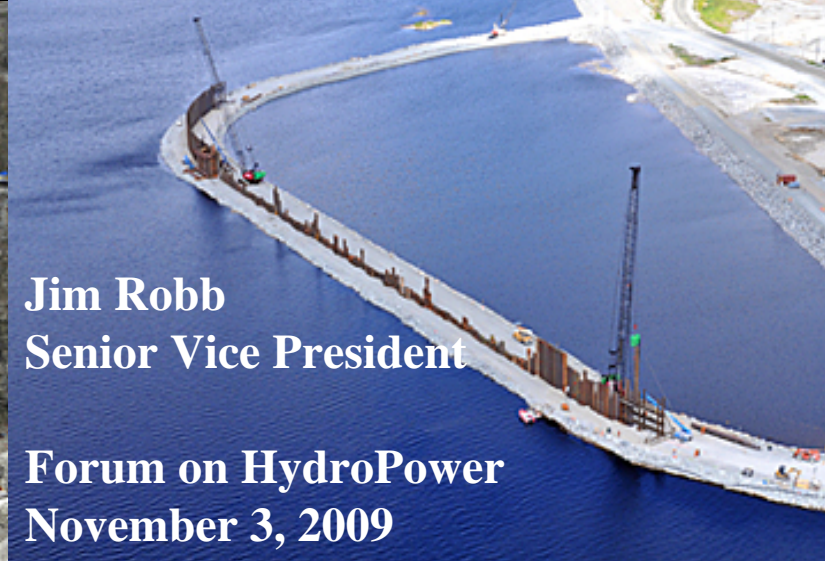




Northeast
Utilities System®



**Hydropower –
Key to our Energy Future**



**Jim Robb
Senior Vice President**

**Forum on HydroPower
November 3, 2009**

Northeast Utilities System is New England's largest electric and gas distribution utility

Western Mass. Electric Co.

- Serves rural western Massachusetts
- 200,000 customers
- Owns no generation

Connecticut Light & Power

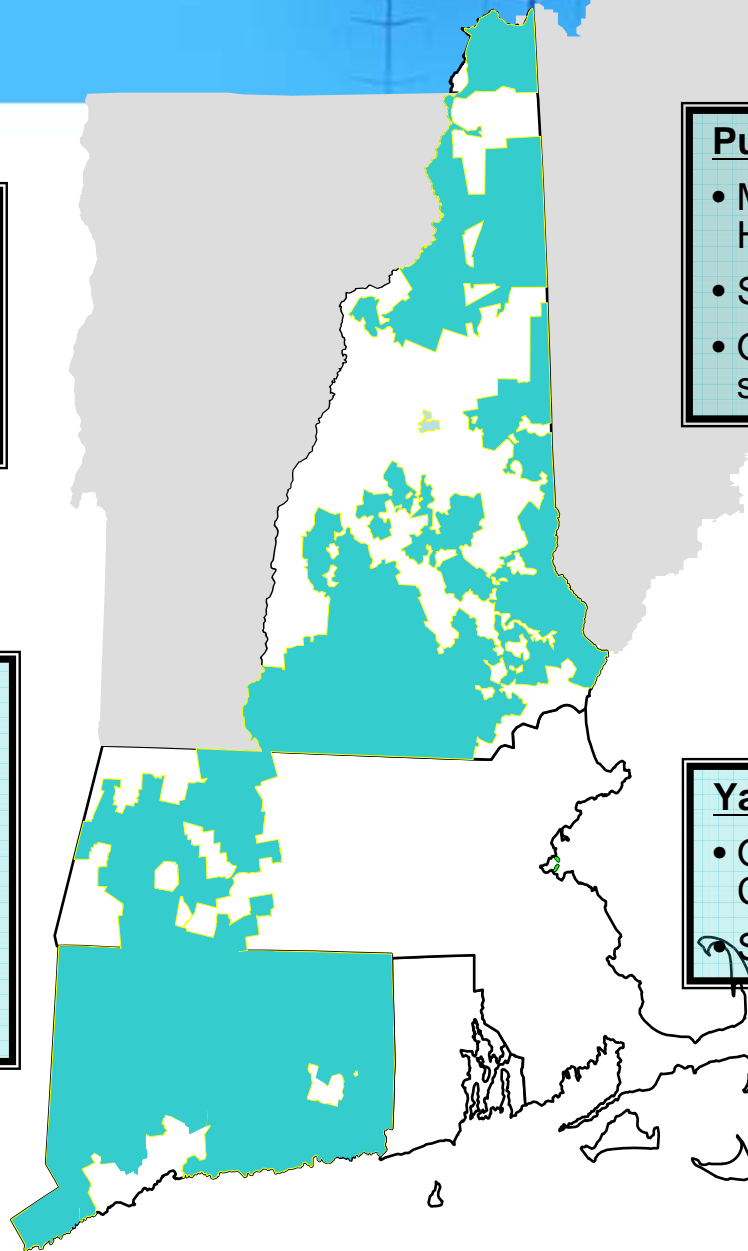
- Dominant electric utility in Connecticut
- Serves 1.2 million customers
- Owns no generation
- Site of significant transmission investment in SW Connecticut

