

[6450-01-P]

DEPARTMENT OF ENERGY

(OE Docket No. PP 400)

**Record of Decision for Issuing a Presidential Permit to Transmission Developers, Inc. -
New England, for the New England Clean Power Link Transmission Line Project**

AGENCY: Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy.

ACTION: Record of Decision.

SUMMARY: The Department of Energy (DOE) announces its decision to issue a Presidential permit to Champlain VT, LLC, d/b/a Transmission Developers, Inc. - New England (TDI-NE), to construct, operate, maintain, and connect an electric transmission line across the U.S./Canada international border in northern Vermont. The potential environmental impacts associated with the transmission line are analyzed in the *New England Clean Power Link (NECPL) Project Final Environmental Impact Statement (DOE/EIS-0503)*.

As proposed, the NECPL Transmission Line would extend south from the U.S./ Canada international border approximately 154 miles to a new converter station in Ludlow, Vermont and the existing Coolidge Substation in the towns of Ludlow and Cavendish, Vermont.

ADDRESSES: The Final Environmental Impact Statement (EIS) and this Record of Decision (ROD) are available on the DOE National Environmental Policy Act (NEPA) Website at <http://nepa.energy.gov/> and on the NECPL Project EIS website at <http://necplinkeis.com>. Copies of the Final EIS and ROD are also available for review on the NECPL Project EIS website.

Copies of the Final EIS and this ROD may be requested by contacting Mr. Brian Mills, Office of Electricity Delivery and Energy Reliability (OE-20), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585; phone 202-586-8267; email Brian.Mills@hq.doe.gov.

FOR FURTHER INFORMATION CONTACT: For further information on the NECPL Project EIS, contact Mr. Brian Mills as indicated in the “**ADDRESSES**” section above. For general information on the DOE NEPA process, contact Carol Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585; email askNEPA@hq.doe.gov; or facsimile to 202-586-7031.

SUPPLEMENTARY INFORMATION

Background

Executive Order (EO) 10485 (September 9, 1953), as amended by EO 12038 (February 7, 1978), requires that a Presidential permit be issued by DOE before electricity transmission

facilities may be constructed, operated, maintained, or connected at the U.S. border. DOE may issue or amend a permit if it determines that the permit is in the public interest and after obtaining favorable recommendations from the U.S. Departments of State and Defense. In determining whether issuance of a permit for a proposed action is in the public interest, DOE considers the potential environmental impacts of the proposed project, the project's impact on electricity reliability by ascertaining whether the proposed project would adversely affect the operation of the U.S. electric power supply system under normal and contingency conditions, and any other factors that DOE considers relevant to the public interest.

On June 23, 2014, TDI-NE applied to DOE for a Presidential permit to construct, operate, maintain, and connect a high-voltage direct current (HVDC) transmission line across the U.S./Canada international border. The proposed transmission line would be capable of transmitting up to 1,000 megawatts (MW) of electricity. The line would extend south from the U.S./Canada international border approximately 154 miles. The transmission line would be located underground in Alburgh, Vermont, for approximately 0.5 miles and would enter Lake Champlain. The cables would then be installed in Lake Champlain, primarily buried in sediments, for 97.6 miles in a southern direction. The cables would emerge from Lake Champlain in the town of Benson, Vermont, and would be buried primarily along town roads and state highway rights-of-way for approximately 55.7 miles in a south-easterly direction until terminating at a proposed converter station in Ludlow, Vermont. The alternating current (AC) system would run approximately 0.3 miles from the converter station in Ludlow to the Coolidge Substation located in the towns of Ludlow and Cavendish, Vermont.

Consultation

Pursuant to Section 7 of the Endangered Species Act, DOE has consulted with the U.S. Fish and Wildlife Service (USFWS) regarding the potential impacts on federally listed threatened or endangered species in the area of the proposed NECPL Project, and DOE has prepared a Biological Assessment (BA). The USFWS concurred on December 1, 2015, with DOE's determination that the project would not adversely impact the Indiana bat and the northern long eared bat.

DOE and the Vermont State Historic Preservation Officer (VTSHPO) consulted under Section 106 of the National Historic Preservation Act and signed a Programmatic Agreement (PA) regarding historic properties in October 2015. The PA requires TDI-NE to prepare a Cultural Resources Management Plan, which will meet the survey, data collection and mitigation measures necessary as identified by the VTSHPO.

Documents associated with both these consultations are available on the NECPL Project EIS website at <http://necplinkeis.com>.

NEPA Review

On August 26, 2014, DOE issued a Notice of Intent (79 FR 50901) to prepare an EIS for the NECPL Project and conduct public scoping.

On June 12, 2015, the U.S. Environmental Protection Agency (EPA) published a Notice of Availability (NOA) of the Draft EIS (80 FR 33519), that began a 60-day public review period.

