



Regional System Plan

2025 OVERVIEW

ISO New England's Regional System Plan (RSP) is a comprehensive look at the 10-year horizon for New England's power grid.

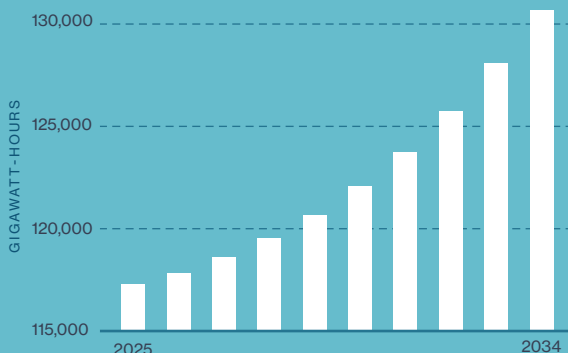
It includes forecasts of electricity demand, an overview of the transmission system, discussion of the current and future resource mix, and a summary of current public policies, economic drivers, and environmental issues affecting the power system. It is not a plan for the development of energy resources in the region. The ISO publishes an RSP once every two years under its responsibilities as a regional transmission organization.

State emissions goals are driving electrification and changes in demand.

State policy goals driving changes in the power system target deep reductions in carbon dioxide (CO₂) emissions by increasing renewable energy while electrifying heating and transportation. The ISO's latest annual forecast projects an increase of **over 11%** in annual regional electricity use between 2025 and 2034 due in part to these policies.

New England currently experiences peak demand for electricity in the summer. But the ISO forecasts that by 2034, New England's winter and summer peaks will begin to converge. The ISO also forecasts sustained growth in behind-the-meter solar (BTM PV) over the next decade, which will drive daytime electric demand to new lows on mild sunny days, and shift the timing of the peak.

Annual electric energy usage in New England will grow significantly between 2025 and 2034.



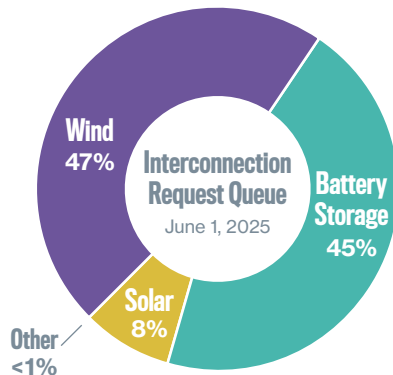
Regional collaboration is powering investment in longer-term transmission needs.

Evaluation of the need for strategic expansion of the region's high-voltage transmission system in the decades ahead is a key ISO planning focus, and a top priority for the New England States Committee on Electricity (NESCOE). The recent NESCOE-directed 2025 Longer-Term Transmission Planning Request for Proposals aims to increase transfer limits through Maine and accommodate the interconnection of **1,200 megawatts of new generation** in northern Maine to the regional power grid. The ISO is evaluating proposals, and a preferred solution may be selected by September 2026.

Changes to the interconnection process improve integration of new resources.

The ISO conducts a series of technical studies to ensure that any resource proposing a connection to the grid can do so reliably. The ISO's implementation of the Federal Energy Regulatory Commission (FERC)'s Orders 2023 and 2023-A will speed up the interconnection queue process through **more collective analyses** of projects that will help reduce backlogs.

Battery storage and wind make up an increasing share of new resources.



Resource adequacy forecast drives progress in capacity market reforms.

Ensuring the region has sufficient resources (capacity) to meet demand now and in the future is one of the ISO's key responsibilities. The ISO forecasts that, given the current projected load growth and expected new resources, the region will have **enough resources to meet demand through 2033**.

The ISO is proposing new market rules to align its capacity auctions with the region's evolving resource mix. The auctions will take place **within months, not years**, of the delivery period, and will shift to a **seasonal approach** with updated accreditation that can better align with risks, including gas constraints that challenge winter operations in New England.

Modeling the energy transition illuminates paths to the future.

The ISO's recent economic studies, including *Economic Planning for the Clean Energy Transition* and *New England's Evolving Grid*, highlight how state policy goals for emissions could result in **significant variability** of supply and demand.



By 2050, peak demand could vary 50% between a mild and a severe winter.

Aging and limited infrastructure presents challenges.

As the grid modernizes, it does so in the context of aging infrastructure. Older resources exiting the markets must be offset by the entry of new ones, especially if system demand grows as forecast. To better prepare for shifts in the resource fleet, the ISO's newly developed Regional Energy Shortfall Threshold (REST) will help the region assess reliability risks during extreme weather events. The ISO also continues to work with stakeholders to develop an asset condition review function to evaluate proposals to replace and update aging transmission infrastructure.

New transmission technologies offer possibilities for inverter-based resource integration.

The ISO continues to improve the integration of inverter-based resources, such as grid-scale solar, to the regional power system, and remains at the technical forefront of new transmission technologies, convening a conference in 2025 focused on Grid Enhancing Technologies (GETs).