Public Service of NH

- Major utility in New Hampshire
- Serves 490,000 customers
- Owns 1,100 MWs of cost of service generation.

Yankee Gas Services Co.

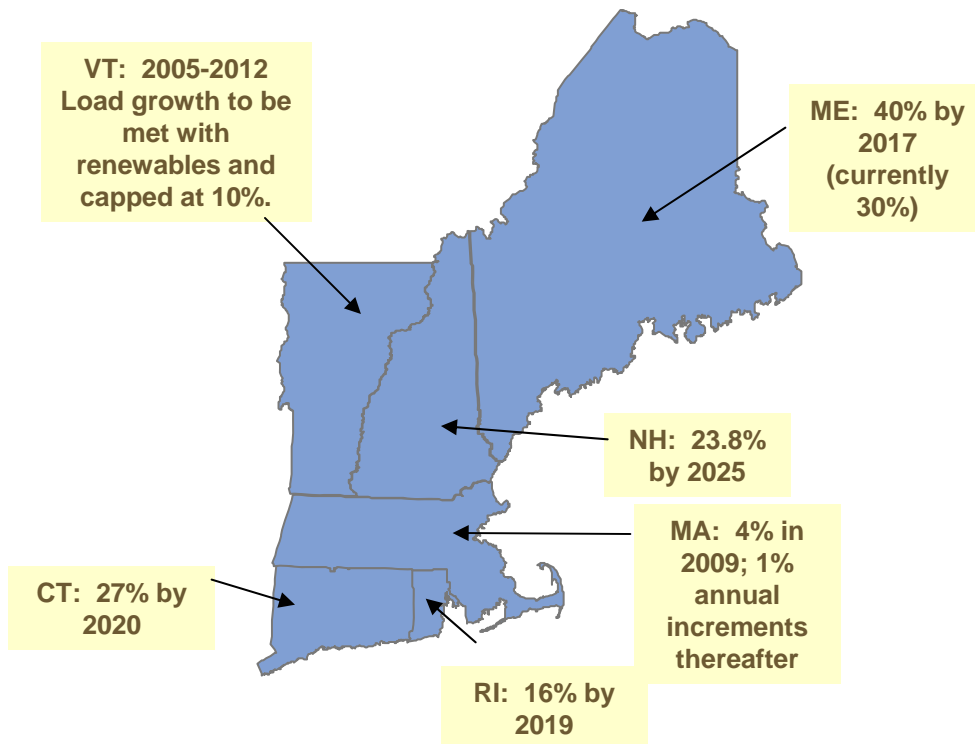
- One of 3 gas LDCs serving Connecticut
- Serves 200,000 customers



