

# RTO Insider

Your Eyes and Ears on the Organized Electric Markets  
CAISO ■ ERCOT ■ ISO-NE ■ MISO ■ NYISO ■ PJM ■ SPP

ISSN 2377-8016 Volume 2020/Issue 33

August 18, 2020

## CAISO Blames Blackouts on Inadequate Resources

*ISO Orders Stop to Controversial Convergence Bidding*

By Hudson Sangree and Robert Mullin

CAISO on Monday blamed inadequate preparation by others for a supply shortfall that caused rolling blackouts over the weekend during the Western heat wave.

During an emergency meeting of the Board of Governors, CEO Steve Berberich immediately jumped to the defense of the ISO, which received the brunt of criticism for ordering the statewide rolling blackouts Friday and Saturday.

The California Public Utilities Commission authorizes load-serving entities to procure energy, he said. CAISO has told the CPUC that an additional 4,700 MW would be needed to meet summer peaks during the state's transition from fossil fuels to renewable energy. The CPUC directed LSEs to procure a total of 3,300 MW by next year, when the shortfall is expected to grow worse, he noted.



"The ISO does not direct procurement. We are the system operator," Berberich said. "The situation we are in could have been avoided. For many years, we have pointed out to the procurement-authorizing authorities that there was inadequate power available during the [evening] net peak," after solar has left the system but demand remains high.

The weekend outages occurred as solar power waned, he said. About 12,000 MW of battery storage are needed to store renew-

*Continued on page 5*

## FERC Accepts PJM TOs' End-of-life Revisions

By Michael Yoder

FERC on Aug. 11 accepted PJM Transmission Owners' Tariff amendments governing end-of-life (EOL) projects, a proposal that was hotly contested by stakeholders (ER20-2046).

The TOs had proposed to identify and include asset-management projects within the existing planning procedures of Tariff Attachment M-3 and to include procedures for the identification and planning for EOL needs of transmission lines 100 kV and above.

The TOs voted in June to approve a Federal Power Act Section 205 filing of the proposed amendments through voting procedures contained in the Consolidated Transmission Owners Agreement (CTOA). (See *TOs Vote to File End-of-life Rules with FERC.*)

Stakeholders challenging the filing asserted that the TOs do not have "exclusive filing rights" in regard to EOL projects and that PJM members maintain rights under the Operating Agreement to also make filings related

to EOL projects. A competing, joint stakeholder proposal is still pending before FERC (ER20-2308). (See *PJM Files EOL Proposal over TO Protest.*)

"Given the specific facts and circumstances before us, we find that the planning activities addressed by the Attachment M-3 revisions filing are within the exclusive rights and responsibilities retained by the PJM TOs under the CTOA," the commission said in its ruling. "Under the CTOA and the Tariff, the PJM TOs retain all rights that they have not specifically granted to PJM."

### TO Filing

The new rules will require TOs to have a formal process for EOL determinations and to identify potential EOL projects five years in advance. Projects that "overlap" with Regional Transmission Expansion Plan (RTEP) violations will be included in a competitive window seeking regional solutions.

*Continued on page 24*

## Maine Court Rejects Referendum on Tx Project

By Rich Heidom Jr.

Maine's Supreme Judicial Court removed a major obstacle to the New England Clean Energy Connect (NECEC) transmission line Thursday, ruling that a proposed voter initiative on the project is unconstitutional.

Ruling on a challenge by Central Maine Power and parent Avangrid Networks, the court said the ballot question improperly intruded on executive branch authority in seeking to reverse the Maine Public Utilities Commission's 2019 order granting the project a certificate of public convenience and necessity. Maine's constitution, the court said, only allows citizens' direct initiatives to propose "legislation."

The decision reversed a lower court decision that said it was not necessary to determine the constitutionality of the referendum before the vote.

*Continued on page 11*

### Also in this issue:



**Calif. to Stay Course on Electrification, CEC Chair Says**  
(p.3)



**MISO Processing Heftiest Queue Ever**  
(p.14)



**PPL to Sell UK Operations, Focus on US**  
(p.22)



**GridLiance, Xcel Battle over Tx Qualifications**  
(p.25)

## CAISO/West News

## CAISO Blames Blackouts on Inadequate Resources

Continued from page 1

able energy, along with an "overbuild" of solar and wind generation to charge the batteries, he said. There's currently only 200 MW of storage on CAISO's grid.

Hotter summers caused by climate change also need to be taken into account, Berberich said.

"We have indicated in filing after filing after filing that the resource adequacy program was broken and needed to be fixed," he said. "That program requires the load-serving entities to only procure to a 50/50 weather forecast. That is the worst weather you might have on average 50% of the time — not to an extreme heat storm like we have now.

"Resource adequacy must be reformed so that every hour of the year is properly resourced," he said.

