



ISO New England Update

*Presentation to the New Hampshire House
Science, Technology & Energy Committee*

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ISO New England Has Nearly Three Decades of Experience Overseeing the Region's Restructured Electric Power System

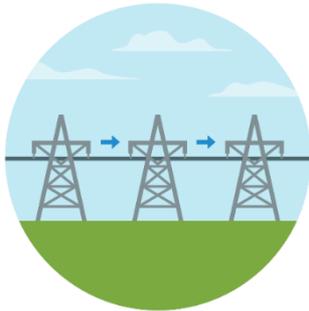
- **Regulated** by the Federal Energy Regulatory Commission
- **Reliability Coordinator** for New England under the North American Electric Reliability Corporation
- **Independent** of companies in the marketplace and **neutral** on technology



ISO New England Performs Three Critical Roles to Ensure Reliable Electricity at Competitive Prices

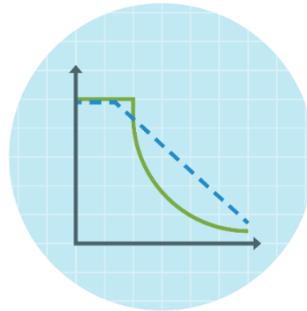
Grid Operation

Coordinate and direct the flow of electricity over the region's high-voltage transmission system



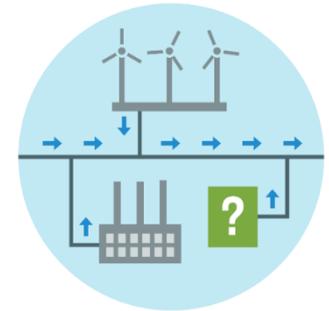
Market Administration

Design, run, and oversee the markets where wholesale electricity is bought and sold



Power System Planning

Study, analyze, and plan to make sure New England's electricity needs will be met over the next 10 years