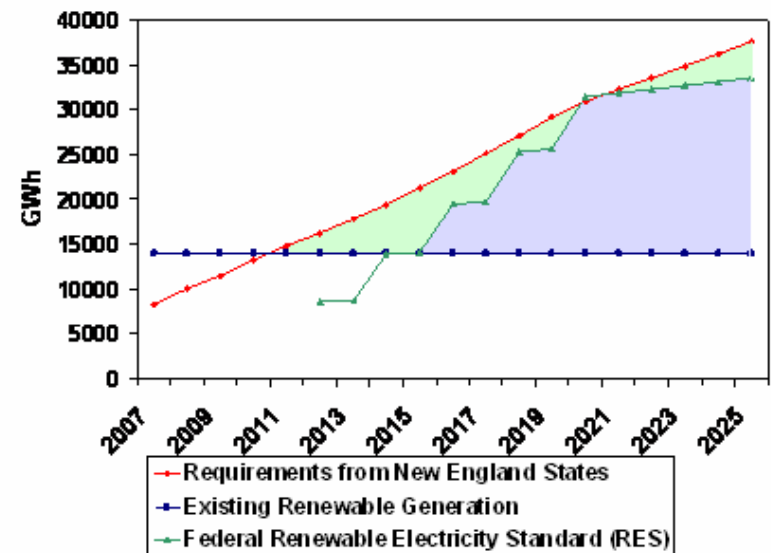
Key Messages

- > New England will have substantial low-carbon energy needs, driven by renewable portfolio standards and carbon emission limitations
- > Canadian resources hold significant appeal IF the cost allocation challenges associated with developing “economic” transmission can be overcome
- > Northeast Utilities, along with NSTAR, has been working with HydroQuebec to develop a land mark power supply – transmission deal which holds promise to make a significant contribution to New England’s energy-environment-economy challenges

New England will need 20% of its energy to come from renewable sources by 2020; currently



Renewable Portfolio Standards Needs in New England*

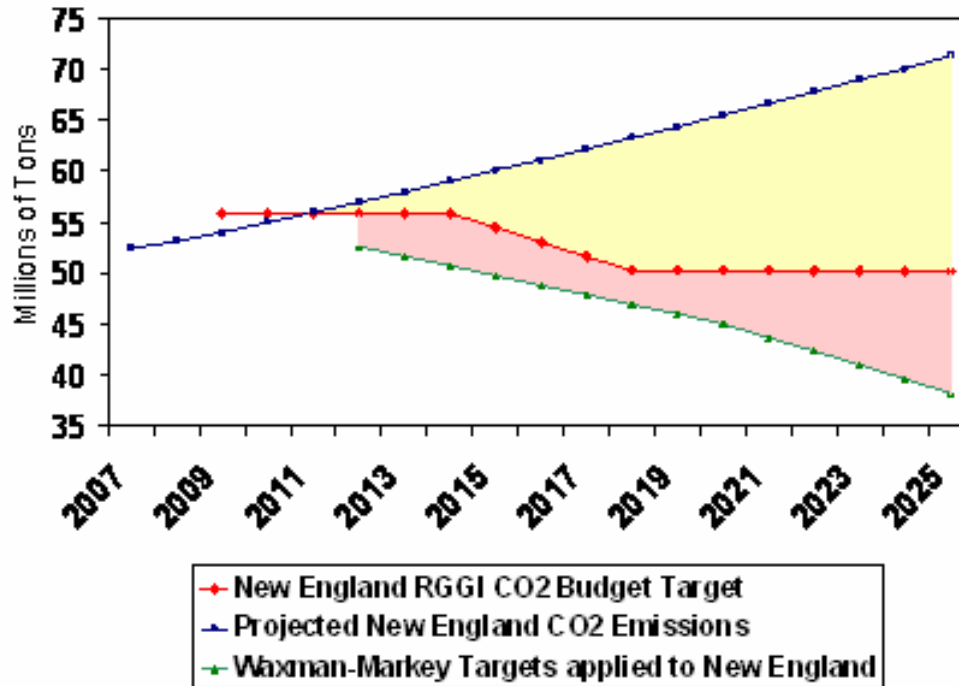


Magnitude of meeting this challenge

- > 2,500 MW of biomass (~\$12 billion), or
- > 5,600 MW of wind (~\$8 billion), or
- > 16,400 MW of solar (~\$128 billion)

New England already has a functioning carbon cap and trade system which, though less aggressive than proposed Federal legislation, promises to significantly reshape the industry

