expressed their concern with the "all-or-nothing" approach to the recommendations' approval, saying no one can predict their effect on a "holistic" basis.

Sensing a repeat of the discussion that took place the day before in the Regional State Committee (RSC), board Chair Larry Altenbaumer stepped in and urged the Members Committee to have faith in SPP's stakeholder process.

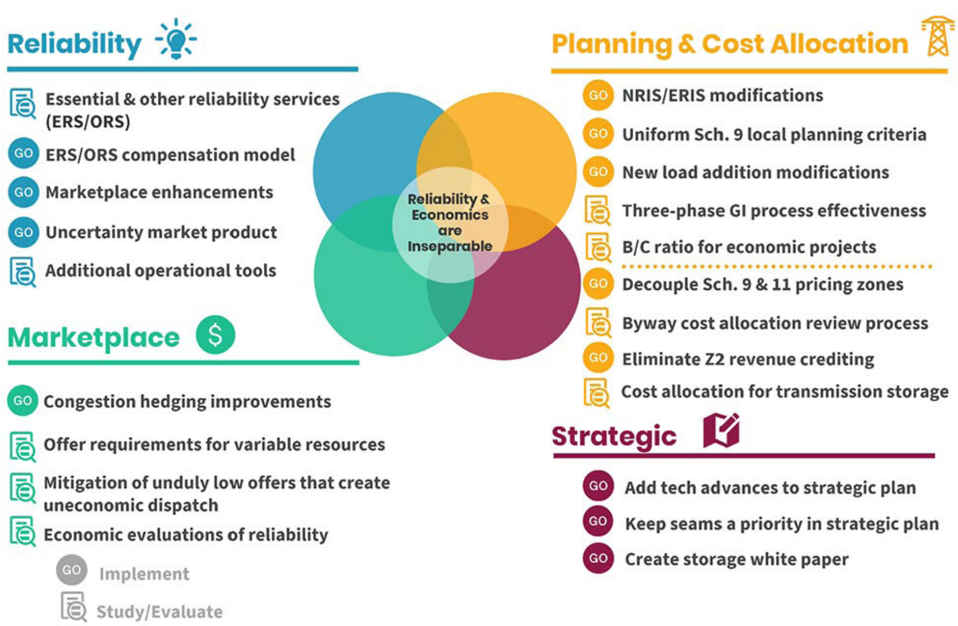
"We have a stakeholder process that works," he said. "Time after time, the stakeholder process … has delivered on results and done a good job of representing the interest of the stakeholders. It would be a disservice to the HITT team and its work to modify their recommendations."

The 20-member committee supported the recommendations by a 17-2 vote, with Oklahoma Gas and Electric and City Utilities of Springfield (Mo.) opposing. Missouri's Liberty Utilities abstained.

Greg McAuley, OG&E | © *RTO Insider*

OG&E *filed* a seven-page letter with the board outlining its opposition to the HITT report ("misplaced" cost-allocation recommendations, "arbitrarily" shifting costs between zones and the "sheer number" of proposed changes). Greg McAuley said his company had concerns about the stakeholder process, given the potential increase in members without concerns for ratepayers, such as financial players and merchants.

McAuley echoed comments by SPP CEO Nick Brown, who said, "We've never seen the magnitude of change in our industry than we've seen over the last five years," when he addressed the head table just before the vote.



Holistic Integrated Tariff Team recommendations | *SPP*


Texas PUC Chair DeAnn Walker questions SPP staff during an RSC meeting. | © *RTO Insider*

"This puts all the ratepayers in this footprint in a vulnerable position, especially with the changes that are coming," McAuley said. "Things are changing, Nick, more quickly than any of us can comprehend. If we move forward without caution in this, I think the consequences will be more significant than anything we've seen in the highway/byway [cost allocation] process."

Springfield's Jeff Knottek focused his comments on the HITT's recommendation that SPP "should" separate its Schedule 9 and 11 transmission pricing zones, allowing the creation of larger Schedule 11 pricing zones and/or Schedule 9 sub-zones. The team noted the zones are largely based on legacy zones that predate SPP's RTO status in 1994 or date to when transmission owners joined.

