



# NEW ENGLAND CLEAN POWER LINK

## **New England Consumer Liaison Group**

*Transmission Planning in New England:  
The Shift to a Competitive Framework and Impact on Ratepayers  
A Developer's Perspective*

Boston Seaport Hotel & World Trade Center  
One Seaport Lane, Boston, MA  
December 3, 2015



# TDI Business Model – Competitive Merchant Transmission

- Transmission Developers Inc. (TDI) was created to meet a market need
  - Transmission is needed to connect remote clean energy supply with constrained energy markets seeking a cleaner economic generation resource
  - Difficult to determine beneficiaries under the traditional reliability model
  - Siting over head transmission lines for economic projects is difficult
- TDI business model
  - Shippers pay through FERC merchant model
  - All buried HVdc transmission
  - Development, construction and operational risk with developer
- TDI currently developing two projects
  - Champlain Hudson Power Express (NYISO Market)
  - New England Clean Power Link (ISO-NE Market)

# New England Clean Power Link Overview



## New England Clean Power Link (“NECPL”) Overview

- 1,000 MW buried HVDC transmission project
- 154 mile route from Canadian border to Ludlow, VT
- \$1.2B estimated project cost
- Target in-service of 2019; 40+ year expected operating life
- Experienced management team currently also developing the Champlain Hudson Power Express project in New York

## Business Model

- NECPL is a merchant transmission project regulated by FERC that will sell transmission rights at negotiated rates through an Open Solicitation process

## Regulatory & Siting

- Expected to have all major permit decisions by the end of 2015
- Permitting advancing with little public opposition
- Project is viewed as having very minimal environmental impacts
- All required land for overland route under control
- Support from local communities

## Environmental & Economic

- Expected to reduce millions of tons-per-year of CO2
- Low impact footprint – submerged and underground installation on established ROW’s and through Lake Champlain
- Significant economic benefits in Vermont and New England

# NECPL – Project Need

## New England Governors

- New England Governors and Eastern Canadian Premiers issue Sept. 2013 resolution on Energy (37-1), recognizing the need to increase Canadian Hydro in New England
- Governors and Eastern Canadian Premiers have reaffirmed their commitment to increased renewable imports at Meetings in April, 2015 (CT) and August, 2015 (Newfoundland)

## Power Plant Retirements

- ISO-NE states 3,500 MW of generation will retire by 2018 within New England
- ISO-NE states an additional 6,000 MW of generation is at risk of retiring within New England

## ISO-NE: Fuel Diversity & Regional Power / Capacity Prices

- All six New England States are within the top 11 nationally in the price of electricity
- New England is moving to increase Canadian hydro and wind imports as a counterweight to natural gas, which in 2014 comprised approximately 44% of the region's electricity production
- Overdependence on Natural Gas resulted in approximately \$3 billion in additional electricity costs to Region during 2014 winter

## Climate Change Objectives

- All six New England State have aggressive Renewable Portfolio Standards
- Massachusetts Global Warming Solutions Act (25% GHG reduction below 1990 levels by 2020 and 80% by 2050) largest driver of clean energy in New England

# NECPL – Project Benefits

## Projected Ratepayer Energy Savings

- \$245 million over first 10 years of operations for Vermont ratepayers
- \$1.9 billion over first 10 years of operations for New England ratepayers

## Job Creation

- ~500 annual direct and indirect jobs in Vermont and over 200 additional jobs in New England during three-year construction period
- 200+ annual direct and indirect jobs in Vermont and over 1,900 additional annual jobs in New England during 40-year operating phase

## Economic Payments

- ~\$900 million in tax and lease payments within Vermont over 40-year operating phase
- \$136 million in ratepayer benefits via agreement with VELCO over 40-year operating phase

## Environmental Contributions

- \$263 million in funding to clean up Lake Champlain over 40 years
- \$109 million for Vermont renewable programs over 40 years
- Millions of tons-per-year of CO2 reductions

*Economic analysis performed by Levitan & Associates, Inc. and Kavet, Rockler & Associates, LLC*

# NECPL – Extensive & Ongoing Outreach

## Initial Stakeholder Outreach

- State / Federal Agencies, Nonprofits, Elected Officials, Utilities, Town Officials, Environmental & Business Groups

## Local & Regional Outreach

- Hundreds of meetings with Town Managers, Town Officials, Select Boards, Abutters, Interested Citizens, RDCs, RPCs, etc.

