New England Conference of Public Utilities Commissioners
necpuc

Solving the Transmission Challenge for Decarbonization

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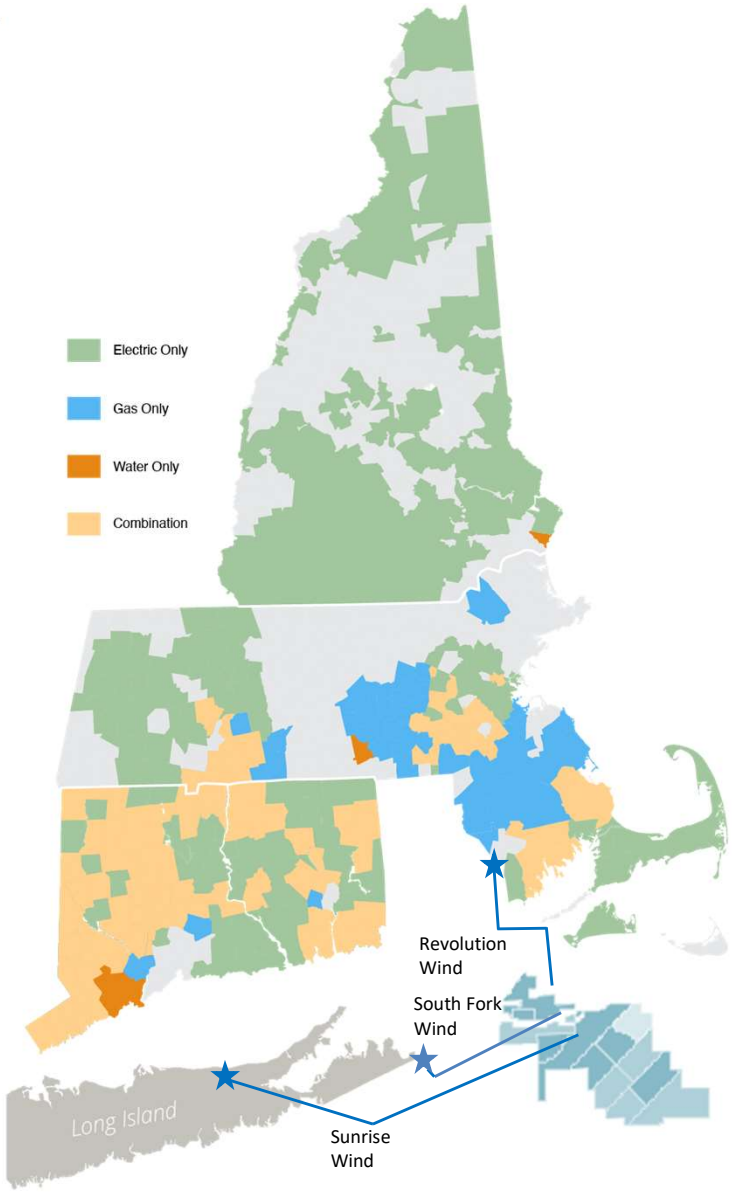
President, Transmission and Offshore Wind Projects at Eversource Energy

EVERSOURCE

Eversource: New England's Largest Utility and a Catalyst for Clean Energy

- Provides **electric, gas, and water** services
- 4.3 million customers
- 9,100 employees
- Operates 49% of New England's transmission system
- **Carbon Neutral** by 2030
- Partnership with Ørsted to provide **~1700 MW of offshore wind power** to New England and New York

