STATE OF VERMONT PUBLIC SERVICE BOARD

Petition of Champlain VT, LLC d/b/a TDI New England)
for a Certificate of Public Good, pursuant to 30 V.S.A. §248,)
authorizing the installation and operation of a high voltage	
direct current (HVDC) underwater and underground electric	Docket No. 8400
transmission line with a capacity of 1,000 MW, a converter	
station, and other associated facilities, to be located in Lake	
Champlain and in the Counties of Grand Isle, Chittenden,	
Addison, Rutland, and Windsor, Vermont, and to be known	
as the New England Clean Power Link Project ("NECPL"))

SUPPLEMENTAL PREFILED DIRECT TESTIMONY OF THOMAS KAVET

ON BEHALF OF CHAMPLAIN VT, LLC

August 26, 2015

Summary:

Mr. Kavet's supplemental testimony provides an update on the Project's economic impacts on the State and its residents as a result of agreements reached between TDI-NE and several parties in this docket, as well as updated anticipated project construction and operational expenditures and electricity price savings in Vermont.

1	Q.	Please state your name, occupation and business address.						
2		Response: My name is Thomas E. Kavet. I am President of the economic and public policy						
3		consulting firm, Kavet, Rockler & Associates, LLC (hereafter, KRA), located in						
4		Williamstown, Vermont.						
5								
6	Q.	Have you previously filed testimony in this proceeding?						
7		Response: Yes, I submitted prefiled direct testimony on behalf of Champlain VT, LLC						
8		d/b/a TDI New England ("TDI-NE") concerning the New England Clean Power Link						
9		("NECPL") Project on December 8, 2014.						
10								
11	Q.	What is the purpose of your supplemental testimony?						
12		Response: The purpose of this testimony is to update my testimony of December 8, 2014,						
13		evaluating the Project's economic impacts on the State and its residents as a result of both						
14		the direct and secondary expenditures associated with new public benefit payments detailed						
15		in agreements recently reached between TDI-NE and several parties in this docket, revised						
16		estimates of ratepayer savings from reduced electricity prices, and updated project						
17		construction and ongoing operational expenditures and timing associated with the NECPL.						
18								
19	Q.	TDI-NE has entered into a number of agreements with parties to this Docket. Have						
20	you r	reviewed these agreements with respect to any economic issues that were within the						
21	scope	e of your original prefiled testimony?						
22		Response: Yes. The aspects of these agreements that affect our assessment of State						
23		economic impacts include the following (see also the summary of the agreements in the						
24		supplemental prefiled testimony of Jessome/Martin/Bagnato):						

1. <u>Stipulation Between TDI-NE and State Agencies (Sec. 3 of *Exhibit TDI-JMB-19a*)¹</u>

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- Payment of approximately \$135.7 million in electric ratepayer benefits through
 VELCO over a 40 year operational period planned to start in 2019. Although these
 payments were mentioned in other TDI-NE direct testimony in the December 2014
 filing, they were not finalized at the time our 2014 economic analysis was performed
 and were not included as a part of our prior economic impact assessment.
- Payments to the Clean Energy Development Fund (CEDF) of approximately \$108.9
 million over the 40 year operational period of the project.
- Payments to the Lake Champlain Pollution Abatement and Restoration Fund of approximately \$202.0 million over the 43 year construction and operational period.
- Payments to the Lake Champlain Enhancement and Restoration Trust Fund of approximately \$61.0 million over the 43 year construction and operational period, now planned for 2016-2058.
- 2. <u>TDI-NE/F&W License</u> (*Exhibit TDI-JMB-26*) -- Payment of \$350,000 planned for 2016 to construct a new public boat ramp in Alburgh, Vermont.
- 3. Lease Option Agreement with the Vermont Agency of Transportation (Exhibit TDI-JMB-25) -- Payment of \$211.8 million to use public highway rights-of-way over the 43 year construction and operational period of the project. For further details see the prefiled direct testimony of Todd Singer.
- 4. Host Town Agreement with the Town of Benson (*Exhibit TDI-JMB-24b*) -- Payment of \$1.1 million in two installments, to be used by the Town for road-related construction and maintenance (one upon project start, planned for 2016 and one upon the start of commercial operations, planned for 2019).

¹ Stipulation between Champlain VT, LLC, the Vermont Public Service Department, the Vermont Agency of Natural Resources, and the Vermont Division for Historic Preservation (July 17, 2015).

Q. How do these agreements affect the conclusions in your prior testimony?

Response: The public benefit expenditures stipulated in connection with the above agreements will result in additional positive economic impacts to the State of Vermont, relative to our prior analysis. With direct expenditures from these agreements totaling more than \$500 million above and beyond our prior expenditure assumptions over the 3 year construction period and 40 year operational PSB approval period, the aggregate economic benefits are comparably important and long-lived.

