OCTOBER 1, 2026 | VIRTUAL

ISO-NE Longer-Term Transmission Planning and 2025 Procurement

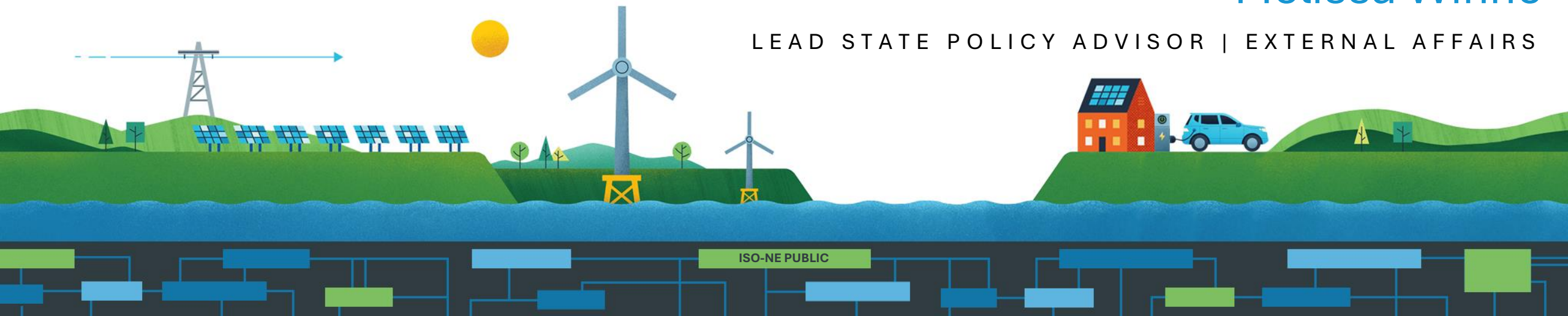
ISO Public Webinar Series

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

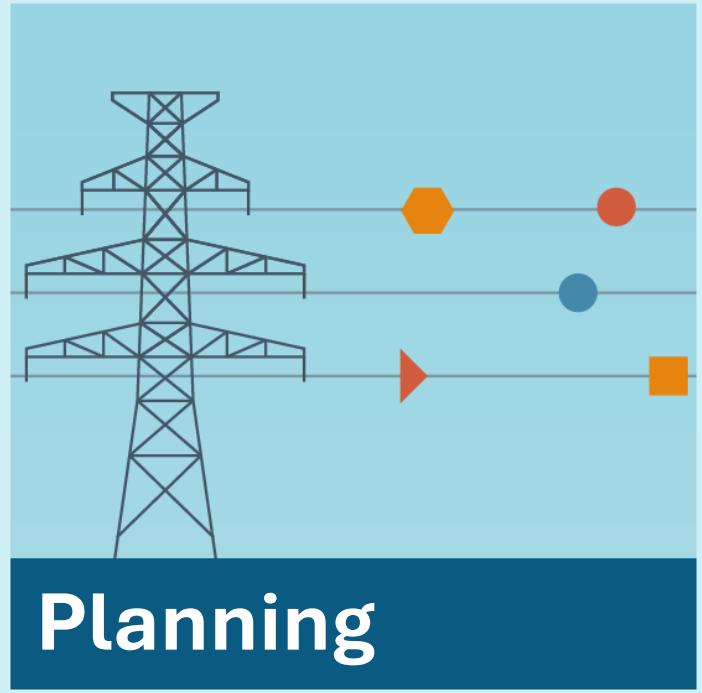
- **Regulated** by the Federal Energy Regulatory Commission
- **Reliability Coordinator** for New England under the North American Electric Reliability Corporation
- **Independent** of companies in the marketplace and **neutral** on technology



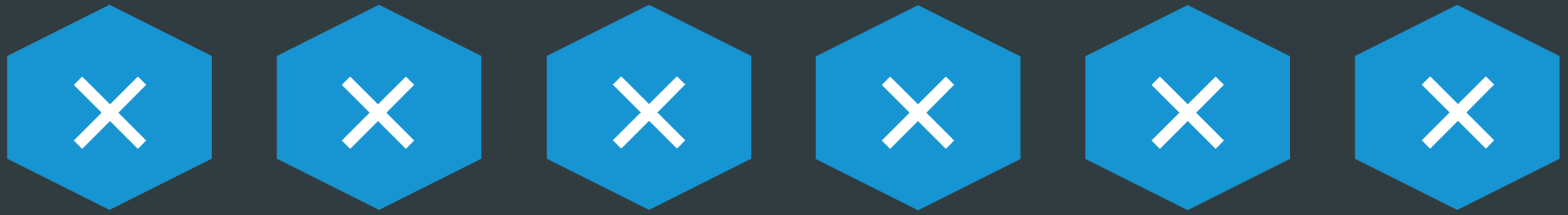
ISO New England Performs Three Critical Roles to Ensure Reliable Electricity at Competitive Prices







