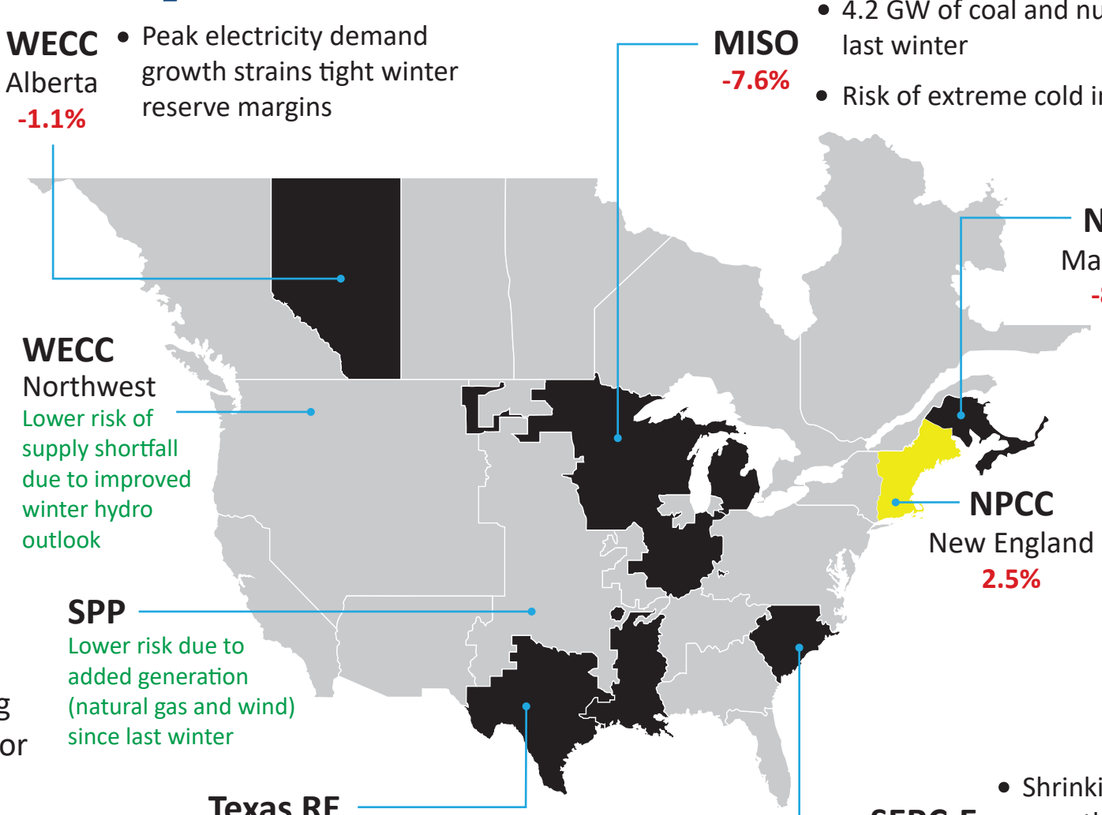
2022–2023 Winter Reliability Assessment

NERC's annual Winter Reliability Assessment evaluates the generation resource and transmission system adequacy needed to meet projected winter peak demands and operating reserves as well as identifies potential reliability issues for the 2022–2023 winter period. Under normal or mild winter weather, the BPS has a sufficient supply of capacity resources. However, some areas are highly vulnerable to extreme and prolonged cold weather and may require load-shedding procedures to maintain reliability. Generators face heightened fuel risk for this winter due to railroad transportation uncertainty and global energy supply issues.

Key Actions

- **Cold Weather Preparations:** Generators should, while considering NERC's cold weather preparations alert, prepare for winter conditions and communicate with grid operators.
- **Fuel:** Generators should take early action to assure fuel and communicate plant availability. Reliability Coordinators and Balancing Authorities should monitor fuel supply adequacy, prepare and train for energy emergencies, and test protocols.
- **State Regulators and Policymakers:** States regulators should preserve critical generation resources at risk of retirement prior to the winter season and support requests for environmental and transportation waivers. Support electric load and natural gas local distribution company conservation and public appeals during emergencies. In New England, the states should support fuel replenishment efforts using all means possible.



Percentages indicate the projected reserve margin with electricity demand, generation outages, and energy derates under extreme conditions.

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Extreme Weather Risk

Winter weather conditions that exceed projections could expose power system generation and fuel delivery infrastructure vulnerabilities. Increased demand caused by frigid temperatures, coupled with higher than anticipated generator forced outages and derates, could result in energy deficiencies that require system operators to take emergency operating actions, up to and including firm load shedding.

Fuel Limitations During Extended Cold

Limited natural gas infrastructure can impact winter reliability due to increased heating demand and the potential for supply disruptions. While New England expects to have sufficient energy during a mild or moderate winter, reliability risk is elevated during a period of extended extreme cold conditions. Oil reserves are below normal levels. During extreme cold, switching fuel types is not always successful.