DOE held two public hearings on the Draft EIS in Burlington and Rutland, Vermont, and received no oral comments on the Draft EIS. Throughout the EIS process, DOE worked with the cooperating agencies to ensure that impacts will be appropriately addressed. DOE considered all comments received on the Draft EIS in the preparation of the Final EIS. The comments received and DOE's responses are contained in Appendix M of the Final EIS. DOE issued the Final EIS in October 2015. On November 6, 2015, the U.S. EPA published a NOA of the Final EIS (80 FR 68868).

The U.S. EPA Region 1 (USEPA), the New England District of the U.S. Army Corps of Engineers (USACE), and the U.S. Coast Guard (USCG) participated as cooperating agencies in the preparation of the EIS.

Alternatives Considered

In the EIS, DOE analyzed the No Action Alternative and the Proposed Action of granting the Presidential permit for the construction, operation, maintenance, and connection of the proposed NECPL Project facilities. Under the No Action Alternative, DOE would not issue a Presidential permit for the proposed NECPL Project and the transmission line would not be built. Under the Proposed Action of granting the Presidential permit (the DOE Preferred Alternative), the transmission line would be constructed from the U.S./Canada international border to the new converter station in Ludlow, Vermont and the existing Coolidge Substation in the towns of Ludlow and Cavendish, Vermont.

Analysis of Environmental Impacts

The EIS analyzes potential environmental impacts associated with the alternatives for each of the following resource areas: land use, transportation and traffic, water resources and quality, aquatic and terrestrial habitats and species, aquatic and terrestrial protected and sensitive species, wetlands, geology and soils, cultural resources, infrastructure, recreation, public health and safety, hazardous materials and wastes, air quality, noise, socioeconomics, environmental justice, and cumulative impacts. This analysis assumes the implementation of all TDI-NE-proposed measures to avoid or minimize adverse impacts (Section 5 and Appendix G of the EIS). The potential impacts of the Proposed Action would be predominantly associated with construction activities and would generally have either no effect (e.g., on infrastructure) or minor, temporary, and/or short-term impacts (e.g., on water quality and recreation).

In the floodplain analysis contained in Sections 5.1.3 and 5.2.3 of the EIS, DOE concluded that the proposed NECPL Project would avoid floodplains to the maximum extent practicable, and that appropriate measures to minimize potential harm to or within the floodplains would be taken. The Vermont Secretary of Natural Resources issued a Flood Hazard Area & River Corridor Individual Permit to TDI-NE on November 24, 2015. This permit is available under Public Documents on the NECPL Project EIS website at <http://necplinkeis.com>.

Implementation of the No Action Alternative would not result in changes to existing conditions in these resource areas and is, therefore, the environmentally preferable alternative.

Comments Received on the Final EIS

EPA provided comments on the Final EIS to DOE on December 4, 2015. EPA noted that

earlier comments on the Draft EIS focused on impacts during construction, operation and maintenance of the project to wetlands, water quality, drinking water, environmental justice, and air quality and that the Final EIS addressed many of their environmental concerns. The EPA provided additional comments on “areas where more could be done to characterize and address project impacts.” The- comments, and DOE’s responses, are discussed herein.

EPA referred to its comments on the Draft EIS regarding DOE’s purpose and need and stated that “an analysis of a broader set of alternatives would have improved the environmental review process” for the NECPL Project. DOE reiterates that its role is limited to deciding whether the issuance of a Presidential permit is in the public interest, and that the purpose and need is to respond to the applicant’s request for a Presidential permit.

EPA expressed support for the overland routing approach for the project adjacent to and within existing transportation corridor right-of-way, and added that proper mitigation to address impacts from project construction and operation would be an important part of the project design. In regard to the segment within Lake Champlain, EPA observed that the project “appears to be designed to avoid impacts to shallow water areas” and expressed support for the use of horizontal directional drilling to achieve that objective.

Regarding water supply and water resources, EPA recommended that any future maps of the project mark the location of the ten surface water systems, nine groundwater systems, and four private wells in the vicinity of the project. DOE notes that the locations of the public water supply system sources (lake intakes and groundwater wells) and associated Source Protection

Areas are depicted on the Natural Resource and Public Water Supply Map Series (December 2, 2014) that is available at www.necplink.com. TDI-NE intends to add the locations of the ten surface water systems and nine groundwater systems to the issued-for-construction drawings. Mapping of these features is intended as a precautionary measure and would not imply that construction activities would have an impact on these features. Also, EPA pointed out that the Final EIS indicates that the “deep intake of one supplier (Grand Isle Consolidated Water District [GICWD]) is within one hundred feet of the project.” DOE notes that more recent information on intake locations from the Applicant indicates that the GICWD’s deep intake is over 300 feet from the NECPL Project alignment.

