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I write about energy and environmental issues.

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New England Grid Operator Raises Doubts Over Mass. Attorney General's Gas Pipeline Study

New England's grid operator reiterated the reliability risks posed by natural gas pipeline constraints during the winter heating season.

"Electricity supplies should be sufficient to meet consumer demand for electricity in New England this winter, but constraints on the region's natural gas pipelines could pose a challenge to reliable operation of the regional power grid," said the Independent System Operator for New England (ISO-NE), a non-profit entity that manages the region's bulk power grid, in a [forecast for winter demand](#) released today.

Under normal operating conditions, the ISO-NE's winter outlook projects that electricity demand is likely to peak at about 21,077 megawatts (MW). In the event of extreme winter weather conditions, electricity demand could increase to nearly 22,000 MW.

Nearly half of the total power generating capacity in New England relies on natural gas as its primary fuel source. Last year, natural gas accounted for 44% of the electricity generated in New England. During the summer, the reliance on natural gas for power poses no special reliability risks. The same cannot be said for the winter months.

During the winter, natural gas pipelines in New England must operate at or near full capacity to serve heating demand for commercial and residential customers, according to [several ISO-NE studies](#). As a result, when it goes colder than usual or for a prolonged period of time, natural-gas-fired generators in New England may not be able to secure the fuel they need to operate.

A staggering 4,000 MW of gas-fired generators in New England are at risk of running out of fuel during cold weather, according to the ISO-NE.

To mitigate the risk of generator outages resulting from lack of fuel, the [ISO-NE said](#) it had approved a Winter Reliability Program for the third consecutive year to ensure system reliability this winter. The Program pays oil-fired generators to burn fuel oil and pays natural-gas-fired generators to burn liquefied natural gas.

“To address the serious challenge these constraints create for reliable power system operation and to ensure that generators can run during times of system stress, ISO New England will again employ a Winter Reliability Program to incentivize oil-fired generators and generators that can access liquefied natural gas to procure sufficient fuel before winter begins,” said Vamsi Chadalavada, the chief operating officer of ISO-NE. “The program has been a key factor in our ability to keep the lights on the last two winters.”

The ISO-NE’s concerns about potential reliability risks posed by the region’s limited gas pipeline capacity stands in remarkable contrast to the recommendations released in November by the Massachusetts Attorney General’s office.

According to the AG’s office, New England’s power grid should perform reliably through 2030 without additional natural gas pipeline capacity. This conclusion is not easy to reconcile with the ISO-NE’s decision to approve an expensive and dirty Winter Reliability Program.

Somebody is baking the books.

Facts and Figures From ISO-NE’s Winter Outlook

Winter peak forecast: 21,077 MW (with winter temperatures at about 7°F)

Extreme winter peak forecast: 21,737 MW (with winter temperatures at about 2°F)

Generation with capacity supply obligations:
about 29,932 MW

Net electricity imports: about 1,226 MW

Demand-response resources: about 587 MW

Last winter's demand peaked at 20,583 MW on January 8, 2015

The all-time winter peak is 22,818, set on January 15, 2004, during a cold snap

The all-time peak demand is 28,130 MW set on August 2, 2006

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