



For a thriving New England

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Via Electronic Mail (Brian.Mills@hq.doe.gov)

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U.S. Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

**RE: U.S. Department of Energy Environmental Impact Statement
TDI-New England Presidential Permit Application, OE Docket No. PP-400**

Dear Mr. Mills:

With regarding to the above-referenced matter, enclosed please find Scoping Comments of the
Conservation Law Foundation.

Respectfully submitted,

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Scoping Comments of the Conservation Law Foundation

U.S. Department of Energy Environmental Impact Statement

TDI-New England Presidential Permit Application, OE Docket No. PP-400

Introduction

Conservation Law Foundation (“CLF”), an intervener in the above-referenced docket, respectfully submits the following comments on the scope of the U.S. Department of Energy (“DOE”) Environmental Impact Statement (“EIS”) in connection with the application of TDI-New England (“TDI-NE”) for a Presidential Permit (the “Application”) to construct and operate the New England Clean Power Link (“NECPL”), an electric transmission line that crosses the United States-Canada border. These comments expand on and incorporate by reference CLF’s Comments and Motion to Intervene filed in this docket, dated August 7, 2014. We offer these comments without prejudice to any and all legal rights CLF may have, which are hereby expressly reserved.

CLF is a member-supported non-profit environmental advocacy organization with offices in Vermont, Massachusetts, Maine, Rhode Island, and New Hampshire. We use law, science, and markets to achieve solutions that protect New England’s environment and communities. CLF has substantial interests in environmental and energy implications of the Application. CLF is working to secure a clean energy future for Vermont and New England—one which our energy system (1) is cleaner and far less carbon-intensive, (2) provides reliable power with minimal environmental impact and at a reasonable cost, and (3) is supported by a robust, local clean-energy economy built on energy efficiency and renewables.

TDI-NE is the third in a series of transmission proposals before DOE that seek to enable greater imports of large-scale Canadian hydropower into the northeastern United States. The first—the 1,000-megawatt Champlain Hudson Power Express (“CHPE”) in New York proposed by TDI-NE’s affiliate Transmission Developers, Inc.—has already received DOE and state approvals. The second—the 1,200-megawatt Northern Pass transmission project in New Hampshire—has been beset by public opposition and remains under review by DOE as the agency prepares a draft EIS for the project. As DOE is aware, CLF has been deeply engaged in the National Environmental Policy Act (“NEPA”) process for the Northern Pass project and remains profoundly concerned that that process is failing, among other things, to meet the requirement of federal law to provide a comprehensive and robust analysis of reasonable project alternatives. The NECPL project now before DOE

and the subject of these comments very much resembles CHPE, except that NECPL is located mere miles away in Vermont and proposes to connect to the New England electric system. These three projects—and several others that have been publicly proposed but are not before DOE—share important characteristics and energy implications for the region. While the advanced underground and underwater infrastructure reflected in NECPL and CHPE may offer certain advantages over overhead transmission lines of the kind proposed for the Northern Pass project, the DOE’s EIS for NECPL must nonetheless fully address the project’s significant impacts on the environment and on regional energy resources.

It is critical to the region’s energy future that DOE exercise its authority in the Presidential Permit process and under NEPA to help manage this wave of proposals in a way that results in project approvals, modifications, or denials that protect the public interest. In other words, DOE’s reviews can and should require that these projects protect the environment; secure substantial and verifiable clean energy, reduce emissions and garner economic benefits; and avoid unnecessary and damaging infrastructure development. These comments are offered to help DOE accomplish this objective in the context of its review of the NECPL project.

In brief, and as discussed in our detailed comments below, CLF urges DOE to:

- (1) Define the purpose and need for agency action on this proposal more broadly;
- (2) Conduct a rigorous and independent assessment of the project’s environmental impacts, with a particular focus on impacts to Lake Champlain’s water quality and aquatic environment;
- (3) Scrutinize the environmental impacts, including greenhouse gas emissions, associated with Canadian power sources of the project;
- (4) Assess the energy implications of the project on the Vermont and New England markets;
- (5) Assess the impacts of large-scale hydropower imports enabled by NECPL on state and regional renewable resource development;
- (6) Study all reasonable alternatives to the current proposal—including siting and routing alternatives; alternative project designs, technologies, and strategies; and the no action alternative—and provide a well-supported rationale for excluding any alternatives from detailed review; and

- (7) Undertake a comprehensive EIS, an innovative mechanism proposed by CLF and others in the Northern Pass Presidential Permit process, addressing imports of electricity into New England from Canada before further site-specific review of the NECPL proposal (and completion of the Northern Pass draft EIS).

Detailed Comments

I. DOE Should Define the Purpose and Need for Action More Broadly

In its notice of intent to prepare an EIS and conduct a scoping process, DOE describes the purpose and need for the project as follows:

The purpose and need for DOE's action is to decide whether to grant TDI-NE a Presidential permit. DOE's decision will be based on the NEPA review, the impact of the proposed action on electric reliability, and any other factors that DOE may find relevant to the public interest.

