

American Council of Engineering Companies of Massachusetts

Energy & Utilities Conference 2023

May 17, 2023

Jerry Fortier, Director, Transmission & Engineering Project Controls

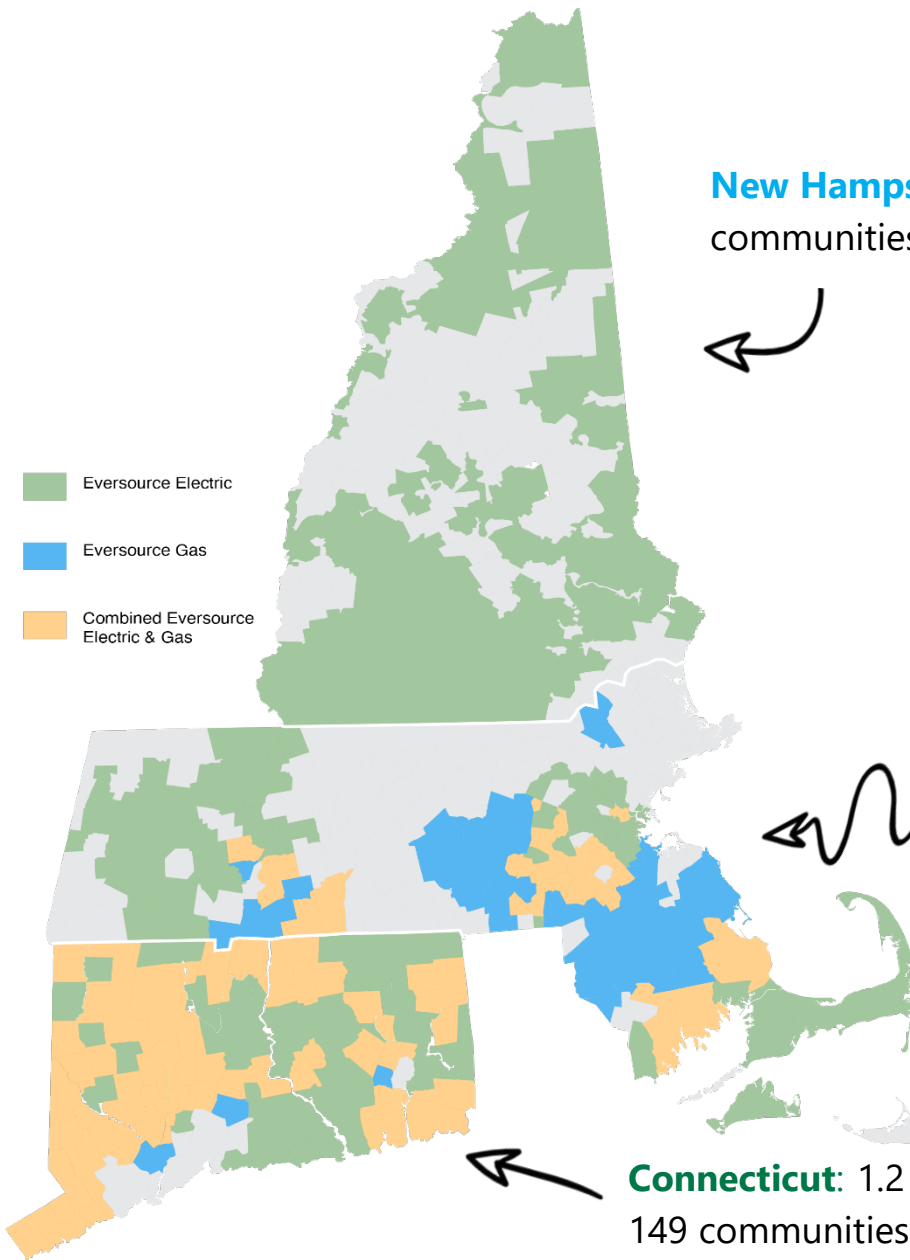
EVERSOURCE

Eversource

Who We Are

We're New England's largest energy delivery company with **4 million customers** across 525 communities in Connecticut, Massachusetts and New Hampshire.

Eversource aims to be **carbon neutral by 2030**, and the benefits of our regional clean energy initiatives will more than offset Eversource's greenhouse gas emissions.