EPA commented that the Final EIS does not describe how the proposed project would meet state regulations and any state guidance for protection of surface and groundwater drinking supplies and recommends that DOE provide this information before the close of the NEPA process. EPA encourages DOE to underscore the importance that TDI-NE consider all state and local land use restrictions designed to protect water supplies. DOE notes that oversight of public water systems is managed by "primacy" agencies, which are either state government agencies or EPA regional offices. The State of Vermont received primacy approval from EPA to supervise the public water systems in its jurisdiction. TDI-NE received a 401 Water Quality Certificate from the State of Vermont on November 24, 2015. The Vermont Agency for Natural Resources (VT ANR) considered the potential impact of the project on groundwater, in accordance with Section 1-04 (A)(2) of the Vermont Water Quality Standards (CVR-12-030-025), and associated Anti-degradation Implementation Procedure. TDI-NE also prepared an Overall Oil and Hazardous Materials Spill Prevention and Contingency Plan for the NECPL

Project.

EPA commented that TDI-NE should provide real-time turbidity data to water suppliers that draw water from Lake Champlain to inform water treatment decisions. EPA recommended that DOE include in the ROD a specific requirement that TDI-NE provide water suppliers this notification. DOE notes that TDI-NE will be required by its permit from the Vermont Public Service Board to notify public water systems, which would involve notifying all ten public water systems with lake intakes near the project in writing at least three weeks prior to construction. The notification would include detailed information regarding the Project schedule, methods, and predicted effects (if any) to sediment and turbidity. Also, the public water systems monitor turbidity in real time at their own intakes already, as required by permits issued by VT ANR.

EPA also recommended to DOE that TDI-NE provide construction management plans to water suppliers prior to construction. TDI-NE will be required by state permit to notify water suppliers in advance of construction and to provide details on the construction process and contact information. Regarding spill notification, TDI-NE would comply with all applicable state and federal laws and would request approval of the Oil and Hazardous Materials Spill Prevention and Contingency Plan from the VT ANR at least 90 days prior to construction.

Regarding sediments and water quality, EPA recommended that town and state culverts be replaced whenever necessary to avoid or minimize any negative environmental impacts. DOE notes that TDI-NE received a stream alternation permit from the VT ANR on November 24,

2015. Specific techniques for crossing all regulated streams were approved after consultation with VT ANR, local towns, and the Vermont Agency of Transportation (VTrans). In a limited number of circumstances, the replacement of a culvert may be necessary due to the size or condition of the culvert. For the majority of streams that are crossed, the culverts would either not be impacted by the project or the need for replacement would be assessed during construction. The specific design at each stream crossing would ensure that the cable is buried at a sufficient depth below each stream's stable longitudinal profile to allow the culverts to be replaced by appropriately-sized structures in the future without needing to disturb the cable. This additional burial depth would help avoid and minimize future negative environmental impacts that would occur when these structures are replaced.

EPA also recommended that TDI-NE commit to compliance with Vermont road and bridge standards during roadside ditch construction. TDI-NE made such commitments in their agreements with VTrans and the Towns of Alburgh, Benson and Ludlow. These commitments can be viewed on TDI-NE's project Web site at www.necplink.com.

EPA commented that DOE should require TDI-NE to consult with the Lake Champlain Basin Project (LCBP) on the issue of invasive species prior to project construction. TDI-NE would be subject to State of Vermont stipulations related to invasive species, which are documented in the Section 401 Water Quality Certificate, Lake Encroachment Permits, and Vermont Wetlands Permits issued by the VT ANR. For the Lake segment, TDI-NE would:

Prior to placing any equipment (e.g., boat, trailer, vehicle, or gear) that has

been in or on any other waterbody other than Lake Champlain into public waters for Project construction or related to Project operation, the Permittee shall inspect and decontaminate the equipment in accordance with the "Aquatic Invasive Species Management and Control Plan, for the New England Clean Power Link HVDC Transmission Project."

DOE notes that TDI-NE consulted with the LCBP staff during the development of the NECPL Project, as well as with parties staffing a similar program in New York. TDI-NE's Invasive Species Management Plan is based on a guidance document that was developed in cooperation with the LCBP and was reviewed and approved by the VT ANR.

Regarding the overland segment of the NECPL Project, TDI-NE is obligated to comply with a Vegetation Management Plan which details the plan for managing, monitoring and controlling non-native invasive species along the project corridor. Monitoring of invasive species per this plan would be required for three years after construction.

