

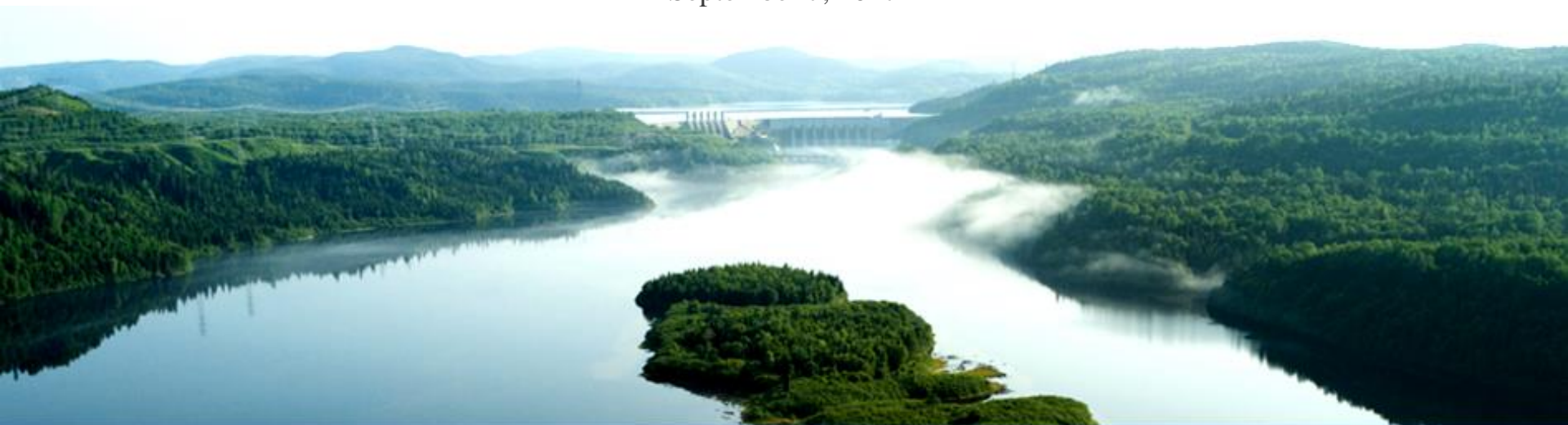


NEW ENGLAND CLEAN POWER LINK

ISO New England Consumer Liaison Group

New England Transmission in a FERC Order 1000 World: Where Are We?

Woodstock Inn & Resort 14 The Green
Woodstock, Vermont
September 7, 2017



What is FERC Order 1000?

Efforts to build new transmission lines are often stymied by three key problems:

1. Lack of successfully coordinated transmission planning efforts to prioritize which transmission projects should be built
2. Lack of cost allocation mechanism to ensure that transmission developers can reliably recover project costs, and
3. Impediments to siting new transmission facilities

FERC Order 1000 pertains to the first two areas of concern: planning and cost allocation

Opportunities of FERC Order 1000

1. *Increased Reliability*: By increasing the number of power supply options available to grid operators, transmission lines can increase reliability and help prevent blackouts
2. *Better integration of Renewable Energy*: Transmission is needed to transport renewable resources, including balancing hydro, in typically remote areas to urban centers.
3. *More competitive energy markets & lower costs*: Transmission can provide more wholesale competition for electricity and thus lower rates

New England Transmission: Massachusetts Clean Energy RFP

Massachusetts Clean Energy

MAcleanenergy.com

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83D Bids

Public versions of the bids received in response to the Massachusetts Clean Energy RFP can be viewed in the Bids section of this website. Please note that the posting of public versions of bids received is subject to change, pending verification of full compliance with all submission requirements, as provided in the RFP. The site will be updated as necessary.

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for Offshore Wind Energy Projects Issued

June 29, 2017

Purpose of the Request for Proposal

- Commonwealth utilities in coordination with the Massachusetts Department of Energy Resources are collectively seeking proposals for incremental Clean Energy Generation
 - Including associated environmental attributes and/or RECs under cost-effective long-term contracts, which may include required associated transmission costs
- Pursuant to Section 83D of Chapter 169 of the Acts of 2008 (the “Green Communities Act”), as amended by chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity (the “Energy Diversity Act”).
- Request for Proposals (“RFP”) soliciting proposals for Clean Energy Generation for an annual amount of electricity equal to approximately 9,450,000 MWh
- Entering into cost-effective long-term contracts for a total of 9,450,000 MWh of cost-effective clean energy
- Maximize the Commonwealth’s ability to meet its Global Warming Solution Act (“GWSA”) goals.