Things We Don’t Do



Handle retail electricity

Own power grid infrastructure

Have a stake in companies that own grid infrastructure

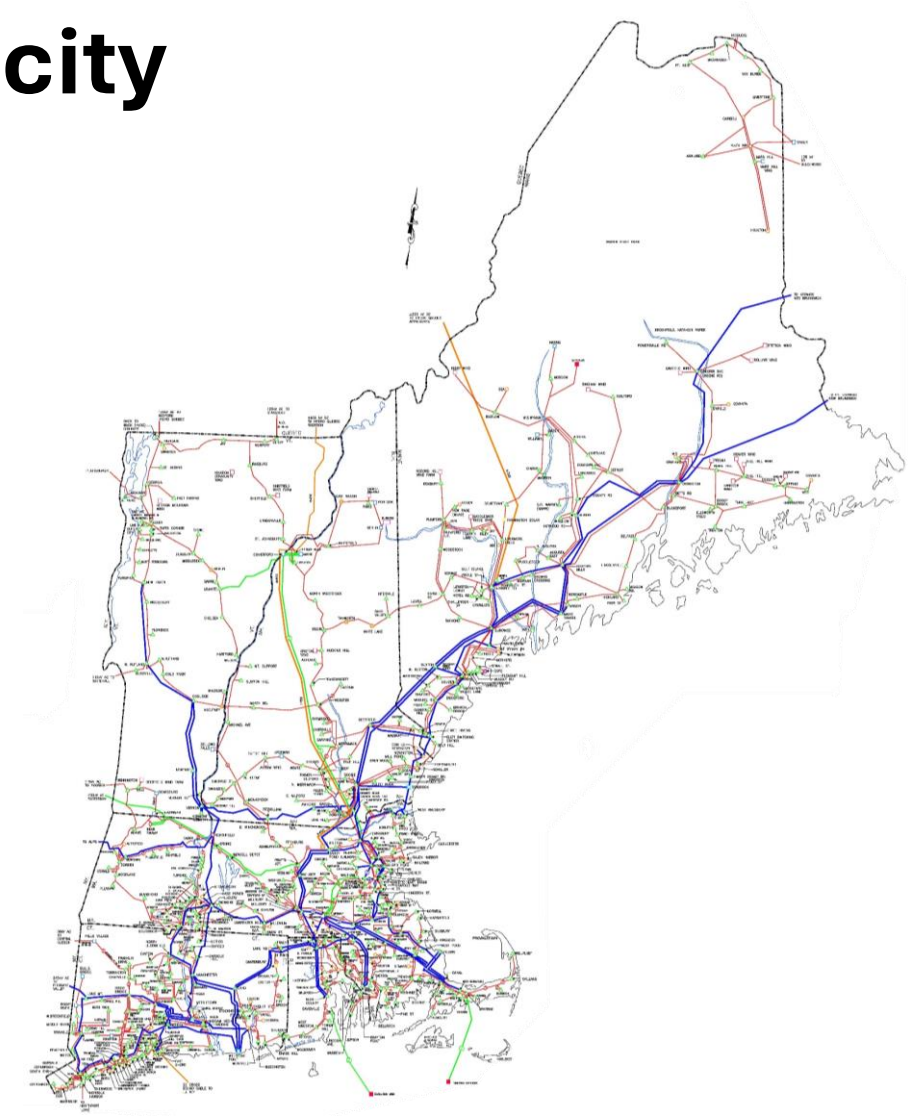
Have jurisdiction over fuel infrastructure