## Local Information Meetings

- Six local open house meetings held
- Lake Symposium held to provide overview of Lake Installation

## Formal Agency-Led Public Meetings

- DOE Hearings
- VT DPS Town Meetings
- VT PSB Public Hearing and Tour
- VT ANR Permit Hearings



**“The TDI-NE project developers have already reached agreements to use rights of way for the project. They also involved communities, landowners, and activists early in the process. The input provided led to important new analysis of impacts and project modifications.”**

*Sandy Levine, Attorney with Conservation Law Foundation, Rutland Herald, July 19, 2015*

# NECPL – Permitting Summary

## VT State Permitting *Certificate of Public Good (Section 248)*

- The Vermont Public Service Board must find that an electric transmission facility project promotes the general good of the State of Vermont pursuant to V.S.A. Title 30 Section 248
- Application filed December 8, 2014
- Public hearing held February 24, 2015
- Agreements reached with all active parties, including State Agencies
- Technical hearing on October 20, 2015
- 3 VT Environmental Permit hearings held with no comments
- 8 Environmental Permits issued by VT Agency of Natural Resources on November 24, 2015



**VT State Siting  
decision expected in Q4 2015**

## Federal Permitting *Presidential Permit*

- A Presidential Permit must be issued for electric transmission facilities at the international border
- U.S. Department of Energy ("DOE") issues the Presidential Permit and is the lead Federal agency for the environmental review
- Application filed May 20, 2014
- Draft Environmental Impact Statement ("EIS") released May 31, 2015
- Seven comments received on DEIS during 60 day comment period
- Concurrence received from Departments of State and Defense
- FEIS released October 29, 2015



**Presidential Permit  
decision expected in Q4 2015**

## Federal Permitting *Army Corps of Engineers*

- ACOE Sections 10 and 404 permits required to ensure compliance with Clean Water Act and Rivers and Harbors Act
- Application filed November 7, 2014
- Application supplemented April 2015
- Application deemed complete and noticed to the public in July 21, 2015
- Public notice period ended August 21, 2015 with minimal comments
- No public hearing scheduled