"We are a bit leery. I don't see any words or discussion here of unintended consequences," Knottek said. "I wish it would say 'evaluate' or 'further study.' ['Should' is] an action term that means go forward and do it."

Regulator Reluctance

Regulators made similar comments during a joint stakeholder meeting July 29.


OCC Commissioner Dana Murphy | © *RTO Insider*

"My concern is overarching. Words matter," said Oklahoma Corporation Commissioner Dana Murphy, who also *filed* a letter with the board urging caution. "When I looked at the executive summary, the language made this like, 'Here's the implementation plan. Here's what we are going to do.' I don't think the report should tell the RSC to

SPP News

create this, do this. There are a lot of moving parts here."

"When we try to approach issues at the commission level, we don't try to throw too many fixes at something at one time, when one or two may fix it," Texas Public Utility Commission Chair DeAnn Walker said. "I'd like to be able to move forward without throwing too much at this. You're saying decouple and create. You're telling the world what to do, and I don't think that's appropriate."

Kansas Corporation Commissioner Shari Feist Albrecht, who served on the HITT, said there is some flexibility within the report.

"It seems like the report builds in the possibility that the RSC may actually reject the recommendation," she said. "It builds in the uncertainty that exists within the RSC of approving or disapproving."

Tom Kent, NPPD | *© RTO Insider*

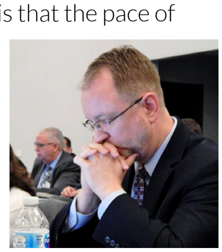
Nebraska Public Power District's Tom Kent, who chaired the HITT, said he was not surprised by the pushback.

"These comments are to be expected," he said. "Any time an organization goes through change — and this represents the beginning of change — it's a hard thing to do. Change management becomes critical."

Saying the HITT effort was the "most significant event of my 37-year career," Brown said he begged Altenbaumer for the privilege to motion for the recommendations' approval.

"This is what was needed. We've played a game of whack-a-mole for eight years. We've seen an issue and tried to hit it with a single team," he said. "Many of the attributes in our Tariff are relics from 1997. To maintain some of that thinking in today's world is not a viable option at all.

"I sensed, as the report was coming to a head, a lot of discomfort with the pace of change," he added. "My argument is that the pace of change is not going to ease up. If that makes you uncomfortable, my suggestion is you better get used to it."



Rob Janssen, Dogwood Energy | *© RTO Insider*

Kent and HITT Vice Chair Rob Janssen, of Dogwood Energy, reminded stakeholders that nine of the recommendations do urge further evaluation. However, 12 of its recommendations require action that will take place within SPP's working groups.

"I feel like the product we provided to the board is a new platform for operations," Janssen said. "The HITT team could have done more; it could have gone on longer. [We] saw 12 clear solutions we could come to consensus on. Some issues in the report are still fairly complex, with a lot of details to work out. I think the stakeholders are up to that challenge."

Janssen said he and other team members have been meeting with SPP's working groups over the past three months. "They are ready to get going," he said. "They all want to know what the result of this meeting is so they can get going and start tackling the recommendations."

'Finest Hour'

The HITT team, which began meeting in April 2018, is composed of 15 directors, members and regulators. They met 17 times, reviewing SPP's cost-allocation model, transmission planning processes, the Integrated Marketplace and real-time operations. (See *SPP's Tariff Team Begins Carving up the Elephant*.)

The group divided its recommendations into four categories: reliability; marketplace enhancement; transmission planning and cost allocation; and strategic, the last of which included developing an energy storage white paper. Those recommendations have been parceled out to many of SPP's stakeholder groups.

In praising the group's work, Golden Spread Electric Cooperative's Mike Wise pointed to SPP's nearly $10 billion in transmission investment that have left consumers with "very high fixed costs … embedded in their rates" and a footprint that touches Canada and nearly Mexico.

"I've been involved with SPP for 23 years," he said. "This really is SPP's finest hour. I love what we have done."