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Framework established pursuant to Section 83D

- The Energy Diversity Act, which includes Section 83D and 83C procurements, recognizes the necessity of the Commonwealth to achieving the goals established pursuant to the GWSA.
- The GWSA requires the Commonwealth to establish goals and meet targets for the reduction of greenhouse gas emissions by 2020, 2030, 2040, and 2050.
 - The goals established by the Commonwealth specifically require a reduction of 25 percent below 1990 levels by 2020 and a reduction of 80 percent below 1990 levels by 2050.
- All proposed long-term contracts are subject to the review and approval of the DPU prior to becoming effective.
 - DPU must take into consideration recommendations from the Office of the Attorney General (“AGO”)
 - DPU shall consider both the potential costs and benefits of such contracts and shall approve a contract only upon a finding that it is a cost effective mechanism for procuring low cost clean energy on a long-term basis

New England Clean Power Link Overview



New England Clean Power Link (“NECPL”) Overview

- 1,000 MW fully buried HVDC transmission project
- 154 mile route from Canadian border to Ludlow, VT
- \$1.6B estimated project cost
- Target in-service of 2021; 40+ year expected operating life
- Experienced management team currently also developing the Champlain Hudson Power Express project in New York

Regulatory & Siting

- All major permits received (state siting, ACOE and Presidential Permit)
- Strong public, governmental and environmental support
- All required land for overland route under control


Environmental & Economic

- 20 Year Fixed Price offer in the Mass RFP, no price risk to the Commonwealth customers
- Will reduce millions of tons-per-year of CO2
 - Achieves 24% of Massachusetts 2020 CO2 reduction targets
- Estimated benefits of \$20 billion over the 20 year contract term
 - Energy, Capacity and Gas Savings: \$16 billion
 - Economic and Environmental Benefits: \$4 billion
- 1,100 induced jobs once operational

NECPL Supply Partnerships

Bid #1: 100% Hydro

Bid #2: Hydro (700MW) & Wind (300MW)




TDI New England
A Blackstone Portfolio Company

- ▶ 1,000 MW transmission line
- ▶ 96.5% minimum availability
- ▶ FERC regulated

TRANSMISSION SERVICES AGREEMENT

TSA with MA Utilities

- ▶ 20-year contract
- ▶ Firm transmission rights
- ▶ Approved by FERC

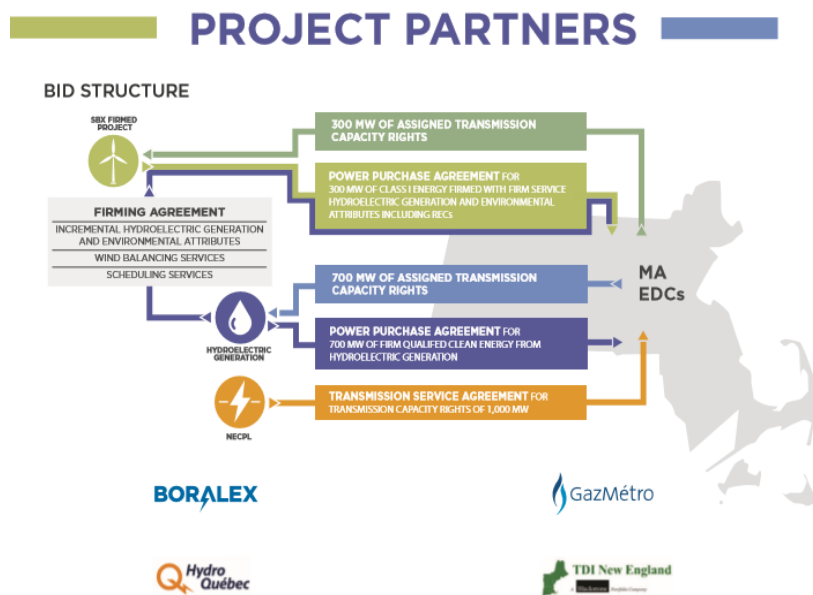


- ▶ Québec 1,000 MW interconnection
- ▶ Commitment to guaranteed deliveries, including peak periods
- ▶ Existing hydro resources

POWER PURCHASE AGREEMENT (8.3 TWh)

PPA with MA Utilities

- ▶ 20-year contract
- ▶ Firm delivery of a minimum of 8.3 TWh hydropower annually
- ▶ Approved by MA DPU
- ▶ Environmental attributes



Mass RFP: A very competitive process

55 Class I Projects

Almost 9,000MW of
Transmission Capacity

4x Offer to 9.45Twh
target

~4,000 MW from
New England

~1,500 MW from
New York
~1,400 MW from
Maritimes

~3,000 MW from
Quebec

TDI New England

PO Box 155

Charlotte, VT 05445

(802) 477-3830

www.necplink.com



Project Contact: Josh Bagnato | josh.bagnato@chvtllc.com | (802) 477-3830