Things We Don't Do



Handle retail electricity



Own power grid infrastructure



Have a stake in companies that own grid infrastructure



Have jurisdiction over fuel infrastructure

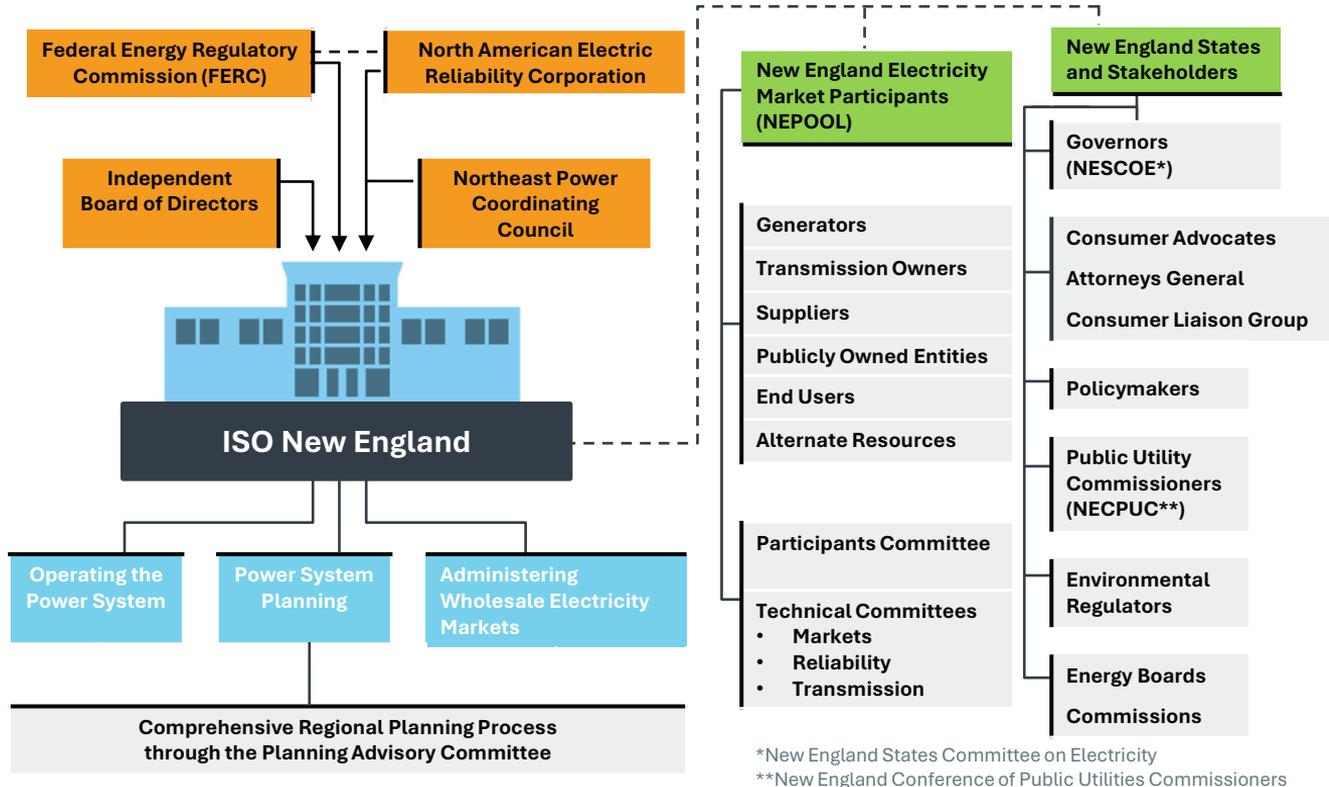


Have control over siting decisions



Plan the resource mix

Numerous Entities Including an Independent Board Provide Oversight of and Input on ISO's Responsibilities





ISO New England Keeps Power Flowing Across the Region Every Minute of Every Day

ORGANIZATIONAL UPDATES



Leadership Transition - Dr. Vamsi Chadalavada

- Dr. Vamsi Chadalavada became ISO's president and CEO effective January 1, 2026, succeeding Gordon van Welie
- Chadalavada joined the ISO in 2004 as vice president for market and system solutions and was promoted to executive vice president and chief operating officer in 2008. As COO, he supervised power system and market operations, market development, system planning, information and cybersecurity services, participant relations and services, advanced technology solutions, and program management.



Read the full
story on the
[ISO Newswire](#)



SYSTEM PLANNING UPDATE



The ISO's Interconnection Process is in Transition

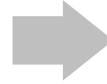
- The ISO's Order No. 2023 compliant Interconnection Procedures include several major changes to its previous “first-come, first-served” serial study-based interconnection process
 - Adopts a “first ready, first-served” cluster study process
 - Increased financial/site control requirements for those entering the ISO's interconnection process
 - A penalty structure applied to the ISO and transmission owners for delays in study completion beyond established deadlines
- On October 11, 2025, the ISO started the **Transitional Cluster Study (TCS)**, which must be completed by August 6, 2026
- State-jurisdiction interconnection studies will continue to closely coordinate with ISO Interconnection Studies



