March 20, 2015

Ref: 57666.00

Mr. Kevin Burke
Vermont Department of Environmental Conservation
Lake Encroachment and Shoreland Permitting
1 National Life Drive, Main 2
Montpelier VT 05620-3522

Via Electronic Submittal

Re: TDI – New England
New England Clean Power Link Project
Alburgh and Benson, Vermont
Lake Champlain Lake Encroachment Permit Application

Dear Kevin:

On behalf of TDI-New England ("TDI-NE"), VHB has prepared the enclosed CD containing the Lake Encroachment Permit application form, narrative and supporting documents for the aquatic portion of the proposed New England Clean Power Link project ("NECPL" or "Project"). The NECPL project is designed to transmit high voltage direct current ("HVDC") electricity with a capacity of 1,000 megawatts ("MW") from Canada to the New England electric grid. This electric transmission line is proposed to extend from the Canadian Border at Alburgh, Vermont to Ludlow, Vermont along aquatic and underground routes. The aquatic portion of the transmission line, approximately 97 miles in length, will be buried in the bed of Lake Champlain, except at water depths of greater than 150 feet where the cables will be placed on the bottom and allowed to self-bury. The cables will enter the Lake in Alburgh, Vermont and emerge in Benson, Vermont.

This permit application and supporting materials are being submitted in accordance with Vermont Statutes Title 29, Chapter 11 Management of Lakes and Ponds §402(3), which states that "the alteration of the lands underlying any waters, or the placement of a cable or similar structure beyond the shoreline is considered to be an encroachment, and is prohibited without obtaining a Lake Encroachment Permit." Therefore, this application has been prepared to demonstrate how the proposed Lake installation will meet the applicable permitting criteria.

In addition to these materials, VHB has enclosed an application fee check in the amount of $20,000 made payable to the State of Vermont.

Engineers | Scientists | Planners | Designers

40 IDX Drive, Building 100
Suite 200
South Burlington, Vermont 05403
P 802.497.6100
F 802.495.5130

Please let us know if you have any questions or need additional information.

Sincerely,

Jeffrey A. Nelson, CPESC, CPSWQ
Director, Energy and Environmental Services

Lydia Lee, PG
Geologist

JAN/LGL/jkw
Enclosures (on CD)

cc: Billy Coster (cover letter and electronic version on CD)
Josh Bagnato (electronic version only via Netdocuments)
Bob Harrison (electronic version only via Netdocuments)
Geoff Hand (cover letter and electronic version on CD)
Sean Murphy (electronic version only via Netdocuments)

\\vtdata\Projects\57666.00 NE Clean Power Link\docs\Permits\LEP_Lake Champlain\LEP_CoverLetter.docx

Application Number _____
(For Office Use Only)

STATE OF VERMONT
Lakes & Ponds Section, Watershed Management Division, 1 National Life Drive,
Main Building Floor 2, Montpelier, VT 05620-3522

29 V.S.A. Chapter 11: Management of Lakes and Ponds

1. Name of Lake or Pond Lake Champlain Municipality Alburgh/Benson
2. Name of Applicant Champlain VT LLC, d/b/a TDI-New England Telephone 802-477-3830
   Mailing Address c/o Mr. Donald Jessome, General Manager, P.O. Box 155, Charlotte, VT 05445
   Email: donald.jessome@chvtllc.com
3. Person to contact (if someone other than the applicant) regarding this application:
   Name Jeffrey Nelson, Vanasse Hangen Brustlin, Inc. ("VHB") Daytime Telephone (802) 497-6150
   Mailing Address 40 IDX Drive, Building 100, Suite 200, South Burlington, VT 05403
   Email: jnelson@vhb.com
4. Project description (See instructions):
   The New England Clean Power Link ("NECPL") Project consists of the construction, operation and maintenance of an electric transmission line and fiber optic cable that will run from the Canadian border at Alburgh, Vermont to Ludlow, Vermont along aquatic and underground routes. The aquatic portion of the transmission line, approximately 97 miles in length, will be buried in the bed of Lake Champlain, except at water depths of greater than 150 feet where the cables will be placed on the bottom and self-bury. The cables will enter the Lake in Alburgh, Vermont and emerge in Benson, Vermont, and horizontal directional drilling ("HDD") will be used to avoid shoreline disturbance at these locations. The overland (terrestrial) portions of the transmission line, approximately 57 miles in length, will be buried underground within existing public road rights-of-way ("ROWs") from Benson to Ludlow. Please refer to the Application Narrative Report for more information and details.
5. Purpose of the project:
   The purpose of the NECPL Project is to provide electricity generated by renewable energy sources in Canada to the New England electric grid. Please refer to the Application Narrative Report for more information and details
6. Public benefits of the project:
   The Project will result in economic, environmental, and infrastructure improvement benefits to the public as presented in the Application Narrative Report.