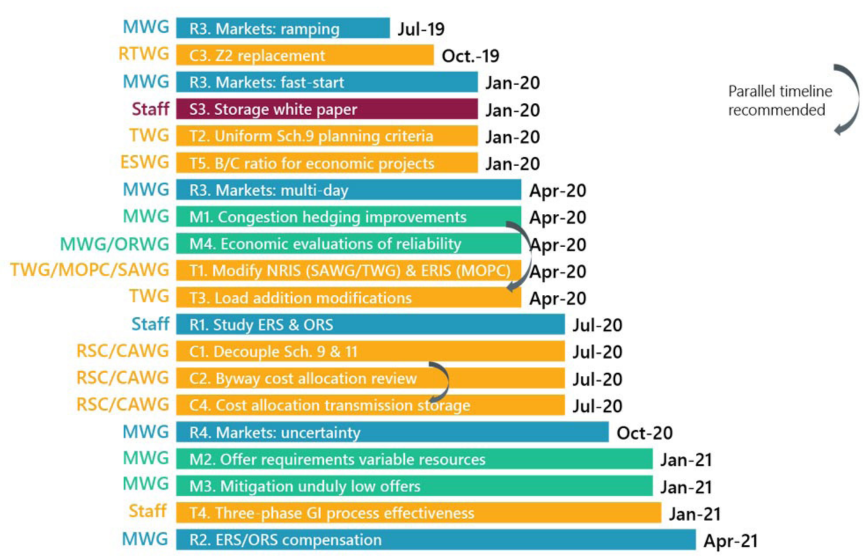
Kent, who likened the team's work to eating an elephant ("one bite at a time") was asked if the HITT had finished devouring the beast.

"There's still a lot of work that has to happen in the stakeholder process to take these recommendations and turn them into implementable actions," he said. "But we got enough bites to give good direction to the stakeholder groups to improve things to the benefit of the organization."

The Markets and Operations Policy Committee is already working on creating a task force to address the HITT's direction to develop a policy that "creates an appropriate balance" between the cost and value of SPP's energy resources interconnection service (ERIS) and network resources interconnection service (NRIS) interconnection products, and generation with long-term firm service.

The task force would be composed of three or four representatives each from the Transmission and Supply Adequacy working groups, two members of the RSC's Cost Allocation Working Group, and three or four independent power producers.

Of course, it could also potentially add yet another acronym to SPP's lexicon: NED (NRIS, ERIS and Deliverability). ■



Timeline by date (proposed) | *SPP*

SPP News

SPP Regional State Committee Briefs

Regulators Approve 'Wind-Rich' Report, HITT Recommendations

DES MOINES, Iowa — SPP's Regional State Committee on Monday endorsed a report on wind-rich areas and several recommendations related to the RTO's effort to improve its planning processes, cost-allocation methodologies, and market products and services.

The RSC failed to reach an agreement on the Cost Allocation Working Group's report and its recommendations when the group brought them forward during the committee's regular quarterly July 29 meeting.

The proposed actions were included in the Holistic Integrated Tariff Team's (HITT) package of 21 recommendations, which the Board of Directors approved on July 30 despite stakeholder pushback. (See related story, *SPP Board Approves HITT's Recommendations*.)

The CAWG recommended:

- Decoupling the Schedule 9 and Schedule 11 transmission pricing zones, allowing for a potential larger Schedule 11 pricing zone;
- Evaluating the byway facility cost-allocation review process; and
- Considering a future study of the generator injection rate.

Several RSC members suggested July 29 that further evaluation is needed before decoupling the zones, while others argued against the "all-or-nothing" approach and the complexity of the work ahead.

Given a week to think about the CAWG's recommendations, the committee approved them without discussion during a conference call Monday by an 8-1 vote, with one abstention and one not voting. The same motion was rejected by a 6-5 margin on July 29.

Texas Public Utility Commission Chair DeAnn Walker cast the one opposing vote and Oklahoma Corporation Commissioner Dana Murphy abstained. Both were outspoken in their opposition to the recommendations the week prior, saying they couldn't agree to everything in the report.

During that discussion, Kansas Corporation Commissioner Shari Feist Albrecht asked whether the RSC would be abdicating its authority over cost allocation by not voting on the recommendations.