Interconnection Process – Basic Flow

Interconnection Request

Basic information: size, location, fuel type



Cluster Study

Identifies upgrades required for interconnection



Construction

Generator begins commercial operation once construction is complete



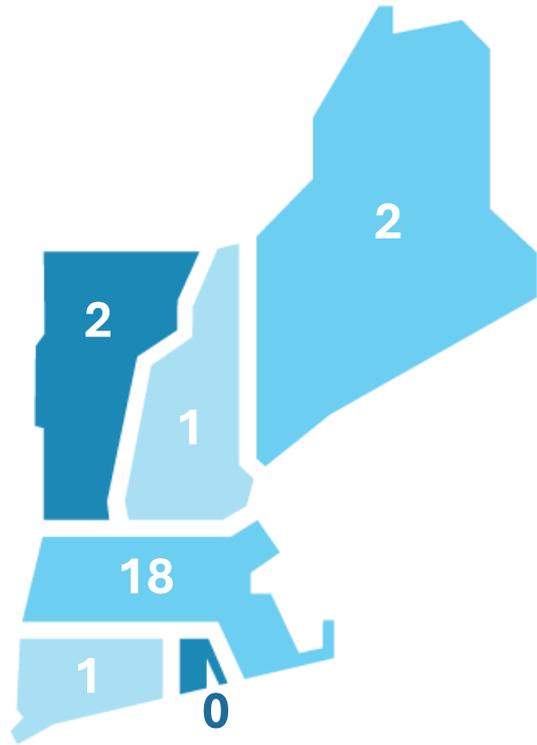
Interconnection Agreement

Three-party agreement between generator, ISO, and transmission owner



For more information about this process, visit [Participate > Applications and Status Changes > New or Modified Interconnections](#)

What's in the Transitional Cluster Study?



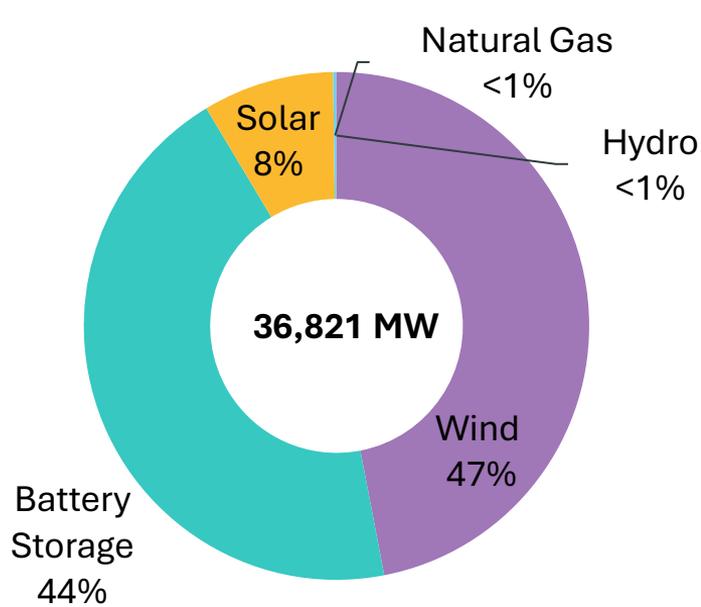
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Interconnection Requests
5,707 MW*

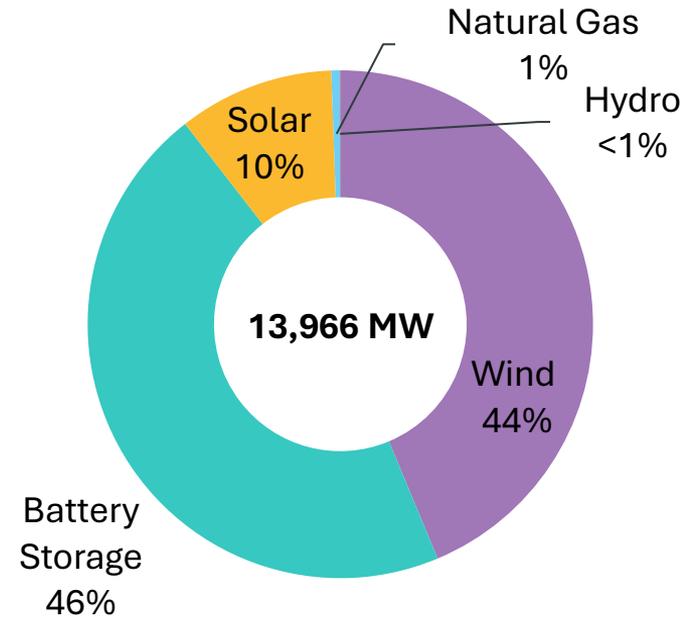


*MW total only includes Interconnection Requests that did not complete a system impact study prior to April 4, 2025, and so will need to be studied according to the Network Capability Interconnection Standard. Totals for each fuel type represents all Interconnection Requests Participating in the Transitional Cluster Study (including those being only studied according to the Capacity Capability Interconnection Standard). January 2026

