



# Restructuring Roundtable

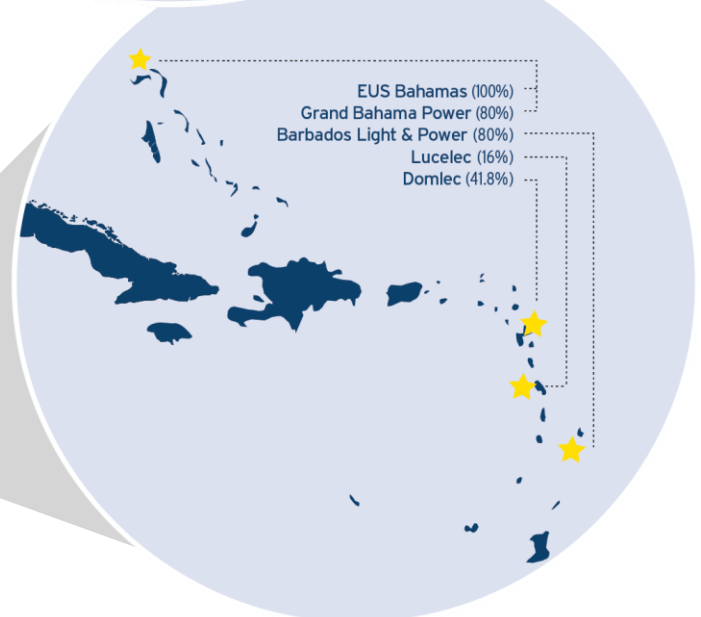
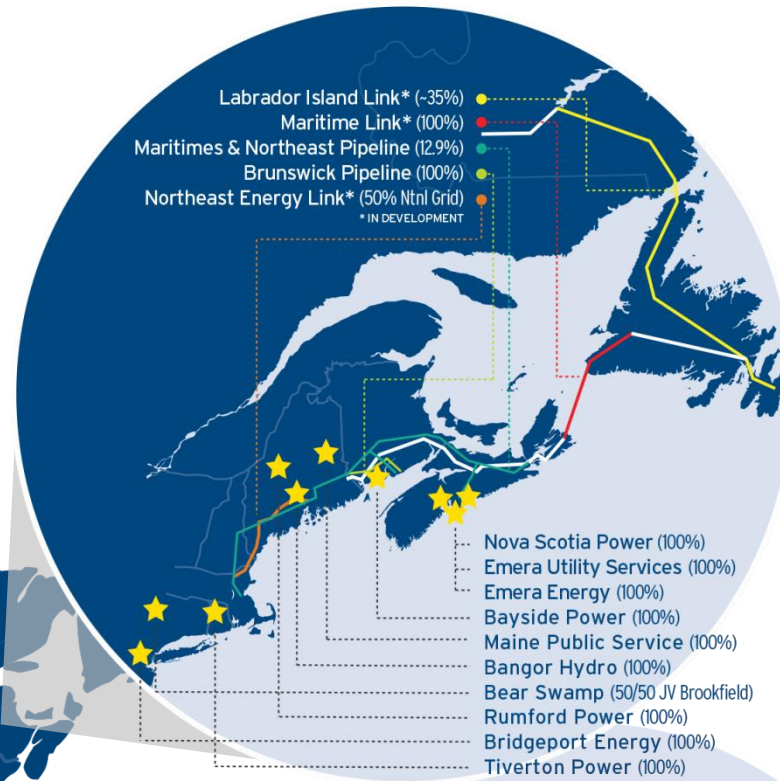