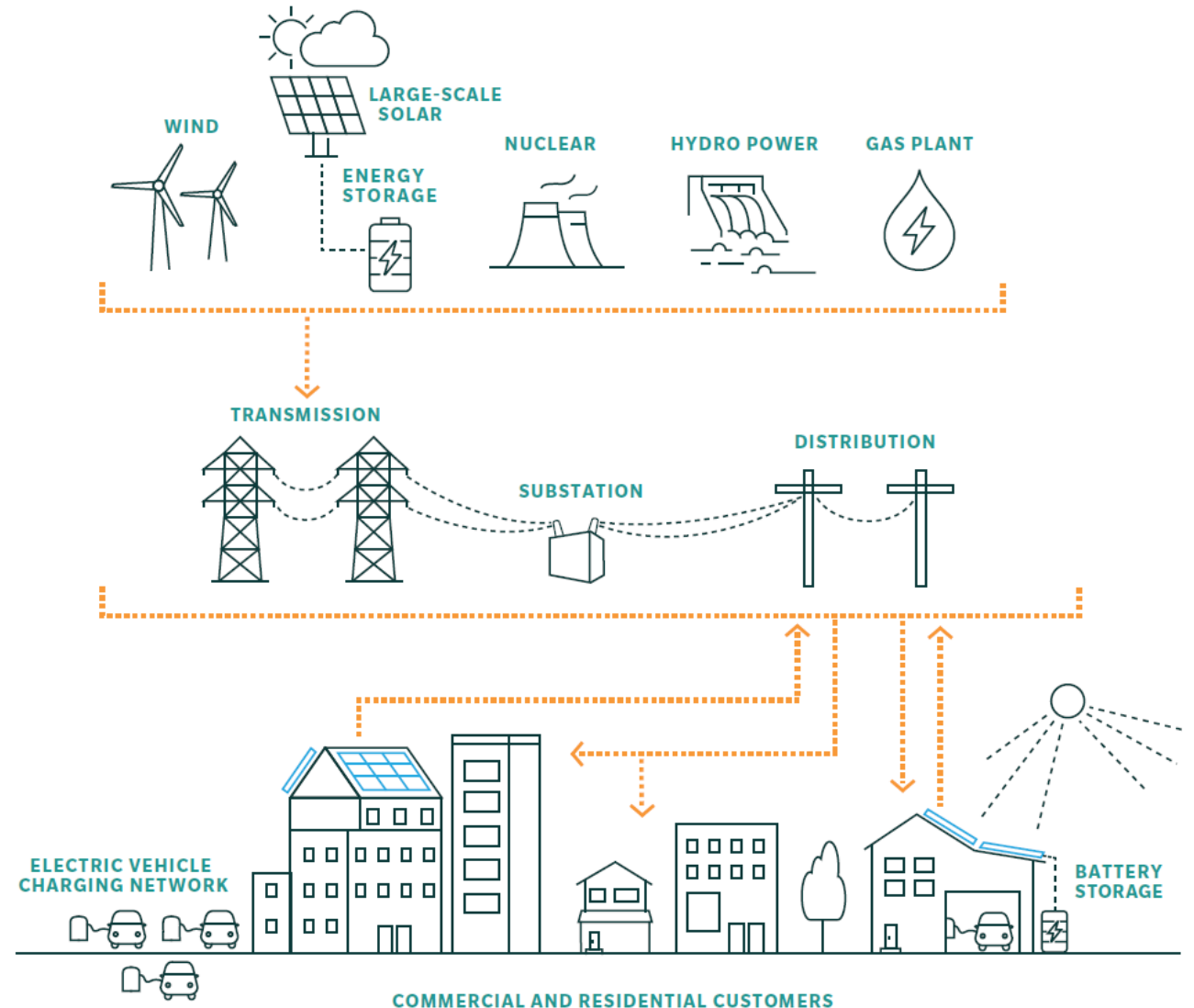
New Hampshire: 510,000 electric in 211 communities, 9,500 water in three communities.

Massachusetts: 1.4 million electric in 140 communities, 625,000 natural gas in 115 communities, 19,500 water in five communities.

Connecticut: 1.2 million electric in 149 communities, 232,000 natural gas in 71 communities, 198,000 water in 51 communities.

The Electric Grid

- Utility scale generation is interconnected across New England and even across the country by way of **high-voltage transmission lines**.
- All of these lines networked together create a type of **superhighway that moves electricity** from the power plants to electric substations and local distribution systems, which ultimately deliver it to homes and businesses.
- The combination of these components is what we call **the electric grid**.