RSC President and Arkansas Public Service Commissioner Kim O'Guinn responded by saying, "I think we have provided plenty of input to the board."

The RSC meets July 29. | © *RTO Insider*

"More than you realize," cracked SPP Board Chair Larry Altenbaumer.

The CAWG's Cost Allocation in Wind-Rich Areas *report* determined that SPP's current cost-allocation methodology "and/or rate recovery mechanism in zones with a high proportion of generation relative to zonal load is not reflective of cost-causation principles."

John Krajewski, representing the Nebraska Power Review Board, said the CAWG identified three potential rate approaches for further review, which will be folded into the HITT work: generation injection, zone consolidation and a "surgical approach." The latter, recommended by Chairman Emeritus Jim Eckelberger, would provide a narrow process through which costs for specific projects between 100 and 300 kV "can be fully allocated on a region-wide basis."

"It had more appeal than the broad byway cost-allocation project," Krajewski said.

RSC Ponders Joining OMS on Tx Incentives Comments

During the conference call, the RSC also debated whether to join onto the Organization of MISO States' reply comments to FERC's inquiry into transmission incentives (*PL19-3*). (See *Tx Incentives NOI Brings Calls for Broader Reforms*.)

The OMS comments included a section on interregional planning, drawing the RSC's interest. SPP stakeholders in particular have been frustrated with the lack of interregional projects with MISO.

SPP News

The draft comments are "not fully formed, but they give you an idea of where the OMS is leaning," Albrecht said.

She said she saw this as an opportunity for the OMS-RSC Seams Liaison Committee, on which she serves, to "emphasize the states' interest in interregional planning issues."

"But if the RSC wants to join [the comments], we can do that," she said.

Albrecht said the OMS plans to post the draft comments Aug. 15, in advance of an Aug. 22 meeting to finalize the comments. The RSC penciled in a meeting on Aug. 23 to review the final document and decide whether to join the comments.

FERC provided an Aug. 26 deadline for reply comments.


RSC President Kim O'Guinn, Arkansas PSC | © *RTO Insider*


John Krajewski, representing Nebraska, explains the "Wind-Rich" report. | © *RTO Insider*

Regulators Cancel 2020 Safe Harbor Review

During its July 29 meeting, the RSC did endorse the CAWG's recommendation to leave the safe harbor eligibility criteria and limits untouched and not to conduct a limited review of the waiver criteria in 2020, given the working group's HITT responsibilities. Instead, the group will perform a full review in 2021, the first of "at least one every five years."

Missouri Public Service Commission economist Adam McKinnie said the CAWG did not "see any problems" with canceling next year's review. He said the working group determined there was "no significant new information" since the end of the 2018 comprehensive study.

The RSC began requiring more limited reviews when a full study in 2016 found no changes were needed. Subsequent safe harbor reviews have come to similar conclusions, leaving some to wonder whether they are worth the effort. (See *SPP RSC Leaves Safe-Harbor Thresholds Unchanged*.)

"I told my [CAWG] representative that the review is not a good use of their time," Walker said, in pushing for a full review at least once every five years.

The reviews are conducted to determine whether modifications should be made to the thresholds used to determine what project costs should be borne by load-serving entities making long-term transmission service requests (TSRs).

SPP's aggregate transmission service study process combines into a single study all long-term point-to-point and designated network resource requests received during a specified time period. The RTO splits the costs of transmission projects between the entire SPP footprint and the LSEs purchasing transmission service for designated resources — those used to meet the LSE's capacity margin requirement.

The safe harbor exempts LSEs from upgrade costs when a TSR meets the aggregate studies' waiver criteria, which include:

- Wind generation not exceed 20% of designated resources.
- TSRs for designated network resources must have a minimum five-year term.
- Designated resources may not exceed 125% of forecasted load.

The RSC also approved its 2018 audit report. Auditing firm Landmark CPAs reported no disagreements with management that could be significant to the report's financial statement ■.