Notice of Intent to Prepare an Environmental Impact Statement and Conduct Public Scoping Meetings, and Notice of Floodplains and Wetlands Involvement; New England Clean Power Link Project, 79 Fed. Reg. 50901-01 (2014).

The above statement confines DOE to one of two alternatives: either the permit is granted in its entirety or denied wholesale. This narrow purpose and need statement runs counter to recent federal court direction: "An agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality." *Nat'l Parks & Conservation Ass'n v. Bureau of Land Mgmt.*, 606 F.3d 1058, 1070 (9th Cir. 2010) (citations omitted).¹ As written, DOE's purpose and need statement does not allow it to meet NEPA's

¹ DOE's own NEPA guidance contains a similar caution:

The statement of the agency's underlying purpose and need is critical to identifying the range of reasonable alternatives. If the purpose and need is defined too broadly, the number of alternatives that might require analysis would be virtually limitless. It is inappropriate in most situations, however, to define purpose and need so narrowly that only a single alternative could

mandate that agencies consider a reasonable range of alternatives—including alternative project configurations and designs—as well as permit conditions requiring mitigation of environmental impacts.

A purpose and need statement must be defined by the nature of a proposed project and associated impacts. The statement must be framed in such a way as to allow for reasonable range of alternatives to be identified and analyzed. *See Border Power Plant Working Group v. Dept. of Energy*, 260 F. Supp. 2d 997, 1030 (S.D. Cal. 2003). In this case, TDI-NE's stated purpose is to import into Vermont and New England 1,000 MW of energy generated in Canada via an underground/underwater merchant transmission line. New England Clean Power Link Presidential Permit Application, 2-1, (May 20, 2004) *available at* <http://necplink.com/docs/Application for a Presidential Permit.pdf> (hereinafter "Application").

The need is, according to TDI-NE:

To further the New England States' energy and environmental policy goals, diversify fuel supply in ISO-NE, lower energy prices for consumers, reduce carbon emissions in New England, improve the economic competitiveness of the New England States, and to provide economic benefits to Vermont and other New England states.

Id.

In light of the foregoing, DOE should broaden its purpose and need statement. DOE should frame its description of purpose and need in terms of the purpose the project seeks to serve, and the need in New England that the project seeks to fulfill (taking into account the nature and impacts of the project), and enabling an analysis of a full range of reasonable alternatives. More specifically, we urge DOE to adopt a purpose and need framework for the EIS that (i) is based on the purpose of importing energy into Vermont

be identified for analysis. The proposed action is generally only one means of meeting the agency's purpose and need for action.

Department of Energy, Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements, 5, (2nd. Ed. Dec. 2004) *available at* http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-DOE-greenbook.pdf (hereinafter, "DOE NEPA Guidance") (emphasis added).

and New England from Hydro-Québec or other Canadian sources,² and (ii) requires an assessment of whether and the what extent Vermont and the broader New England region has a need for imports to advance the goals of a clean, low-carbon energy future, and whether and how the proposed project (and alternatives) can fulfill any such need.

II. Environmental and Community Impacts

The project as proposed is likely to have significant environmental, cultural, and socio-economic impacts along its route. The environmental impacts on Lake Champlain are of special importance. DOE should engage the assistance of cooperating federal and state resource agencies to describe and analyze these impacts. Ultimately, the EIS must provide a complete discussion of all relevant impacts associated with the project and its alternatives (from either construction activities or permanent infrastructure), including but not limited to:

- Impacts to forest, wetland, and other wilderness areas, including fragmentation or disruption of wildlife habitat and other losses of ecological services;
- Impacts to protected and sensitive species of animals and plants, whether under federal or state protection, including all species with ranges near the proposed route (per the Application, lake sturgeon, Eastern sand darter, stonecat, fragile papershell mussel, giant floater mussel, pink heelsplitter mussel, pocketbook mussel, dwarf wedgemussel, fluted-shell mussel, Indiana Bat, bald eagle, little brown bat, Northern long-eared bat, grasshopper sparrow, Jesup's milk-vetch, Northeastern bulrush, Eastern rat snake, Upland sandpiper, timber rattlesnake, white adder's mouth. *See* Application, 3-26 to 3-49). As discussed below, this assessment should include all sensitive species near the proposed route—not simply those designated threatened or endangered under federal or state law;
- Impacts to air quality, including vehicle and equipment emissions associated with construction and, as discussed below, relative to the project's energy implications and greenhouse gas emissions, the reductions on conventional and toxic air emissions from displacement of other electric generation;

² The purpose statement must not include specific project parameters proposed by TDI-NE, such as the volume of electricity proposed to be imported; the entry- and end-points of the proposed transmission line; and the proposed transmission route and design. *See* DOE NEPA Guidance at 5 (stating "Do not include requirements (e.g., conceptual design specifications) in statement of purpose and need that unreasonably narrow or bias the range of reasonable alternatives.").