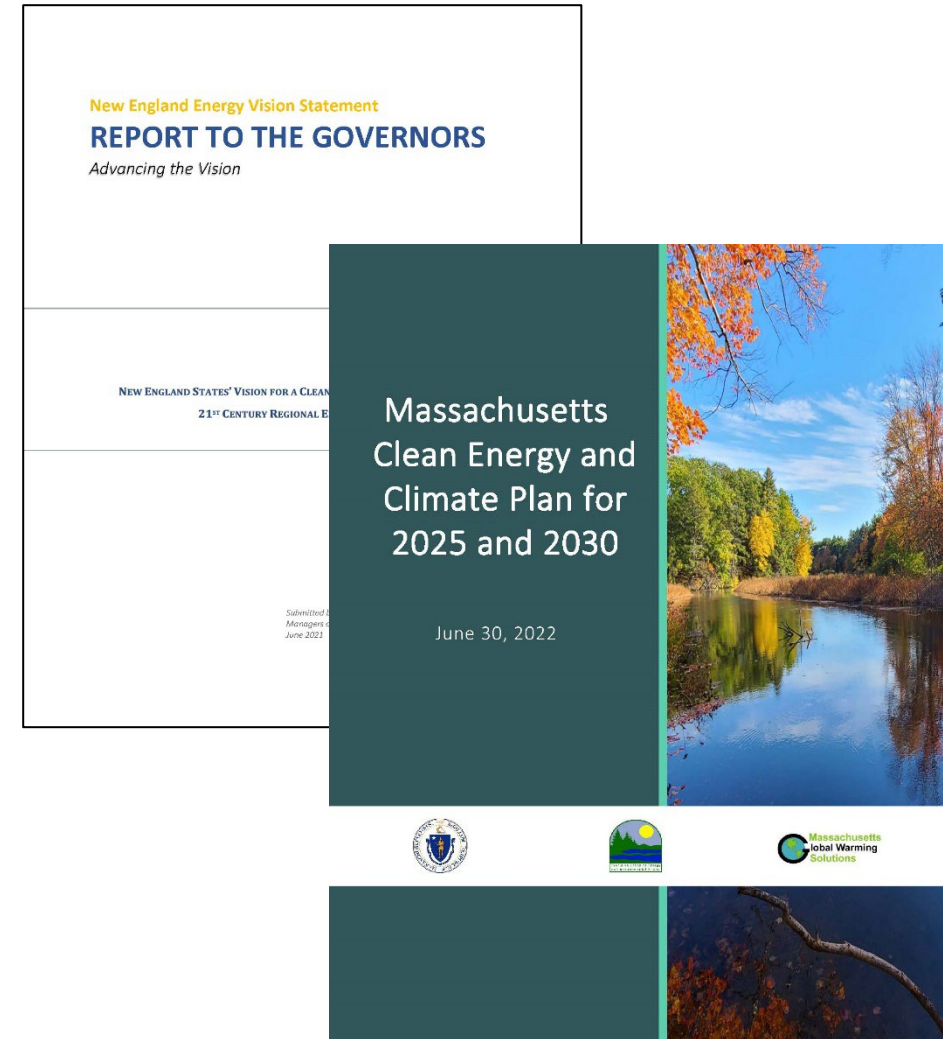
New England Energy Vision & Massachusetts Clean Energy & Climate Plan

The New England States' Energy Vision outlines suggested significant changes in three core segments of our shared energy system: Wholesale Electricity Market Design, Transmission System Planning, and ISO New England (ISO-NE) Governance.

The MA Clean Energy & Climate Plan (CECP) outlines actions the Commonwealth will undertake through the next decade to ensure the 2025 and 2030 emissions limits are met.

Goals:

- Achieve a **33 percent reduction in greenhouse gas** emissions in 2025;
- **50 percent** reduction in 2030;
- And maximize the Commonwealth's ability to **achieve Net Zero in 2050**.



Electric grid must be transformed to achieve Decarbonization Goals

Multiple Independent Studies show several possible Pathways to Decarbonization

Widespread agreement that all cost-effective, reliable outcomes require:



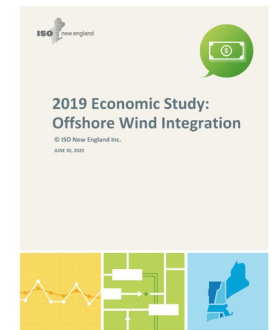
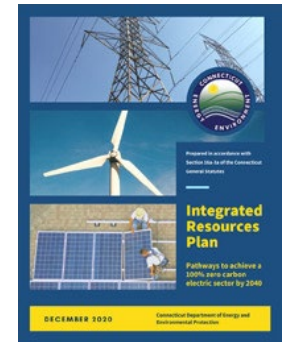
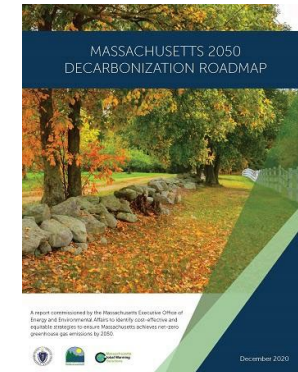
- Dramatic increases in electric vehicles and zero-carbon heating



