New England Electricity Roundtable Presentation

March 22, 2024

LS Power: An Industry-leading Developer, Operator, and Investor

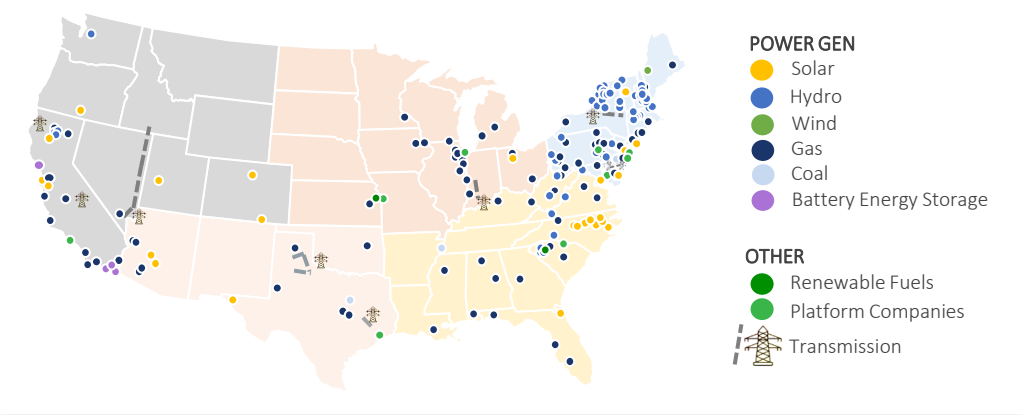
LS POWER
Innovation and Investment in Energy

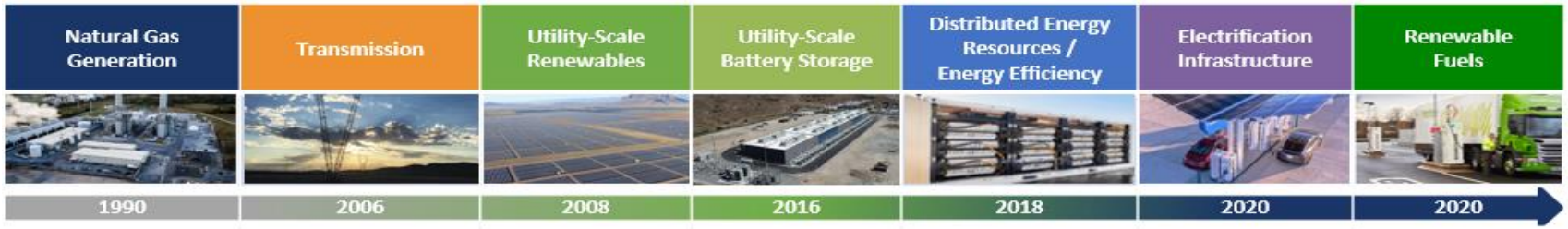
1990	Inception
>47	GW Developed and Acquired
>160	Power Generation Projects
>780	Miles of High-Voltage Transmission Completed
6	Transmission Utilities
8	Energy Services Platform Companies
>370	Professionals Across Five Offices

LS Power Group

Power Generation	Transmission	Energy Storage & Renewables

- Developed/Acquired ~47,000 MW of generation
- 16 transmission projects developed including 6 utilities across 5 ISO/RTOs and 8 states
- Nation leading energy transition businesses representing electric vehicle charging, demand response (virtual power plants), microgrids, renewable fuels and waste-to-energy platforms





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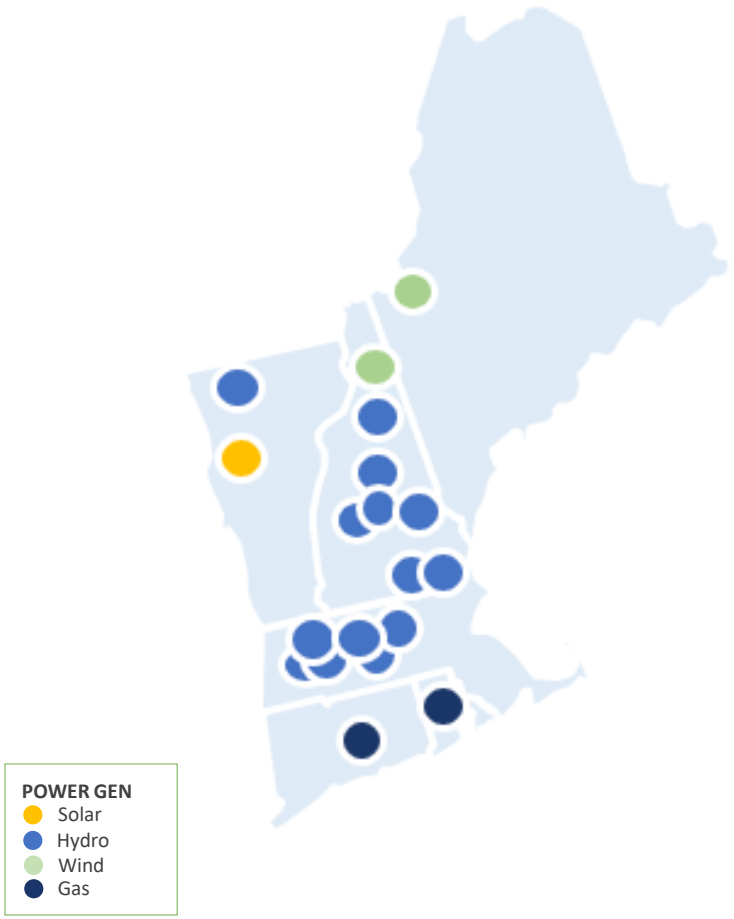
LS Power Commitment to New England