- Impacts to public lands and/or waters dedicated to conservation uses;
- Noise impacts, including construction and any operational effects, such as at substations;
- Socio-economic impacts to communities along the route as well as to Vermont and the region as a whole, including to employment generally, agriculture, the forest industry, tourism, recreational attraction, local property tax revenues, property values for land held by existing landowners, and the construction and skilled trades;
- Impacts to historic sites and districts, and to geographic areas with cultural importance;
- Disproportional impacts in “environmental justice areas,” including all areas with high levels of poverty, as measured relative to state-wide per capita income; and
- Impacts on implementation of local, regional, state, and federal land use, conservation, and other plans, including Vermont’s Comprehensive Energy Plan and the Lake Champlain Total Maximum Daily Load.

III. DOE Should Conduct a Rigorous Independent Assessment of the Project’s Impact on the Aquatic Environments of the Proposed Route

A thorough NEPA analysis requires DOE to utilize its extensive resources in order to conduct a rigorous and independent assessment of the environmental impacts of any proposed project. *See* 40 C.F.R § 1502.1. To this end, DOE should work with an applicant to obtain project-specific data in furtherance of this goal. In this case, DOE should pay special attention to the impacts of the project on water quality and the delicate aquatic ecosystems along the proposed project route, particularly in the Lake Champlain segment. Any conclusory statement made in the application should be examined by DOE according to the best information available. Furthermore, any potential impacts on water quality and aquatic life omitted from the Application should be addressed in the EIS.

Lake Champlain is a priceless natural resource of immeasurable value to the State of Vermont. It is critical that all potential impacts to the Lake resulting from the Project are fully considered and addressed. The Lake is one of the primary drivers in Vermont’s economy and quality of life. Lake-related tourism includes swimming, fishing, boating, birding, and incredible scenic beauty. Unfortunately, the Lake does not meet water quality standards for phosphorus and mercury and, in many areas, is afflicted with pathogen contamination as well. Recent analyses by the Environmental Protection Agency indicate

that phosphorus-related impairments are likely to get much worse as a result of climate change as well. Outlined below are areas identified by CLF which require comprehensive scrutiny on the part of DOE. This list is meant to be illustrative, not exhaustive.

A. *The EIS Must Independently Examine Conclusory or Unsupported Statements Regarding Environmental Impacts to Water Quality and Aquatic Life in the Application*

During its review of the Application, DOE should identify and independently assess any statements that are conclusory or unsupported. In particular, the EIS should rigorously analyze the following areas.

1. *Impact of Increased Turbidity, Sediment Disruption, and Redistribution*

The impact of increased turbidity, sediment disruption, and redeposition as a result of the project on the aquatic community and water quality is a point which the Application briefly addresses, and DOE should thoroughly assess. The Application explains that the “displaced sediment will settle out, and the trench will naturally refill following the installation of the transmission cables.” Application at 2-20. However, support for this statement appears to be lacking. Redeposition could change the sediment composition; these changes “will affect the species composition of the benthic community” and will likely impact immobile flora and fauna; however, the Application does not anticipate population level impacts. Application at 3-19. In conducting its independent analysis, DOE should investigate and analyze these impacts on not only the immobile species, but the entire aquatic ecosystem along the proposed route.

In addition to the direct impacts of turbidity, sediment disruption, and redistribution, DOE must assess the potential for resuspension and release of phosphorus and mercury accumulated in sediments. Lake Champlain’s well-publicized plights due to excessive phosphorus and mercury levels are a grave concern throughout the Lake.

Phosphorus binds readily with soil particles and accumulates in the bottom sediments of the Lake. Disturbance of sediments provides a significant pathway for discharge of phosphorus from project activities into sections of the Lake that currently do not meet water quality standards. Most likely, project activities will fall within the jurisdictional scope of the Clean Water Act and may require a discharge permit. In any case, the likely resuspension and release of phosphorus from disturbed sediments is a significant concern that must be assessed.

Similarly, mercury has been deposited in the Lake for decades as a result of emissions from power plants and other sources. Resuspension of mercury in sediments

could make this toxic metal bioavailable to organisms in the food chain. DOE should analyze the potential for resuspension and methylation of mercury in sediments as a result of project activities and the impact on bioaccumulation in the food chain.

2. *Impact of Projected Temperature Increases*

Similarly, DOE should independently investigate the impacts on aquatic life and water quality from temperature increases caused by the project at the sediment surface. The Application estimates a rise in sediment temperature of 1.8 degrees Fahrenheit at the sediment surface directly above the buried cables, the effects of which should be negligible. Application at 3-13. The proposed cable route, however, is home to many species that could be affected by these temperature increases. DOE should thoroughly assess any temperature increases in order to independently determine their impacts on aquatic life.

3. *Impacts of Hydrocarbon Releases*

DOE should also address any risk of release of hydrocarbons, hydraulic fluid, and other hazardous materials into Lake Champlain. The Application notes that spills of hydrocarbons, ranging from minor releases of fuel from construction vessels to more serious widespread spills of hydraulic fluid and other hazardous materials, may occur during installation. Application at 3-21. Any releases could have a lethal effect on aquatic species. *Id.* The Applicant states the fish would likely avoid water contaminated with hydrocarbons, and articulates a commitment to “developing an emergency response plan to address these accidental spills.” *Id.* DOE should fully characterize the risk of impacts from released hydrocarbons on fish species (including reactions to released hydrocarbons beyond avoidance), other animals and plants, drinking water quality, and recreational uses of the lake, as well as evaluate the likelihood of spillage. DOE should also obtain a detailed emergency response plan from the Applicant and describe any necessary provisions to protect aquatic life, both generally and also with respect to equipment that may be unique to a transmission installation and maintenance activities.