- Substantial increases in solar, offshore wind, storage and energy efficiency



- Significant additional transmission capacity and a modern grid



Enabling Explosive **Growth in Clean Energy** and Supporting **Higher Demand**

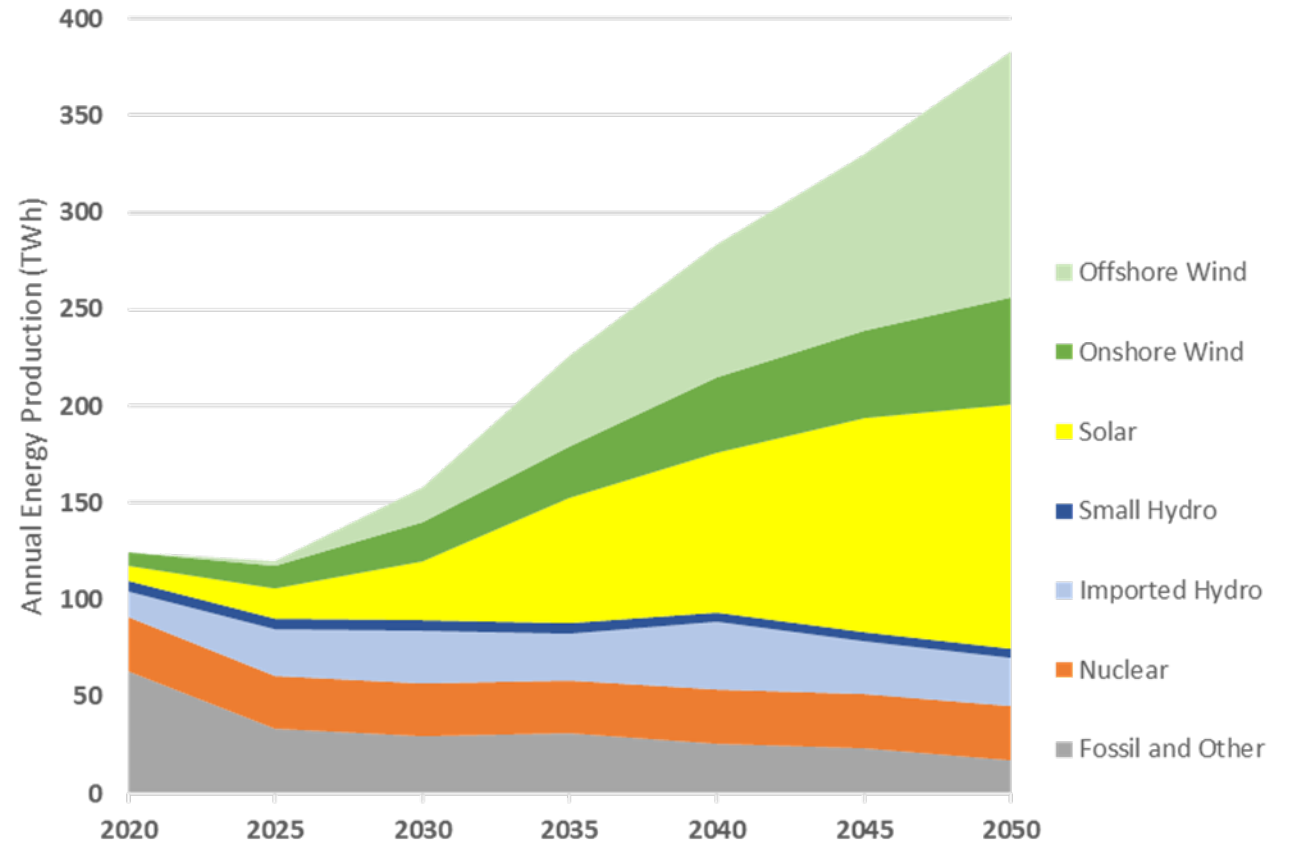


Electrification increases demand by
at least **100% in 2040**



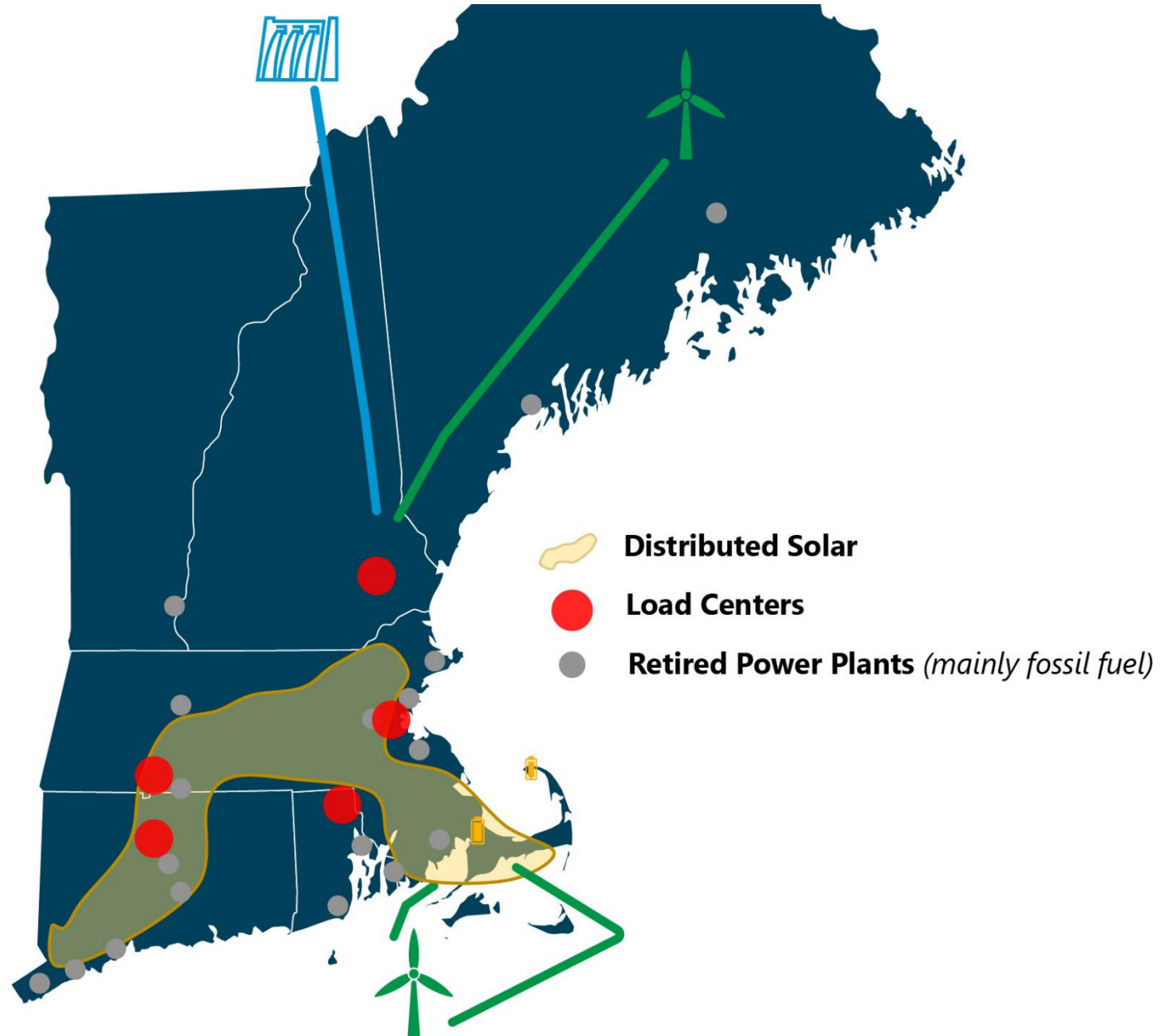
Demand response, energy efficiency and
distributed resources will continue to help
moderate electricity demand

