STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 8400

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 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,)
to be known as the New England Clean Power Link)
Project)

Entered: 1/5/2016

<u>CERTIFICATE OF PUBLIC GOOD ISSUED</u> PURSUANT TO 30 V.S.A. SECTION 248

It Is Hereby Certified that the Public Service Board ("Board") of the State of Vermont this day found and adjudged that the proposed installation and operation of the New England Clean Power Link Project ("NECPL" or "Project"), including a 1,000 MW high-voltage DC ("HVDC") electric transmission line, a converter station, and other associated facilities by Champlain VT, LLC d/b/a TDI New England ("TDI-NE" or "Petitioner"), in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State of Vermont, subject to the following conditions:

I. General Conditions

- 1. Construction, operation, and maintenance of the Project shall be in accordance with the plans and evidence as submitted in this proceeding. Any material deviation from these plans or a substantial change to the Project must be approved by the Board. Failure to obtain advance approval from the Board for a material deviation from the approved plans or a substantial change to the Project may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.
- 2. Petitioner shall obtain all municipal, state, and federal permits or other regulatory approvals that are required for the Project, and shall construct, operate, and maintain the Project in accordance with all conditions set forth in any such permits and approvals.

3. Petitioner shall comply with all terms and conditions of the following stipulations and agreements, the terms and conditions of which are incorporated herein by reference:

Agreement Between TDI-NE and Vermont Electric Power Company, Inc. and Vermont Transco LLC (together "VELCO") (12/4/14) and First Amendment (8/20/15) (collectively, "VELCO Agreement")	Exhs. TDI-JMB-7, 7a
Stipulation Among TDI-NE, the Department of Public Service ("Department" or "DPS"), Agency of Natural Resources ("ANR"), and the Vermont Division for Historic Preservation ("DHP") (7/17/15) and First Amendment (7/29/15) (collectively, "DPS/ANR/DHP Stipulation")	Exhs. TDI-JMB-19a-b
Stipulation Between TDI-NE and Conservation Law Foundation (5/29/15) ("CLF Agreement")	Exh. TDI-JMB-20
Stipulation Between TDI-NE and VELCO (7/24/15) ("VELCO Stipulation")	Exh. TDI-JMB-21
Stipulation Between TDI-NE and Green Mountain Power Corporation ("GMP") (7/17 /15) ("GMP Stipulation")	Exh. TDI-JMB-22
Stipulation Between TDI-NE and the City of Burlington Electric Department ("BED") (7/28/15) ("BED Stipulation")	Exh. TDI-JMB-23
Town of Alburgh Host Town Agreement (6/2/15) ("Alburgh Agreement")	Exh. TDI-JMB-24a
Town of Benson Host Town Agreement (6/10/15) ("Benson Agreement")	Exh. TDI-JMB-24b
Town of Ludlow Host Town Agreement (7/2/15) ("Ludlow Agreement")	Exh. TDI-JMB-24c

- 4. Petitioner shall comply with the conditions related to environmental resources specified in Attachment II of the DPS/ANR/DHP Stipulation.
- 5. Petitioner shall comply with the conditions related to historic resources specified in Attachment III of the DPS/ANR/DHP Stipulation.
- 6. Construction hours will be from 7:00 A.M. to 7:00 P.M. Monday through Friday and from 8:00 A.M. to 6:00 P.M. on Saturdays. All construction activities and related deliveries shall

cease on Sundays and state or federal holidays. Petitioner may extend its construction hours as follows: (i) 24 hours per day seven days per week on Lake Champlain during the construction window as identified in Attachment II of the DPS/ANR/DHP Stipulation; (ii) extenuating circumstances, beyond the Petitioner's reasonable control, that necessitate after-hours work to protect public safety, worker safety, and/or the convenience of the traveling public; (iii) certain horizontal directional drilling ("HDD") operations that may require extended hours in order to complete the operation; or (iv) other extensions to the schedule for good cause, provided the Board approves them in advance.