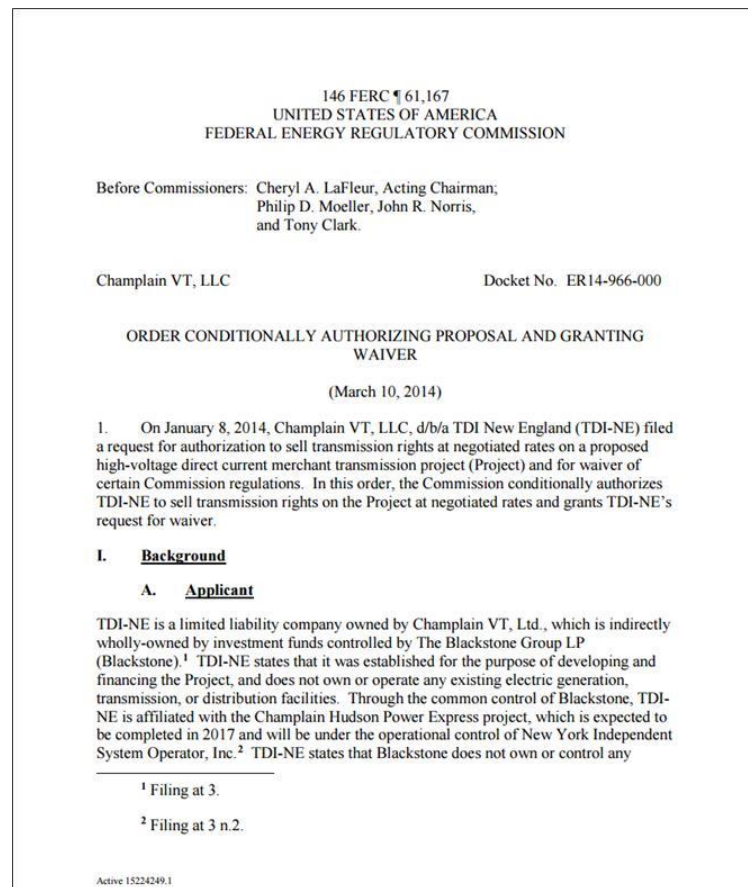
**US Army Corps  
of Engineers®**

**Army Corps Permits  
decision expected in Q4 2015**

# NECPL – FERC Approval / Open Solicitation

**On March 10, 2014, FERC issued an order granting authority to TDI-NE to sell transmission rights on the NECPL at negotiated rates**

- FERC’s Order authorizes TDI-NE to allocate transmission capacity on the project through an Open Solicitation
- The Open Solicitation requires TDI-NE to
  1. broadly solicit interest from potential customers
  2. allocate transmission capacity in a manner that is not unduly discriminatory or preferential
- The process is being monitored by Boston Pacific Company, Inc., an independent third party to ensure it is transparent and not unduly discriminatory