Today's Queue Reflects the Changing Interconnection Process



April 2025

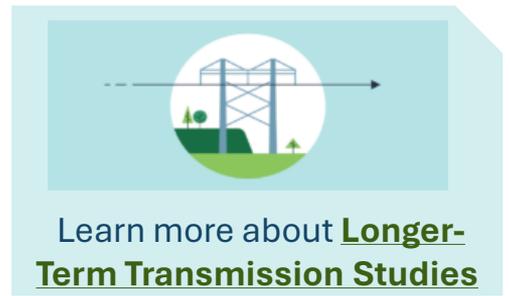


January 2026

Source: ISO Generator Interconnection Queue, FERC Jurisdictional Proposals; Nameplate Capacity Ratings.

Longer-Term Transmission Planning (LTTP)

- 2020: New England States Committee on Electricity (NESCOE)'s [vision statement](#) recommended that the ISO work with stakeholders to conduct a **comprehensive long-term regional transmission study**
 - In response, the ISO began the study and received **FERC approval** to revise the ISO Tariff to establish a repeatable longer-term study process
- 2024: [2050 Transmission Study](#) was the **first longer-term transmission study**
 - Informs stakeholders of the amount and type of transmission infrastructure necessary to provide reliable, cost-effective energy to the region through the **clean energy transition**, driven by state policy
- The region's **aging transmission system** has the potential to become a **significant bottleneck** to progress if it does not keep pace with changes to other elements of the power system



Longer-Term Transmission Planning RFP



- ISO received 6 Longer-Term Proposals:
 - 3 primarily AC transmission; 3 primarily HVDC transmission
 - All designs claim to support 1,200 MW of northern ME wind
 - Cost estimates range from \$0.96B to \$4.04B**
 - In service dates Q4 2032 to Q3 2035 (12/31/2035 target)
- Bid summaries are available on the [ISO website](#)

* May be either Preferred Longer-Term Transmission Solution or Preferred Longer-Term Transmission Proposal, depending on whether Attachment K Section 16.4(i) or 16.4(j) applies. Schedule subject to change; **Costs may include estimates for corollary upgrades that may change with final PTO provided cost estimates.

ISO is Developing a New Function to Provide Oversight of Asset Condition Projects

- In response to state and stakeholder requests, with certain boundary conditions established, the ISO has committed to take on a **new advisory role** as Asset Condition Reviewer (AC Reviewer)
- Development of a framework to establish this role is a novel undertaking in the industry that will require time, resources and stakeholder engagement
 - The ISO has **prioritized** this as a key project for 2026
- The new role is envisioned to provide an **independent review and opinion** of asset condition projects submitted for review by the Transmission Owners (TOs)
 - Asset condition projects are upgrades to the power grid that replace deteriorating transmission facilities
- ISO expects to finalize the framework for the role by **January 2027**

Asset Condition Reviewer Update

Efforts are underway to develop a framework for a permanent role & begin interim reviews

- ISO-NE provided an [update](#) on the AC Reviewer key project, at the October Planning Advisory Committee (PAC) meeting and requested feedback
- In response to requests to begin asset condition project reviews as soon as possible, the ISO will be conducting **interim reviews** on selected projects through 2026
 - ISO will utilize consultants to provide the necessary expertise to perform the interim reviews
- The PAC presentation included a proposed **draft list of asset condition projects** for the interim reviews
- Discussions to develop a framework for the permanent AC Reviewer role will begin in **Q1 2026**, including updates provided at PAC
 - ISO requested feedback to better understand stakeholder objectives for the AC Reviewer role
 - A summary of stakeholder feedback will be provided in early 2026