- 7. Blasting associated with construction of the Project shall only occur during the hours of 9:00 A.M. to 5:00 P.M., Monday through Friday, with no blasting permitted on federal or state holidays.
- 8. All blasting shall be carried out by licensed and certified blasting technicians. All blasting will be performed in accordance with Attachment II of the DPS/ANR/DHP Stipulation, the Project Blasting Plan, exhibits TDI-JMB-10 and JMB-10a, and any and all applicable laws and regulations, including but not limited to US Department of Interior Rules 816.61-68 and 817.61-68 and the Blasting Guidance Manual, Office of Surface Mining, Reclamation and Enforcement, US Department of Interior, to limit peak particle velocity and ground vibration to safe levels. Noise and air blast effects shall be limited through application of proper techniques, and blasting mats shall be used where needed to limit the occurrence of flyrock.
- 9. Petitioner shall prepare a decommissioning plan and associated cost estimate for the Project's converter station as a pre-construction compliance filing pursuant to Condition 17, below. For the duration of the Project, Petitioner shall file with the Board and the Department each of the NECPL's transmission service contracts within 30 days of execution of such contracts, redacted or under seal as necessary to protect confidential business information. Petitioner shall regularly monitor the transmission service contracts for use of the transmission line. If at any time Petitioner's review of those contracts reveals that, within two years, contracts for use of the transmission line will fall below 50% of total line capacity, Petitioner shall notify the Board and parties and the Board will initiate a proceeding to investigate the appropriateness of establishing a decommissioning fund. Should the Board determine that a decommissioning

fund must be established, Petitioner shall update the previously approved decommissioning plan and cost figures to fully fund the decommissioning fund, either through a letter of credit or other financial mechanism acceptable to the Board, on a schedule established by the Board during that proceeding. Failure to use the converter station, other than during planned or unplanned outages or repairs, for a period of eighteen consecutive months, shall trigger Board review of whether the converter station should be decommissioned.

10. Petitioner shall not transfer this CPG without prior approval of the Board.

II. Compliance Filing Requirements Prior to Commencement of Construction

- 11. Prior to commencing construction of the Project, Petitioner shall file with the Board for review and approval the final versions of the Project design plans exhibits TDI-JMB-4 (revised) and TDI-AW-2 (revised). The parties shall have 15 business days to file comments on the plans.
- 12. Prior to commencing construction of the Project, Petitioner shall file with the Board and parties the final system impact study ("SIS") and I.3.9 approval, which shall be subject to review by the Board, the Department, VELCO, GMP, and BED. The Department, VELCO, GMP, and BED shall have 15 business days to file comments and recommendations in response to the SIS and I.3.9 approval.
- 13. Prior to commencing construction of the Project, Petitioner shall file with the Board and parties a compliance filing demonstrating that all transmission and subtransmission upgrades that are required in Vermont due to the Project have obtained any necessary Section 248 approvals.
- 14. Prior to commencing construction of the Project, Petitioner shall file with the Board and parties all transmission service contracts with energy suppliers who will utilize the NECPL. The purpose of the filing shall be to confirm Petitioner's representations in its Petition that energy to be transmitted on the NECPL will be from hydro, wind, or other "renewable energy" sources, as defined under Vermont law. In addition, Petitioner will endeavor to obtain facility-specific information from its transmission customer(s) in order to track the source of energy shipped on the NECPL. Petitioner may submit redacted versions of such contracts to protect pricing and other business confidential and trade secret information.

15. Prior to commencing construction of the Project, Petitioner shall file with the Board all ANR permits that are required for construction of the Project and that had not been issued prior to the close of evidence in this proceeding. Submission of such permits shall be for notice purposes only and shall not give rise to further review or proceedings by the Board, provided that such permit or permits do not require any material or substantial changes to the Project that have not yet undergone Board review.