Potential Supply Scenario That Meets New England's Decarbonization Policies



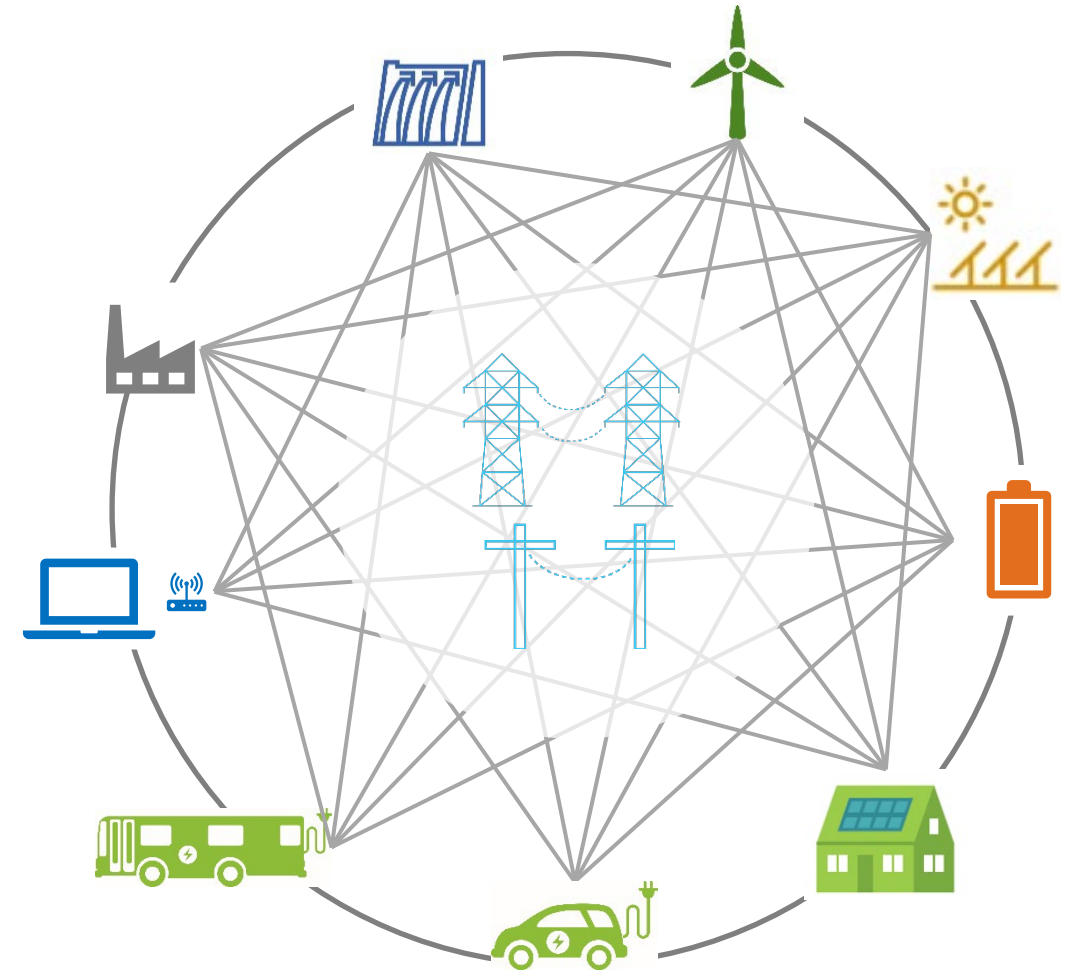
Clean Resources are **Far From Demand**

Investments in transmission are required to bring clean energy from their source to load pockets and make significant progress towards our **clean energy goals**



Transitioning to the **Grid of the Future** requires **Widespread Collaboration** and **Thoughtful Planning**

- **Targets** for economy-wide decarbonization
- **Changes** in supply and demand
- **Planned grid solutions** including new technologies
- **Policies** to develop and fund the future energy system