Learn more about the AC Reviewer key project on the [ISO Newswire](#)



Learn more about the
**Asset Condition Reviewer
Key Project**

ISO-NE Statements on Generation Projects

- The Department of the Interior’s Bureau of Ocean Energy Management (BOEM) issued a **stop work order** for Revolution Wind on August 22, 2025.
 - The ISO issued a statement on the Newswire, saying in part: “Delaying the project will increase risks to reliability”
- The Department of the Interior announced a **pause** in offshore wind leases on December 22, 2025, including two projects in New England: Revolution Wind and Vineyard Wind 1.
 - The ISO issued a statement on the Newswire, reiterating that “Both projects are included in our near-term and future modeling and analyses to ensure adequate electricity for New England” and “...delays of new generating resources also will adversely affect New England’s economy and industrial growth, including potential future data centers.”

Read the full
statement on the
[ISO Newswire](#)



MARKETS UPDATE

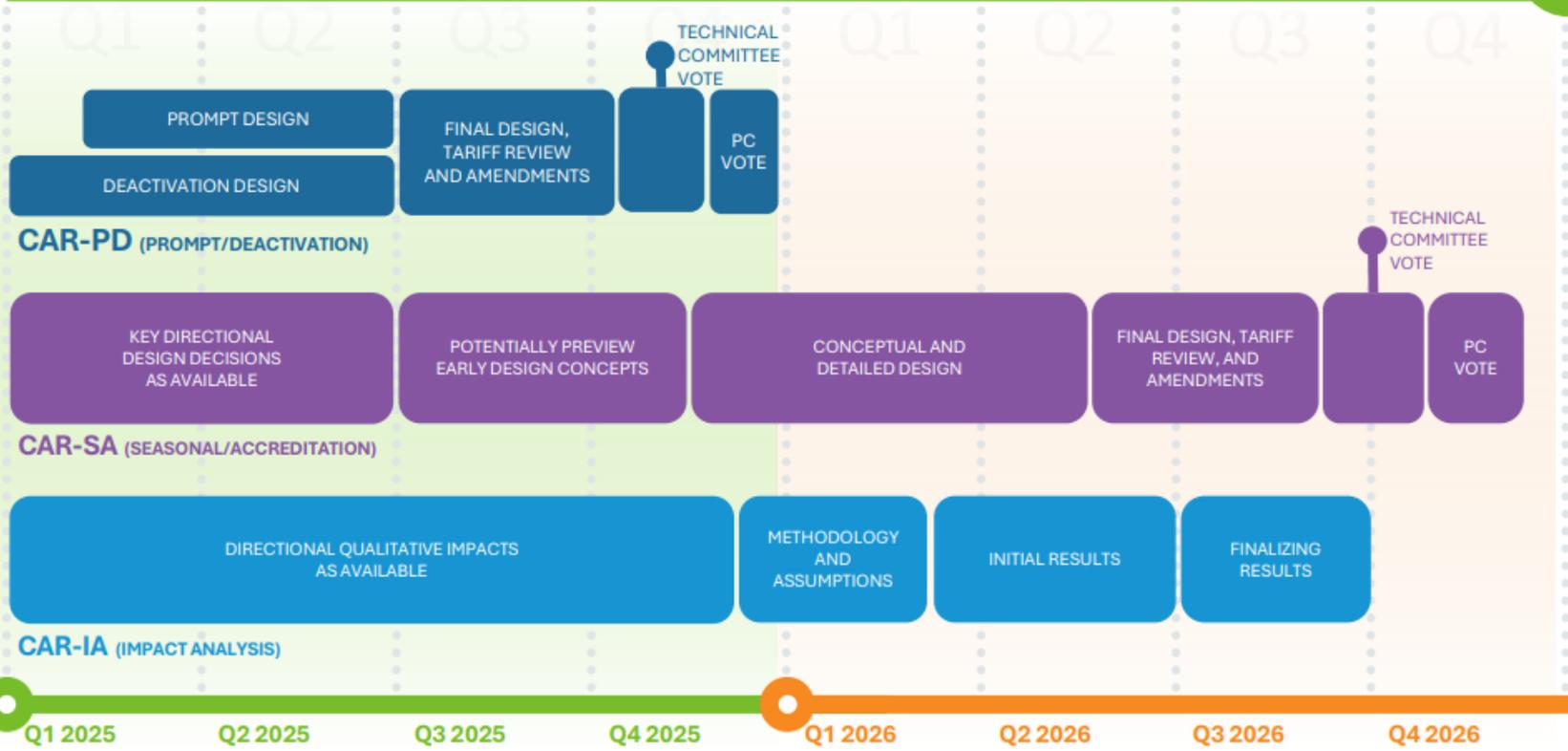


Next Steps for the Capacity Market

- To address system reliability and cost-effectiveness as electricity demand and the resource mix change, the **Capacity Auction Reform (CAR) Key Project**:
 - Transitions the capacity market from a three-year forward auction to a **prompt auction** that runs shortly before the capacity commitment period (CCP)
 - Restructures the CCP from **annual to seasonal** commitment periods
 - Reshapes capacity market accreditation to more accurately reflect **resource adequacy contributions** from an evolving resource mix, from season to season



Stakeholder Schedule for CAR



Oct. 2025 CAR Project Schedule

A woman with long brown hair, wearing a purple jacket, is seen from the back, speaking at a podium. The background shows a conference room with other people seated at tables, some looking towards the speaker. The room has a modern, professional feel with recessed ceiling lights and decorative wall sconces.

ISO New England regularly engages with public officials and the public to share information and discuss changes to the power system