Have control over siting decisions

Plan the resource mix

New England's Transmission Grid Is the Interstate Highway System for Electricity

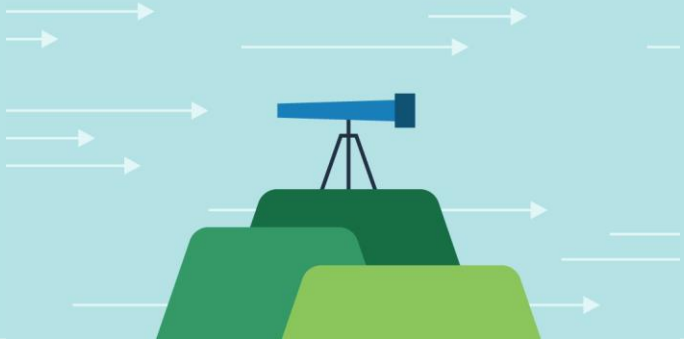
- **9,000 miles** of high-voltage transmission lines (primarily 115 kV and 345 kV)
- **14 transmission interconnections** to power systems in New York and Eastern Canada



ISO New England Manages Regional Power System Planning to Meet Future Electricity Needs

Longer-Term Transmission Planning (LTTP)

Allows for system planning analyses and related procurements beyond the 10-year planning horizon



- Manage **regional power system planning** in accordance with mandatory reliability standards
- Administer requests for **interconnection** of generation and regional transmission system access
- Conduct transmission system **needs assessments**
- Plan regional transmission system to provide regional network service
- The **Capacity, Energy, Load, and Transmission (CELT) Report** looks out at least 10 years and includes a forecast for regional electricity demand
- Develop **Regional System Plan (RSP),** a detailed report describing ISO's current work to support planning the New England power grid

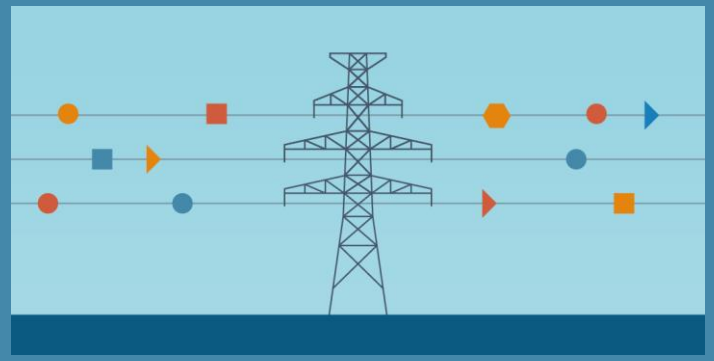
LONGER-TERM TRANSMISSION PLANNING (LTTP) PROCESS AND STUDY BACKGROUND

ISO Engages with Regional Stakeholders on Planning Recommendations



ISO works closely with regional stakeholders, electricity consumers and the New England states, including the **New England States Committee on Electricity (NESCOE)**

- NESCOE is a not-for-profit entity that represents the collective perspective of the six New England Governors in regional electricity matters



In **2020,** NESCOE released the "***New England States' Vision for a Clean, Affordable, and Reliable 21st Century Regional Electric Grid***"

- Included a recommendation that the ISO work with stakeholders to establish a comprehensive long-term regional transmission study process

