

# **Department of Energy** Washington, DC 20585

June 3, 2010

MEMORANDUM FOR:

The General Counsel (GC-1)

FROM:

Patricia A. Hoffman

Principal Deputy Assistant Secretary Office of Electricity Delivery and

Energy Reliability (OE-1)

SUBJECT:

Notice of Intent to Prepare an Environmental Impact Statement

The Office of Electricity Delivery and Energy Reliability (OE) is processing a Presidential permit application submitted by Champlain Hudson Power Express, Inc., on January 27, 2010, to construct, operate, maintain, and connect a 2,000-megawatt (MW) high-voltage direct current (HVDC) transmission line across the U.S.-Canada border.

The applicant's proposed transmission line consists of four cables that would cross the U.S. international border in Lake Champlain and extend to a proposed converter station in Yonkers, NY, where one bipole (two cables) would be terminated. The remaining bipole would continue to a proposed converter station in Bridgeport, CT. The two converter stations would convert the direct current to alternating current in order to be connected to the U.S. electrical grid. Champlain Hudson's proposed transmission line would connect renewable sources in Canada with load centers in and around the New York City and southwestern Connecticut regions. The overall length of the proposed line in the United States is approximately 384 miles, of which 312 miles would be submerged in waterways, including Lake Champlain, the Hudson River, and Long Island Sound.

After due consideration of the nature and extent of the proposed project, OE has determined that the appropriate level of NEPA review for this project is an environmental impact statement (EIS). Accordingly, the *Federal Register* Notice of Intent to prepare an EIS and to conduct public scoping meetings is attached for your approval.

If you have any questions, please contact Tony Como of my staff, at 202-586-5935.

Attachment

# [6450-01-P] DEPARTMENT OF ENERGY (OE Docket No. PP-362)

Notice of Intent to Prepare an Environmental Impact Statement and to Conduct Public Scoping Meetings, and Notice of Floodplains and Wetlands Involvement; Champlain Hudson Power Express, Inc.

**AGENCY:** Department of Energy (DOE).

ACTION: Notice of Intent to Prepare an Environmental Impact Statement (EIS) and to

conduct Public Scoping Meetings; Notice of Floodplains and Wetlands

Involvement.

SUMMARY: The Department of Energy (DOE) announces its intention to prepare an EIS pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.), the Council on Environmental Quality (CEQ) NEPA regulations (40 CFR parts 1500-1508), and the DOE NEPA implementing procedures (10 CFR part 1021) to assess the potential environmental impacts from its proposed Federal action of granting a Presidential permit to Champlain Hudson Power Express, Inc. (Champlain Hudson) to construct, operate, maintain, and connect a new electric transmission line across the U.S.-Canada border in northeastern New York State. The EIS, Champlain Hudson Power Express Transmission Line Project Environmental Impact Statement (DOE/EIS-0447), will address potential environmental impacts from the proposed action and the range of reasonable alternatives.

The purpose of this Notice of Intent (NOI) is to inform the public about the proposed action, announce plans to conduct seven public scoping meetings in the vicinity of the proposed transmission line, invite public participation in the scoping process, and solicit public comments for consideration in establishing the scope of the EIS. Because the proposed project may involve

actions in floodplains and wetlands, in accordance with 10 CFR part 1022, Compliance with Floodplain and Wetland Environmental Review Requirements, the draft EIS will include a floodplain and wetland assessment as appropriate, and the final EIS or record of decision will include a floodplain statement of findings.

<u>DATES</u>: DOE invites interested agencies, organizations, Native American tribes, and members of the public to submit comments to assist in identifying significant environmental issues and in determining the appropriate scope of the EIS. The public scoping period starts with the publication of this Notice in the *Federal Register* and will continue until [INSERT DATE 45 DAYS AFTER PUBLICATION IN THE *FEDERAL REGISTER*]. Written and oral comments will be given equal weight, and DOE will consider all comments received or postmarked by [INSERT DATE 45 DAYS AFTER PUBLICATION IN THE *FEDERAL REGISTER*] in defining the scope of this EIS. Comments received or postmarked after that date will be considered to the extent practicable.

Locations, dates, and start and end times for the public scoping meetings are listed in the SUPPLEMENTARY INFORMATION section of this NOI.

Requests to speak at any one or more public scoping meeting(s) should be received by Dr. Jerry Pell at the address indicated below on or before [INSERT DATE 15 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]; requests received by that date will be given priority in the speaking order. However, requests to speak also may be made at the scoping meetings.

