News : Experts debate New England power market changes during gas-electric forum

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- Blackouts blamed on unplanned generation loss
- Firm gas deliveries at high prices

Experts have offered mixed views on whether New England's grid operator should shift from a three-year forward capacity auction construct to an approach that procures power supplies closer to when they are needed.

Grid reliability in New England has become a persistent concern for federal regulators as the ISO New England, the region's wholesale power market operator, seeks to manage what have become strong interdependencies between the natural gas and power sectors.

"It's no longer sufficient to say we have enough installed capacity," ISO-NE Executive Vice President and COO Vamsi Chadalavada said during a gas-electric harmonization forum June 20 convened in Portland, Maine, by the Federal Energy Regulatory Commission.

Chadalavada noted that recent grid emergencies in 2021 and 2022 involving customer blackouts were primarily caused by unplanned generation losses, with gas-fired units accounting for most of the outages. In some cases, gas-fired generators that failed to perform as expected were unable or unwilling to secure firm gas deliveries at high prices.

Gas-fired resources typically supply the bulk of New England's power, accounting for 53% of the total electricity produced for the region in 2021. But gas-fired units only supplied 16% of New England's electricity on Dec. 24, 2022, during a widespread severe cold weather event.

The June 20 forum marked the second consecutive year FERC has convened a winter reliability forum in New England to explore potential solutions, including the idea of moving to a prompt, or more immediate, power capacity auction.

Like the 13-state PJM Interconnection, the ISO-NE is considering moving away from a forward capacity market construct that procures power supplies three years in advance. Potomac Economics, the ISO-NE's independent market monitor, has been urging the grid operator to do so for years. In March, Potomac Economics President David Patton called forward capacity markets "a terrible, terrible idea."

A prompt market would only procure capacity for the coming delivery year, also known as a commitment period, while a "seasonal and prompt" market would allow capacity sellers to make separate offer prices for each season within a delivery year.

'There are always trade-offs'

Pallas LeeVanSchaick, vice president of Potomac Economics, asserted during the FERC forum that moving to a prompt construct for the New England region "is very important." One of the primary benefits associated with a prompt auction is that it allows resources to procure fuel in line with when they are entering capacity supply obligations, LeeVanSchaick said.

Aleks Mitreski, senior director of regulatory affairs for power producer Brookfield Renewable Energy Group, said prompt and seasonal auctions would address some concerns but could also raise new ones. In addition to fuel procurement, a prompt market would also address a "phantom megawatt" problem where resources that secure capacity supply obligations are not ready to come online three years later, Mitreski said.

But Mitreski warned that adopting a prompt market approach could "severely open" the potential for reliability must-run, or RMR, contracts for generating units at risk of retirement. RMRs are out-of-market mechanisms used to keep generators online when they fail to earn enough revenue in competitive markets to cover their costs.

"There are always trade-offs," Mitreski said.

Michelle Gardner, executive director of regulatory affairs for NextEra Energy power generation subsidiary NextEra Energy Resources, echoed those concerns.

"I'm very concerned about the idea of moving to a prompt market," Gardner said.

Gardner cited the results of PJM's latest capacity auction, which initially included a major price spike in a small capacity zone after a significant number of planned resources declined to participate. The resources were not required to participate and may have chosen not to for reasons including interconnection delays and a lack of available transmission capacity.

"The timelines of resources in auctions are very much tied to planning processes, both in terms of assumptions on new resources coming into the market -- even if it's through state policies -- as well as transmission," Gardner said. "So, I am very worried that unless we really think through what that would mean, in terms of those assumptions, we could be creating situations where we end up with more RMRs."

Andrew Weinstein, vice president of FERC market policy for power producer Vistra, said preliminary data from the ISO-NE's ongoing resource capacity accreditation process suggests gas-fired resources without firm supply contracts may not have their capacity values derated to account for the risk of correlated unplanned outages.

"We're learning that the data may show that there may be no need for derating non-firm gas in the winter given the outcomes," Weinstein said. "So, then the question is, 'What is the incentive, or why would you need to incorporate your firming into your capacity offers year-out?'"

Weinstein said moving to a prompt market design could take roughly 18 months.

"We are very open to it, but I think it's going to be a complicated design," Weinstein said.

Next steps

Mark Karl, vice president of market development and settlements for the ISO-NE, said the grid operator's staff is still evaluating whether to pursue a prompt or seasonal approach or both.

"That's not locked in place," Karl said.

The ISO-NE plans to file proposed resource capacity accreditation, or RCA, rules with FERC by the end year for implementation starting with its 19th forward capacity auction. Dubbed FCA 19, the auction is set to start in February 2025 and covers the 2028-29 delivery year, according to a memo June 14 from Chadalavada to stakeholders.

In the memo, Chadalavada sought feedback on four options.

Under one option, the ISO-NE would implement its new capacity accreditation rules for FCA 19 but with a shorter forward auction cycle and move to a prompt seasonal market for FCA 20 covering the 2029-30 delivery year. A second option calls for delaying the RCA filing by a year and targeting implementation for FCA 20 while moving to a prompt and seasonal market for FCA 21.

A third option would implement RCA, as well as a prompt and seasonal auction, for FCA 19 while establishing a later auction date for the 2028-29 delivery year. And a fourth option would implement RCA with a prompt and seasonal market for FCA 20, with a later auction date for the 2029-30 delivery year.

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