4. *Impacts of Proposed Cofferdams*

Any major disruption to the shoreline, such as the cofferdams proposed, has the potential to seriously impact plants and animals which rely on that sediment for survival. A rigorous evaluation of these impacts is necessary. The Application states that a 16x30 foot temporary cofferdam will be built at the offshore exit-hole location, causing approximately 119 to 179 cubic yards of sediment to be excavated from within the cofferdam. Application at 2-12. After construction, the area will be filled with clean sand and “restored and revegetated as appropriate to reconstruction grades and conditions to the extent practicable.” *Id.* Notably absent is a commitment to restore the shoreline to pre-construction conditions. DOE’s EIS should not only address this major disruption to

shoreline plants and animals, but take steps with the applicant to develop a plan which fully restores shoreline sediment to pre-construction conditions after the cofferdam is removed.

5. *Impacts of Construction Noise on Aquatic Life*

Noise from construction can have profound physiological effects on aquatic life and must therefore be analyzed by DOE. In this particular project, noise is expected to be temporary and localized, and may cause temporary hearing interference or loss, flight, startle, or alarm responses, and physical damage to the ear region. Application at 3-21. The Application likens the underwater noise levels of the construction vessels to that of other ships and boats, to which the fish in question are presumably habituated. *Id.* Absent from the Application is a statement quantifying the levels of underwater noise that the cable laying activity itself is expected to generate. DOE should address this issue through an independent assessment of the impact of construction noise on the aquatic life of Lake Champlain.

B. *The EIS Should Also Address Impacts to Aquatic Life and Water Quality Not Discussed in the Application*

In the EIS, DOE should also identify and address reasonably foreseeable impacts to aquatic organisms that are not raised within the Application. For example, CLF notes specifically the omission of potential impacts of invasive species and anchor chain sweep. As above, these examples are intended to be illustrative, not exhaustive.

1. *Potential Impacts of Invasive Species on Lake Champlain Aquatic Life and Water Quality*

Construction activities which could introduce invasive species, which could wreak havoc on the ecosystem of Lake Champlain, are well within the scope of DOE's EIS analysis. The Applicant mentions invasive species control measures in other segments of the proposed route, but nothing specific to the aquatic ecosystems. Aquatic invasive species control, particularly in the context of ballast water management, was raised by the U.S. Environmental Protection Agency ("EPA") in its comments regarding the CHPE EIS, and the DOE should comprehensively address the issue in the NECPL EIS. See CHPE Final EIS Comment Response DocumentP-254, available at [http://chpexpresseis.org/docs/library/final-eis/easy/2_CHPE%20FEIS%20Vol%20III%20Appendix%20P_Aug14%20\(2%20of%207\).pdf](http://chpexpresseis.org/docs/library/final-eis/easy/2_CHPE%20FEIS%20Vol%20III%20Appendix%20P_Aug14%20(2%20of%207).pdf) (hereinafter "CHPE Comment Responses").

2. *Impact of Anchor Chain Sweep on Benthic Habitats and Water Quality*

A thorough analysis of impacts on aquatic life includes any aspects of a project which could result in habitat destruction. In its scoping comments regarding the CHPE project, the EPA expressed concern with the lack of information regarding habitat loss due to anchor chain sweep. *See* CHPE Comment Responses at P-239. Although the Application describes the use of anchors in its pre-installation route clearance operation, it does not discuss the potential benthic habitat loss due to anchor chain sweep or the effects on water quality. Application at 2-17. DOE took this issue into consideration when drafting the final EIS in the CHPE project; it should do so again for NECPL *See* CHPE Comment Responses at P-239.

C. ***The EIS Should Analyze All Sensitive Species Along the Proposed Project Route***

As part of its rigorous and independent assessment of the proposal, DOE should consider the impact to all sensitive species along the proposed route. TDI-NE correctly notes that “[n]o federally ESA-listed aquatic threatened or endangered species are known to occur in the Lake Champlain Segment.” Application at 3-26. Environmentally responsible development, however, requires the EIS to consider any sensitive or protected species, even if the species in question is not afforded federal or state legal protection at the time of drafting. This includes, for example, the American eel, which could be adversely affected by the electromagnetic fields which the line creates. In its comments on the draft EIS for CHPE, the Department of the Interior voiced concerns regarding the impact of the project on the American Eel, a potential candidate for ESA listing; DOE took note of its concerns. *See Id* at P-238. Since the NECPL follows a very similar route along the Lake Champlain, DOE should assess the impacts of NECPL on at least the same aquatic species that it considered in the CHPE EIS. DOE should expand its scope of analysis to include the impact of the project on all sensitive species near the project route.