The CPUC rejected Berberich's argument that it was mainly to blame.

"This is a shared responsibility, and we are

working with our sister agencies to better understand why this occurred," spokeswoman Terrie Prosper said in an email. "Our current focus is the public's safety and to emphasize the importance of energy conservation to reduce the strain on electric supply."

Demand during the heat wave was in line with predictions and should have been manageable, Prosper said.

"The electricity demand of the last few days is consistent with the level the agencies have for August, and the utilities and community choice aggregators procured the resources that were required to meet the forecasts," said. "The question we're tackling is why certain resources were not available."

### Millions Could be Without Power

CAISO predicted even worse outages Monday and Tuesday than those that roiled the state last week. (See *CAISO Warns Blackouts Could Continue, Calls Emergency Meetings.*)

It had predicted up to a 4,400-MW shortfall Monday, with rolling blackouts in the

afternoon, increasing after sunset. About 3 million customers could lose power, Berberich acknowledged in a call with reporters.

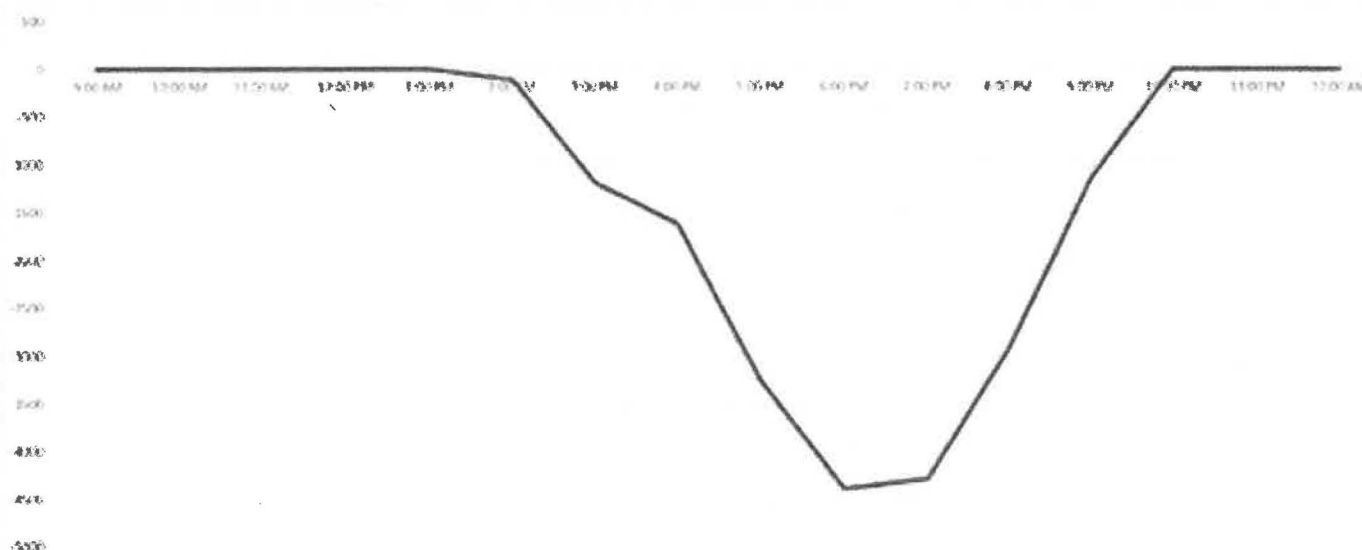
"We have a perfect storm going on here," Berberich said. "The entire region ... is extremely hot. We can't get the energy we'd normally get from out of state because it's being used to serve load natively."

On Monday night, however, CAISO lifted a Stage 2 emergency declaration, saying "no rotating power outages are anticipated, thanks to reduced demand due to consumer conservation and cooler-than-expected weather." The ISO had not updated its predictions for Tuesday as of press time.

The ISO can't dip deeper into its contingency reserve, which can total thousands of megawatts, because the reserve is necessary to protect the Western grid from failure, CAISO officials said.

John Phipps, director of real-time operations, said CAISO must follow NERC and WECC standards that protect the Western Interconnection from failure should a large generator

## Monday August 17, 2020



Load forecast 49,792 MW

Resource deficiency from 111 MW to 4,400 MW"

CAISO predicts resource deficiencies of up to 4,400 MW this week. | CAISO



## CAISO/West News

# CAISO Blames Blackouts on Inadequate Resources

drop offline or another serious problem occur.

CAISO contains 35% of the load in the interconnection, which stretches from the Rocky Mountains to the Pacific Ocean and into Canada and part of Mexico. A serious disruption in the ISO could prove disastrous to the entire area, Phipps said.