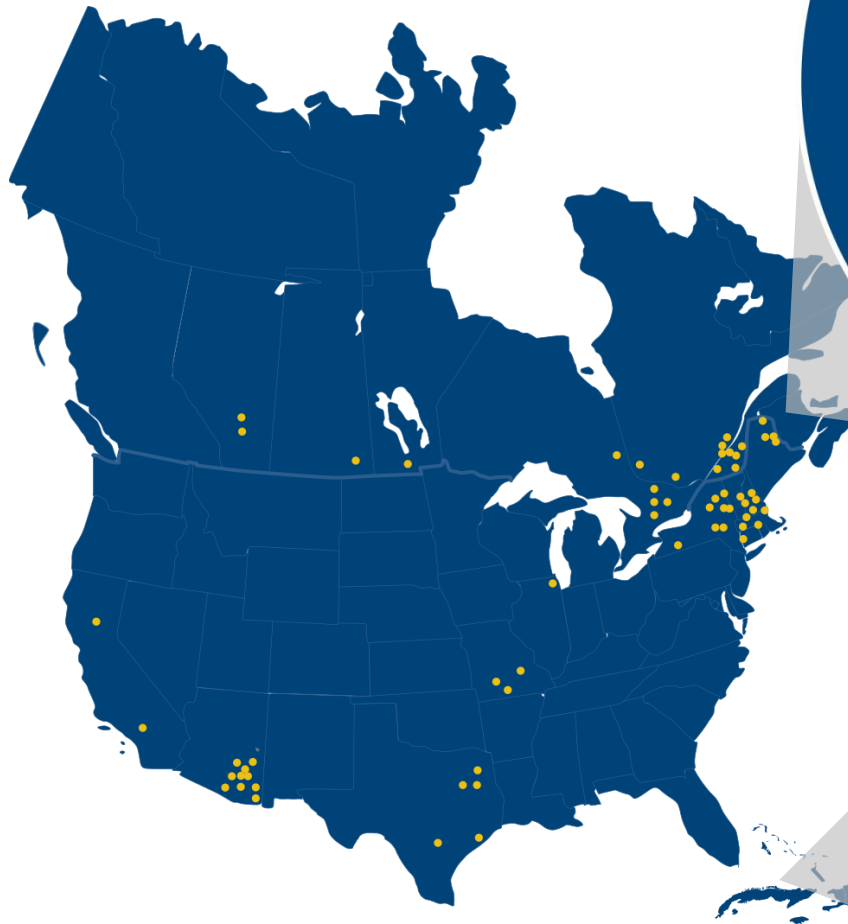
Transmission and  
Renewable Developments  
in New England