D. ***DOE Should Obtain a Best Management Practice Plan from Applicant in Order to Evaluate and Improve the Adequacy of Planned Impact Avoidance, Minimization, and Mitigation Measures***

DOE should consider obtaining from the Applicant and posting publicly a draft Environmental Management and Construction Plan before preparing the draft EIS. Early availability of such a document would allow DOE to understand in detail the Applicant’s planned responses to specific construction and maintenance impacts to the aquatic environment. Although the Applicant refers several times to implementing best management practices in order to minimize damaging environmental effects of the project,

identifying and describing such practices in a formal plan would allow DOE to scrutinize them and determine whether such practices adequately avoid, minimize, or mitigate identified impacts. *See e.g.*, Application at 3-10, 3-30, 3-40. Such practices would include continuous monitoring, both pre- and post- construction, of sediment redistribution, temperature, magnetic fields, and other relevant measures to ensure construction has a minimal impact on water quality and aquatic species. At the very least, DOE should request further information about avoidance and minimization measures in order to decrease the aquatic impact of the project. Given the advanced stage of CHPE's permitting, similar documents for that project are likely available.³

E. *Cumulative Impacts of Construction Projects on the Aquatic Life and Water Quality of Lake Champlain Are Within the Proper Scope of the EIS*

DOE should also incorporate a cumulative impact assessment of all present and reasonable foreseeable construction projects in Lake Champlain as part of its EIS. As a federal agency, DOE has a vantage point from which it can view environmental impacts of a project based on a broader context. Other construction projects are currently planned or underway in the Lake Champlain area, most notably the CHPE transmission line. DOE must assess the cumulative impact of these projects on water quality and the aquatic life of Lake Champlain and other water-based segments of the proposed project. *See* 40 C.F.R. §1508.8

IV. DOE Must Scrutinize the Environmental Impacts Associated with Power Sources of the Proposed NECPL Transmission Project

Environmental and other impacts associated with the source of the electric power that would be transmitted by NECPL are relevant to a complete account of environmental effects of the project as a whole, and therefore within the scope of the NEPA analysis. DOE's prior statements to the contrary are at odds with federal law, and the agency should take the opportunity to correct its erroneous views in this and all pending similar permit proceedings. TDI-NE maintains that the dominant, if not exclusive, source for the power to be transmitted by the project will be Canadian hydropower facilities.⁴ DOE should look

³ The Application makes note of monitoring efforts by Vermont Department of Environmental Conservation, but it is unclear if TDI-NE will be relying on these measurements to assess the environmental impact of the project, or if they will take their own. Application at 3-17. DOE should work with the Applicant to clarify this point.

⁴ *See* Application at 2-1 (stating the purpose of the project is to import "clean, renewable power from the province of Québec"); New England Clean Power Link Brochure, *available at*

closer at the claimed source of power and whether there are any obligations to supply power from Hydro Quebec. The DOE should evaluate closely the availability and commitment to supply power from Hydro Quebec, which is already being claimed as part of other projects. DOE should identify all other commitments of Hydro Quebec power to be available in the northeast. Without any commitment from specific generation or from Hydro Quebec DOE should carefully evaluate the claim that the project will carry clean power from Canada.

The Canadian hydropower facilities have massive ecological and community impacts in Canada, and there is ample evidence that new facilities currently under development in Quebec and in Newfoundland/Labrador are intended to supply New England customers through transmission projects like NECPL.⁵ DOE should characterize and evaluate the impacts of Canadian hydropower facilities as part of the EIS.

In particular, the potential net effects of the project and their power sources on greenhouse gas (“GHG”) emissions is a specific issue that warrants DOE’s detailed analysis in the EIS. While DOE would be required to conduct such an analysis in any event, understanding the net GHG impacts of the project is especially important because TDI-NE maintains that one of the project’s goals is the reduction of GHG pollution.⁶ DOE should fully vet and evaluate these claims as part of the EIS.

http://necplink.com/docs/New_England_Clean_Power_Link_Brochure.pdf (stating the project is being proposed response to New England’s desire for clean, affordable hydroelectricity);

⁵ See, e.g., Hydro-Québec Strategic Plan (2009-2013), 19-27, *available at* http://www.hydroquebec.com/publications/en/strategic_plan/pdf/plan-strategique-2009-2013.pdf, (“As a result of recent and ongoing hydroelectric development projects, Hydro-Quebec Production expects to have generating capacity needed to ensure export growth”); Quebec Energy Strategy (2006-2015) 9-10, *available at* <http://www.mern.gouv.qc.ca/english/publications/energy/strategy/energy-strategy-2006-2015-summary.pdf>. (“The 4,500 MW added capacity will be sufficient to meet Quebec’s long-term demand, promote wealth-creating industrial development, and support exports...The Government also intends to ensure that Quebec is able to increase its electricity exports, once its own needs have been met. It has therefore mandated Hydro-Quebec to begin discussions with potential partners in view of signing electricity export agreements.”).