FERC Approved New Process for Longer-Term Transmission Planning

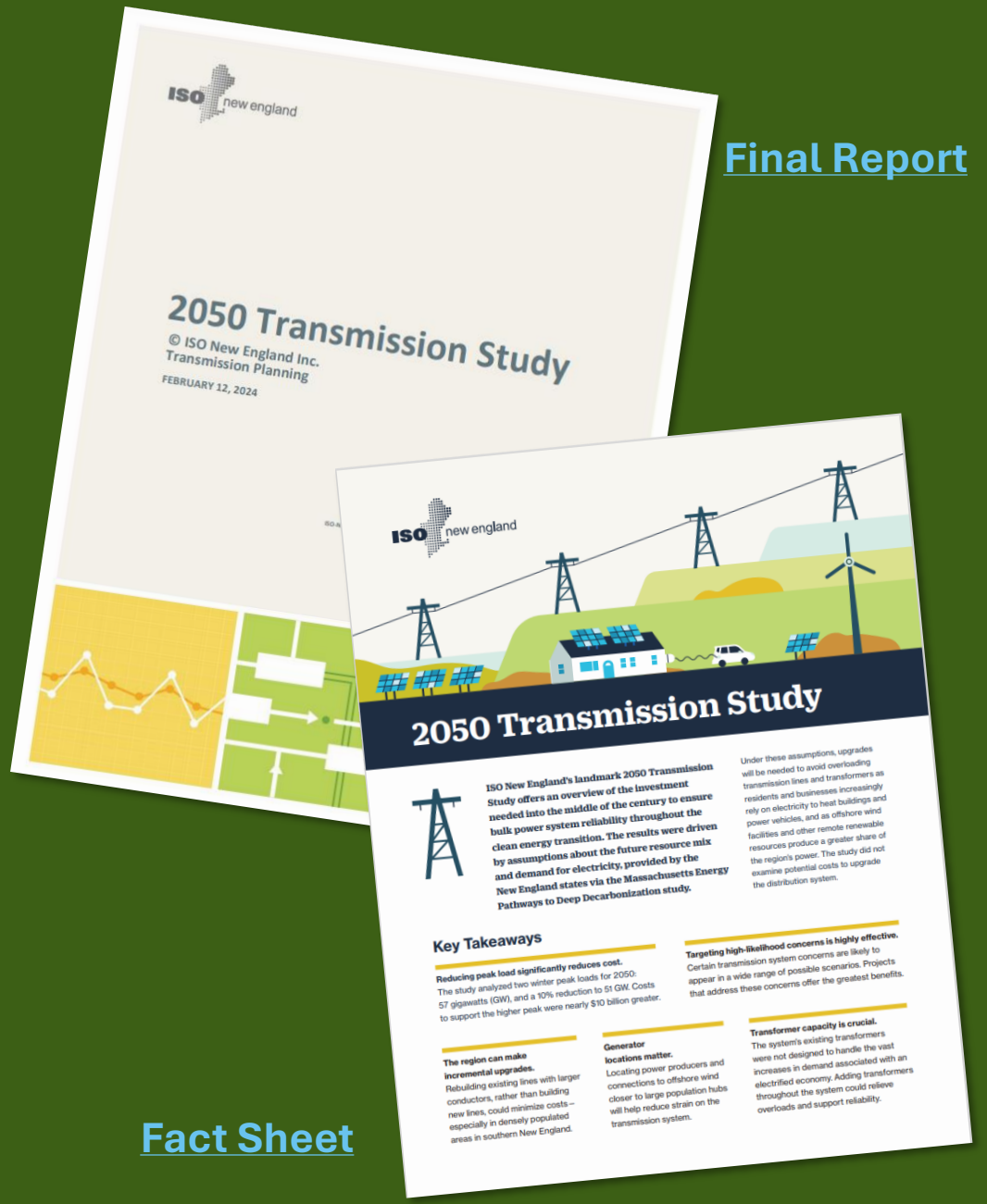
- In response to NESCOE's recommendation, ISO engaged stakeholders to develop proposed changes to enable transmission studies looking beyond ten years, and a process to address needs identified in these longer-term studies
- **2022:** FERC approved changes to the ISO Tariff to establish the Longer-Term Transmission Planning (LTTP) process
  - Created a repeatable longer-term transmission study (LTTS) process
- **2024:** FERC approved changes to establish a process to enable the states, through NESCOE, to procure solutions to address needs identified by a LTTS, with provisions for cost allocation
  - Effort for this phase of changes began with stakeholder engagement in 2023

Learn more: **Longer-Term Transmission Studies**



ISO Analyzed Future Grid Scenarios in First Longer-Term Transmission Study (LTTS)

- In 2024, ISO publishes first LTTS, the 2050 Transmission Study
  - Scenario inputs for the study were provided by NESCOE, based on state analysis for load forecasts and resource mixes in 2035, 2040 and 2050
  - Discussions occurred through the ISO's public stakeholder group, the Planning Advisory Committee (PAC)
- Analyzed 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



2050 Transmission Study Overview



Examined the thermal performance of the transmission system under **summer** and **winter** peak load conditions



Identified **transmission concerns** with a high-likelihood of occurring under various future scenarios

- Results help inform which areas of the transmission system are likely to be the most limiting as the system evolves



Developed transmission upgrade **roadmaps** to solve for these concerns, considering both constructability and cost

- Roadmaps were intended to provide a basis of comparison
- ISO did not recommend pursuing any one roadmap or concern