ADDRESSES: Comments on the scope of the EIS and requests to be added to the document mailing list should be addressed to: Dr. Jerry Pell, Office of Electricity Delivery and Energy Reliability (OE-20), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585; by electronic mail to Jerry.Pell@hq.doe.gov; or by facsimile to 202-318-7761.

For general information on the DOE NEPA process contact: Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585; by electronic mail at askNEPA@hq.doe.gov; or by facsimile at 202-586-7031.

**FOR FURTHER INFORMATION CONTACT:** Dr. Jerry Pell at the addresses above, or at 202-586-3362. For general information on the DOE NEPA process, contact Ms. Carol M. Borgstrom at 202-586-4600, leave a message at 800-472-2756, or at the addresses above.

SUPPLEMENTARY INFORMATION: Executive Order (E.O.) 10485, as amended by E.O. 12038, requires that a Presidential permit be issued by DOE before electric transmission facilities may be constructed, operated, maintained, or connected at the U.S. international border. The E.O. provides that a Presidential permit may be issued after a finding that the proposed project is consistent with the public interest and after favorable recommendations from the U.S. Departments of State and Defense. In determining consistency with the public interest, DOE considers the potential environmental impacts of the proposed project under NEPA, determines the project's impact on electric reliability (including whether the proposed project would adversely affect the operation of the U.S. electric power supply system under normal and

contingency conditions), and considers any other factors that DOE may find relevant to the public interest. The regulations implementing the E.O. have been codified at 10 CFR parts 205.320-205.329. DOE's issuance of a Presidential permit indicates that there is no Federal objection to the project, but does not mandate that the project be undertaken.

Champlain Hudson applied on January 27, 2010, to DOE's Office of Electricity Delivery and Energy Reliability (OE) for a Presidential permit to construct, operate, maintain, and connect a 2,000-megawatt (MW) high-voltage direct current (HVDC) Voltage Source Converter (VSC) controllable transmission system from the Canadian Province of Quebec to the New York City and Southwestern Connecticut regions. After due consideration of the nature and extent of the proposed project, including evaluation of the "Information Regarding Potential Environmental Impacts" section of the Presidential permit application, DOE has determined that the appropriate level of NEPA review for this project is an EIS.

The proposed Federal action is the granting of the Presidential permit and it is anticipated that the project could significantly affect the quality of the human environment. Because the proposed project may involve actions in floodplains and wetlands, in accordance with 10 CFR part 1022, Compliance with Floodplain and Wetland Environmental Review Requirements, the draft EIS will include a floodplain and wetland assessment as appropriate, and the final EIS or record of decision will include a floodplain statement of findings.

DOE invites Tribal governments and Federal, state, and local agencies with jurisdiction by law or special expertise with respect to environmental issues to be cooperating agencies with

respect to the EIS, as defined at 40 CFR part 1501.6. Cooperating agencies have certain responsibilities to support the NEPA process, as specified at 40 CFR part 1501.6(b). The U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency Region 2, and the New York State Departments of Environmental Conservation and Public Service are cooperating agencies with respect to this EIS.

In addition, Champlain Hudson applied to DOE on September 12, 2009, for a Federal loan guarantee for the proposed project in response to a DOE competitive solicitation, "Federal Loan Guarantees for Electric Power Transmission Infrastructure Investment Projects," issued under section 1705, Title XVII, of the Energy Policy Act of 2005 (EPAct). Section 406 of the American Recovery and Reinvestment Act of 2009 (the "Recovery Act") amended EPAct by adding section 1705. This section is designed to address the current economic conditions of the Nation, in part by facilitating the development of eligible renewable and transmission projects that commence construction no later than September 30, 2011. DOE is carrying out an evaluation of the application submitted by Champlain Hudson. Should DOE decide to enter into the negotiation of a possible loan guarantee with Champlain Hudson, DOE would use this EIS to meet its NEPA requirements in making a determination of funding.

#### Applicant's Proposal

The applicant's proposed VSC controllable transmission system consists of two 1,000-MW HVDC bipoles. A bipole consists of two connected submarine or underground cables, one of which is positively charged, and the other negatively charged. In total, four cables would be laid between Quebec, Canada, and a proposed converter station in Yonkers, NY, where one bipole (two cables) would be terminated. The converter station would change the electrical

power from direct current to alternative current. The remaining bipole (two cables) would continue to a proposed converter station in Bridgeport, CT. Champlain Hudson's proposed transmission line would connect renewable sources of power generation in Canada with load centers in and around the New York City and southwestern Connecticut regions.