April 17, 2015



# About Emera

\$9.85 billion of assets in Canada,  
United States and Caribbean



# Opportunity

## NEW ENGLAND

- Meet greenhouse gas reduction target; 2020 GHG target of 25% reduction compared to 1990
- Reduce over-dependence on natural gas fired generation; Long term wind contracts offer effective hedge for volatility of gas market impact on electric rates
- Backfill approximately 8000 MW of planned capacity retirements;
- Meet Renewable Portfolio Standards; demand for REC qualified energy is outpacing supply.
- Terrestrial wind and Canadian imports offer lowest-cost solutions.

MUSKRAT FALLS (MF)  
GENERATION & LABRADOR  
TRANSMISSION (LTA)

NL

LABRADOR  
ISLAND LINK  
(LIL)

MARITIME LINK

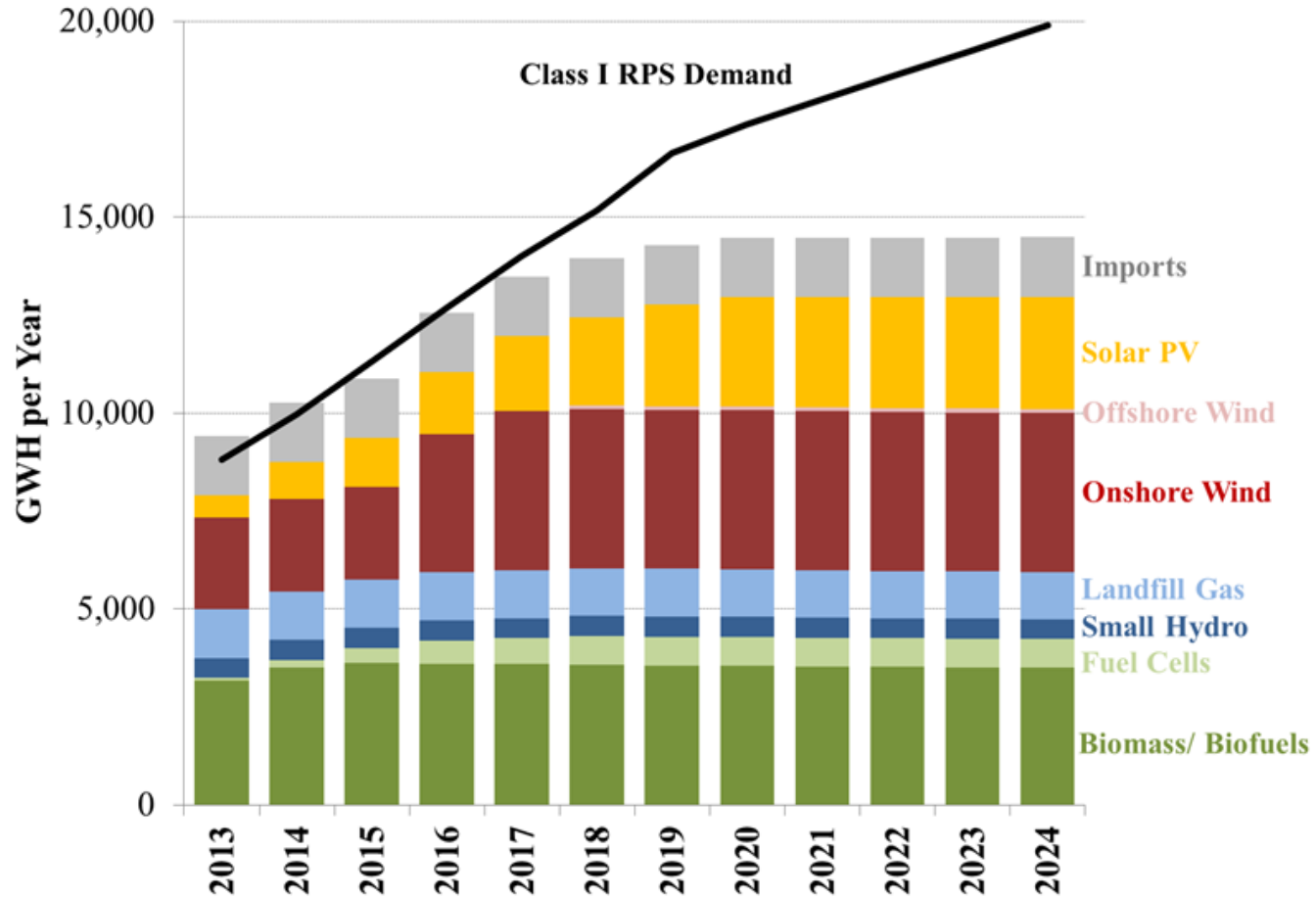


Wind Facility



Hydro Facility

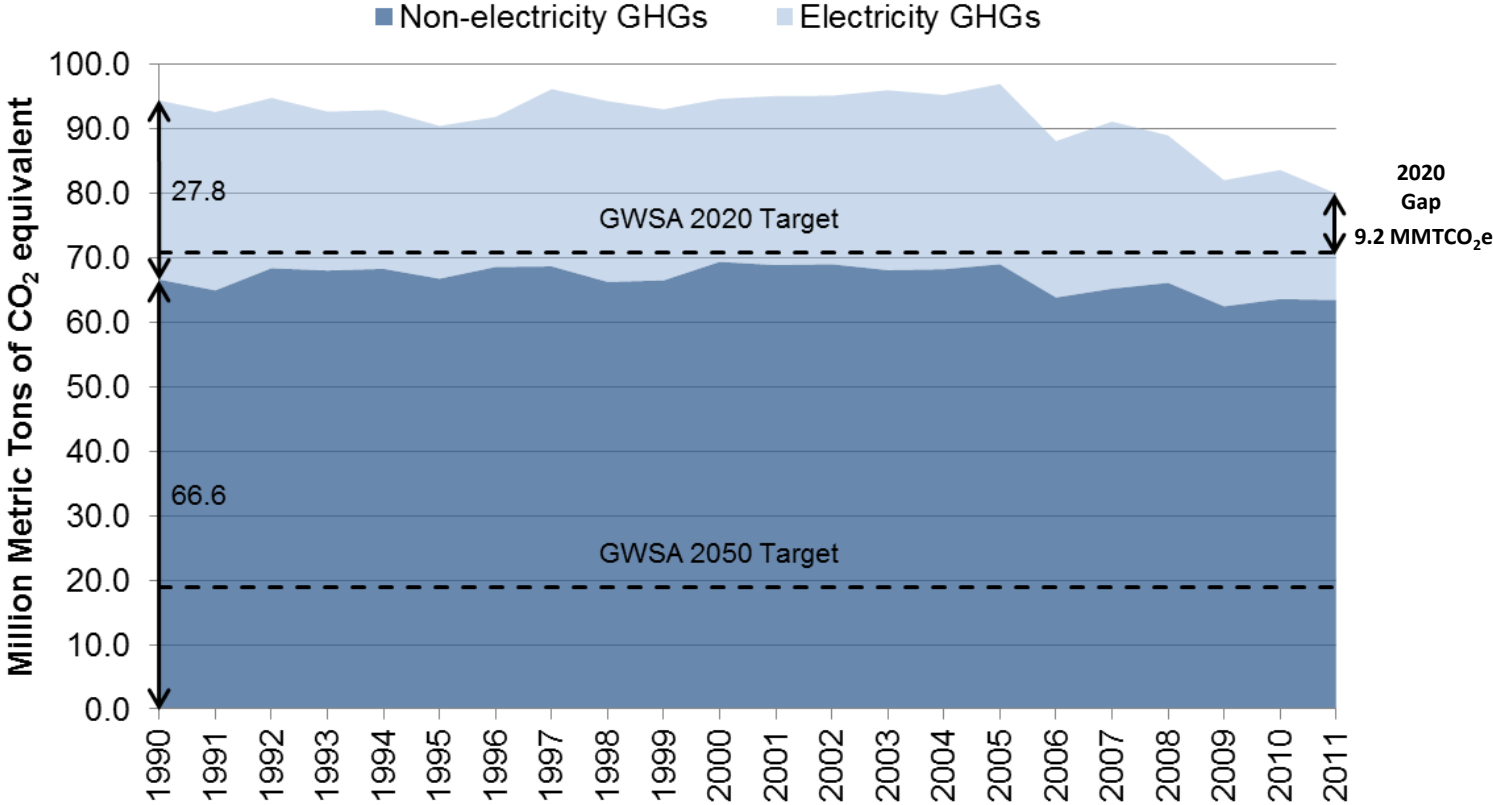
# RPS Compliance



New England Class I Renewable Resource Supply and Demand Balance (Cumulative GWh)  
 2014 Integrated Resource Plan For Connecticut, March 2015

# GHG Compliance

## Massachusetts GHG Emissions



# Will we turn the ship? When should we start?



# Lower Churchill

## Phase 1 and Maritime Link

### MUSKRAT FALLS (MF) GENERATION & LABRADOR TRANSMISSION (LTA)

- \$4.2 billion project value
- 824 MW hydroelectric facility
- 4.9 TWh/yr
- 100% Nalcor owned





### LABRADOR ISLAND LINK (LIL)

- \$2.79 billion project value
- 900 MW capacity
- 1,100 km
- Emera to invest ≈ \$400 million for a ≈ 35% equity interest in the LIL