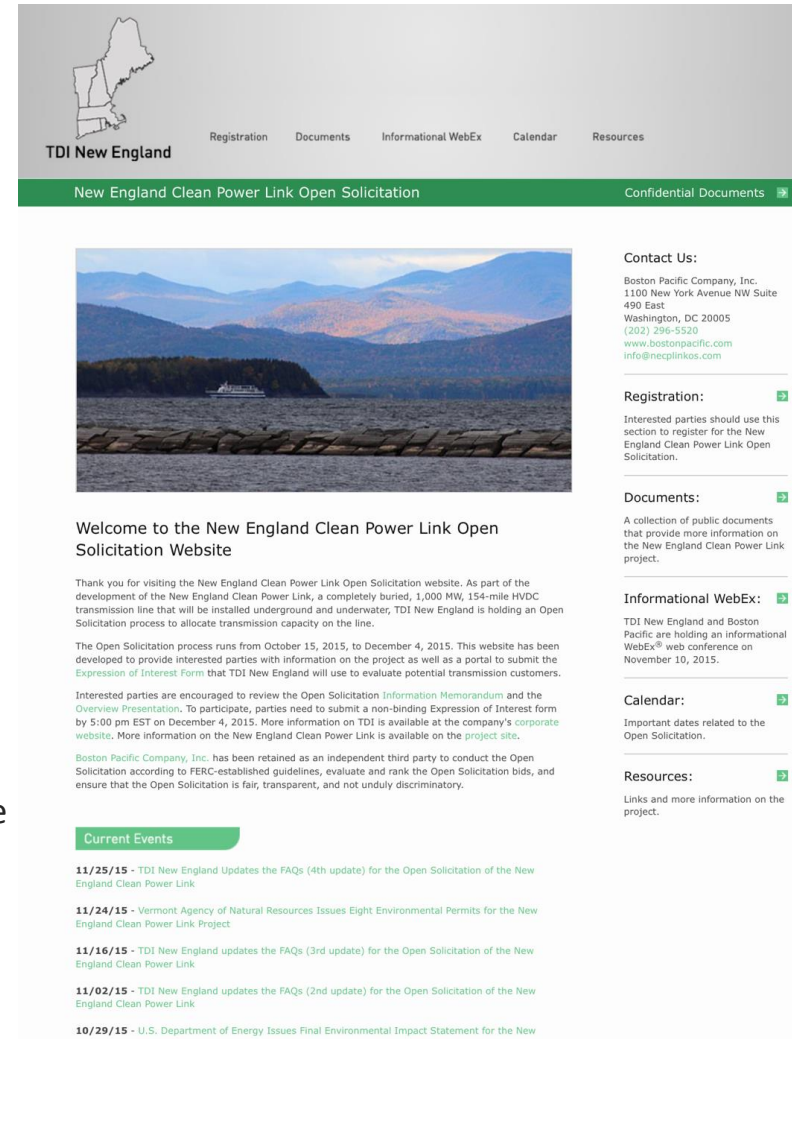
# NECPL – Open Solicitation Process

## Process

10/15/15	Open Solicitation Commences
11/10/15	Informational WebEx® for Interested Parties
12/04/15	Open Solicitation Closes
12/18/15	Selection of Parties for Bilateral Negotiations
01/15/16	Negotiate Precedent Agreement(s)
06/15/16	Negotiate Transmission Service Agreement(s)
07/15/16	Submit Section 205 Filing to FERC

## Selection Criteria

- 1) Level of creditworthiness
- 2) Anticipated amount of reserved capacity
- 3) Anticipated length of term
- 4) Financial Strength
- 5) Desired date for the commencement of transmission service
- 6) Ability to advance New England public policy goals of promoting greenhouse gas emission reductions and supply diversity



The screenshot shows the TDI New England website interface. At the top, there is a navigation menu with links for Registration, Documents, Informational WebEx, Calendar, and Resources. Below the navigation is a green banner with the text "New England Clean Power Link Open Solicitation" and "Confidential Documents". The main content area features a large image of a lake with mountains in the background. To the right of the image is a "Contact Us" section for Boston Pacific Company, Inc., including their address, phone number, and email. Below this are sections for "Registration", "Documents", "Informational WebEx", "Calendar", and "Resources", each with a brief description and a link icon. At the bottom, there is a "Current Events" section with a list of dates and descriptions of recent updates and filings.

**TDI New England**

Registration Documents Informational WebEx Calendar Resources

New England Clean Power Link Open Solicitation Confidential Documents

**Contact Us:**  
Boston Pacific Company, Inc.  
1100 New York Avenue NW Suite  
490 East  
Washington, DC 20005  
(202) 296-5520  
www.bostonpacific.com  
info@neclinkos.com

**Registration:**  
Interested parties should use this section to register for the New England Clean Power Link Open Solicitation.

**Documents:**  
A collection of public documents that provide more information on the New England Clean Power Link project.

**Informational WebEx:**  
TDI New England and Boston Pacific are holding an Informational WebEx® web conference on November 10, 2015.

**Calendar:**  
Important dates related to the Open Solicitation.

**Resources:**  
Links and more information on the project.

**Current Events**

- 11/25/15 - TDI New England Updates the FAQs (4th update) for the Open Solicitation of the New England Clean Power Link
- 11/24/15 - Vermont Agency of Natural Resources Issues Eight Environmental Permits for the New England Clean Power Link Project
- 11/16/15 - TDI New England updates the FAQs (3rd update) for the Open Solicitation of the New England Clean Power Link
- 11/02/15 - TDI New England updates the FAQs (2nd update) for the Open Solicitation of the New England Clean Power Link
- 10/29/15 - U.S. Department of Energy Issues Final Environmental Impact Statement for the New