- 16. Prior to commencing construction of the Project, Petitioner shall file a final blasting plan with the Board for review and approval. The parties shall have 15 business days to file comments on the proposed blasting plan. Any subsequent material changes to the plan will require further Board review and approval.
- 17. Prior to commencing construction of the Project, Petitioner shall file a decommissioning plan with the Board for review and approval. The proposed decommissioning plan shall provide for the off-site removal of the converter station building and all structural steel components, and the restoration of the converter station site to a stabilized condition allowing for natural revegetation. Petitioner shall also provide a cost estimate for the decommissioning activities as part of the plan. Parties shall have 15 business days to file comments on the proposed decommissioning plan.
- 18. Prior to commencing construction of the Project, Petitioner shall file with the Board and the parties written confirmation that it has fulfilled all requisite CPG conditions under this section of the CPG and that it intends to commence construction of the Project.

III. Compliance Filing Requirements Prior to Commencement of Operations

19. Prior to commencing commercial operation of the Project, TDI-NE shall file with the Board for review and approval a noise monitoring plan to confirm that the Project complies with the sound level limits specified in Condition 46, below. The plan shall be prepared and implemented under the direction of a qualified noise control engineer and shall include a monitoring schedule to be implemented during the first year of operations under a variety of climatic and seasonal conditions, a complaint resolution procedure, and a process for addressing any exceedances of the sound level limits, should they occur. The Department shall have fifteen business days to file comments and recommendations on the proposed plan.

20. Prior to commencing commercial operation of the Project, Petitioner shall file with the Board and parties a compliance filing demonstrating that all SIS mitigation measures or supplemental subtransmission mitigation measures have been implemented at Petitioner's expense.

- 21. Prior to commencing commercial operation of the Project, Petitioner shall become a member of Dig Safe System, Inc., and for the life of the Project shall comply with the requirements of 30 V.S.A. Chapter 86 and Board Rule 3.800.
- 22. Prior to commencing commercial operation of the Project, Petitioner shall file an underground damage prevention plan with the Department.
- 23. Prior to commencing commercial operation of the Project, TDI-NE shall file with the Board and parties written confirmation that it has fulfilled all requisite CPG conditions, and that it intends to commence commercial operation of the Project.

IV. Conditions Pertaining to Economic Benefits and Public Good

- 24. Pursuant to the DPS/ANR/DHP Stipulation, the VELCO Agreement, and the prefiled direct and supplemental testimony of TDI-NE witnesses Donald Jessome, Eugene Martin, and Joshua Bagnato, Petitioner shall implement its public benefits plan with respect to payments to VELCO, Vermont renewable energy programs (through the Clean Energy Development Fund), the Lake Champlain Pollution Abatement and Restoration Fund, and the Lake Champlain Enhancement and Restoration Trust Fund.
- 25. Pursuant to Paragraph 17 of the VELCO Agreement, VELCO will establish a special class of stock, either directly or through a special purpose entity, in order to receive and distribute the quarterly payments to be made by Petitioner to Vermont's retail electric distribution utilities ("DUs") for the benefit of their ratepayers, contingent upon receipt of necessary approvals from the VELCO Board of Directors. The DUs shall be the owners of such stock, with their respective ownership in proportion to each DU's load ratio share in order to ensure an equitable distribution of benefits among Vermont ratepayers. VELCO shall distribute the TDI-NE quarterly payments, less any required taxes and administration costs, to the DUs as stock dividends on a quarterly basis, for the benefit of their ratepayers as required by the VELCO Agreement. In the event that the VELCO Board of Directors fails to issue the necessary approvals in accordance with the above, VELCO shall propose a new payment arrangement to implement Paragraph 1 of the

VELCO Agreement, subject to consent from TDI-NE, amendment of the Agreement, and approval by the Board.