An Ongoing Dialogue: ISO's External Affairs Team



Eric Johnson
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New England



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Federal Affairs



Ruben Flores-Marzan
Policy Advisor
Environmental & Community Affairs



Kerry Schlichting
Supervisor, State Policy
Connecticut and Rhode Island



Sarah Adams
Senior State Policy Advisor
Vermont



Melissa Winne
Senior State Policy Advisor
Maine



Marissa Ribeiro Dahan
State Policy Advisor
Massachusetts



Brendan Flaherty
State Policy Advisor
New Hampshire

Contact information: <https://www.iso-ne.com/about/contact/government-industry-affairs>

Opportunities to Engage and Learn More

Public Webinars

- ISO External Affairs periodically hosts informational **webinars** that are free and open to the public on topics such as recent ISO studies, including:
 - [Pathways Study](#)
 - [Future Grid Reliability Study](#)
 - [Overview of System Planning](#)
 - [FERC Order 2023](#)
 - [2050 Transmission Study](#)
 - [Economic Planning for the Clean Energy Transition](#)
 - [Annual Electric Generator Air Emissions Report](#)



2026 Consumer Liaison Group (CLG) Meetings

March
25th, 2026

June 2nd,
2026

September
24th, 2026

December
2nd, 2026

ISO Publications

Accessible webpages & fact sheets on key initiatives



Future Grid Reliability Study Summary

The New England States have set ambitious decarbonization goals to combat climate change over the next several decades. The rapid electrification of heating and transportation will drive unprecedented demand for electricity, and the ongoing shift to variable, renewable resources will further transform the electric grid of the future.

ISO New England's Future Grid Reliability Study examines the region's decarbonization goals and the reliability challenges that will be faced by the grid in the 2040s and 2050s. The study analyzes 32 scenarios, with a particular focus on the 2040 and 2050 scenarios, to identify the key challenges and opportunities for the grid. The study also identifies key areas for research and development, such as energy storage, demand response, and advanced power system operations.