2025 LTTP REQUEST FOR PROPOSALS (RFP)

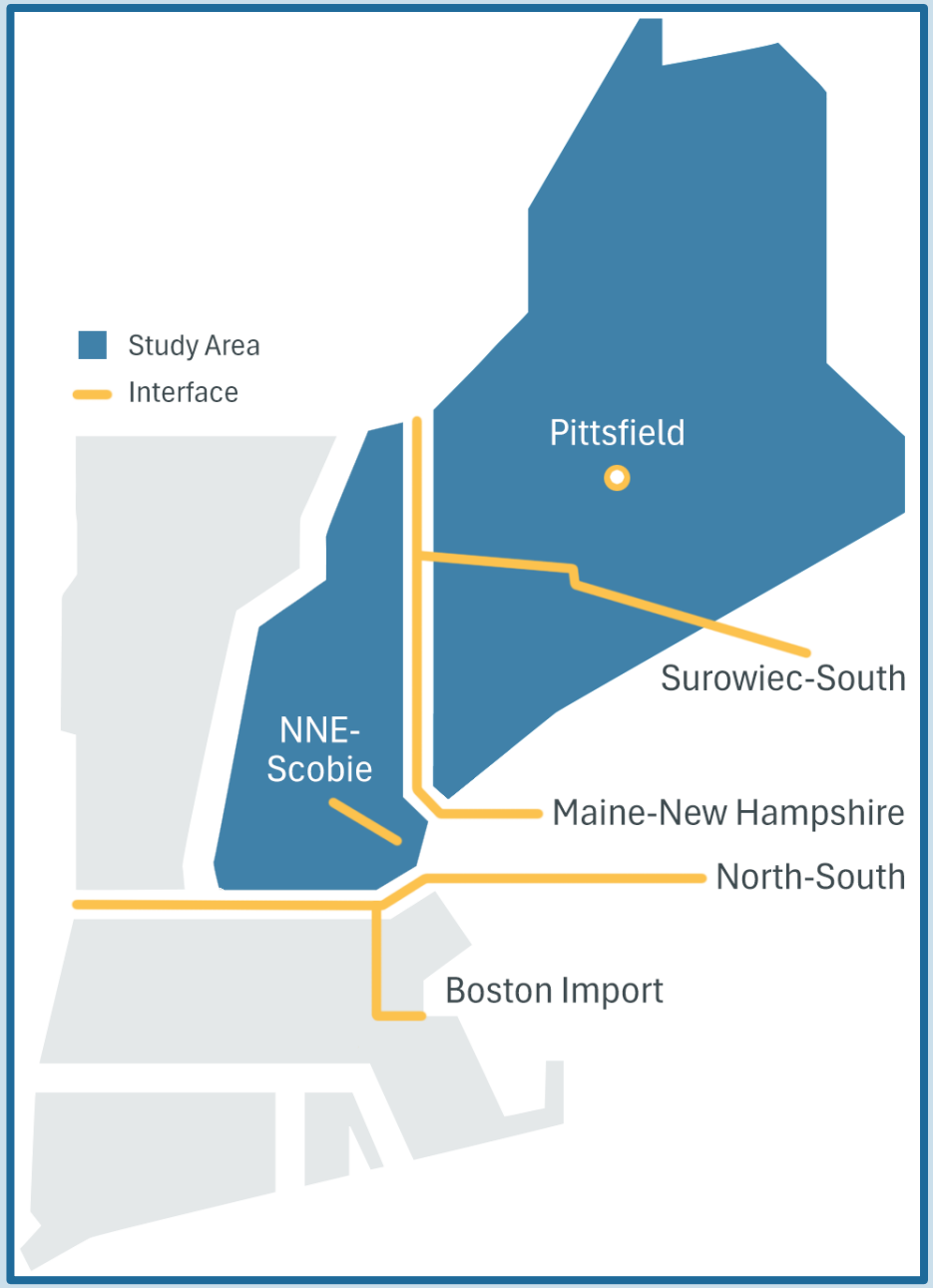
Solving Transmission Needs Through an LTTP RFP

- One **high-likelihood concern** identified by the 2050 Transmission Study was constraints on the system between ME and NH leading south into Boston
  - Identified in the study as North-South/Boston Import Constraint
- **Under numerous future scenarios**, this area of the transmission system is expected to experience significant overloads along major 345 kilovolt (kV) lines in Maine, New Hampshire, and Massachusetts
  - **Overloads** occur when transmission infrastructure carries more power than its rated amount, which can lead to overheating, equipment disconnection, or permanent damage
- The New England states decided to focus on moving power **across Maine and into New Hampshire**



NESCOE Identified Longer-Term Needs for First LTTP Request for Proposals

- In December 2024, NESCOE issued a letter requesting that ISO issue an RFP to address the following needs by 2035:
  - Increase Surowiec-South interface limit to at least 3,200 MW
  - Increase Maine-New Hampshire interface limit to at least 3,000 MW
  - Accommodate the interconnection of at least 1,200 MW of new onshore wind at or near Pittsfield, ME



2025 Longer-Term Transmission Planning RFP Issued in March 2025



- In response to NESCOE's request, ISO issued a draft RFP in March 2025 and provided an opportunity for stakeholder feedback
  - ISO published stakeholder comments and ISO responses
- The final 2025 LTTP RFP was issued March 31, 2025
  - Proposals were due Sept. 30, 2025

2025 Longer-Term Transmission Planning RFP Proposals Submitted by September 2025

March 2025

ISO Issues Request for Proposals (RFP)

September 2025

Deadline for Proposal Submission

August 2026

ISO Selects Preferred Solution

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

*Costs may include estimates for corollary upgrades that may change with final PTO provided cost estimates.