⁶ Despite a flawed approach to this issue in the CHPE EIS, DOE repeatedly noted the potential for that project to reduce emissions as relevant and important to its review. See Champlain Hudson Power Express Transmission Line Project Final Environmental Impact Statement Summary, S-60, *available at* http://www.chpexpresseis.org/docs/library/final-eis/full/1_CHPE%20FEIS_Summary_Aug14.pdf (“no direct emission would occur from the proposed CHPE Project”); *id.* at S-61, (noting that New York State

Without an accurate accounting of power source GHG emissions and the power sector emissions that are likely to be displaced, any analysis of the net environmental impacts of the project will be incomplete. Courts have recognized three legal principles that dictate the scope of a NEPA analysis in cases such as this. First, the environmental impacts of a foreign generating facility that will export power to the United States through an international transmission line must be considered by DOE during DOE's NEPA review of the line. *Border Power Plant Working Group, v. Department of Energy*, 260 F. Supp.2d 997, 1012-18 (S.D. Cal. 2003). Second, any increase in GHG emissions as a result of a permitting activity—regardless of the geographic location of such emissions—is an environmental impact subject to analysis.⁷ Third, the lifecycle emissions of a project *and any associated activity*—not merely the direct emissions from the project infrastructure itself—are subject to NEPA analysis.⁸ This requirement encompasses emissions associated with federally permitted transmission projects and reasonably foreseeable direct, indirect, and cumulative pollution associated with their power sources. The law on this point is clear:

power generation emissions would be reduced significantly, but making no mention of net emission reductions); *id.* at S-66 (“The proposed CHPE Project is intended to reduce criteria pollutant and GHG emissions by alleviating the need to operate older, more emissive fossil-fueled power plants. New York State currently derives approximately 21 percent of its electricity generation needs from renewable resources, most of which comes from hydroelectric power, and the majority of the remaining generation is fossil-fuel based....as older, more emissive fossil-fueled sources of power generation are retired, the proposed CHPE Project would be expected to have long-term, beneficial, cumulative impacts on air quality, particularly in the New York City area where there are many fossil-fueled generating units and high energy demand.”).

⁷ See *Province of Manitoba v. Salazar*, 691 F. Supp. 2d 37, 51 (D.D.C. 2010) (requiring analysis of effects in Canada of interbasin water transfer project); *Center for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1217 (9th Cir. 2008) (The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.”); ; see also CEQ, Guidance on NEPA Analyses for Transboundary Impacts (July 1, 1997) *available at* http://energy.gov/sites/prod/files/2014/08/f18/CEQTransboundaryGuidance_07_01_97.pdf (citing, inter alia, *Swinomish Tribal Cmty. v. FERC*, 627 F.2d 499 (D.C. Cir. 1980); *Wilderness Soc’y v. Morton*, 463 F.2d 1261 (D.C. Cir. 1972)).

⁸ See *High Country Conservation Advocates v. United States Forest Serv.*, No. 13-CV-01723-RBJ, 2014 WL 2922751 (D. Colo. June 27, 2014) (rejecting defendants’ argument that GHG emissions would remain the same regardless of project approval because customers would simply pay to have the same amount of coal mined elsewhere and requiring the EIS address the reasonably foreseeable effect of an increased supply of coal on GHG emissions.); *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549 (8th Cir. 2003) (holding an agency violated NEPA when it failed to consider the indirect effects of reasonably foreseeable increased coal consumption due to a proposed railway extension project.)

DOE must take source generation emissions into consideration when evaluating the impacts of this project.

According to Hydro-Québec’s own science, hydropower facilities—particularly large, new facilities recently built, under construction, or to be constructed in Canada—result in significant net GHG emissions, including carbon dioxide and other pollutants. *See, e.g.* Conservation Law Foundation, Third Supplemental Scoping Submission, Presidential Permit Application for Northern Pass Transmission LLC (OE Docket No. PP-371), 2, dated Feb. 14, 2012, *available at* <http://northernpasseis.us/comments/1655/>; Conservation Law Foundation, Fifth Supplemental Scoping Submission, Presidential Permit Application for Northern Pass Transmission LLC (OE Docket No. PP-371), 10-12, dated Nov. 5, 2013, *available at* <http://northernpasseis.us/comments/5604>. Both the science and the law require DOE to scrutinize these emissions impacts in its review of TDI-NE’s proposed project and provide a complete accounting of the emissions from its power sources.⁹

In addition, DOE must analyze the overall implications for GHG emissions, in Canada and the United States, of the imports enabled by NECPL. TDI-NE states one of the benefits of the project is the displacement of fossil-fired power generation and their GHG emissions. Application at 2-1. The extent of this supposed benefit should be analyzed in detail in the EIS, taking to account the potential that the incremental power exported to New England could be replaced with additional fossil-fired power generation imports into the exporting Canadian provinces, resulting in no net GHG benefits from the project. *See, e.g.* Conservation Law Foundation, Third Supplemental Scoping Submission, Presidential Permit Application for Northern Pass Transmission LLC (OE Docket No. PP-371), dated Feb. 14, 2012, *available at* <http://northernpasseis.us/comments/1655/>; Conservation Law Foundation, Fifth Supplemental Scoping Submission, Presidential Permit Application for Northern Pass Transmission LLC (OE Docket No. PP-371), dated Nov. 5, 2013, *available at* <http://northernpasseis.us/comments/5604>.