The specific order of events during this transition will impact reliability. Identifying other high-emission heating systems are likely to be identified before natural gas, and other high-emission heating systems are likely to be identified before natural gas. The study also identifies key areas for research and development, such as energy storage, demand response, and advanced power system operations.

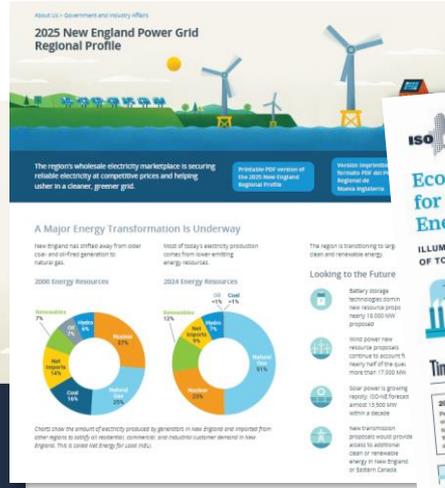
Introduction

The clean energy transition is accelerating, but there are challenges. The four pillars provide a framework for talking about what we need to do to a reliable clean energy future.

The Four Pillars

- PILLAR ONE: Clean Energy** - Significant increases in clean energy to cover the increasing demand for power.
- PILLAR TWO: Balancing Resources** - Resources that can supply electricity, reduce demand, or provide other services to maintain power system equilibrium.
- PILLAR THREE: Energy Adequacy** - A dependable energy supply chain and a robust energy market to ensure enough capacity to meet the needs of our customers.
- PILLAR FOUR: Robust Transmission** - To integrate renewable resources and move them where they are needed most in New England.

New England's electric power grid is undergoing a transition. Transmission, public policy aimed at fighting climate change.



2025 New England Power Grid Regional Profile

The region's wholesale electricity marketplace is securing reliable electricity at competitive prices and helping usher in a cleaner, greener grid.

A Major Energy Transformation is Underway

New England has shifted away from coal and oil-fired generation to natural gas.

The region is transitioning to a greener and more diverse energy mix.

2024 Energy Resources

Resource	Percentage
Natural Gas	44%
Coal	1%
Oil	1%
Nuclear	1%
Renewable	52%

2050 Energy Resources

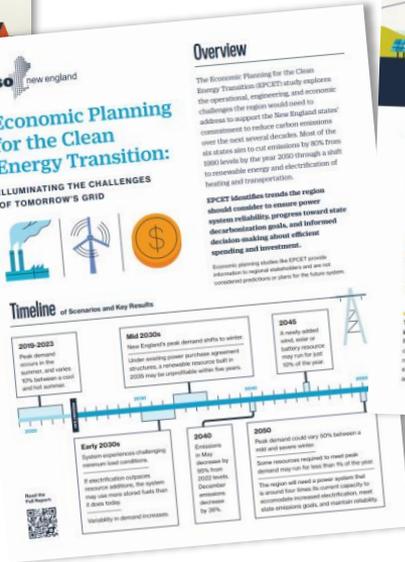
Resource	Percentage
Natural Gas	1%
Coal	0%
Oil	0%
Nuclear	1%
Renewable	98%

ISO's 2024 study shows that by 2050, renewable resources will provide nearly 98% of the region's electricity.

Wind power and solar resources are projected to continue to grow, with wind alone projected to provide more than 17,500 MW.

Solar power is growing rapidly. ISO's forecast shows that by 2050, solar will provide about 15,000 MW.

New transmission projects will provide a significant amount of renewable energy to New England, and the region will continue to diversify its energy mix.