— Tom Kleckner

Company Briefs

More Delays Likely for Vogtle Nuclear Plant

The Georgia Public Service Commission's Public Interest Advocacy staff last week published an evaluation of the most recent reassessment of project timeline and cost for Georgia Power's Vogtle Units 3 and 4, concluding that while the latest analysis by Southern Nuclear Co. was "generally sound," they did not believe the baseline timeline to begin operations is "achievable."

That target was May 2021 and 2022 for the two reactors. Staff said even commercial operation by November 2021 and 2022 would be "a challenge to achieve." They also said "there is a chance" of hitting $17.1 billion in capital costs, not including financing costs. Further delays would increase the project cost though.

Already, the remaining work is expected to be 2.5 times more dollar-intensive than the construction finished so far. Workers have completed 77% of the project at a cost of $9.86 billion. The remaining 23% is budgeted to cost $7.243 billion, assuming it does not run over.

More: *Greentech Media*

Cash Refunds Begin Arriving for Dominion Customers in SC

Customers of Dominion Energy South Carolina — formerly South Carolina Electric & Gas — began receiving about $60 million in checks last week.

The checks, all of which should arrive by Aug. 10, are the first round of up to $146 million in payouts stemming from a settlement over the utility's failed V.C. Summer nuclear plant expansion project.

Most of the utility's 1.1 million current and former customers will get less than $100 — a fraction of what they were charged for the nuclear project. However, some 41,000 customers will get at least $100 back. One unnamed customer will get a $1 million refund.

More: *The State*

Federal Briefs

Feds, Vineyard Wind at Odds over Wind Farm Setup

All three federal agencies that weighed in on Vineyard Wind's construction and operations plan have conformed around the east-to-west orientation of the 84 wind turbines with a distance of at least 1 mile between each.

That is a marked contrast to Vineyard Wind's diagonal layout plan with less space between. Changing the grid layout could delay the project for a year, according to the project's draft environmental impact statement.

The Interior Department's Bureau of Ocean Energy Management is the lead federal permitting agency for the wind farm construction and operation. The Coast Guard, Army Corps of Engineers, EPA and National Marine Fisheries Service serve as cooperating federal agencies.

More: *Cape Cod Times*

Bipartisan Transportation Bill Includes up to $1B for EV Charging

The Senate Environment and Public Works Committee last week passed the America's

Transportation Infrastructure Act of 2019, which would provide a funding boost for electric vehicle charging infrastructure and other initiatives aimed at curbing carbon emissions from the transportation sector.

The act proposes investing $287 billion in federal transportation projects over the next five years, which is a 27% increase over existing legislation set to expire in October 2020. In addition to funding for roads and bridges, the bill includes $3 billion to support projects that lower highway-related carbon emissions. The bill also includes a competitive grant program funded at $1 billion over the five-year period for states and localities to build hydrogen, natural gas and EV fueling infrastructure along designated highway corridors.

More: *Greentech Media*

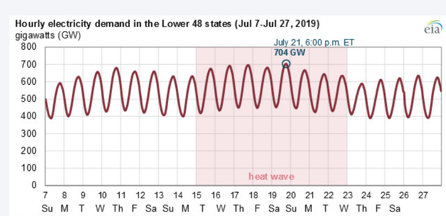
EPA Proposal Scraps Limits on Coal Plant Waste

EPA last week proposed lifting some regulations on coal ash, which is filled with hazardous substances that can leach into the water supply and cause health problems. The latest proposal would eliminate restrictions from 2015 that limited coal ash use to 12,400 tons per site.

The Trump administration proposal would allow projects to use as much coal ash as they want but would have to file a demonstration that shows the project won't cause harm if it's close to certain features like groundwater or wetlands.

More: *The Hill*

Heat Wave Results in Highest US Electricity Demand Since 2017



The heat wave that ripped through the Midwest and Atlantic Coast between July 15 and 22 caused a peak in energy demand not seen in the country in two years.

At 6 p.m. ET on July 19, hourly electricity demand in the lower 48 states peaked at 704 GW, according to data from the Energy Information Administration's U.S. Electric System Operating Data. Electricity demand had not been that high since July 20, 2017, when electricity demand hit 718 GW.