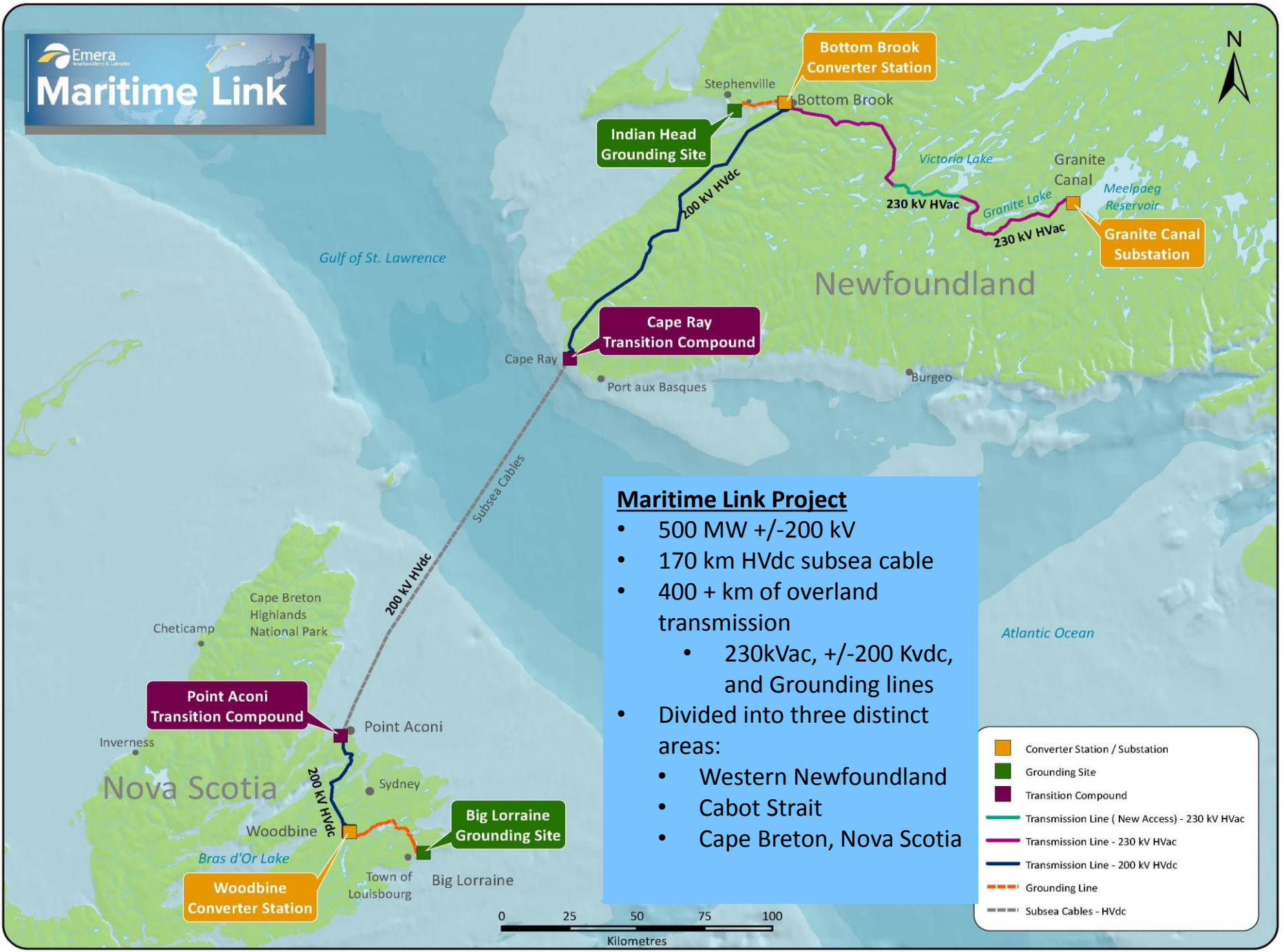
### MARITIME LINK (ML)

- \$1.577 billion project value
- 500 MW capacity
- 170km undersea link
- 100% Emera owned for 35 years

### TRANSMISSION LINES

-  Existing Transmission Lines
-  Proposed Northeast Energy Link
-  NSPI, Emera Maine Transmission Lines
-  Utility Service Area

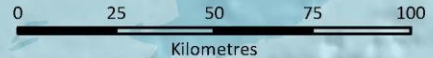




**Maritime Link Project**

- 500 MW +/-200 kV
- 170 km HVdc subsea cable
- 400 + km of overland transmission
  - 230kVac, +/-200 Kvdc, and Grounding lines
- Divided into three distinct areas:
  - Western Newfoundland
  - Cabot Strait
  - Cape Breton, Nova Scotia