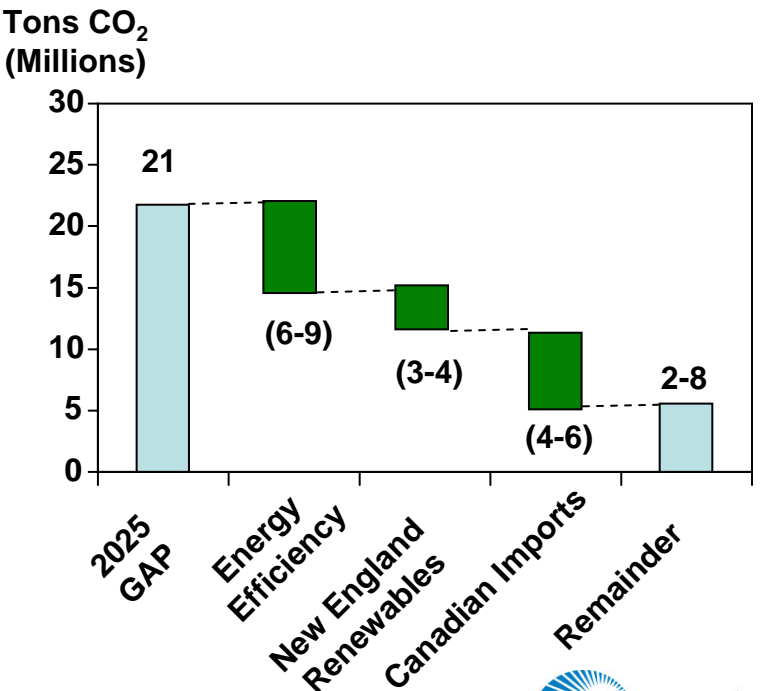
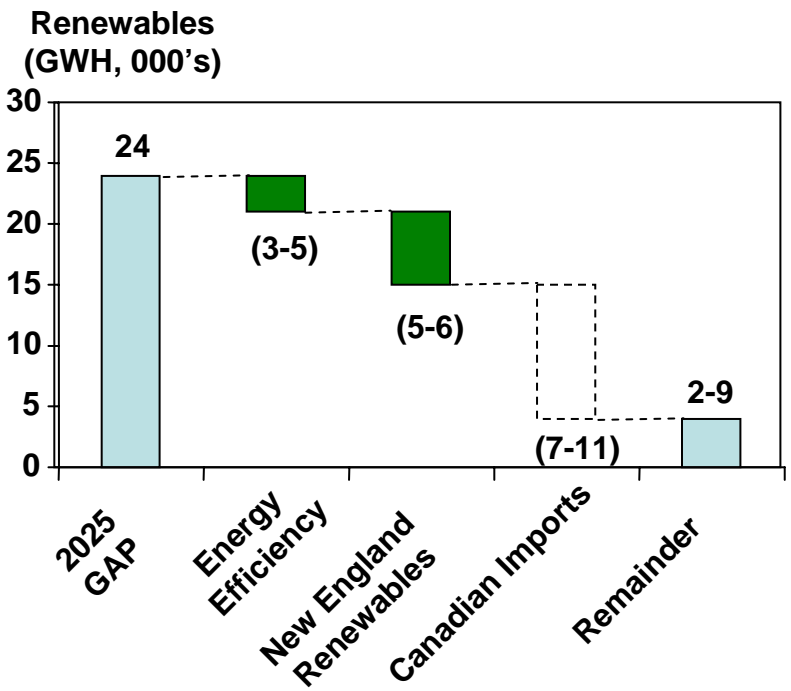
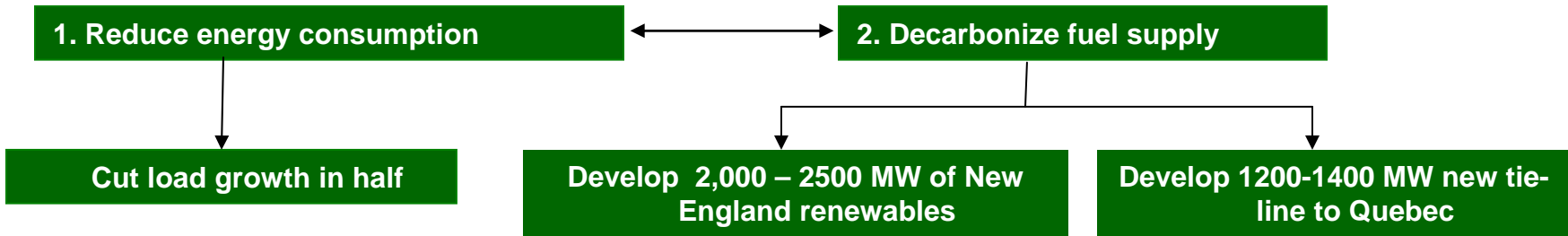
Greenhouse Gas Reduction Targets in New England (Pro-Rata)*