The project would originate at an HVDC converter station near Hydro-Québec TransEnergie's 765/315-kilovolt (kV) Hertel substation, located southeast of Montreal, and extend approximately 35 miles to the international border between the United States and Canada, crossing in Lake Champlain to the east of the Town of Champlain, NY. Four cables (two bipoles) would extend south under Lake Champlain for approximately 111 miles entirely within the jurisdictional waters of New York State. At the southern end of Lake Champlain, the cables would exit the water just north of Lock C12 of the Champlain Canal (Canal) and would be buried within an existing railroad right-of-way owned by Canadian Pacific Railway (CP) for 1.7 miles. The cables would enter the Canal just south of Lock C12 and continue under the Canal for 5.6 miles before utilizing another CP railroad right-of-way for 0.4 miles to circumvent Lock C11. The cables would re-enter the canal just south of Lock C11 and continue under the Canal for 8.9 miles toward Lock C9 (there is no Lock C10). North of Lock C9, the cables would exit the Canal and would be buried for 0.5 miles within land owned by the New York State Canal Corporation on the eastern shore of Lock C9. The HVDC cables would re-enter the Canal just south of Lock C9 and continue under the Canal for 2.7 miles toward Lock C8.

The Upper Hudson River portion of the Hudson River polychlorinated biphenyl (PCB) site (USEPA Identification Number NYD980763841) stretches from Hudson Falls, New York,

to the Federal Dam at Troy, New York. To avoid installing and burying HVDC cables within this area, the proposed Project route would exit the Canal north of Lock C8 near Durham Basin, where an existing CP railroad right-of-way is located immediately adjacent to the west of the Canal. Upon exiting the canal, the four cables would be buried for approximately 46.1 miles within the CP railroad bypass route to the west of the Hudson River, then connect to a CSX Railroad (CSX) right-of-way in the town of Rotterdam, NY. After approximately 23.7 miles within the CSX right-of-way, the proposed Project route would exit the railroad right-of-way and enter the Hudson River at the town of Coeymans, New York.

Upon entering the Hudson River, the four cables would be buried for 118 miles until they reach the City of Yonkers, NY. Two of the four HVDC cables (one bipole) would terminate at the proposed converter station located in Yonkers for a total length of approximately 319 miles from the U.S. border with Canada to Yonkers, NY. The remaining two cables would continue for approximately 66 miles under the Hudson River, Spuyten Duyvil Creek, the Harlem River, and the East River into Long Island Sound before terminating at a converter station near 1 W Avenue in Bridgeport, CT, for at total length of approximately 384.4 miles from the U.S. border with Canada to Bridgeport. This route is discussed below as being Route A, the applicant's preferred alternative.

The Champlain Hudson Presidential permit application, including associated maps and drawings, can be viewed or downloaded in its entirety from the DOE program Web site at <a href="http://www.oe.energy.gov/permits\_pending.htm">http://www.oe.energy.gov/permits\_pending.htm</a> (see PP-362), or on the project EIS Web site at <a href="http://chpexpressEIS.org">http://chpexpressEIS.org</a>. Also available at these same locations is the March 5, 2010, Federal Register Notice of Receipt of Application (75 FR 10229).

### Agency Purpose and Need, Proposed Action, and Alternatives

The purpose and need for DOE's action is to decide whether to grant Champlain Hudson a Presidential permit for the construction, operation, maintenance, and connection of the proposed international electric transmission line. If granted, the Presidential permit would authorize only that portion of the line that would be constructed, operated, and maintained wholly within the United States.

Three action alternatives (routes) for constructing the proposed transmission line inside the United States have been identified by the applicant. The routes range in length from about 384.4 miles (Route A) to about 386.4 miles (Route C) within the United States, mostly submerged. They differ in the amount of the line that is submerged or buried underground. Route A, the Champlain Hudson preferred alternative, has approximately 72 miles buried underground. Route B has approximately 89 miles buried underground, and Route C has approximately 68 miles buried underground. The remaining distances of all routes are submerged.

All three routes cross the U.S.-Canada border in Lake Champlain at Rouses Point, NY (which is about five miles east of the Town of Champlain, NY), 35 miles from where they would begin southeast of Montreal, Canada. Route A, the applicant's preferred alternative, is described in detail above.

The Route B alternative is the same as Route A except that after exiting the water just north of Lock C12 of the Champlain Canal (Canal), Route B would continue within an existing railroad right-of-way owned by Canadian Pacific Railway (CP) for 8.9 miles. Route B would overlap with Route A where Route A exits the Champlain Canal north of Lock C8 near Durham Basin.