- 26. Six months prior to the termination of the initial transmission service contracts for the Project, and subject to applicable FERC requirements, Petitioner shall negotiate in good faith with the DUs for up to 200 MW of transmission service on the NECPL for a term of up to 20 years. The price of such transmission service shall be determined at that time and shall be generally consistent with market prices; however, the price offered to the DUs shall not exceed the price of transmission service for a contract of similar size and scope executed in the prior three years.
- 27. If, at the conclusion of TDI-NE's open solicitation process for NECPL transmission capacity, NECPL's transmission capacity has not been fully allocated, then prior to the Project's commercial operation date, and subject to any applicable FERC requirements, TDI-NE and BED shall initiate good-faith negotiations for up to 30 MW of transmission service on the NECPL for a term of up to 20 years pursuant to the terms of the BED Stipulation.
- 28. No later than January 1st of the 37th year of commercial operation of the Project, Petitioner shall enter into discussions with ANR and the Department, and shall negotiate in good faith, regarding continued payment of public good benefits and/or other amendments to the DPS/ANR/DHP Stipulation in the event commercial operation of the Project extends beyond the 40th year. No later than January 1st of the 39th year of commercial operation of the Project, Petitioner shall file with the Board for review and approval a plan regarding the extension of benefit fund payments beyond the 40th year of commercial operations. In the event this plan does not reflect an agreement reached with ANR and the Department, Petitioner shall provide an explanation of the efforts it made to engage in good faith negotiations, and the Board shall open a docket and establish a schedule to determine: (i) whether continued public good benefits are appropriate; and (ii) a plan for the continued payment of public good benefits if determined appropriate. Petitioner, ANR, and the Department shall automatically be parties to the docket. Petitioner shall be authorized to continue to operate the Project beyond the 40th year during and after the proceedings concerning the public good benefits, provided that if payment of public good benefits ultimately is approved by the Board, the payment obligation shall be applied retroactively beginning in the 41st year of operation of the Project.

29. Pursuant to Paragraph 16 of the VELCO Agreement, to the extent that the Project has a regulated rate through the FERC Order 1000 process or another regional cost-sharing mechanism, Petitioner shall indemnify Vermont's regionally allocated share of the Project costs to ensure that the net benefit identified in Schedule I of the VELCO Agreement accrues to Vermont's retail electric customers by making additional payments to VELCO. VELCO or the special purpose entity shall distribute these additional funds in accordance with Paragraphs 1 and 17 and other relevant provisions of the VELCO Agreement. In the event that the FERC Order 1000 process or another regional cost-sharing mechanism is utilized, and for so long as Project costs are being recovered by such process or mechanism, these additional indemnification payments shall not be suspended. Paragraphs 5 and 6 of the VELCO Agreement shall apply to these payments. Petitioner will not seek cost recovery for these additional indemnification payments whether under the ISO-NE Tariff or any other cost-sharing mechanism that allocates costs to Vermont ratepayers.

30. In the event that Paragraph 16 of the VELCO Agreement applies to the Project, the Department shall use its best efforts to minimize Vermont's regional share of the NECPL's costs.

V. Conditions Pertaining to Electric System Stability and Reliability

- 31. Petitioner shall be responsible for the costs of the transmission system and subtransmission system upgrades in Vermont that are necessary in order to address adverse impacts to system stability and reliability due to the Project, as determined by ISO-NE pursuant to the interconnection process administered by ISO-NE, and as determined pursuant to any supplemental subtransmission study performed pursuant to the GMP Stipulation.
- 32. Petitioner shall collaborate with GMP to design and implement in a timely fashion any mitigation strategies or system upgrades necessary or required to avoid adverse effects on the reliability and stability of the GMP electric system as a result of contingencies identified in the SIS or in a supplemental subtransmission study, if performed, as provided in Paragraph 5 of the GMP Stipulation.
- 33. In the event that a supplemental subtransmission study is prepared under Paragraph 5 of the GMP Stipulation, Petitioner shall file the final version of the study with the Board prior to the filing of GMP's section 248 petition(s) as set forth in Paragraph 5 of the GMP Stipulation.