In addition to the measured direct and secondary impacts from these expenditures, there are substantial future public benefits not included in our impact analysis that relate to the value of significantly reduced pollution in Lake Champlain (such as enhanced tourism spending, property values on and near the Lake, etc.), improved recreational access and facilities in and around Lake Champlain, and the benefits of Clean Energy Development Fund activities, including reduced greenhouse gas emissions, greater power production diversity and compliance with PSD renewable energy production goals. These many additional benefits, both measurable as a part of our quantitative analysis herein and otherwise, reinforce and expand our prior conclusion that "the Project will have significant and positive economic impacts on the State and its residents."

Q. Since the filing of your previous testimony and exhibits, have there been other changes to the Project that affect your estimations of the economic impact that the Project will have on Vermont and its residents? If so, please explain.

Response: Yes. There were reductions in the electricity price savings expected as a result of the Project as estimated by Levitan & Associates for the State of Vermont, which are inputs to our economic analysis. See the supplemental prefiled direct testimony of Seth Parker for

an explanation of the correction. Although estimated savings for the entire New England region did not significantly change, the reductions in savings to Vermont were about 15% below prior estimates, with average annual constant dollar savings over the first ten year operational period now estimated at about \$13.4 million, instead of \$15.7 million. As indicated in the below charts (updated versions of charts from my prior testimony), electricity price savings are still a highly beneficial aspect of the Project, representing savings to the six New England states of more than \$1.5 billion in constant 2014 dollars (and nearly \$1.9 billion in current dollars) during the first 10 years of operation, more than \$130 million (in constant 2014 dollars, and more than \$160 million in current dollars) of which will benefit Vermont ratepayers directly.

UPDATED CHART 1: Average Annual Savings in Electricity Costs During First 10 Years Due to Power Delivered Via the New England Clean Power Link

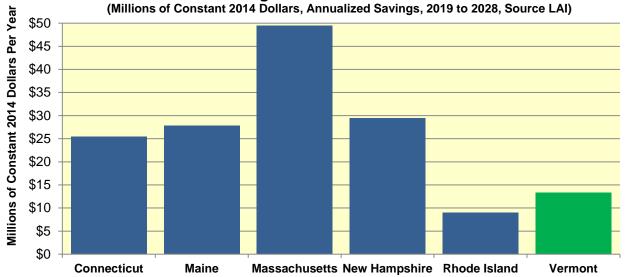
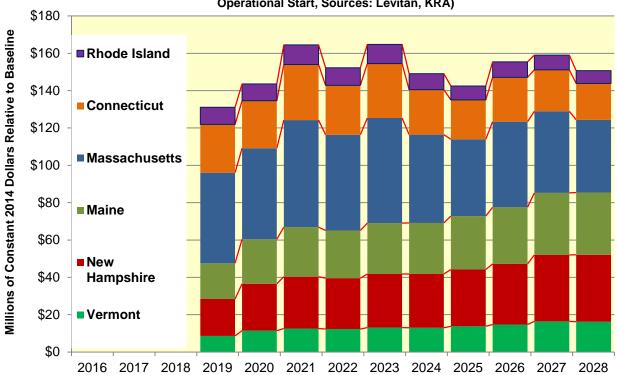


CHART 2: Total Annual Savings in Electricity Costs as a Result of the New England Clean Power Link

(Total Constant 2014 Dollar Savings Realtive to Baseline, Assumes April 1, 2019 Operational Start, Sources: Levitan, KRA)



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In addition to these changes, TDI-NE updated its construction and operational expenditure estimates, consistent with new and more accurate cost information as the planned project start date approaches. These changes were primarily due to a small revision in the terrestrial vs. underwater mileage of the transmission line. This resulted in slightly higher construction costs (less than \$3 million); refinements in estimated property taxes and other state taxes that, excluding the new public benefit payments, result in lower operational period expenditures (about \$2 million per year lower between 2019 and 2028 than previously estimated).

Q. Please summarize the change in economic impacts of the Project to the state economic and Vermont ratepayers based on your revised estimates.

Response: By including all three sets of changes described herein (new public benefit expenditures, reduced electricity price savings and adjusted project construction and operational expenditures), the net economic impacts of the Project to the State remain large and positive, and are significantly more beneficial than measured in our prior December 2014 analysis and testimony. Utilizing the same six state regional economic impact model employed in our prior analysis (prefiled direct testimony at pp. 4-7), and organizing the analysis into the same two relevant impact periods (a three year construction phase from 2016 to 2018 and an initial ten year operational phase from 2019 to 2028), a summary of the positive economic impacts are detailed in Updated Table 1 on the following page.