Magnitude of meeting this challenge

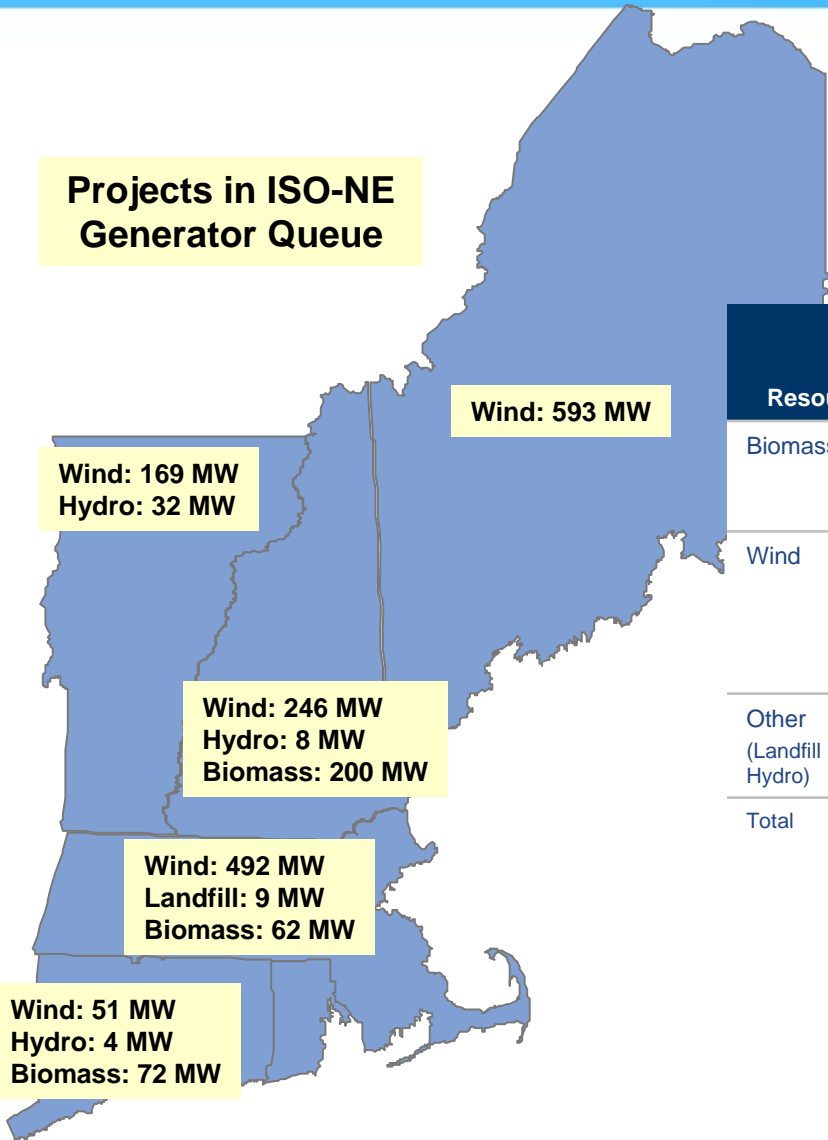
- > 36,000 GWh fossil generation replaced with low / no emissions resources
- > Equivalent to 5,000 MW of baseload generation

New England will need to take multi-dimensional actions to meet its energy goals



Despite significant potential, it is unlikely New England will be able to meet its entire RPS and RGGI needs

Projects in ISO-NE Generator Queue



Resource	Existing	Proposed (in ISO-NE Queue)	Remaining Potential	Comments
Biomass	475 MW 3,329 GWh	334 MW 2,334 GWh	170 MW 1,191 GWh	Economic supply of wood is limiting factor
Wind	21 MW 50 GWh	1,551 MW 3,990 GWh	9,300 MW 24,000 GWh	On and Off-shore wind facilities likely to have major siting challenges
Other (Landfill & Hydro)	1,721 MW 7,127 GWh	53 MW 174 GWh	? MW ? GWh	Supply limited
Total	2,217 MW 10,506 GWh	1,938 MW 6,498 GWh	9,470 MW 25,191 GWh	

Total Queue & Additional Potential of about 32,000 GWh Versus 36,000 GWh needed to meet RGGI target in 2020