ISO Review of the Six 2025 LTTP RFP Proposals

- ISO reviewed proposals based on various factors, including:



  - Requirements of the RFP
  - Technical feasibility
  - Cost and benefit to the region
  - Constructability
  - Financial capability
  - Evaluation priorities identified by NESCOE

X

Some proposals were disqualified throughout the review process for not meeting Tariff, RFP, or technical requirements

In Addition to Economic and Technical Review Factors, NESCOE Prioritized Non-Economic Evaluation Factors

Highest Priority	Second Highest Priority	Third Highest Priority
Life-cycle cost	Extreme contingency performance	Project constructability
Cost containment	Impact on other interface limits	Generation and transmission outages
Potential siting/permitting issues or delays	Operational impacts	Incremental costs for potential resource retirements
Future expandability	Winter reliability impacts	Consistency with good utility practice
In-service date	Environmental impact	Design standards
Qualified Transmission Project Sponsor (QTPS) capabilities		Joint proposals
System performance		Deployment of advanced transmission technologies
Impact on NPCC* Bulk Power System (BPS) classification		

*NPCC stands for Northeast Power Coordinating Council and is responsible for promoting and enhancing the reliability of the international, interconnected bulk power system in Northeastern North America (www.npcc.org)

2025 LTTP RFP Proposal Summary

ID	Lead Developer	Type	Cost*	In-service Date
A1	Central Maine Power	Alternating Current (AC)	$2.20B	Q4 2032
A2	Central Maine Power	AC	$2.14B	Q4 2032
B1	energyRe Giga-Projects USA	Direct Current (DC)	$4.04B	Q2 2035
C1	[Confidential]	AC	$0.96B	Q2 2035
D1	NGV US Transmission	DC	$2.60B	Q3 2035
D2	NGV US Transmission	DC	$2.55B	Q3 2035

*Some proposals include cost estimates for corollary upgrades, which were replaced, as necessary, with cost estimates provided by the applicable Participating Transmission Owner(s) for modifications to their existing equipment

2025 Longer-Term Transmission Planning RFP Project Selection Made in July 2026

March 2025

ISO Issues Request for Proposal (RFP)