1,162 MW operating fleet with additional DER capacity in every state in the region



Renewable Generation

- **Hydro**
  - 14 projects totaling 125 MW across ISO-NE (part of 41-project Patriot Hydro portfolio)
- **Wind**
  - Kibby – 132 MW in Maine
  - Jericho – 12 MW in New Hampshire
- **Solar**
  - Whitcomb – 2 MW in Vermont

Natural Gas Generation

- Ocean State Power – 541 MW in Rhode Island
- Wallingford – 350 MW in Connecticut

Distributed Energy Resources (DER)

- CPower – leader in demand-side energy management solutions provider with 6.7 GW in DER capacity across 27,000+ customer sites
  - 500+ MW in state programs and wholesale markets across all six NE states
- EVgo FAST CHARGING - one of the largest EV charging networks powered 100% by renewable energy, with over 900 locations and 500,000+ customers across 35+ states
  - 100+ chargers across ISO-NE

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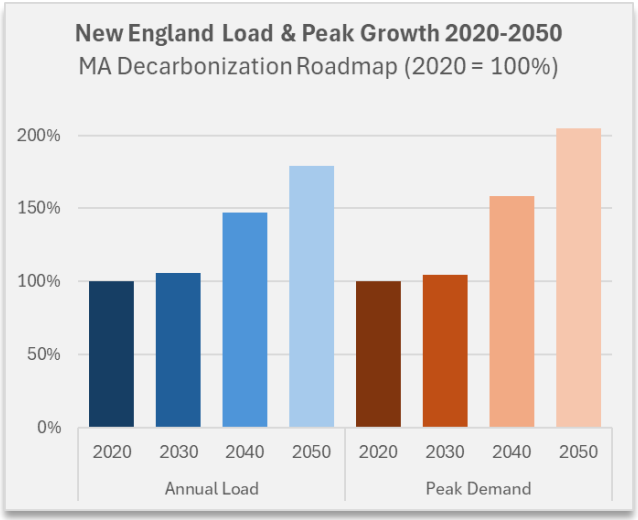
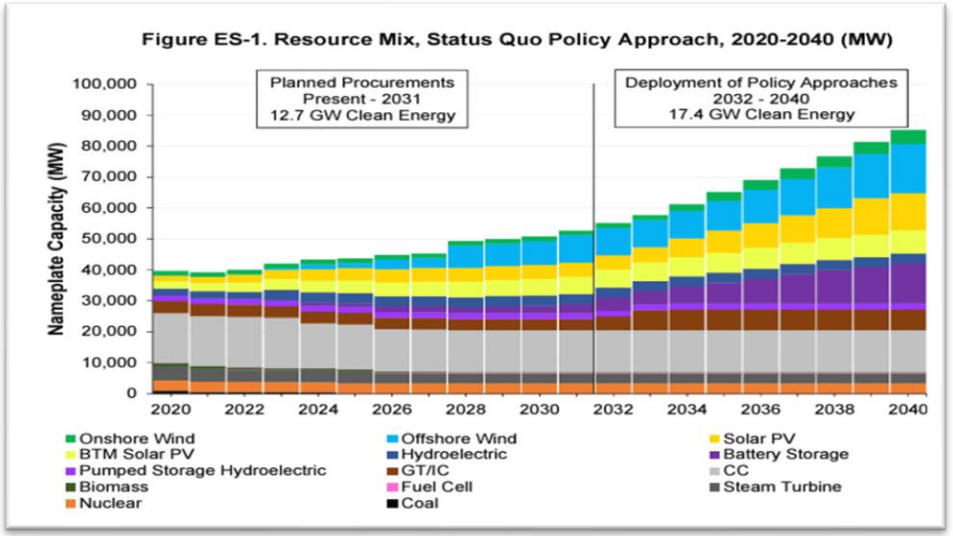
System Needs Necessitated by Increasing Energy Demands…

Load Growth Driven by Demand from Electrification of Heating and Transportation





- Long-term studies of region indicate **doubling in both electricity consumption and peak demand**, plus a shift to a winter peak (1), (2)
- Still very early stages of integrating zero carbon resources into the supply mix
- Dispatchable, flexible, firm supply is essential to cost-effective decarbonization (1), (3)