	Converter Station / Substation
	Grounding Site
	Transition Compound
	Transmission Line ( New Access) - 230 kV HVac
	Transmission Line - 230 kV HVac
	Transmission Line - 200 kV HVdc
	Grounding Line
	Subsea Cables - HVdc





# Maritime Link: Work Underway



Mulcher clearing ROW in NL

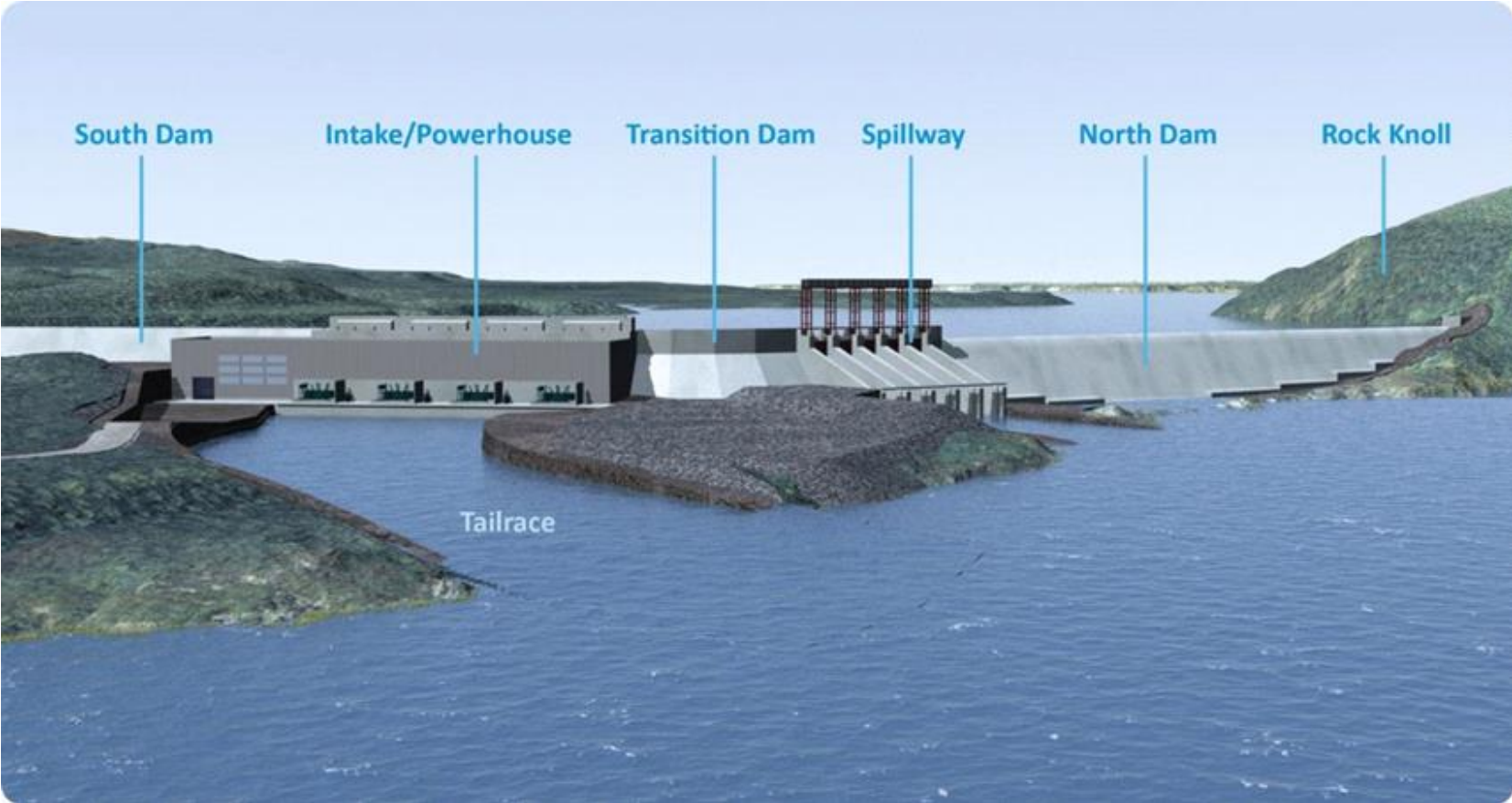


Accommodation facility construction at Granite Canal, December 2014



Woodbine Converter Station site (NS)