Eversource's Clean Energy Strategy

Prepare the Grid for the Future

- Connecting a growing number of new, clean sources of energy
- Adapting for changing power flows (DERs)
- Meeting increased demand from electrification
- Strengthening resiliency & reliability

Support Development of Clean Energy Options

- Solar
- Offshore wind
- Battery storage
- Energy efficiency
- Electric vehicle infrastructure
- Networked geothermal pilot & decarbonizing natural gas

Decarbonize Our Operations

- Industry-leading goal to achieve carbon neutrality in our own operations by 2030

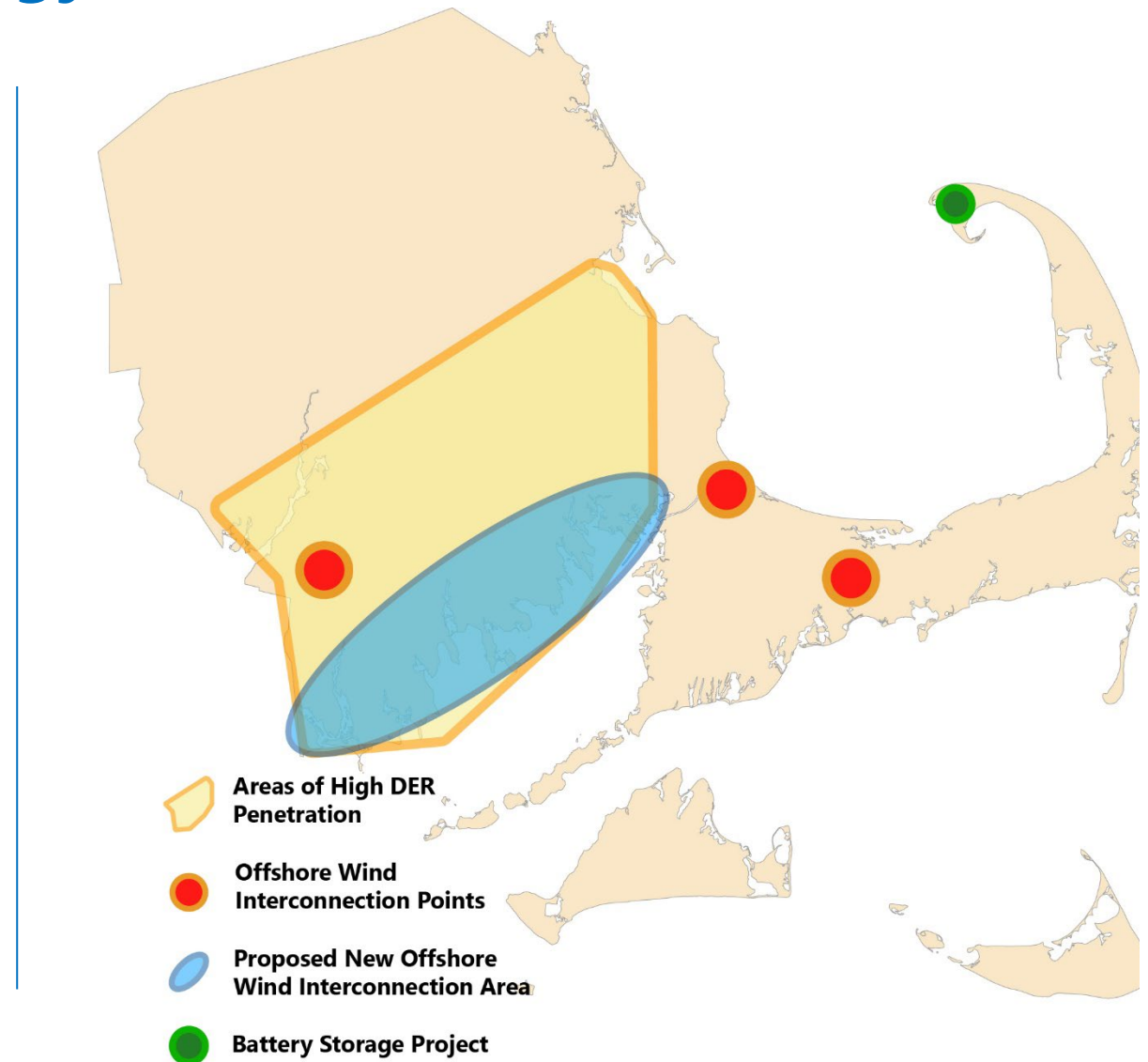
Working to Combine **Grid Reliability, Resiliency** and **Clean Energy** in the SEMA Area

Pursuing strategic transmission investments to address reliability needs and interconnect offshore wind

Efficient use of our rights of way and electric infrastructure by co-optimizing reliability improvements and clean energy integration

Proactively planning for clusters of distributed generation and integrating with local transmission projects