September 2025

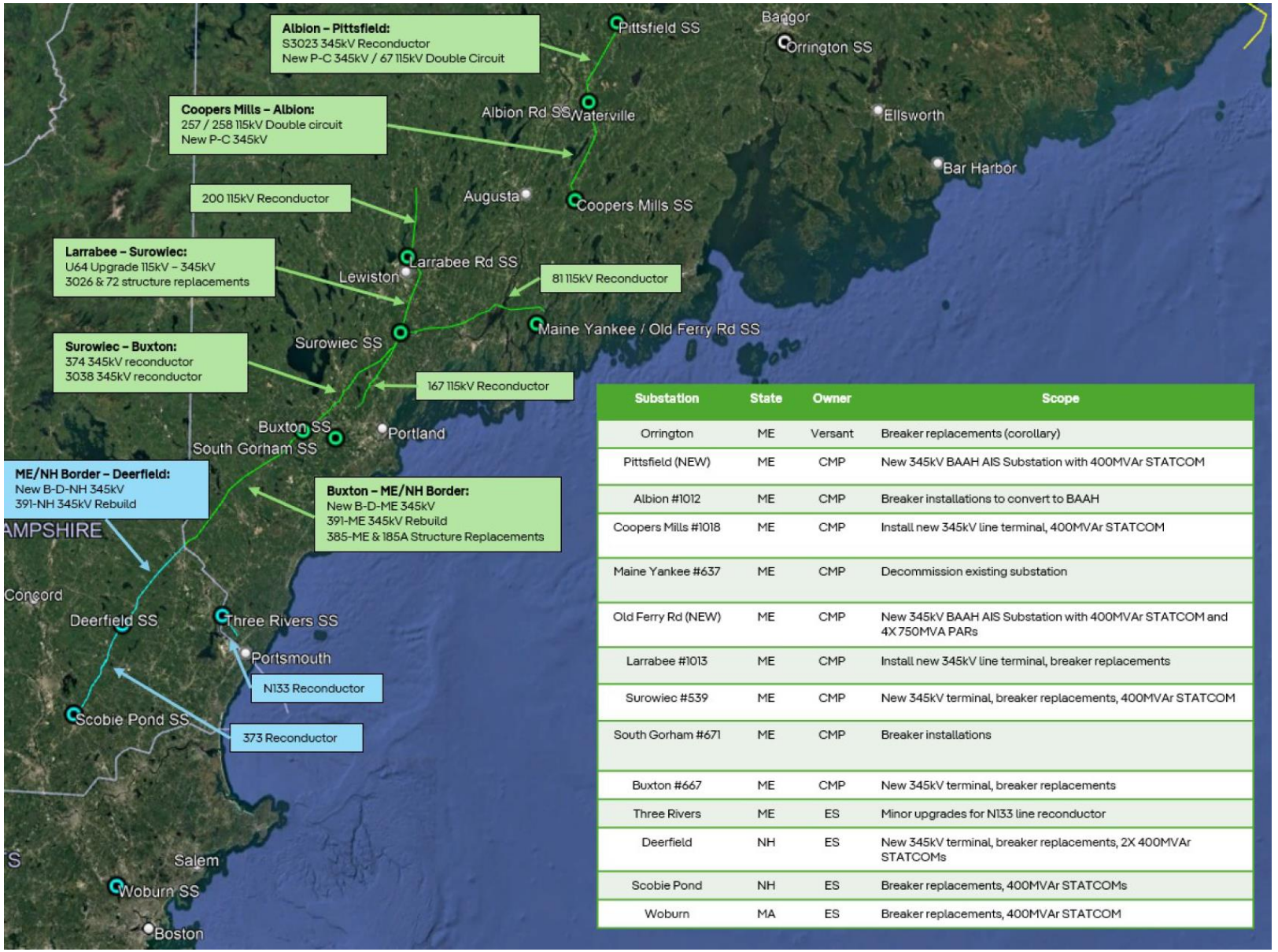
Deadline for Proposal Submission

July/August 2026

ISO Selects Preferred Solution

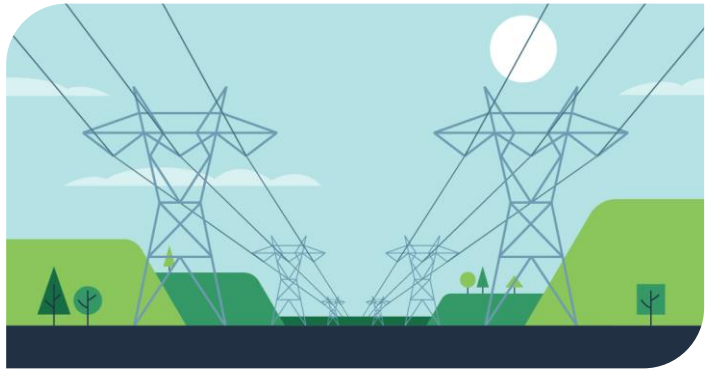
- In July 2026, ISO presented to PAC the selection of a preliminary preferred solution, providing an **opportunity for stakeholder feedback**
  - Stakeholder comments and ISO responses were posted to the ISO website
- **Longer-Term Proposal (LTP) A1 selected** as the preliminary preferred solution
  - AC transmission in ME and NH
  - Mix of rebuilding and new transmission facilities, primarily in existing rights of way
  - Installed cost of $2.2 billion with a projected in-service date of Q4 2032
  - Benefit-to-cost ratio (BCR) of 2.10

In August, ISO-NE Finalized Selection of Proposal A1 from Central Maine Power and Eversource as Preferred Solution