Route C is the same as Route A except for a 6.3 mile segment from north of Lock C8 near Durham Basin, NY, where Route A exits the Champlain Canal (Canal) to where the CP railroad right-of-way crosses the Hudson River. At the point where Route A exits the canal, Route C continues under the Canal for 2.9 miles toward Lock C8. North of Lock C8, the cables would exit the Canal and would be buried for 0.4 miles within land owned by the New York State Canal Corporation on the eastern shore of Lock C8. The HVDC cables would re-enter the Canal just south of Lock C8 and continue under the Canal for 2.1 miles towards Lock C7. North of Lock C7, the cables would exit the eastern side of the canal and be buried for 0.2 miles within land owned by the New York State Canal Corporation before entering the Hudson River to the south of Rogers Island, where the Hudson River flows parallel to the Champlain Canal. The four cables would be buried under the Hudson River, and Route C would travel in a northern direction within the river to the west of Rogers Island for 0.7 miles before reaching the CP railroad crossing in the town of Moreau. The cables would then exit the water to be buried within the CP railroad right-of-way, and Route C then would be the same route as Route A (approximately 4.8 miles south of where Route A exited the Champlain Canal near Dunham Basin). This alternative assumes that PCB dredging activities associated with the

Hudson River Dredging Project planned for the area around Rogers Island are completed by 2013.

Champlain Hudson is also considering two alternative substations identified as feasible points of interconnection in New York, regardless of the alternative route: the Gowanus 345-kV substation, located in New York County, and the Astoria (Polleti) 345-kV substation, located in Queens County. An alternative site under consideration for the DC-AC converter station in New York is land adjacent to the Astoria substation. In Connecticut, 60 Main Street in Bridgeport has been identified as a possible alternative site for the converter station.

Under the No Action alternative, DOE would deny Champlain Hudson's application for a Presidential permit for the proposed international electric transmission line.

#### Identification of Environmental Issues

The EIS will examine public health and safety effects and environmental impacts in the U.S. from the proposed HVDC transmission facilities. This notice is intended to inform agencies and the public of the proposed project, and to solicit comments and suggestions for consideration in the preparation of the EIS. To help the public frame its comments, the following is a preliminary list of several potential environmental issues in the U.S. that DOE and Champlain Hudson have tentatively identified for analysis, including:

1. Impacts on protected, threatened, endangered, or sensitive species of animals or plants, or their critical habitats: The EIS will consider the effects of the construction and operation of the

project on essential fish habitats and species, including the shortnose sturgeon (Federally listed endangered species), leatherback sea turtle (Federally listed endangered species), loggerhead sea turtle (Federal listed threatened species), green sea turtle (Federal listed threatened species), and Atlantic sturgeon (Federally listed candidate species as of October 17, 2006).

- 2. Impacts on aquatic biological resources: The EIS will consider the effects of the construction and operation of the project on shellfish, benthic communities, finfish, and commercial and recreational fisheries, and the potential for introduction of invasive species.
- 3. Impacts on floodplains and wetlands: The EIS will consider the effects of the construction and operation of the project on freshwater, tidal and estuarine floodplains and wetlands. The portions of all three alternative routes that utilize the CP railroad right-of-way would cross Federal Emergency Management Agency-mapped floodplains associated with the Champlain Canal and the Hudson River. The underground connection to the Yonkers and Bridgeport converter stations utilized by all three route alternatives would cross bordering floodplain at the landfall location. Portions of the Sherman Creek East substation site and the underground connection to the substation are located in floodplain associated with the Harlem River in New York City. Limited wetland delineations and available New York State mapping resources indicate that less than 15 acres of wetlands would be temporarily impacted within the construction corridor along the underground portions of Routes A, B, and C.
- 4. Impacts on cultural or historic resources: The EIS will consider the effects of the construction and operation of the project on shipwrecks and National Historic Landmarks; e.g.,

the proposed transmission cable route travels through the boundary of the Crown Point and Fort Ticonderoga National Historic Landmarks. The project facilities would also be located within National Heritage Areas and New York State Heritage Areas, including the Mohawk Valley Heritage Corridor and the RiverSpark (Hudson-Mohawk) Heritage Area.