V. Energy Implications of the Project for the Vermont and New England Energy Markets

DOE must also consider the implications of this proposal on the energy market of both Vermont and the New England region. In this regard, the EIS should examine the extent of the project’s consistency (or inconsistency) with existing planning efforts of

⁹ Because the precise sources of supply may not be clear at this time, DOE must endeavor to consider the generation facilities that are reasonably foreseeable sources for the project and in particular compare the potential GHG emissions of such sources.

federal, regional, state, and local decisionmakers—including, but not limited to the U.S.-Canada Energy Dialogue, DOE's own renewable energy initiatives, transmission siting and congestion studies performed by DOE and the Federal Energy Regulatory Commission, grid operator ISO-NE's transmission and wholesale electric market planning, Vermont energy policies and initiatives, including the Vermont Comprehensive Energy Plan Vermont's Long Range Transmission Plan, Vermont's renewable energy goals and Vermont utility least cost plans and similar policies and plans of other New England states, and local plans and efforts intended to maintain and facilitate development of renewable energy facilities. A thorough EIS should address the project's impacts on energy resources, use, markets, reliability, and prices. In particular, DOE should focus on the effects of the project and all reasonable alternatives on the specific issues described below.

A. *Renewable Energy Resources in Vermont and the Northeastern United States*

An influx of Canadian hydropower into the market through this project could negatively impact the development and maintenance of domestic energy resources, including new renewable such as solar, wind, efficient low-emitting biomass, and small-scale hydroelectric facilities. Creating incentives for the development of these resources in Vermont has been a focus at all levels of government in recent years. According to the 2011 Comprehensive Energy Plan ("CEP"), the goal is for Vermont to obtain 90% of total energy from renewable sources by 2050.¹⁰ DOE should closely examine how this large-scale hydro project fits into a diversified Vermont and New England power grid and the development of renewable energy resources.

B. *Displacement of Fossil Fuel Generation*

DOE must address the potential effect of the project on nonrenewable energy resources, including the extent of the environmental impacts and benefits of imported power from Canada from reduced utilization of New England's fossil-fuel generating facilities. In media statements and regulatory filings, TDI-NE has made representations that approval of the project will result in displacement of fossil fuel generation.¹¹ Using electric

¹⁰ Vermont Department of Public Service, Comprehensive Energy Plan Overview, 1 (December 2011), available at http://publicservice.vermont.gov/sites/psd/files/Pubs_Plans_Reports/State_Plans/Comp_Energy_Plan/2011/CEP%20Overview%20Page_Final%5B1%5D.pdf.

¹¹ See, e.g. Press Release, TDI-New England, Innovative New Clean Energy Transmission Line Proposed (October 31, 2013), available at <http://necplink.com/press-releases/103113.php>; Press Release, TDI-

system modeling and scrutinizing the Applicant's own analyses on this effect, DOE should undertake to evaluate and characterize the extent of this effect, if any, and its effect on New England air pollutant emissions.¹² DOE should independently assess the extent to which the power carried by this project will displace emissions from power plants as part of its EIS.

C. *Impacts on Demand Management, Demand Response, Energy Efficiency, and Conservation*

DOE should also address, in detail, how substantial new energy into the New England electric grid may diminish the economic incentives for demand management, demand response, energy efficiency, and conservation efforts to continue to grow—and the value of the many federal, state, local, and utility investments promoting them.

D. *Impacts on Transmission System, Energy Markets, and Rates*

In addressing the project's effect on energy resources, the EIS must fully describe the impacts of the proposal, and alternatives, on the regional transmission system, wholesale energy markets, other markets for capacity and ancillary services, and retail energy prices for New England and Vermont customers.

E. *Implications for Renewable Energy Resources Based in New England*

DOE should not only consider how additional imports from the project will affect Vermont's strategy for meeting its renewable energy goals, but also the projects implications for the state of Connecticut and the region as a whole. Notably, Vermont is the sole New England state that unconditionally labels large scale hydroelectric power production renewable, and the availability of additional imports may dramatically change the renewable resource mix that Vermont and its utilities use to further renewable energy objectives.¹³ Similarly, Connecticut recently enacted legislation that permits Canadian

New England,TDI New England Files Presidential Permit Application for New England Clean Power Link (May 20, 2014), available at <http://necplink.com/press-releases/052014.php>.

¹² The Application touts the project's reduction of carbon emissions associated with the burning of fossil fuels in New England. New England Clean Power Link Presidential Permit Application, May 20, 2014, p. 2-1, available at <http://necplink.com/docs/Application for a Presidential Permit.pdf>.

¹³ See An Act Relating to Renewable Energy, Act 159, sec. 13, Vermont 2009-2010 Legislative Session (codified at Vt. Stat. Ann. tit. 30, § 8002).

hydropower to qualify as renewable in some circumstances, and the imports from NECPL could affect how Connecticut achieves its Renewable Portfolio Standard goals. An Act Concerning Connecticut's Clean Energy Goals, Pub. Act No. 13-303 (2013). More broadly, DOE should examine the potential impact of the project and its imports on the renewable energy marketplace in New England, including whether the project displaces existing renewable power or diminishes the economic prospects for additional renewable deployment (e.g., through claimed price suppression effects)..