Although demand for power was relatively high nationwide, actual demand generally stayed within expectations of regional grid systems. In New England, hourly power demand peaked at 23,865 MW at 7 p.m. ET on July 20. This level was lower than ISO-NE's summer peak forecast of 25,323 MW. Similarly, peak power demand in ERCOT reached 70,177 MW on the evening of July 16, which was lower than its summer peak forecast of 74,853 MW.

However, in PJM, peak power demand was higher than the summer peak forecast. Hourly power demand peaked at 152,315 MW at 6 p.m. CT on July 19. In early May, PJM issued a summer peak forecast of 151,000 MW. In that hour of peak demand, generators dispatched 155,263 MW of power, supplying more than 3,000 MW to adjacent grids.

More: *EIA*

State Briefs

MARYLAND

PSC Fines Smart One Energy $561K

The Public Service Commission suspended the license of Smart One Energy, a retail gas supplier, and levied a $561,000 civil penalty against the company, the largest such fine the commission has ever issued.

Commission staff said the agency received three complaints that the company deceived customers in soliciting them for their business by enrolling them in contracts to buy natural gas without obtaining their signature and failing to provide the customers with summaries of their contracts, as is required by state law.

"Maryland is committed to a thriving, competitive energy marketplace because customers stand to benefit from potentially lower rates, renewable and innovative energy products and promotional incentives," PSC Chair Jason Stanek said in a statement. "However, we are very concerned about the practices of a few retail suppliers, whose actions can harm customers and retail competition in Maryland."

More: *The Baltimore Sun*

NEVADA

Reno Approves Climate Action Plan

The Reno City Council last week unanimously signed off on a comprehensive plan outlining steps toward making the city more resistant to climate change.

Under the plan, the city will look to progressively reduce emissions in three steps: 28% by 2025, 40% by 2030 and 80% by 2050.

More: *The Nevada Independent*

NEW YORK

NYPA Moves Forward with North Country Storage Demo

The New York Power Authority is moving ahead with its first large-scale energy storage project, establishing a 20-MW demonstration facility adjacent to an existing substation in the North Country.

The project supports the state's nation-leading storage goal of 3,000 MW by 2030. Construction is expected to start in October, with operation anticipated by June 2020.

The Board of Trustees approved $23.8 million for the project at its July 30 meeting, with the total estimated project cost is $29.8 million. The other $6 million was approved by the board last October.

More: *Press-Republican*

TEXAS

Houston Votes Against CenterPoint Request to Increase Rates

The Houston City Council voted to deny a rate increased requested by CenterPoint Energy, which would raise the average customer's bill by about $3 a month.

Even though the council voted to deny the increase, the state Public Utility Commission will make the final decision on the request.

"What we know is that the rate that they're requesting is way more than what the ratepayers in the city of Houston should be paying," Mayor Sylvester Turner said. "So we're in opposition to it."

More: *Houston Public Media*

WISCONSIN

Xcel Customers to See Bill Savings in 2020

State regulators approved a plan for Xcel Energy to freeze electricity rates for two years and cut the utility's natural gas revenues by 4.6%. The proposal allows Xcel to continue earning a 10% profit on its investments and to retain fuel savings from some 1,450 MW of new wind farms.

Xcel estimates typical residential electric bills next year will be about 5% lower than in 2018, thanks to credits for the tax savings. Bills are expected to increase in 2021, though, while remaining below 2018 levels.

The settlement is the third approved since the passage of a 2017 state law that allows utilities to negotiate agreements with one or more interest groups rather than fight over rates before the Public Service Commission.

More: *Wisconsin State Journal*

We Energies to Invest in Massive Solar Farm

We Energies plans to invest nearly $130 million in its first utility-scale solar project by taking a stake in a sprawling solar farm under development in the western part of the state.

The utility said it will acquire 100 MW in the Badger Hollow solar farm in Iowa County, at a cost of $129.9 million. Madison Gas & Electric will purchase 50 MW in the development and invest $65 million. The companies jointly filed an application last Thursday with the Public Service Commission for approval to invest in the 300-MW solar farm.

We Energies' investment will go toward its pledge to reduce carbon emissions by 80% from 2005 levels by 2050.

More: *Milwaukee Journal Sentinel*