South Fork Wind construction on Beach Lane in East Hampton, NY



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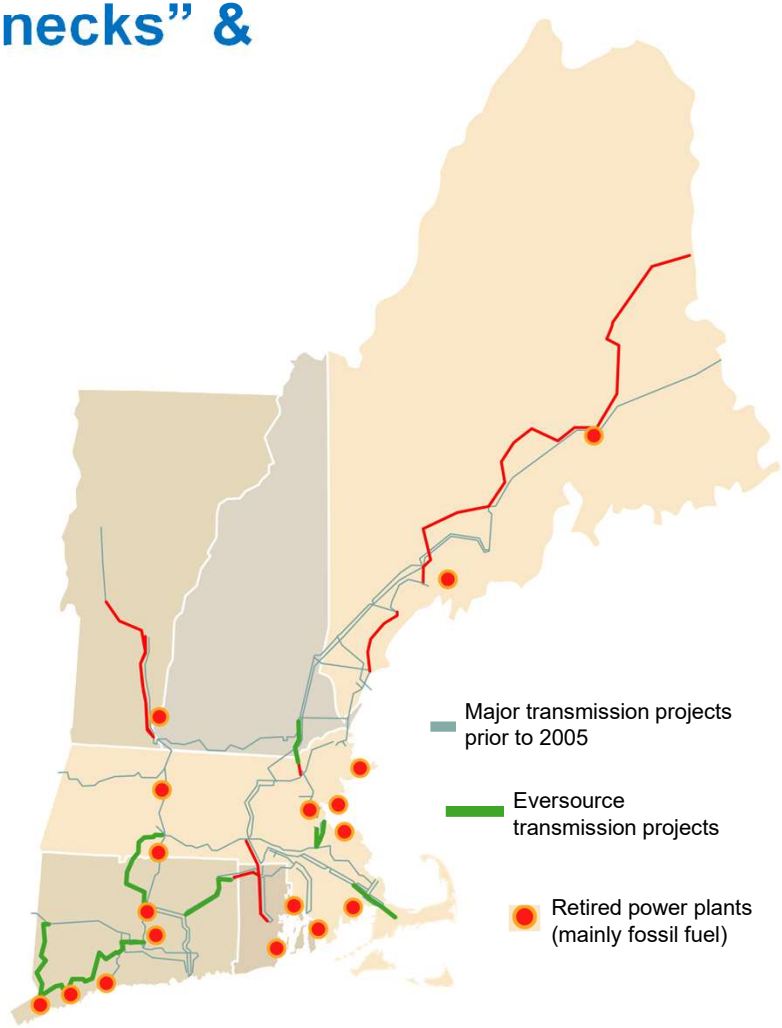
A History of Solving Grid "Bottlenecks" & Improving Reliability

2005-2020:

- **8** major transmission programs
- **$11B** investment
- **$600M** in annual customer savings
- Over **6,000** MW of baseload generation retired since 2000
- **36%** reduction in CO_2 emissions



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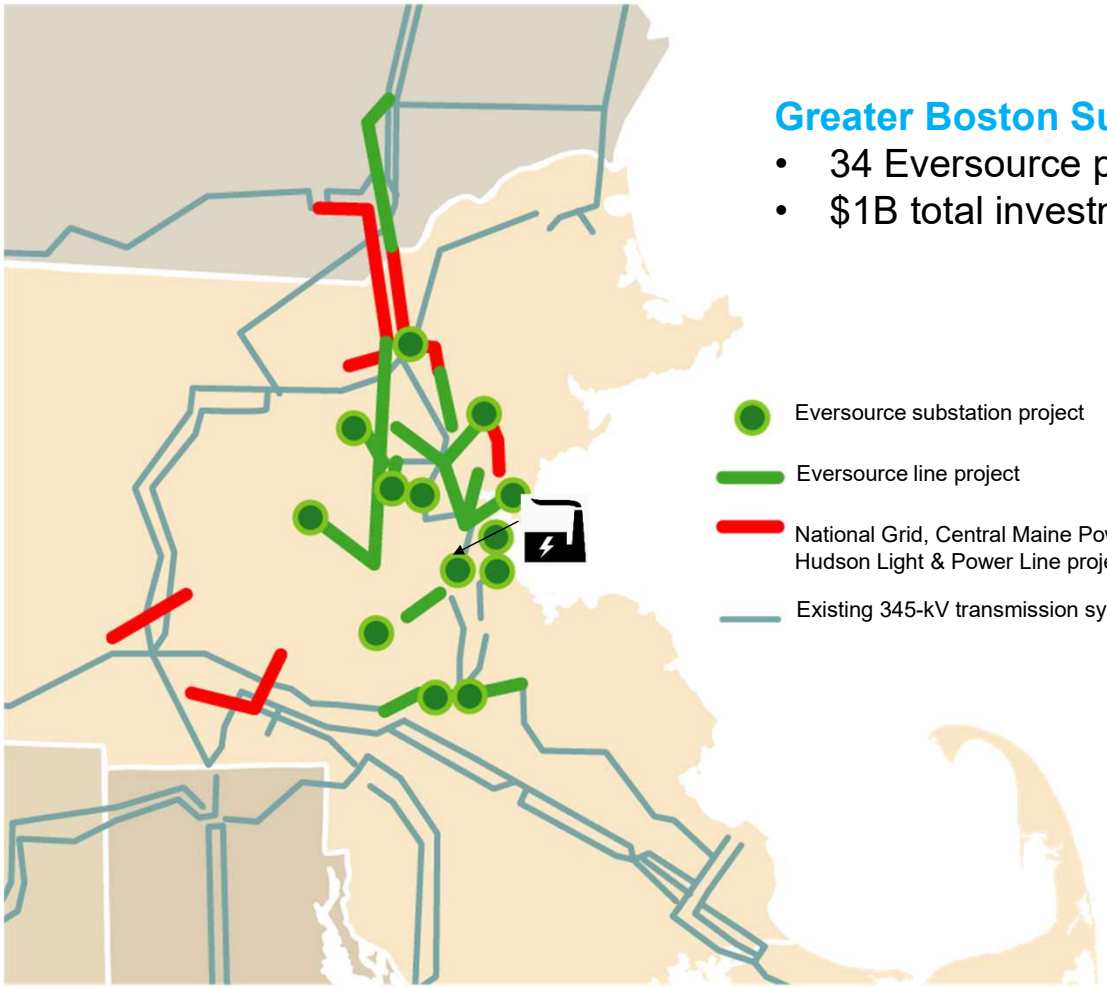
An Integrated Approach to Providing Reliable, Cost-Effective Solutions