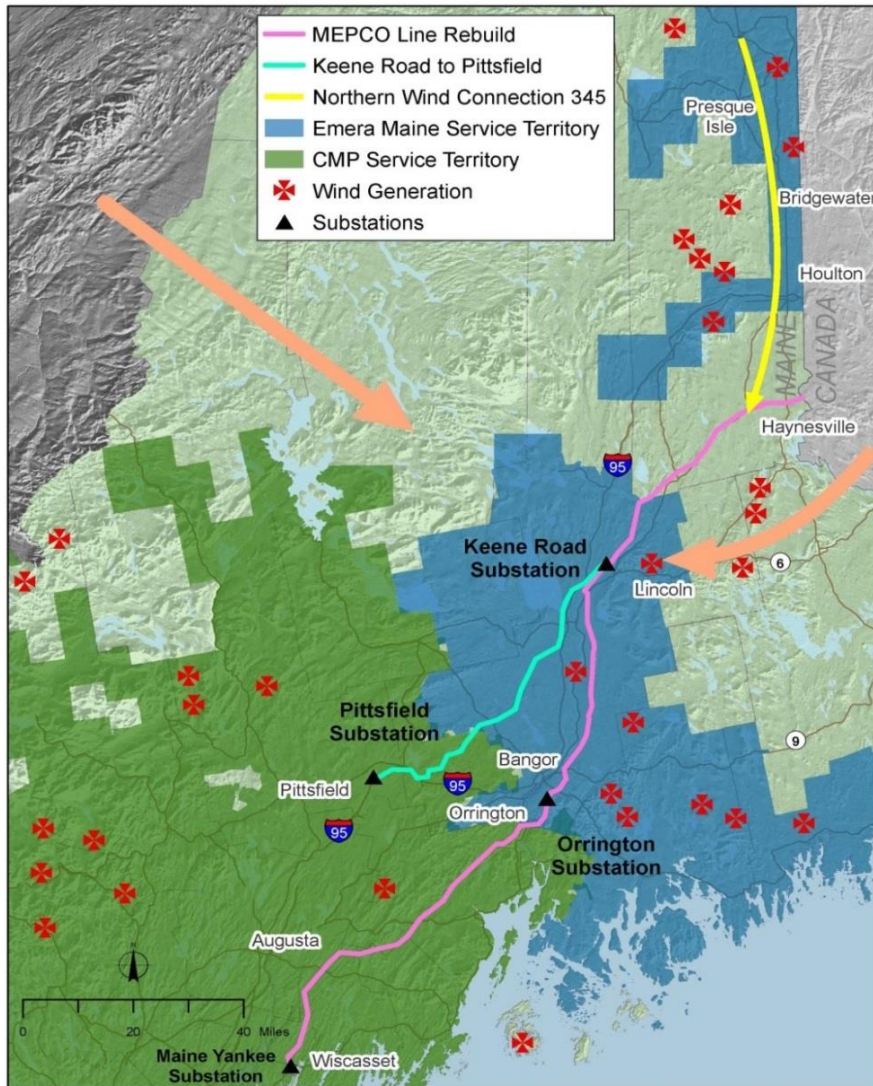
# Nalcor Energy: Muskrat Falls



# Nalcor Energy: Muskrat Falls



# AC Transmission Upgrades in Maine



- Emera Maine – CMP MOU
- Objective: optimized AC transmission to collect large scale renewables
- Scope could include rebuild of existing MEPCO line
- In-service by 2018

# Wind in Nova Scotia



# New Energy Loop for Atlantic Canada



# Regional Collaboration



MUSKRAT FALLS (MF)  
GENERATION & LABRADOR  
TRANSMISSION (LTA)

NL

LABRADOR  
ISLAND LINK  
(LIL)

QC

ON

NB

PE

MARITIME LINK

ME

NS

NY

VT

NH

MA

CT

RI

PA

NJ

WV

MD



Wind Facility



Hydro Facility

# Time is of the Essence