Economic Planning for the Clean Energy Transition: ILLUMINATING THE CHALLENGES OF TOMORROW'S GRID

Overview

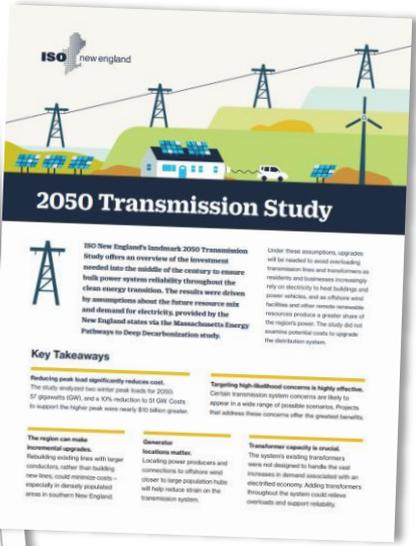
The Economic Planning for the Clean Energy Transition (EPCT) study explores the operational, engineering, and economic challenges the region will need to address to support the New England states' commitment to reduce carbon emissions by 90% from the year 2000 through a 2050 goal. The study also looks at the year 2050 through a 2050 goal to look at the challenges of heating and transportation.

EPCT identifies trends the region should consider to ensure power system reliability, progress toward state decarbonization goals, and informed decision-making about efficient spending and investment.

Economic planning studies like EPCT provide an important tool for regulators and other stakeholders to plan for the future system.

Timeline of Scenarios and Key Results

- 2019-2023**: Peak demand rises in the summer and winter. ISO's 2023 study shows that by 2023, peak demand will rise to 100,000 MW.
- Mid 2030s**: New England's peak demand shifts to winter. New England's peak demand shifts to winter in the mid-2030s. This is due to the increasing use of electric heating and other winter loads.
- 2040s**: A newly added wind and solar resources will provide 50% of the peak. A newly added wind and solar resources will provide 50% of the peak.
- 2050**: Peak demand could vary 10% between a wet and a warm winter. Some resources required to meet peak demand may not be needed for 10% of the year. The region will need a power system that is around the clock. The current capacity to meet peak demand is 100,000 MW. The region will need a power system that is around the clock. The current capacity to meet peak demand is 100,000 MW.



2050 Transmission Study

ISO New England's benchmark 2050 Transmission Study offers an overview of the investment needed into the middle of the century to ensure built power system reliability throughout the clean energy transition. The results were driven by assumptions about the future resource mix and demand for electricity provided by the New England states via the Massachusetts Energy Pathways to Deep Decarbonization study.

Under these assumptions, upgrades will be needed to meet increasing transmission line and transformer needs and to address the increasing reliance on electricity to heat buildings and power vehicles, and as offshore wind facilities and other remote renewable resources provide a greater share of the region's power. The study did not estimate potential costs to upgrade the transmission system.

Key Takeaways

- Reducing peak load significantly reduces cost.** The study analyzed two winter peak loads for 2050: 87 GW (80,000 MW) and a 10% reduction to 81 GW. Costs to support the higher peak were nearly \$10 billion greater.
- Targeting high-loadback scenarios is highly effective.** Certain transmission system concerns are likely to appear in a wide range of possible scenarios. Projects that address these concerns offer the greatest benefits.

Key Takeaways

- The region can make incremental upgrades.** Reducing winter peak load with larger transmission lines and other investments in the system can help reduce the need for large population hubs.
- Location matters.** Locating lower production and connections to offshore wind power to large population hubs will help reduce strain on the transmission system.
- Transformer capacity is essential.** The system's existing transformers were not designed to handle the increased capacity. Adding transformers throughout the system could reduce emissions and support reliability.

2024 Regional Electricity Outlook

New England Power Grid State Profiles

2024 EPCT Report Factsheet

2050 Transmission Study Factsheet

For More Information



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[ISO Newswire](#) is your source for regular news about ISO New England and the wholesale electricity industry within the six-state region



Log on to ISO Express

[ISO Express](#) provides real-time data on New England's wholesale electricity markets and power system operations



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Download the ISO to Go App

[ISO to Go](#) is a free mobile application that puts real-time wholesale electricity pricing and power grid information in the palm of your hand



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Questions



About the Presenters



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Who is ISO New England?



[Link](#) to watch “We Are ISO New England”