Greater Boston Suite

- 34 Eversource projects
- $1B total investment

Boston Area Optimized Solution

- $49M total investment by Eversource and National Grid
- Enables the retirement of Mystic Generating Station, a 2,000 MW fossil-fuel resource
- Eversource portion completed on budget and ahead of schedule
- First competitively awarded reliability project chosen by ISO-NE

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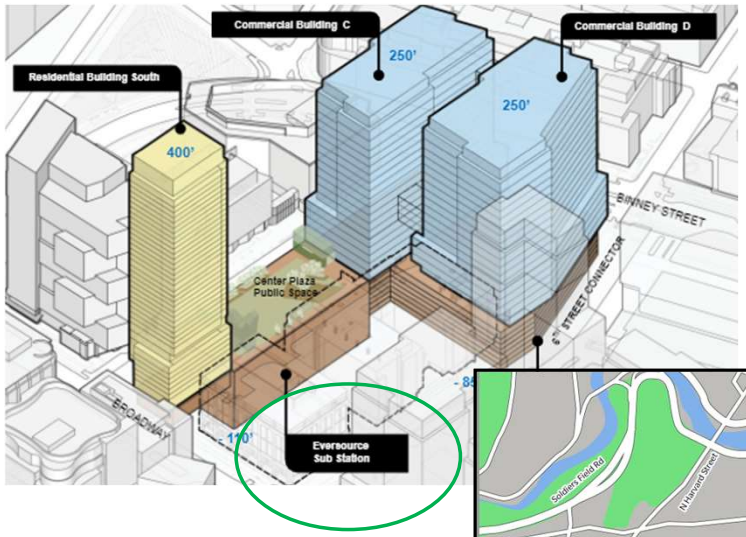
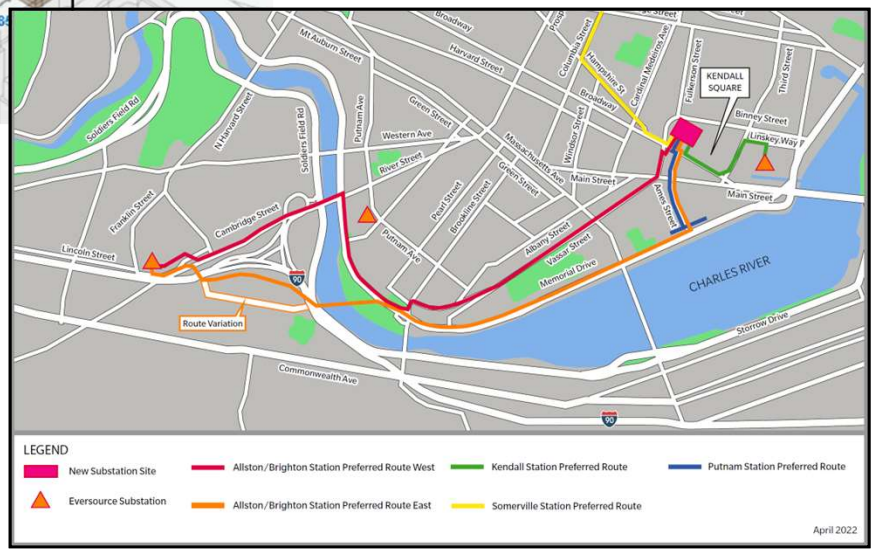
Facilitating Clean Energy in Greater Cambridge with a Unique Solution