34. The protections extended to GMP under Paragraph 5 of the GMP Stipulation shall also apply to VELCO and to all electric load-serving utilities in the state of Vermont.

- 35. Petitioner shall be obligated to pay for all costs reasonably incurred by GMP to implement the GMP Stipulation, including but not limited to the costs of the SIS mitigation measures, the supplemental mitigation measures, the SIS and SIS mitigation process, and the supplemental subtransmission study process provided for under Paragraph 5 of the GMP Stipulation. Petitioner shall reimburse GMP for any and all costs GMP reasonably incurs in implementing the GMP Stipulation, including the hourly costs of employees, consultants, and reasonable expenses.
- 36. Petitioner shall, in accordance with good utility practice, cooperate and coordinate with GMP and other affected Vermont electric distribution, transmission, and subtransmission system owners, if any, during pre-construction and construction to mitigate and minimize any adverse impacts on GMP's facilities, customers, employees, and contractors, including but not limited to outages, which shall only be taken as a matter of last resort; facility relocations; and impacts to GMP's ability to reliably and safely serve its customers.
- 37. Prior to construction of the Project, Petitioner shall undertake a process with GMP in which Petitioner and GMP will review on the ground and via detailed Project plans the entire overland portion of the Project where it coincides with GMP's facilities. During this process, all areas of potential adverse impacts on GMP's facilities, customers, and ability to reliably and safely serve those customers shall be identified and a mutually agreed-upon work plan shall be developed by the parties in accordance with good utility practice. The work plan shall identify how each identified impact will be mitigated or avoided. Such mitigation measures include but are not limited to minimizing to the fullest extent possible outages to GMP customers, ROW acquisition, facility relocations, and alternative construction procedures. All reasonably incurred costs of the process, work plan, and mitigation measures shall be paid for by Petitioner, including any reasonably incurred costs for GMP employees, consultants, contractors, and expenses.
- 38. Petitioner shall, in accordance with good utility practice, cooperate and coordinate with GMP and other affected Vermont electric distribution, transmission, and subtransmission system owners, if any, to ensure that operation of the Project does not cause adverse impacts on their distribution, transmission, and subtransmission systems; provided, however, that Petitioner

shall at all times operate the Project in a manner that is consistent with ISO-NE's operating instructions. Petitioner shall follow good utility practice and Dig Safe provisions in the maintenance and operation of the Project. Prior to undertaking any maintenance of the Project, Petitioner shall determine whether GMP facilities or customers may be affected and shall provide reasonable advance notice of such maintenance. For any such maintenance, Petitioner shall work with GMP to develop a mutually agreed-upon maintenance plan subject to good utility practice to perform such maintenance in a manner that mitigates or avoids impacts on GMP's facilities, customers, or ability to safely and reliably serve such customers. Any and all reasonably incurred costs of such maintenance plan and mitigation measures shall be paid by Petitioner, including but not limited to reasonably incurred costs of GMP's employees, contractors, and consultants, plus expenses.

39. If, after construction of the Project, it is determined that there are adverse impacts on GMP's facilities, customers, or ability to safely and reliably serve its customers that are attributable to the Project and that could not have been reasonably foreseen prior to construction, Petitioner and GMP shall work collaboratively and subject to good utility practice to mitigate such impacts at Petitioner's sole expense.

VI. Conditions Related to the VELCO PV20 Installation

- 40. Petitioner and VELCO, and other utilities if applicable, shall consult and coordinate regarding those aspects of the Project and those aspects of the existing PV20 installation and the PV20 project brought about by the need to accommodate the crossing of the cables (the "Works") and shall create a working group for this purpose. Such group shall meet on a regular basis and shall consist of appropriate engineering and project management personnel empowered to make decisions pertaining to the Works on behalf of Petitioner and VELCO, and other utilities if applicable.
- 41. Petitioner shall construct, maintain, repair, and operate the Project in accordance with good utility practice and avoid causing construction delays or other adverse impacts on the PV20 project.
- 42. Petitioner shall construct the Project in a manner that allows the safe and efficient removal of the existing PV20 installation and its replacement in its entirety, by employing for

this purpose an underwater bridge or bridges or an alternative design that VELCO, and other utilities if applicable, agrees will provide a similar level of protection, at Petitioner's cost.