7. Planned work schedule:

TDI-NE anticipates permitting decisions by December 2015. Pre-construction activities would commence in 2016. Construction-related engineering activities are expected to commence in 2016 and continue through early 2019 with performance testing and commissioning. TDI-NE anticipates that the commercial operation date for the proposed NECPL Project will be April 2019. Lake construction would take place between May and October of the construction year.

8. Site location/address: 155 Bay Road, Alburgh, VT and 229 Stoney Point Road, Benson, VT (HDD entry/emergence points)

9. Complete name and **mailing addresses** of each abutting property owner:

(1) Please refer to Appendix 1 of the Permit Application Narrative Report

(2) _____

(3) _____

10. Application fee enclosed $ 20,000 Estimated cost of project $_____

Fee for non-structural erosion control projects $155; Fee for structural erosion control $250; Fee for other projects $300 plus 0.01 times the project cost.

10. Certification: I hereby certify that the information in this application and its enclosures are true and accurate. I grant the Department permission to enter upon the land to verify information contained in the application [29 V.S.A. 404(b)].

APPLICANT'S SIGNATURE

3/16/2015
DATE

TDI-NE/New England Clean Power Link
Appendix Document Tracking Table
Lake Champlain Encroachment Permit
Prepared by VHB
March 20, 2015

Location	Document ID	Document	PDF Name	Author	Date
Application Form		Application Form	NECPL LEP LChamplain Application Form	VHB/TDI-NE	March 16, 2014
Appendix 1	a	NECPL Overview Map	Appendix 1a_NECPL Overview Map	TRC	December 15, 2014
	b	NECPL Lake Segment Overview	Appendix 1b_NECPL LChamplain Segment Overview	TRC	December 15, 2014
	c	NECPL Lake Route Plans	Appendix 1c_NECPL LChamplain Route Plans	TRC	March 19,. 2015
	d	NECPL Lake Champlain Segment Details and HDD Profiles	Appendix 1d_NECPL LChamplain Plans and Profiles	TRC	March 2015
		G-1 Cover Sheet			
		G-4 Legend			
		G-6 EPSC Plan - General Notes			
		CM-1 Construction Methods (Overland)			
		CM-4 Construction Methods (Overland)			
		L-TD-1 Typical Details			
		L-TD-2 Typical Details			
		L-TR-1 Plan & Profile - Alburgh (Overland)			
		L-TR-3 Plan & Profile - Overland/Lake Route Transition option 2 -Alburgh			
		L-TR-4 Plan & Profile - Overland/Lake Route Transition option 2 -Causeway			
		L-TR-5 Plan & Profile - Overland/Lake Route Transition -Benson			
	e	Representative Photographs of Project Locations	Appendix 1e_PhotoLog	TDI-NE	NA
	f	Project Schedule	Appendix 1f_Project Schedule	TDI-NE	NA
Appendix 2	--	FWD Access Area License	Appendix 2_FWD License and Abutters		
		Abutting Landowners - Alburgh Map		VHB	February 2015
		Abutting Landowners - Benson Map		VHB	February 2015
		Abutting Landowners Table		VHB	February 2015
Appendix 3	a	NECPL Phase 1 Archaeological Report – Lake Route (LCMM)	Appendix 3a_NECPL Phase 1A Public	Lake Champlain Maritime Museum	November 2014
	b	Review of Historic Studies of Paper Mill Sedimentation Areas in Southern Lake Champlain in Relation to the Proposed NECPL Route Memorandum	Appendix 3b_Paper Mill Sedimentation Review	TRC	March 16, 2015
	c	HDD Boring/Inadvertent Return Contingency Plan	Appendix 3c_ NECPL HDD IR Contingency Plan	TDI-NE	February 2015
	d	Overall Oil and Hazardous Materials Spill Prevention and Contingency Plan	Appendix 3d_NECPL Spill Prevention Plan	TDI-NE	February 2015
	e	Safety Data Sheets for Bentonite	Appendix 3e_Bentonite MSDS	various	
	f	Aquatic Invasive Species Management and Control Plan for the New England Clean Power Link HVDC Transmission Project	Appendix 3f_Aquatic Invasive Species Plan	TDI-NE	December 1, 2014
Appendix 4	a	Acoustic Sediment Study	Appendix 4a_Lake Acoustic Sediment Study	Marine Research Corp	August 15, 2014
	b	Lake Champlain Water Quality Modeling Report	Appendix 4b_LChamplain WQ Report	HDR	December 1, 2014
	c	Temperature Gradients in the Vicinity of NECPL Cables and Potential Effects on Water Quality, Bioavailability of Mercury, and Macroinvertebrates	Appendix 4c_LChamplain Thermal Report	Exponent	December 1, 2014
	d	Lake Champlain Mussel Survey Report	Appendix 4d_LChamplain Mussel Survey Report	HDR	September 1, 2014
	e	Submarine Cable DC Magnetic Field in Lake Champlain and Marine Assessment	Appendix 4e_NECPL Magnetic Field Report	Exponent	November 29, 2014
	f	Criteria 2 & 3 - Water Supply Preliminary Assessment	Appendix 4f_NECPL Water Supply Assessment	VHB	November 26, 2014