# FERC Order 1000 vs. Merchant Model

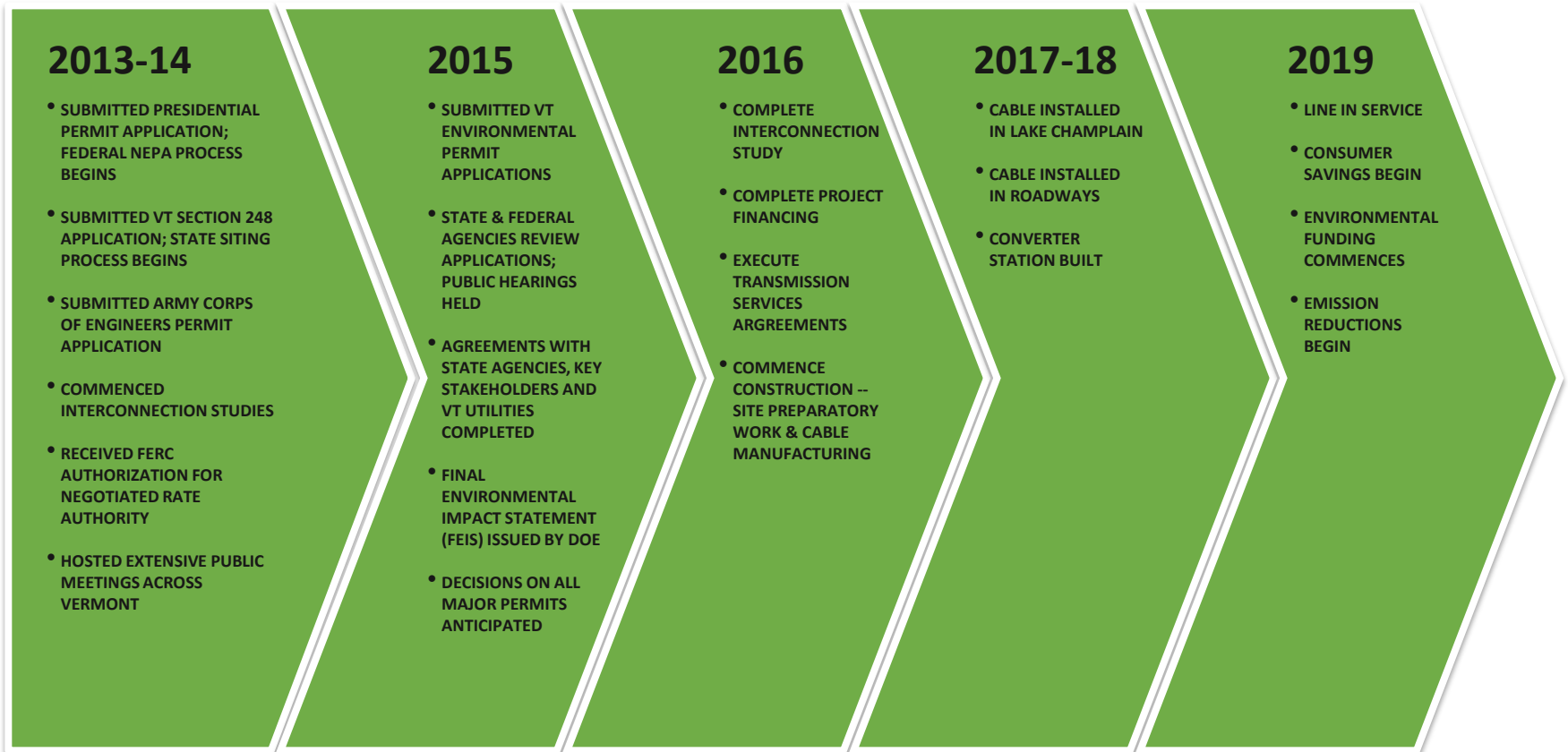
**Both models are the product of competitive market forces, which should provide consumers with more efficient and cost-effective transmission solutions**

	Merchant Model	FERC Order 1000 Model
Development Rationale	Developed in response to market needs identified by private developers	Addresses issues identified through regional and interregional transmission planning processes – Public Policy Need
Cost Recovery	Cost-recovery through bilateral negotiations with specific customers	Project costs are allocated regionally through rates approved by FERC

TDI-NE's business model can adjust to a FERC Order 1000 model if necessary

# NECPL – Project Timeline

## PROPOSED TIMELINE / ACCOMPLISHMENTS



## TDI New England

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Charlotte, VT 05445

(802) 477-3830

[www.necplink.com](http://www.necplink.com)



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