System planning in this new paradigm requires scrutiny of historical assumptions and growth mindset

1. MA EEA, 2020, Energy Pathways to Deep Decarbonization, https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/
2. Schatzki et al, 2022, "Pathways Study",https://www.iso-ne.com/static-assets/documents/2022/03/schatzki-et-al-pathways-final.pdf
3. CT DEEP, 2020 Integrated Resource Plan,https://portal.ct.gov/-/media/DEEP/energy/IRP/2020-IRP/Appendix-A3--Modeling-Results.pdf

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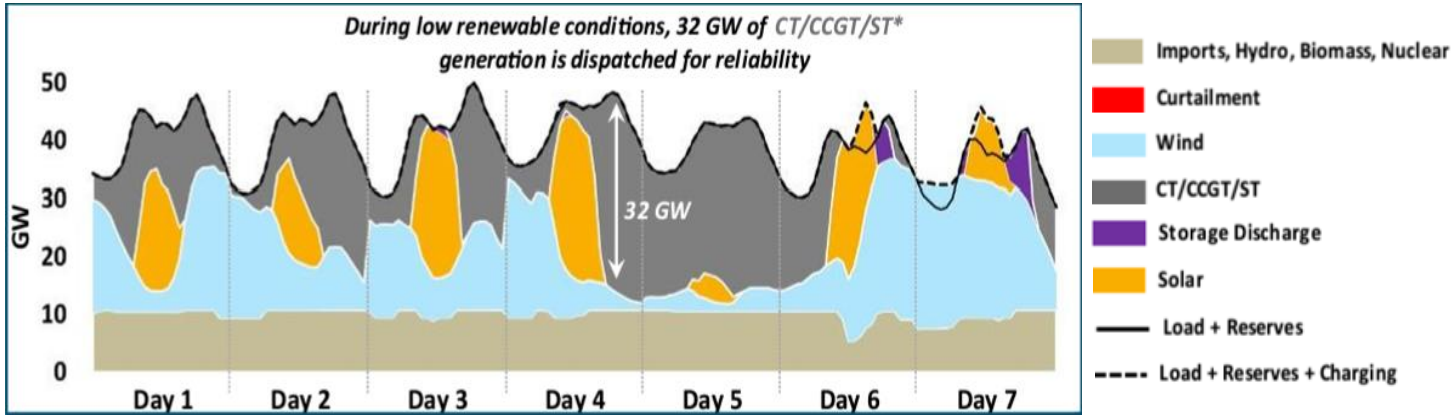
…Supported by Flexible Thermal Generation for Critical Reliability

Thermal resources are critical for reliability during high load periods and to integrate renewables. More dispatchable, flexible, long-runtime generation will be needed

High Stress Week from E3's 2020 Study[1] of New England Highlights Critical Need for Reliable, Dispatchable, Long-Duration Generation



- Renewables will serve load demand during most hours of the year, **but there will be multiday periods with high loads and low renewable generation**
  - This will pose a critical reliability challenge
- To cover these periods, **thermal generation capacity will continue to provide the region's reliability backbone for years to come** [1], [2]
- Forcing premature retirement of thermal generation will *increase* the challenge of decarbonization by making it more difficult to reliably integrate renewables and maintain resource adequacy [3]
- Decarbonizing power gen without gas will increase consumer costs by $3.7[2] to $19 billion[1] annually

Recognition of System Reliability Requirements is being integrated into Public Policy Conversation

1. E3 & EFI, 2020, "Net-Zero New England: Ensuring Electric Reliability in a Low-Carbon Future", Fig 4-10
2. MA EEA, 2020, Energy Pathways to Deep Decarbonization: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study
3. NREL, 2022, "Examining Supply-Side Options to Achieve 100% Clean Electricity by 2035", Fig 11,

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Markets and Policies Need to Support Competition

Competitively procuring needed resources and grid services is the most cost-effective way to meet clean energy requirements and save consumers money

Three key questions for the next decade:

1. How do we **plan** for a highly decarbonized system that ensures reliable, affordable electricity for consumers?
2. How do we **design markets** to support resources that are needed for reliability?
3. How do we **build transmission and generation** at huge scale, cost-effectively?

Wholesale Energy Market	Wholesale Capacity Market	State Policy
Markets *that better reflects system risk, weather uncertainty, and that accurately price the value flexibility*	**Pricing** *that supports development and operation of highly reliable, flexible, but seldom used resources*	**Focus on procuring resources** *rather than forcing the retirement of less favored ones*
Carbon pricing, *economy-wide, to align new development and generation with state goals*	**Capacity accreditation** *that accurately differentiates between high- and low-quality resources, and doesn't rely on outdated assumptions (e.g. tie benefits)*	**Ensure competitive transmission flourishes**; *enable merchant use of utility equipment, right-of-way*

Wholesale markets and state policy must evolve to ensure a cost-effective, reliable power system

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