- Eversource's **first underground substation** and one of the largest in the U.S.
- Preserves **green space for community use** at ground level between Boston Properties buildings
- Improves **reliability** and supports **anticipated increased demand** from electrification
- Conducting **extensive proactive community outreach** with a focus on environmental justice



Boston Properties rendering



Preferred transmission line routes

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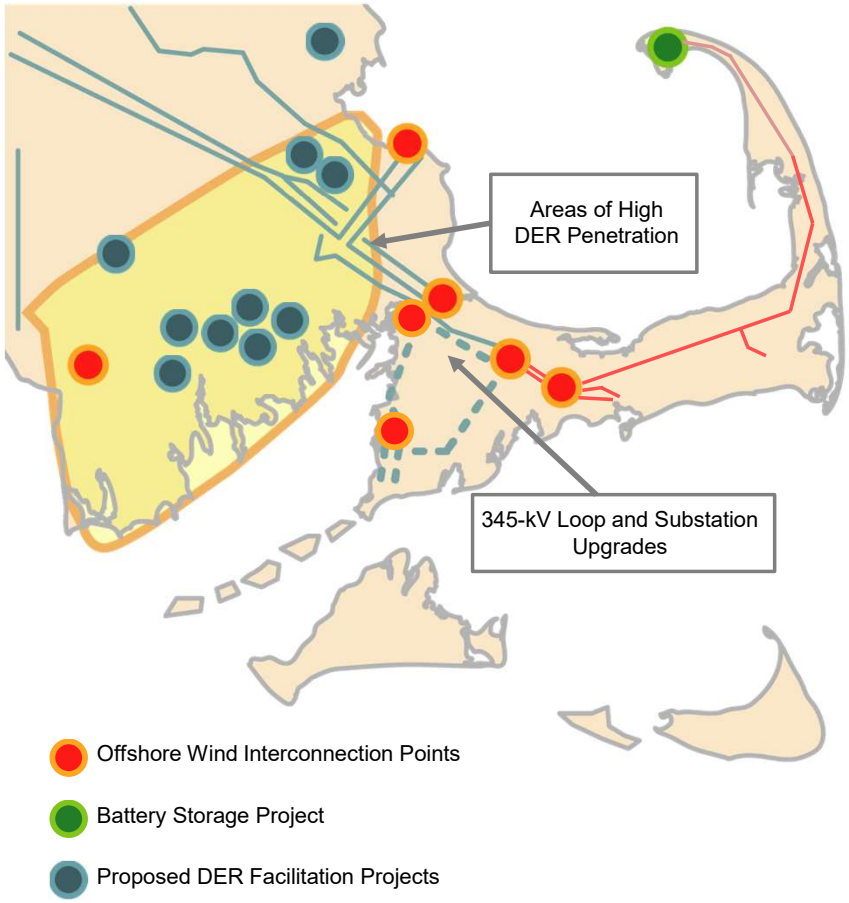
Successful Transmission Solutions Will Combine Grid Reliability, Resiliency, and Clean Energy

Co-optimized transmission solutions to address both reliability needs and interconnect offshore wind

Energy storage solution to provide essential back-up power for resiliency

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



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Achieving the Grid of the Future in New England is Possible, but Brings Challenges

- **Traditional planning processes only consider "firm" new generation and retirements**
  - How do we agree on the resources to plan for? Who decides?
- **Traditional cost allocation rules will assign most of these costs to generators**
  - How do we broaden cost allocation while navigating different state policy choices?
- **Co-optimization will be essential for success**
  - How can we cost effectively prepare the grid now for future clean energy and electrification demands as we make upgrades for resiliency and reliability?

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