In regard to greenhouse gas (GHG) emissions and climate change, EPA commented that it was inappropriate for DOE to compare Project emissions to global levels in Section 5 of the Final EIS. DOE notes that the Final EIS concludes that GHG emissions from construction and operation of the project would be small in comparison to total annual emissions for the state. Moreover, the Final EIS explains that operation of the Project would be expected to offset the need for other sources of electricity, including those with higher levels of GHG emissions. As such, the proposed project could contribute positively to Vermont achieving its GHG reduction

goals. EPA stated that DOE should recommend that TDI-NE ensure that specific detailed mitigation measures are implemented during construction to help reduce and minimize air quality impacts from the construction phase of the project. The Presidential permit will include conditions requiring TDI-NE to implement mitigation measures in the Final EIS including those related to local air emissions during construction of the project.

EPA also commented that DOE could have improved the Final EIS by discussing the emissions profile of the electricity to be imported with that of the “electricity it would likely displace from the New England Power grid.” EPA recommends that DOE use tools on the Council of Environmental Quality’s NEPA.gov Web site. DOE notes that it consulted directly with EPA staff on the Motor Vehicle Emission Simulator (MOVES) program to quantify GHG emissions and associated effects and presented the analysis in Section 5 and Appendix K of the Final EIS.

EPA also commented that the Final EIS could have been “improved with a discussion of the environmental effects that would be avoided through potential reductions in the need to operate power plants with significant cooling water needs.” DOE notes that such a discussion might be beneficial but would be premised on substantial uncertainty.

In regard to environmental justice, EPA acknowledged that analysis in the Final EIS identifies low-income populations and minority populations at the census tract level but commented that it “does not differentiate between the overland and lake segments.” EPA further commented that, “This is significant in that populations likely to be affected by the project will be in the overland section, and the proximity of the project to those populations would be useful to

examine.” DOE notes that its analysis did include potential impacts to low-income populations and minority populations in communities throughout the potentially affected area.

EPA also recommended that DOE and TDI-NE conduct public outreach during the construction phase of the project to keep environmental justice populations informed about the project’s progress and potential impacts, even those anticipated to be minor in nature. DOE notes that in addition to the four public meetings held during DOE’s NEPA process, TDI-NE conducted comprehensive outreach throughout the development of the project using town offices, Front Porch Forums, and targeted letters to landowners in the vicinity of the project route to communicate project information. TDI-NE conducted six local open house meetings in several communities along the project route. TDI-NE plans to continue to use these forums to communicate with local citizens along the project route.

The construction phase of the NECPL project including stipulations, mitigation measures, and public outreach efforts, would be under the jurisdiction of the USACE, VT-ANR, VTrans, the VT Public Service Board, and the Towns of Alburgh, Benson and Ludlow.

Decision

DOE has decided to issue Presidential Permit PP-400 to authorize TDI-NE to construct, operate, maintain, and connect a 1,000-MW HVDC transmission line across the U.S./Canada international border. The permit will include a condition requiring TDI-NE to implement the Applicant-proposed avoidance and minimization measures identified in the EIS.

Basis for Decision

DOE's decision to grant this Presidential permit is based on consideration of environmental impacts, impacts on the reliability of the U.S. electric power supply system under normal and contingency conditions, and the favorable recommendations of the U.S. Departments of State and Defense (which were provided, respectively, in July and August of 2015).

DOE determined that the proposed international electric transmission line would not have an adverse impact on the reliability of the U.S. electric power supply system. In reaching this determination, DOE reviewed the System Impact Study produced by the Independent System Operator New England Inc. (ISO-NE) in October 2016 and a November 1, 2016, letter from ISO-NE. Based on the information available, DOE staff has determined that the 1000 MW of incremental north-to-south transfer, which represents south-bound transmission service requests from Quebec to the United States, will not have a negative impact on the reliability of the United States electric grid if operated consistent with both ISO-New England and North American Electric Reliability Corporation policies and standards, terms and conditions of the Presidential Permit and other regulatory and statutory requirements. Neither DOE nor ISO-NE has studied a south-to-north transfer, so the permit does not authorize such a transfer.

Mitigation

All practicable means to avoid or minimize environmental harm from the alternative selected have been, or will be, adopted. TDI-NE's proposed measures to avoid and minimize adverse impacts are described in the EIS, the BA, and the PA. TDI-NE will be responsible for implementing these avoidance and minimization measures. Additional measures will be

required as a result of ongoing consultations (e.g., regarding Clean Water Act Section 404, the Cultural Resources Management Plan) between TDI-NE and state and federal agencies as part of approval and permitting processes.

Issued in Washington, DC, on December 5, 2016.

A handwritten signature in cursive script, appearing to read "Meghan Conklin", is written over a horizontal line.

Meghan Conklin
Deputy Assistant Secretary
Office of Electricity Delivery and
Energy Reliability