UPDATED TABLE 1 Selected Economic Impact Metrics, Relative to Baseline, for New England Clean Power Link Project Current August 2015 vs. Prior December 2014 Analysis

(Average Annual Impacts – Construction and Operational Periods)²

(Average Annual Impacts – Construction and Operational Periods) Construction Period Initial 10 Year Operational Period									
Concept	Region	2016-2018			2019 to 2028				
·	J	Current	Prior	Difference	Current	Prior	Difference		
Total Employment	Vermont	552	493	59	285	205	80		
(number of jobs ³)	New Hampshire	58	56	2	436	417	19		
	Maine	23	23	0	294	305	-11		
	Massachusetts	107	105	2	780	802	-22		
	Connecticut	29	29	0	297	307	-10		
	Rhode Island	10	10	0	119	122	-3		
	New England	779	716	63	2,212	2,158	54		
Gross State Product	Vermont	\$43.40	\$38.80	\$4.6	\$39.00	\$31.60	\$7.4		
(millions of current dollars)	New Hampshire	\$5.60	\$5.50	\$0.1	\$61.40	\$58.90	\$2.5		
	Maine	\$2.10	\$2.00	\$0.1	\$37.30	\$38.60	-\$1.3		
	Massachusetts	\$13.70	\$13.20	\$0.5	\$155.70	\$157.50	-\$1.8		
	Connecticut	\$3.70	\$3.60	\$0.1	\$50.10	\$50.40	-\$0.3		
	Rhode Island	\$1.10	\$1.10	\$0.0	\$17.90	\$17.40	\$0.5		
	Total New England	\$69.50	\$64.30	\$5.2	\$361.60	\$354.30	\$7.3		
Electricity Cost Savings ⁴	Vermont	-			\$16.30	\$19.20	-\$2.9		
(millions of current dollars)	New Hampshire	-			\$36.00	\$34.20	\$1.8		
	Maine	-			\$33.90	\$35.00	-\$1.1		
	Massachusetts	-			\$59.60	\$58.80	\$0.8		
	Connecticut	-			\$30.70	\$30.50	\$0.2		
	Rhode Island	-			\$10.90	\$10.80	\$0.1		
	Total New England	-			\$187.40	\$188.60	-\$1.2		
State and Local Tax Revenues and Other	Vermont	\$21.6	\$12.6	\$9.0	\$28.9	\$21.6	\$7.3		
Public Benefit Payments ⁵									
(millions of current dollars)									

² Based on project information provided by TDI-NE to KRA as of August 4, 2015. Note: In the current model run, 2019 electricity price impacts are for a partial year only, assuming an operational start date of April 1, 2019. Thus, the current "10 year" averages in the above table for the period 2019-2028 are computed on 9.75 years of electricity price savings, resulting in slightly lower estimates for comparative purposes.

³ Employment impacts include both direct and secondary effects, as estimated in the economic impact model.

⁴ These cost savings exclude capacity market savings, estimated to total more than \$75 million in constant 2014 dollars in Vermont over the initial 10 year operational period and nearly \$2.7 billion in the entire New England region over the same period.

⁵ This category includes both direct public benefit payments, known property taxes, construction period sales taxes and all other state taxes estimated via the economic impact model from both direct and secondary economic activity.

1 As outlined in the preceding Updated Table 1, the net economic impacts associated with this 2 Project in Vermont and throughout New England continue to be substantial. 3 4 Q. How do the changes to your estimates affect your previous conclusion that the 5 Project will generate significant economic and fiscal benefits to Vermont, if at all? 6 Response: Our current analysis reinforces and expands our previous conclusion that the 7 Project will generate significant economic and fiscal benefits to Vermont. The additional 8 beneficial economic impacts now associated with this project not only represent added jobs 9 and economic growth in Vermont and the region, but will also help address some of the 10 most pressing problems currently facing the State. By focusing public benefit payments in 11 two key areas, the health of Lake Champlain and renewable energy development, there will 12 be a wide array of downstream economic and environmental benefits in addition to those 13 detailed herein. This Project represents a rare combination of extraordinary economic and 14 fiscal benefits and virtually non-existent negative externalities and public costs. 15 16 Q. In making these revised estimates, did you rely on the work of any other experts? If 17 so, please explain, including any sources and inputs used. 18 Response: Yes. All information on ISO New England wholesale electricity price savings was 19 provided to us by Seth Parker of Levitan Associates, Inc., and is detailed in his supplemental 20 testimony and exhibits. All revised and new project construction, operations and public benefits expenditure data were provided to us by TDI-NE. 21 22 23 Q. Does this conclude your testimony at this time? 24 Response: Yes.