- 5. Impacts on human health and safety: The EIS will consider the nature and effects of electric and magnetic fields that may be generated by the construction and operation of the project.
- 6. Impacts on air quality: The EIS will consider the effects of the construction and operation of the project on air quality, including the emission and effects of greenhouse gases such as carbon dioxide.
- 7. Impacts on soil: The EIS will consider the effects of the construction and operation of the project on the loss or disturbance of soils.
- 8. Impacts on water quality: The EIS will consider the effects of the installation and operation of the transmission cables on water quality due to potential re-suspension of sediments and contaminants, including PCBs in the Hudson River.
- 9. Impacts to land use: The EIS will consider the effects of the installation and operation of the project on land uses, including agricultural lands, parks, and public lands.

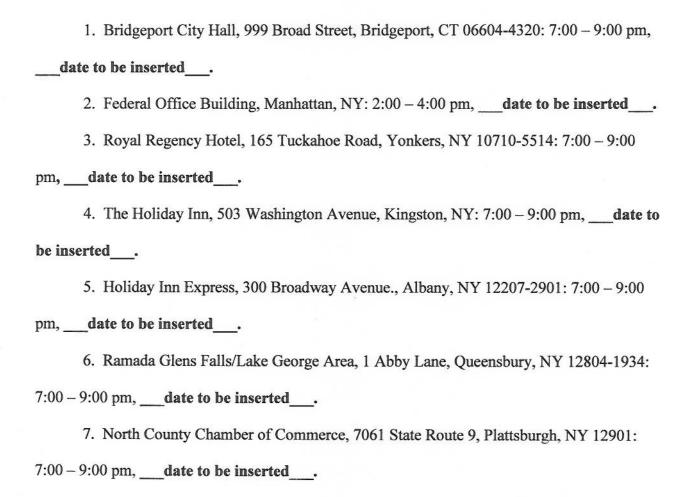
- 10. Visual impacts: The EIS will consider the effects of the installation and operation of the project on visual resources of any above-ground components of the project, including near the locations of the two converter stations.
- 11. Noise impacts: The EIS will consider the effects of the installation and operation of the project on noise levels near the locations of the two DC-to-AC converter stations.
- 12. Socioeconomic impacts: This EIS will consider impacts on community services.
- 13. Environmental justice: The EIS will include consideration of any disproportionately high and adverse impacts on minority and low-income populations.

This list is not intended to be all inclusive or to imply any predetermination of impacts.

DOE invites interested parties to suggest specific issues within these general categories, or other issues not included above, to be considered in the EIS.

#### **Scoping Process**

Interested parties are invited to participate in the scoping process, both to help define the environmental issues to be analyzed and to identify the range of reasonable alternatives. Both oral and written comments will be considered and given equal weight by DOE, regardless of how submitted. Public scoping meetings will be held at the locations, dates, and times as indicated below:



The scoping meetings will be structured in two parts: first, an informal discussion "workshop" period that will not be recorded; and, second, the formal taking of comments with transcription by a court stenographer. The meetings will provide interested parties the opportunity to view proposed project exhibits, ask questions, and make comments. Applicant, DOE, and any cooperating agency representatives will be available to answer questions and provide additional information to attendees to the extent that additional information is available at this early stage of the proceedings.

Persons submitting comments during the scoping process, whether orally or in writing, will receive either paper or electronic copies of the Draft EIS, according to their preference.

Persons who do not wish to submit comments or suggestions at this time but who would like to receive a copy of the document for review and comment when it is issued should notify Dr. Jerry Pell as provided above, with their paper-or-electronic preference.

## **EIS Preparation and Schedule**

In preparing the Draft EIS, DOE will consider comments received during the scoping period. As noted above, comments can be submitted by various means, and will be given the same consideration. They can be submitted to Dr. Jerry Pell either electronically or by paper copy; if the latter, consider using a delivery service because materials submitted by regular mail are subject to security screening, which both causes extended delay and potential damage to the contents. (Warped and unusable CD or DVD discs are common.) Additionally, comments can be submitted through the project Web site established for preparation of the EIS, at <a href="http://CHPExpressEIS.org">http://CHPExpressEIS.org</a>. This site will also serve as a repository for all public documents and the central location for announcements. Individuals may subscribe to the "mail list" feature on the project Web site in order to receive future announcements and news releases.

DOE will summarize all comments received in a "Scoping Report" that will be available on the project Web site and distributed either electronically to all parties of record for whom we have an e-mail address, or by mailing paper copies upon request.

Issued in Washington, D.C., on June \_\_\_\_\_, 2010.

Patricia A. Hoffman
Principal Deputy Assistant Secretary
Office of Electricity Delivery and
Energy Reliability