

News : ISO New England expects to meet winter power demand, extreme cold could stress system

By Jared Anderson

Published on - Mon, 14 Nov 2022 16:41:28 EST | Modified on - Mon, 14 Nov 2022 17:28:42 EST

- Normal weather: 20,009 MW peakload
- 31 Bcf of LNG expected to be available
- High volumes of oil burn possible

ISO New England expects to have adequate power generation resources this winter to meet anticipated power demand under normal weather conditions of 20,009 MW and demand of 20,695 MW under extremely cold conditions, the grid operator said Nov. 14.

“ISO-NE remains focused and vigilant [in] monitoring fuel inventories ... to meet the energy needs of New England,” Steven Gould, the grid operator’s director of operations said during the annual Winter Generator Readiness Seminar that was held remotely.

It is important for power generators to share information with ISO-NE that could limit generator availability or generation output to manage the resources needed to meet demand, Gould said.

The main winter readiness theme is the importance of collaboration during normal, abnormal, and emergency conditions, he said.

Warmer-than-normal weather is forecast for most of New England, according to the National Weather Service, with near-normal precipitation expected based on probabilities, Michael Fontaine, ISO-NE’s lead forecast analyst said.

And while average winter temperatures have been trending milder, exceptional cold can occur at any time, he said. In fact, from late December 2017 through early January 2018 a major arctic outbreak occurred, even though average temperatures for the entire winter were above normal, according to Fontaine’s presentation.

That arctic outbreak resulted in 14 consecutive days of below-normal temperatures across New England.

Winter capacity outlook

ISO-NE’s historical average winter peak net load is 22,818 MW, Mike Knowland, the grid operator’s forecast, and scheduling manager said during his presentation.

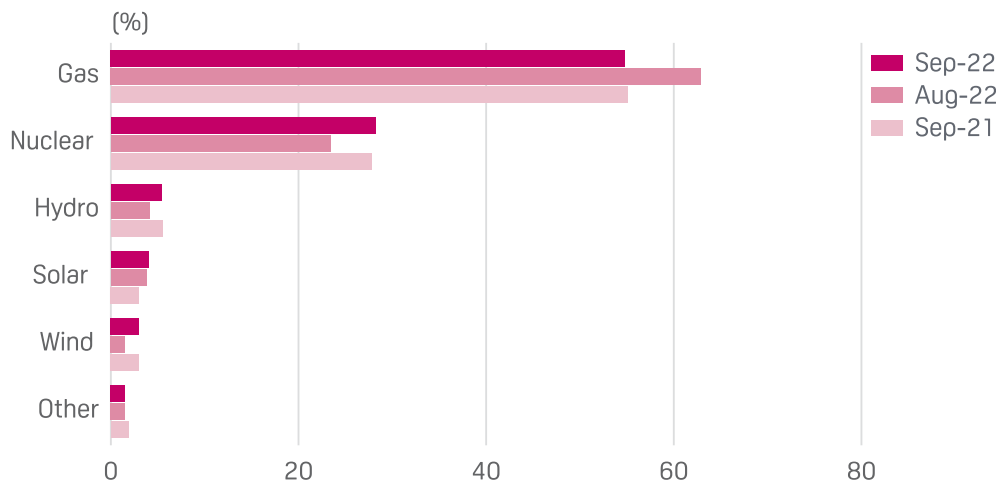
Based on capacity supply obligations, there is an operable capacity surplus of 1,001 MW on the 50-50 forecast and a deficiency of 496 MW on the 90/10 extreme weather forecast, he said. The most significant adder the ISO has are the normally expected generator offers that come in above their capacity supply obligations that should more than cover the 90/10 deficiency, Knowland said.

When the weather is colder there is more heating demand on the region’s natural gas pipelines and less gas available for power generation, which results in some generators turning to oil or LNG if the gas pipeline supply is unavailable, he said.

“With the way world events are coming together, it could be a stressful winter if it gets cold,” Knowland said.

Regarding LNG replenishment, over the past 10 winters, the region has averaged about 31.7 Bcf of LNG consumption, with the highest usage of about 42.9 Bcf during the 2012/2013 winter and the lowest usage of about 20 Bcf during the 2021/2022 winter, the presentation said.

ISO-NE POWER GENERATION FUEL MIX COMPARISON



Source: ISO-NE

The ISO’s current expectation is that around 31 Bcf of LNG will be available this winter. Based on contracting, “that number could go up or stay the same,” Knowland said. It will also be based on demand and given current LNG price levels, “I would expect to see an oil burn that would be similar to last year,” given similar weather because most of the market fundamentals are similar to this time last year, he said. Last winter the region burned roughly 80 million barrels of fuel oil for power generation, according to the presentation.

The grid operator modeled the winter under three scenarios—a mild winter like last year, a moderate winter with a 13-day cold spell like winter 2017/2018, and a colder-than-normal winter similar to 2013/2014.

Scenario 1 anticipates there would be sufficient capacity and energy to meet expected peakloads, scenario 2 could require calling on capacity deficiency operational procedures in five to seven days, and scenario 3 would require "significant use of all availability capacity deficiency actions" including public appeal actions for several weeks, according to the presentation. Scenario 3 could also create a need for load shedding "across several days," the ISO said.

For internal use only. Not for reproduction or further distribution. Platts' standard terms and conditions apply to all use of this article/excerpt. Read Platts' Terms & Conditions at <https://pmc.platts.com/Public/TermsConditions.aspx>.
© 2022 by S&P Global Inc. All rights reserved.

Please contact us to learn more about Platts products and services at +1-800-PLATTS-8 / 1-800-752-8878 (Toll-free in U.S. and Canada) or by email at support@platts.com