Coordinated planning for additional interconnections

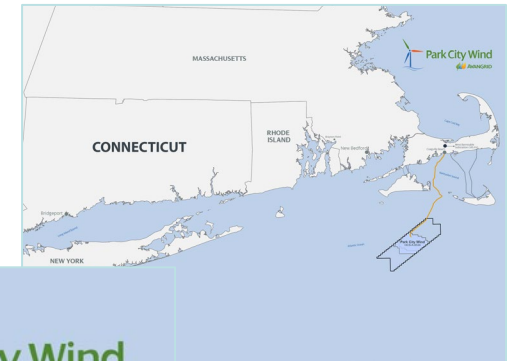


Cape Cod Solution

Co-optimized solution providing improved reliability and integration of offshore wind

A co-optimized, multi-phase transmission program that will **efficiently and cost-effectively integrate clean energy** and **strengthen the electric grid**, benefitting multiple states:

- Massachusetts residents on the Cape will receive a more resilient grid and increased access to renewable energy through future offshore wind projects.
- Connecticut customers will benefit from increased access to clean power through the interconnection of Park City Wind, an 804 MW project that will provide enough clean energy to power ~ 400,000 homes per year.
- New England residents will benefit from additional renewable resources being connected to the grid, contributing to the fight against climate change and meeting growing demand for clean energy.

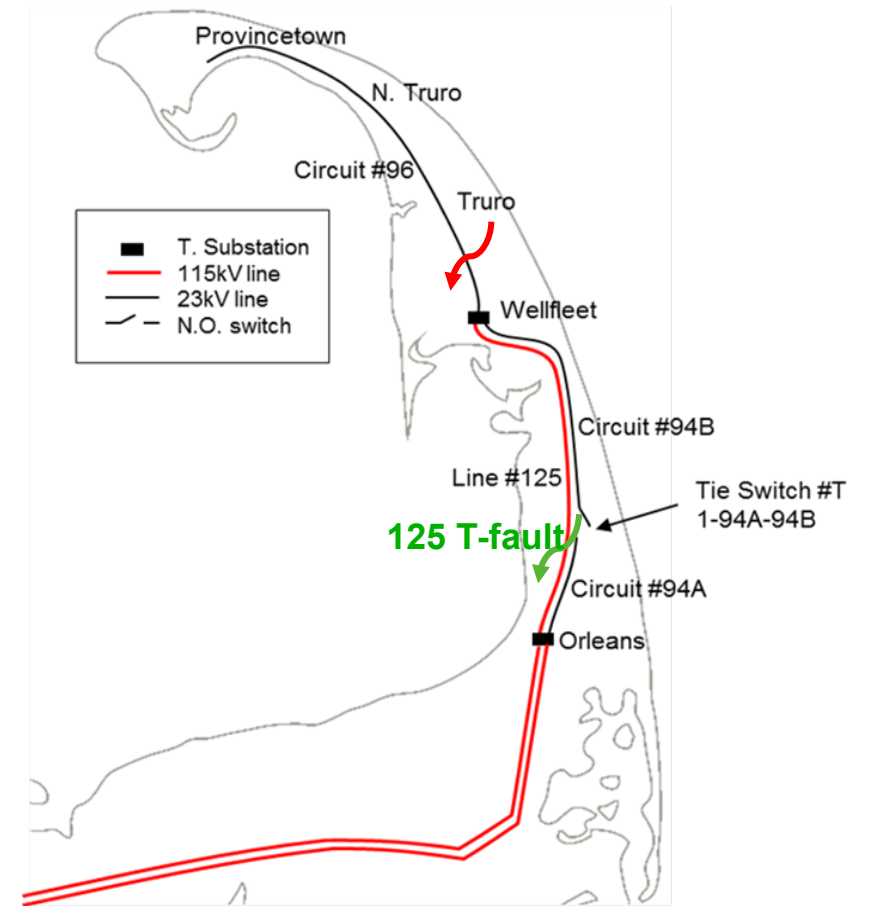


Outer Cape Battery Energy Storage System

Innovative Backup Solution to meet customers' energy needs

A first-in-the-nation project of its size and scope providing significant system reliability upgrades for several Outer Cape communities.

- 25 MW battery in Provincetown will automatically provide backup power to ~10,200 customers
- Innovative solution avoids the need for a 2nd 13-mile distribution line which would have required significant construction through the Cape Cod National Seashore.
- Battery helps to stabilize voltage along the current distribution line, improving the flow of electricity to homes and businesses on the Outer Cape.