How HydroPower could fit in

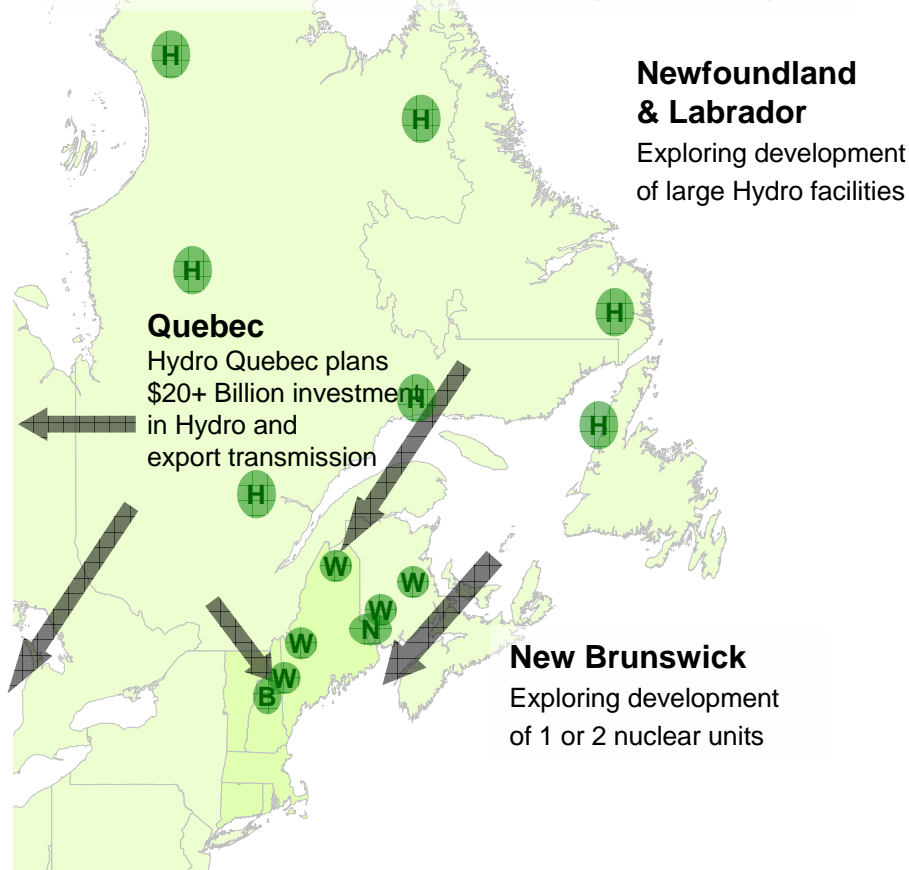
- > Eastern Canadian low carbon resources are very attractive resources in this market environment, hydro in particular holds significant interest
 - › Does not qualify for state Renewable Energy Certificates (doesn't invite protectionism from local renewable developers)
 - › Does not invite the controversy that nuclear would

- > Two key challenges need to be overcome, however
 - › Financing the generation without the security of a long-term known price
 - › Paying for economic transmission to deliver the power to southern New England load centers