Substation	State	Owner	Scope
Orrington	ME	Versant	Breaker replacements (corollary)
Pittsfield (NEW)	ME	CMP	New 345kV BAAH AIS Substation with 400MVAr STATCOM
Albion #1012	ME	CMP	Breaker installations to convert to BAAH
Coopers Mills #1018	ME	CMP	Install new 345kV line terminal, 400MVAr STATCOM
Maine Yankee #637	ME	CMP	Decommission existing substation
Old Ferry Rd (NEW)	ME	CMP	New 345kV BAAH AIS Substation with 400MVAr STATCOM and 4X 750MVA PARs
Larrabee #1013	ME	CMP	Install new 345kV line terminal, breaker replacements
Surowiec #539	ME	CMP	New 345kV terminal, breaker replacements, 400MVAr STATCOM
South Gorham #671	ME	CMP	Breaker installations
Buxton #667	ME	CMP	New 345kV terminal, breaker replacements
Three Rivers	ME	ES	Minor upgrades for N133 line reconductor
Deerfield	NH	ES	New 345kV terminal, breaker replacements, 2X 400MVAr STATCOMs
Scobie Pond	NH	ES	Breaker replacements, 400MVAr STATCOMs
Woburn	MA	ES	Breaker replacements, 400MVAr STATCOM

NESCOE Decides to Move Forward with Established Cost Allocation Methodology



In September 2026, NESCOE issued a letter:

- Acknowledging selection of LTP A1 as the preferred solution
- Confirming NESCOE did not propose an alternate cost allocation



Costs of the selected project will be regionalized based on each state's percentage share of peak electricity demand

Learn more on the **ISO Newswire**

Preferred Solution Will Help Address Longstanding Constraints & Strengthen Regional Connections

- As outlined by NESCOE in their request, the objectives of the 2025 LTTP RFP were to:
  - ✓ Strengthen the connection between northern and southern New England
  - ✓ Facilitate the integration and deliverability of additional generation resources located in Maine
- Diverse stakeholder feedback helped to inform the LTTS and RFP

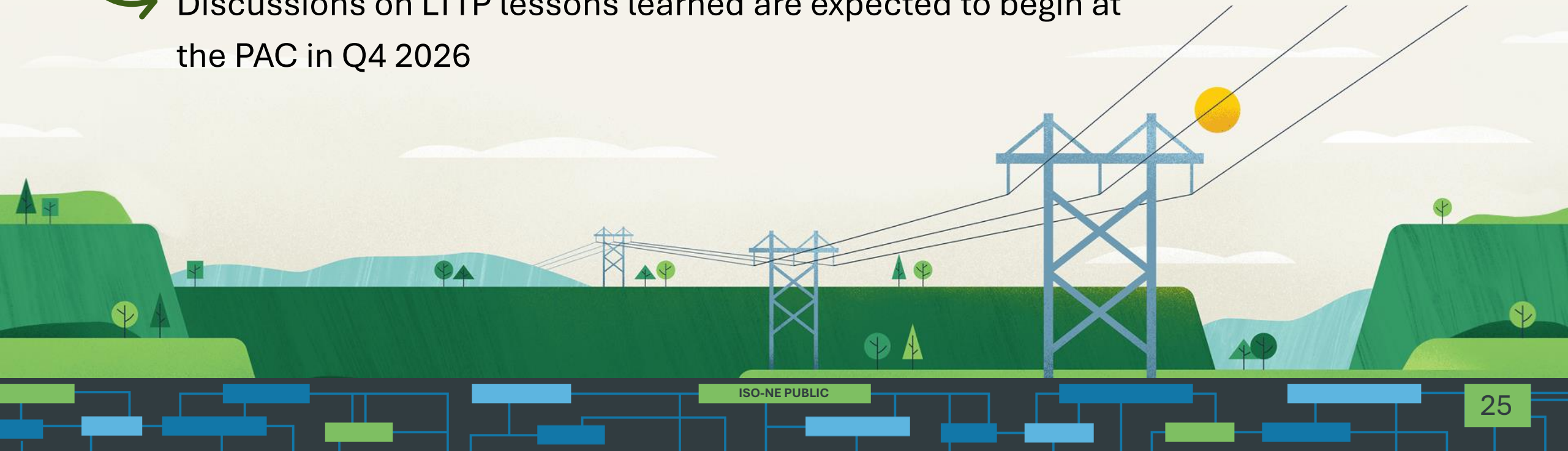


Establishment of LTTP process and first RFP demonstrates *strong collaboration* among the six New England states and stakeholders

NEXT STEPS FOR LONGER-TERM PLANNING

Next Steps for 2025 LTTP RFP

- Next steps include signing agreements with project sponsors and further rigorous analysis required of any new project interconnecting to the system
- Updates will continue to be made, as appropriate, through the PAC
- Discussions on LTTP lessons learned are expected to begin at the PAC in Q4 2026



Questions?



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https://www.iso-ne.com/about/public-affairs/consumer-resources