## Governor Weighs in

During a televised address Monday to California residents, Gov. Gavin Newsom noted the record-setting heat that set the stage for the blackouts but acknowledged the state's ultimate culpability for the crisis.

"Let me just make this crystal clear," Newsom said. "We failed to predict and plan for these shortages, and that's simply unacceptable. I am the governor. I am ultimately accountable and will ultimately take responsibility to immediately address this issue and move forward to make sure this simply never happens again here in the state of California."

Newsom said his office had launched an investigation into the "interrelationship" among CAISO, the CPUC and the California Energy Commission, which he said have a "shared responsibility" to maintain reliable electricity delivery.

"We'll get to the bottom of it, and that's why that investigation into what happened and its implications for the future will be done swiftly and immediately, and we will lay out in detailed terms what we are going to do to make sure this simply doesn't happen again," he said.

In the meantime, the state is "working with partners across the spectrum" to alleviate the immediate energy shortages, including reducing consumption at the state's ports, allowing utilities to tap resources reserved for public safety power shutoffs from wildfires, and procuring more power from the Los Angeles Department of Water and Power (LADWP) and the State Water Resources Control Board, the governor said.

Newsom also called for a broader examination of how California will continue to reliably serve electricity customers while pursuing its ambitious renewable energy and decarbonization targets. State law requires all LSEs to supply 100% carbon-free energy to retail customers by 2045.

"We now have to sober up to the reality that in this transition, we're going to have to do

more and be much more mindful in terms of our capacity to provide backup [energy] and insurance," he said.

## Convergence Bidding

In a move signaling that its own market mechanisms might be contributing to its real-time shortfalls, CAISO on Sunday notified market participants that it would suspend convergence bidding throughout its footprint beginning Monday (for the Aug. 18 trading date).

"As a result of the record-breaking heat wave that has led to load curtailments, the California ISO has determined that convergence bidding is detrimentally affecting the ISO's ability to maintain reliable grid operations," the ISO wrote in a market notice.

## "Their 15% reserve margin should have handled this easily."

—Robert McCullough

Convergence — or virtual — bidding allows market participants to hedge their physical positions and limit exposure to day-ahead and real-time price differentials. The bid is a purely financial one, implying no obligation to take or deliver electricity. Instead, a market participant buys or sells "virtual" energy in the day-ahead market, a position required to be automatically liquidated in the opposite direction in real time.

CAISO said Monday that it had eliminated convergence bidding to give it a clearer picture of day-ahead market conditions. But the practice has a checkered history in California.

A week after implementing convergence bidding at interties into California in February 2011, the ISO suspended bids at nodes on nine interties linked to the Mountain West because of a software glitch that risked overscheduling those points in the physical day-ahead market.

That incident was followed months later by the more serious discovery that some CAISO market participants were using virtual supply bids on the interties to offset virtual demand bids at nodes located just inside the state, a

gaming strategy that produced no benefit for the physical market and cost the ISO more than \$50 million.

The scheme prompted CAISO to suspend intertie convergence bidding altogether, and it completely eliminated the bidding at interties in March 2016. (See *FERC Eliminates Intertie Convergence Bidding in CAISO*.)

Robert McCullough, an energy economist who was among the first to spot the market manipulation behind the Western energy crisis of 2000/01, pointed to why the convergence bidding market that still exists inside the CAISO remains "worrisome."

"By allowing node-level bids and not requiring physical assets, this allows any single party the ability to dominate transactions at a specific location. Enron called such exploits 'load shift,'" McCullough told RTO Insider. "However, that exploit required lying to the ISO about the 'virtual' supplies. The convergence market doesn't even require a lie — just a willingness to gamble on the ISO's computer systems. Past experience has tended to make this less of a gamble than you might think since critical information is often learned by specific market participants and then used to advantage."

McCullough, long an outspoken critic of organized electricity markets, questioned how Friday's unforeseen demand could have sent CAISO into a Stage 3 emergency.

"Their 15% reserve margin should have handled this easily," he said. "The congestion data indicates that this is a Southern California issue, although, mysteriously, LADWP was not affected."

CAISO's demand peaked at 46,777 MW on Friday, above the 1-in-2 peak forecast of 45,907 MW in the ISO's 2020 Summer Loads and Resources Assessment, but below the 1-in-5 (47,755 MW) and 1-in-10 (48,457 MW) forecasts. That assessment also estimated a 3.7% probability the ISO would enter Stage 2 operations this summer and a 1.1% probability for Stage 3.

CAISO on Sunday also declared a capacity procurement mechanism (CPM) significant event to solicit any available resources not already offered into the CPM's competitive solicitation for August. Resource owners were urged to contact the ISO if they were willing to accept its soft offer cap of \$6.31/kW-month. CAISO will give preference to resources able to deliver energy from 2 to 10 p.m. ■