Canadian resources of interest

Low Carbon resources in the greater region



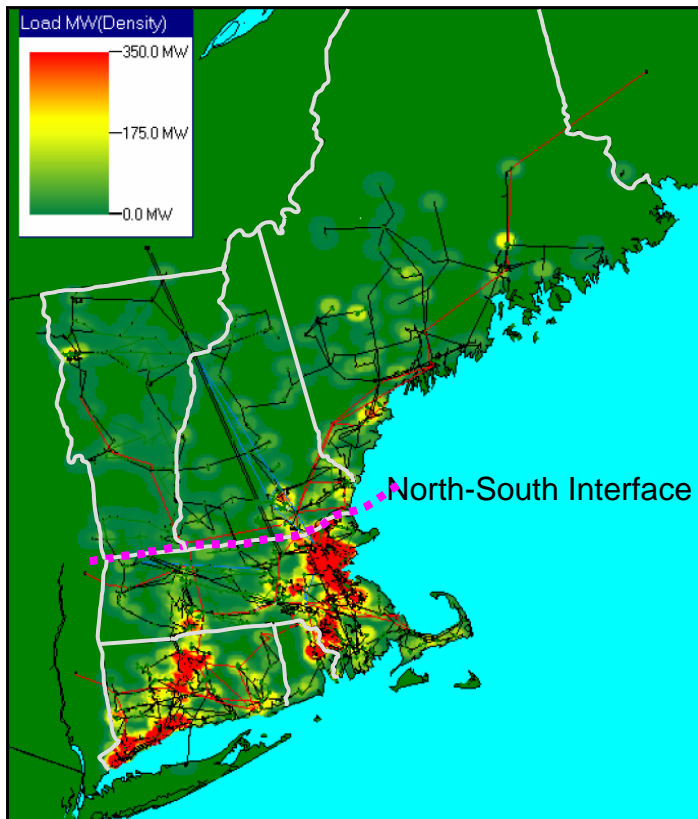
Key Issues for Canadian generation

- Hydro and Nuclear do not and are unlikely to qualify for state Renewable Energy Certificates (they may get “partial credit” under a proposed Federal bill)
- New England utilities will not enter into long-term fixed price contracts
- Transmission distances are very long and very expensive, especially with HVDC technology

B Biomass
 H Hydro
 N Nuclear
 W Wind
 General Movement Of Power

New England Transmission Challenges

Over 80% of New England's Load is South of the North-South Interface



Key Issues for Transmission

- Not enough to deliver to New England...need to get to load centers in MA and CT
- Limited transfer capacity currently exists between northern and southern states
- New England regulators actively oppose socialized cost recovery for “economic” transmission projects

NU-NSTAR-HYDROQUEBEC DEAL

- > After one year of investigation and discussions with multiple regulators, suppliers, other transmission owners, and key stakeholders, NU catalyzed an integrated power supply/ transmission deal with Hydro Quebec and NSTAR
- > Last May, the U.S. Federal Energy Regulatory Commission issued a declaratory order sanctioning the proposed deal structure
- > The parties are advancing commercial discussions in anticipation of a 2014-2015 in service date

Why Hydro Quebec? Why NU? Why NSTAR?









- > HydroQuebec is currently actively developing and constructing large scale hydro facilities (> 4500 MW)
 - › Focus is on tapping into higher priced U.S. power market
 - › Balance sheet financed, so no long term price commitments are necessary
 - › Physically closest to key New England load centers
- > NU is the largest distributor of power in New England and has developed a distinctive transmission development capability, demonstrated through our southwest Connecticut projects
- > NSTAR is the largest power distributor in Massachusetts and serves the largest New England load center, Boston.



FERC Declaratory Order – May 2009

- > In December 2008, NU and NSTAR petitioned the FERC to allow this deal structure
- > In May, 2009, FERC issued a Declaratory Order, sanctioning the “participant funded” model *in this instance*:
 - › Clarified the right of HQ as the funder of the line to own the firm capacity rights of the line (subject to remarketing any unused capacity in the secondary market)
 - › Did not require an open season for the base project capacity of 1200 MW but did require an open season for any economic capacity above 1200 MW
 - › Agreed that NU/NSTAR revenue requirements needed to be cost-based and subject to FERC’s “just and reasonable” standard

Why “Participant Funding” works for this project

- ›  **PPA benefits:** A PPA will be structured consistent with market alternatives that doesn't expose customers to undue risk (subject to state regulatory approvals).
- ›  **Participant Funded:** The Transmission investment will be borne without regional cost allocation.
- ›  **Renewable Portfolio Standards:** Hydro-electric power is not currently a qualified renewable in New England; may garner a load exemption under Federal Renewable Energy Standard.
- ›  **CO2 Emissions:** CO₂ emissions reduced (1/3 of RGGI “GAP” by 2025).
- ›  **Market Prices for Power:** Project is of sufficient scale to lower market prices for power for all customers (perhaps \$1 - \$3/MWh).
- ›  **Fuel Diversity:** Increase in non-natural gas power to New England increases the region's fuel diversity.
- ›  **Other environmental benefits:** Power will displace marginal fossil generation and associated environmental impacts (NO_x, SO_x, etc.).
- ›  **Customer benefits:** 1200 MW of hydro would power approximately 1 million homes with low-carbon energy and another 1 million homes could be heated with the displaced gas.

Conclusions and Next Steps

- > New England is an attractive market for Canadian Hydro and Canadian Hydro is an attractive resource for New England
- > NU, NSTAR, and HydroQuebec are paving the way with an innovative project structure to bring 1200+ MW of low carbon power to New England through a participant funded transmission project that promises to be a win for Quebec and New England customers
- > We are optimistic that we will be in a position to file key commercial documents with US (and Canadian) regulators later this year or early in 2010.