VI. DOE Should Study All Reasonable Alternatives to the Project

DOE's analysis of alternatives to the proposal "should present the environmental impacts of the proposal and alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14 (emphasis added).¹⁴ DOE should consider the "no action" alternative and all reasonable alternatives, including any which are practical or feasible from a technical or economic standpoint, as opposed to those which are simply desirable from the standpoint of the applicant. *See* 40 C.F.R. § 1502.14(c)-(d). DOE should study in detail alternative route and sites, alternative technologies and designs (including other high-voltage direct current technologies other than that proposed by the Applicant and the combination of high-voltage direct current with alternating current configurations that would permit Vermont-based generation to access the grid), alternative means of providing energy resources (such as utility-scale renewables, demand management, distributed generation, energy efficiency, and conservation, in combination and separately), and no action in the EIS, as well as provide rationales for the selection or rejection of any alternatives it considers.

In particular, DOE should consider all pending and announced transmission projects providing import capability between Canada and the northeastern United States as reasonable alternatives to the project for purposes of the EIS's comparative analysis.

¹⁴ *See also* 40 C.F.R. §§1502.14(a)-(b) (stating agencies shall "rigorously explore and objectively evaluate all reasonable alternatives...devot[ing] substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.").

VII. DOE Should Consider Coordinating its Review of the Project with Its Ongoing NEPA Review of the Northern Pass Project, through a Comprehensive EIS Addressing Common Issues

The proposed importation of 1,000 megawatts (“MW”) of Canadian-generated electricity through NECPL is intended to pair with a long-term, large-scale strategy on the part of Canadian provinces to expand hydropower generation and increase exports to the United States. This strategy necessarily has significant implications for New England and the Northeast region of the United States (the “Northeast”). As such, it is a critical question whether additional imports of Canadian power are in the best interest of the United States generally, and the New England and other Northeast states in particular. DOE’s NEPA processes for the related transmission projects are clear opportunities to develop a single record on this issue, for use in DOE’s public interest determinations on Presidential Permit applications and in fulfillment of its obligations under NEPA.

CLF urges DOE to initiate a broad, comprehensive EIS to study (i) the nature and extent of the Northeast’s need for Canadian hydro-power, taking into account the nation’s and region’s energy policies and goals, and (ii) the most efficient, least impacting means of importing Canadian power to meet any such need. Such an analysis would be akin to a programmatic EIS and effectively establish a master plan for the region’s importation of Canadian power, including whether and how that power fits into the region’s broader energy needs and policies—for which ample DOE precedent exists.¹⁵

CLF has submitted extensive comments on the need for a comprehensive, regional EIS in its Northern Pass scoping submissions, as well as a motion to stay proceedings in order to prepare a comprehensive assessment of the need for Canadian energy imports. They are incorporated by reference here. *See* Scoping Comments of the Conservation Law Foundation, Presidential Permit Application for Northern Pass Transmission LLC (OE Docket No. PP-371), dated April 12, 2011, *available at* <http://www.clf.org/wp->

¹⁵ *See, e.g.*, Department of Energy, Final Programmatic Environmental Impact Statement For Solar Energy Development in Six Southwestern States, July 2012, *available at* <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=310791>; Upper Great Plains Wind Draft Programmatic Environmental Impact Statement, March 2013, *available at* <http://energy.gov/sites/prod/files/EIS-0408-DEIS-2013.pdf>; Final Uranium Leasing Program Programmatic Environmental Impact Statement, March 2014, *available at* http://energy.gov/sites/prod/files/2014/03/f11/ULP-PEIS-Summary_March%202014_0.pdf; Hawaii Clean Energy Draft Programmatic Environmental Impact Statement, April 2014, *available at* http://energy.gov/sites/prod/files/2014/04/f14/EIS-0459-DEIS-2014_0.pdf.

[content/uploads/2011/04/2011-4-12-DOE-Northern-Pass-Scoping-Comments-FINAL.pdf](#); Conservation Law Foundation's Motion to Stay Proceedings for Preparation of Comprehensive Assessment of Need for Imports of Canadian Energy Into Northeastern United States, (OE Docket No. PP-371), filed April 28, 2011, *available at* http://northernpasseis.us/media/comments/SCI_CCou_42811.pdf; Northern Pass Transmission LLC, Presidential Permit Application, OE Docket No. PP-371 Response to Scoping Report Alternatives Addendum, filed June 27 2014, *available at* www.clf.org/wp-content/uploads/2014/07/Northern-Pass-Alternatives-Addendum-Comments-Jun.-27-2014.pdf. Responsible energy policy and development demand that DOE comprehensively analyze the regional impact of this massive influx of Canadian hydropower before proceeding any further.

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CLF appreciates the opportunity to provide these comments on the proper scope of the EIS for the TDI-NE's NECPL project.

Respectfully submitted,

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