Greater Cambridge Energy Project

New Substation, New Lines Interconnecting the Electric Grid

Innovative solution to meet electrical growth and clean energy policy goals

Partnership between City of Cambridge, Developer communities

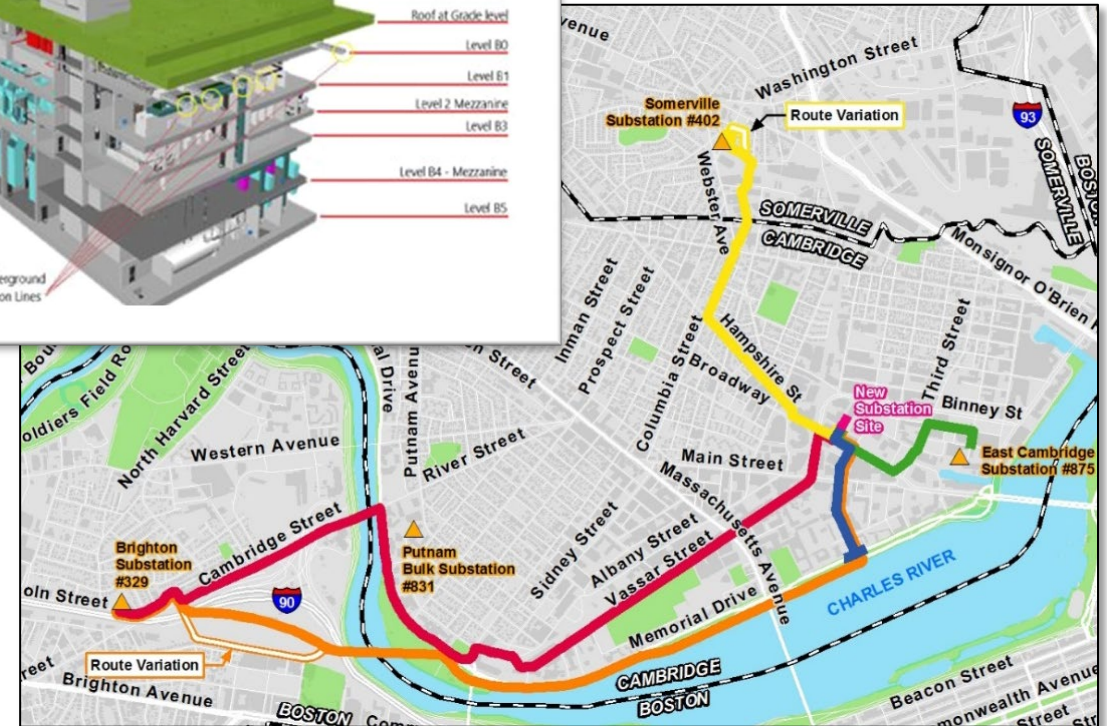
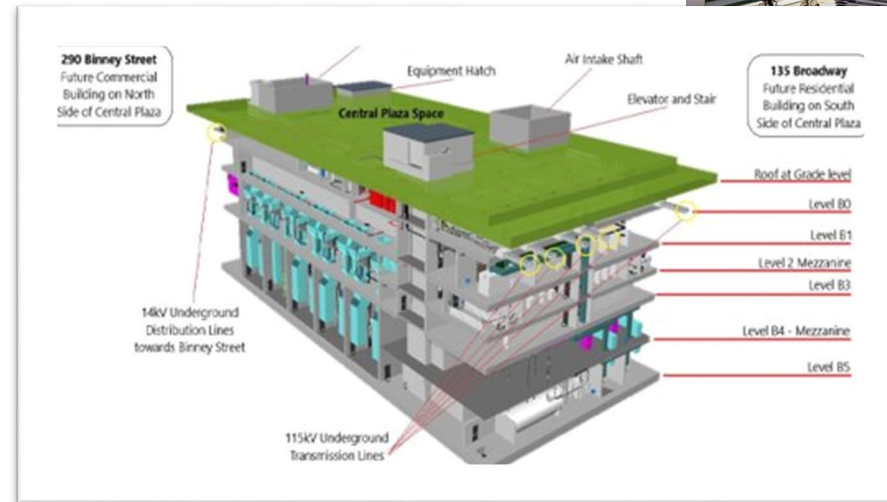
- Underground Substation in Kendall Square Integrated into Boston Properties redevelopment

New underground transmission lines

- Five new 115-kilovolt underground transmission line duct banks

New distribution lines

- 48 new distribution lines



Doing Business at Eversource

Overview of "Of Choice" Contracting Process

Supplier Qualification Process

- **RFI Phase – technical pre-qualification:**
 - Interested suppliers to participate via Ariba
 - Includes general questions regarding company overview & company experience
 - Includes discipline specific technical questions
 - Suppliers who are successful will move to RFP stage
- **RFP Phase – commercial rates & terms:**
 - Acceptance of Terms and Conditions
 - Acceptance of Commercial Time & Material rates
 - Overall evaluation completed and short list generated for award recommendation

Engineer of Choice (EOC) Program

- **Term:**
 - Re-bid every ~4 years
 - Current contracts valid through July 2024
 - Next rebid process to kick-off ~Q3 2023
- **Scope:**
 - 2020 Re-bid included over 100 interested bidders; ~30% awarded a contract
 - Awarded suppliers must sign Competitive Energy Project Information (CEPI) NDA
 - Currently >20 EOC disciplines which include but are not limited to: Transmission OH and UG, Substation Civil & Electrical Design, P&C, Relay Settings, Planning Studies, Telecom, Geotechnical Services, Sound Studies, etc.



Doing Business at Eversource

Next Steps - How to engage

New Suppliers:

- Contact Procurement at Procurement@Eversource.com to indicate interest
- Register as a Supplier in [Ariba Sourcing](#) to enable proper receipt of RFI/RFP opportunities
- Review Terms to understand expectations:
 - <https://www.eversource.com/content/residential/about/doing-business-with-us/procurement>
 - Resources for Prospective Suppliers:
 - [Supplier Code of Conduct](#)
 - [Supplier Sustainability](#)
 - [Terms and Conditions](#)
 - [CT Direct Payment Permits](#)



Questions?

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