- 43. Petitioner shall reimburse VELCO or its designee for all reasonable costs that it or its designee incurs in connection with VELCO's obligations set forth in Condition 40, above, including, without limitation, its review of Petitioner's Project plans.
- 44. Petitioner and VELCO shall cooperate to minimize costs related to construction, maintenance, and/or repair of the Works. Petitioner shall reimburse VELCO, and its designee if applicable, for all reasonable costs attributable to Petitioner's actions or inactions that are incurred by VELCO, or its designee, in connection with the removal of the existing PV20 installation and the construction, maintenance, and repair of the proposed PV20 project; provided, however, that in the event that the need to perform repair, removal, or maintenance activities regarding the new PV20 installation is caused by the alleged negligence or other legally culpable act or omission of a third party, Petitioner shall not be required to make the reimbursements required above if VELCO has been indemnified pursuant to contracts of insurance or other risk-sharing arrangements, which arrangements VELCO shall make commercially reasonable efforts to secure prior to commencement of the PV20 project. Upon occurrence of such negligence or other legally culpable act or omission of a third party, VELCO shall advise Petitioner of such occurrence in a timely fashion and shall pursue the claim of indemnity in due course, consulting with Petitioner as appropriate.
- 45. Petitioner shall indemnify and hold harmless VELCO, and any other project owner, for any physical damage that the Project causes to the existing and proposed PV20 installations, and will hold harmless and indemnify and, at VELCO's option, defend VELCO against any third-party claims of any nature whatsoever arising out of the Project. VELCO will hold harmless and indemnify and, at Petitioner's option, defend Petitioner against any third-party claims of any nature whatsoever arising out of the existing or proposed PV20 installation.

VII. Conditions Pertaining to Aesthetics (Visual and Noise)

46. Sound levels due to operation of the converter station shall be measured at the exterior of the nearest surrounding residence and shall not exceed 45 dBA Leq (1-hour) (day or night). Petitioner shall implement the sound monitoring plan required as a pre-operation

compliance filing under Condition 19, above. If sound levels exceed 45 dBA Leq (1-hour)(day or night), Petitioner shall install mitigation measures to ensure compliance with the limit.

- 47. Petitioner shall minimize tree removal along the entire route to the greatest extent practicable.
- 48. Petitioner shall take reasonable precautions during construction to limit impacts on nearby trees and shrubs on private property. If trees or shrubs on private property are damaged due to construction, Petitioner shall be responsible for replacements for a three-year period after construction.
- 49. At Shunpike Road in Shrewsbury, Petitioner shall coordinate the tree-planting plan with the property owner immediately adjacent to the Project, to the extent such owner agrees to become involved, as well as with the local planning commission and/or conservation commission. If neither the landowner nor the local planning commission or conservation commission elects to become involved in the tree-planting plan for this location, Petitioner shall confer with the aesthetics consultant for the Department to reach agreement on an appropriate aesthetic landscape mitigation plan for this location.
- 50. The converter station building shall be dark brown or dark gray in color. Other ancillary structures at the converter station site that are fabricated from galvanized steel similar to the equipment and structures at the Coolidge substation are not required to be painted.
- 51. Petitioner shall conduct a post-construction site visit in conjunction with the Department to determine if additional mitigation in the form of vegetative screening is necessary at the converter station.

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary

January 5, 2016

Acting Clerk of the Board

corrections may be made. (E-mail address: psb.clerk@vermont.gov)

ATTEST: s/Judith C. Whitney

FILED: