
United States
Department of Energy

Office of Electricity
OE Docket No. PP-481-2

CHPE LLC



Presidential Permit
No. PP-481-2

March 22, 2022

Presidential Permit

CHPE LLC Order No. PP-481-2

I. BACKGROUND

The United States (U.S.) Department of Energy (DOE) has the responsibility for implementing Executive Order (E.O.) 10,485, as amended by E.O. 12,038, which requires the issuance of a Presidential permit for the construction, operation, maintenance, or connection of electric transmission facilities at the United States international border.¹ DOE may issue such a permit if it determines that issuance of the permit is consistent with the public interest and after obtaining favorable recommendations from the U.S. Departments of State and Defense.

On October 6, 2014, DOE issued Presidential Permit No. PP-362, authorizing Champlain Hudson Power Express, Inc. (CHPEI) to construct, operate, maintain, and connect electric transmission facilities at the international border of the United States and Canada. The facilities would form the Champlain Hudson Power Express Project (the Project). The permitted Project, yet to be constructed, was initially designed as a 1,000-megawatt (MW), high-voltage direct current (HVDC), underground and underwater merchant transmission system that is to cross the United States-Canada international border underwater near the Town of Champlain, New York, extend approximately 336 miles south through New York State, and interconnect to facilities located in Queens County, New York, owned by the Consolidated Edison Company of New York. The aquatic segments of the transmission line are primarily to be submerged in Lake Champlain, the Hudson River, the Harlem River, and the East River. The terrestrial portions of the transmission line are primarily to be buried in existing road and railroad rights-of-way (ROW).

On July 21, 2020, DOE issued Presidential Permit No. PP-481, transferring the permit for the facilities authorized in PP-362 from CHPEI to CHPE LLC at the request of CHPEI and CHPE LLC. The new permit was substantially identical to the former permit, but with a new permittee and an updated order number.

On April 30, 2021, DOE issued Presidential Permit No. PP-481-1, amending CHPE LLC's permit to incorporate proposed minor revisions to the Project route and authorizing the increase in the Project's capacity from 1,000 MW to 1,250 MW.

On November 24, 2021, CHPE LLC filed an application with the Office of Electricity of the DOE as required by regulations at 10 CFR 205.320 et seq., requesting

¹ The Secretary of Energy delegated the authority to administer the International Electricity Regulatory Program, through the regulation of electricity exports and the issuance of Presidential permits, to the Under Secretary for Science (and Energy) in paragraph 1.15 D. of Delegation Order No. S1-DEL-S4-2021-2, issued on December 8, 2021. The Under Secretary for Science (and Energy) redelegated this authority to the Assistant Secretary for Electricity in paragraph 1.8 D. of Redelegation Order No. S4-DEL-OE1-2021-2, also issued on December 8, 2021.

that DOE amend Presidential Permit No. PP-481-1 to clarify the maximum electric transmission capacity of the previously permitted facilities.

In its Supplemental Request for authorization to increase the Project's capacity from 1,000 MW to 1,250 MW in PP-481-1, CHPE LLC noted that it had "submitted an application request (NYISO Queue Position #887) for an additional 250 MW injection at the Point of Interconnection at the New York Power Authority's Astoria Annex 345 kV substation." The New York Independent System Operator (NYISO) evaluated the request via an "Interconnection System Reliability Impact Study for the NYISO Q887: CH Uprate Project" (SRIS) and provided the SRIS to DOE. To gauge the reliability impact of the additional 250 MW injection at the Astoria Annex Substation, the SRIS modeled 1,298 MW of Project withdrawal at the Hertel Substation in Canada to account for expected transmission line losses. In other words, an assumption in the SRIS was that the transmission rate at the U.S.-Canada border would have to be 1,298 MW for 1,250 MW to be injected at the Astoria Annex Substation more than 300 miles away.

Article 3 of PP-481-1 states, in part, that the "maximum non-simultaneous rate of transmission over the permitted facilities shall not exceed 1,250 MW." On its face, this language limits the Project's authorized capacity such that the Project cannot transmit at a rate greater than 1,250 MW anywhere between the U.S.-Canada border crossing and the Astoria Annex Substation. CHPE LLC requests that DOE amend the Presidential Permit to explicitly state that the Project is authorized to inject 1,250 MW at the point of interconnection at the Astoria Annex Substation. This amendment would account for anticipated line losses and is consistent with the reliability analysis conducted by NYISO. The requested capacity increase to allow 1,250 MW injection at the Astoria Annex Substation is the only requested amendment; no other changes to the permitted facilities as described or analyzed in PP-481-1 are contemplated.

Notice of the Amendment Application was published in the *Federal Register* on December 7, 2021 (86 FR 69,233). The Department received no comments on the Amendment Application.

II. DISCUSSION

In determining whether issuance of a Presidential permit is consistent with the public interest, DOE considers the environmental impacts of the proposed project, determines the project's impact on reliability of the United States electric grid, and weighs any other factors that DOE may consider relevant to the public interest. When an Independent System Operator (ISO)/Regional Transmission Organization (RTO) conducts a separate reliability analysis, DOE's practice has been to review the ISO/RTO's analysis and make a determination as to the project's impact on reliability.

A. Reliability Analysis

As part of its review, DOE analyzed the NYISO's SRIS for the Project. NYISO identified two potential areas where the 25-percent increase in the Project's transmission capacity could affect the reliability of the New York transmission system and proposed

mitigation measures. The issues and mitigation measures particular to the design capacity increase were:

- Significant impacts to the short circuit levels at the Farragut, Rainey, Dunwoodie and Sprainbrook 345-kilovolt (kV) Substations. NYISO is requiring an Individual Breaker Analysis in the Class Year Interconnection Facilities Study to verify the identified issues, which may result in additional mitigation measures being undertaken by CHPE LLC.
- Post-contingency overloads on the proposed 345-kV cable between Rainey West and Astoria Annex Substations. NYISO is requiring that the cables be sized appropriately during the design of the Project to avoid the observed overloads.

NYISO's Large Generator Interconnection Agreement (LGIA) requires that any operation of the Project prior to completion of all System Upgrade Facilities, including those identified above, will be allowed only to the extent that operating studies performed by NYISO confirm that such operations fully comply with Applicable Reliability Standards and Good Utility Practice. The LGIA also ensures that prior to commercial operation, the interconnecting facility will be tested to ensure safe and reliable operation, and that it will undergo routine inspection and testing after the start of commercial operation, in accordance with Applicable Reliability Standards and Good Utility Practice, to ensure that it will not adversely affect the reliability of the New York State transmission system.

Based on NYISO's SRIS and associated mitigation requirements, DOE finds that the Project will not have a negative impact on the reliability of the United States electric grid if its operation is consistent with North American Electric Reliability Corporation (NERC) policies and standards and other regulatory and statutory requirements, including the requirements of the NYISO LGIA.

B. Environmental Analysis

DOE previously prepared a Supplement Analysis (SA) (DOE/EIS-0447-SA-1) to evaluate the August 2014 Final Environmental Impact Statement (FEIS) for the Project in light of changes that could have bearing on the potential environmental impacts previously analyzed. The Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations direct agencies to prepare a supplement to either a draft or final EIS when "a major Federal action remains to occur" and "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 CFR 1502.9(d)(1)(ii). DOE's NEPA implementing regulations state that "[w]hen it is unclear whether or not an EIS supplement is required, DOE shall prepare a Supplement Analysis." 10 CFR 1021.314(c). The regulations also provide that "[t]he Supplement Analysis [must] contain sufficient information for DOE to determine whether: (i) An existing EIS should be supplemented; (ii) A new EIS should be prepared; or (iii) No further NEPA documentation is required." 10 CFR 1021.314(c)(2).

The SA analyzed the eight proposed route modifications representing the addition of approximately 5.1 linear miles or an overall increase in project length of less than 2%; the proposed converter station relocation; and the proposed capacity increase from 1,000 MW to 1,250 MW. The SA provided sufficient information for DOE to make the required determination. DOE concluded that the proposed changes would result in an overall net reduction in environmental impacts and were not significant, and that no further NEPA documentation was therefore required.

DOE also previously re-initiated and concluded Endangered Species Act Section 7 (16 U.S.C. 1536), Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.) / Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), and National Historic Preservation Act Section 106 (54 U.S.C. 306108) consultations.

DOE has determined that the clarification of Article 3 in PP-481-1 fits within the typical classes of actions listed in Appendix B4-Categorical Exclusions Applicable to Electric Power and Transmission to Subpart D of the Department's NEPA Implementing Procedures. The specific categorical exclusion being applied is B4.4-Power marketing services and activities: *Power marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits.* 10 C.F.R. Part 1021, App. B to Subpart D, § B4.4. DOE has notified the United States Fish & Wildlife Service and National Oceanic & Atmospheric Administration of the application of this categorical exclusion.

C. Concurrences

On January 21, 2022, DOE received a favorable recommendation from the Department of Defense to issue the amended permit. On March 21, 2022, DOE received a letter from the Department of State stating that it had no objection to DOE issuing the amended permit to CHPE LLC.

D. Public Comments

As noted above, DOE received no comments following its December 7, 2021 notice in the *Federal Register*.

III. FINDINGS AND DECISION

Based on its review of CHPE LLC's application and the NYISO SRIS, DOE finds that the Project will not have a negative impact on the reliability of the United States grid if operated consistently with NERC policies and standards (as approved by the Federal Energy Regulatory Commission (FERC)), terms and conditions of the Presidential permit, and other regulatory and statutory requirements.

Furthermore, based on the SA, DOE determines that no further documentation is needed pursuant to NEPA and that DOE's 2014 conclusions regarding environmental impacts are reaffirmed. The Environmental Impact Statement and Record of Decision for

the original permit, PP-362, informed mitigation measures that were incorporated into that permit and that rendered the Project, as designed at that time, consistent with the public interest. As the SA concluded that the redesigned Project would result in an overall net reduction in environmental impacts, and the SA proposed no changes to mitigation from those described and incorporated in 2014, DOE finds that the Project, as redesigned for the present amended permit, remains consistent with the public interest from an environmental perspective.

As a result of DOE's reliability determination, the environmental analysis, concurrences of the Departments of State and Defense, and the public comment process, DOE determines that the issuance of a Presidential permit to CHPE LLC is consistent with the public interest.²

IV. DATA COLLECTION AND REPORTING

DOE's Energy Information Administration (EIA) is responsible for data collection and reporting under Presidential permits authorizing electric transmission facilities at the U.S. international border and orders authorizing electricity exports to a foreign country. CHPE LLC must submit Form EIA-111 "Quarterly Electricity Imports and Exports Report," or any successor forms, as specified by the EIA. CHPE LLC must also follow EIA instructions in utilizing the Data xChange Community Portal. Questions regarding the data collection and reporting requirements can be directed to the EIA by email at EIA4USA@eia.gov or by phone at 1-855-342-4872.

V. ORDER

Pursuant to the provisions of E.O. 10,485, as amended by E.O. 12,038, and the regulations issued thereunder (10 CFR 205.320 et seq.), permission is granted to CHPE LLC to construct, operate, maintain, and connect electric transmission facilities at the international border of the United States and Canada, as further described in Article 2 below, upon the following conditions:

Article 1. The facilities herein described shall be subject to all conditions, provisions, and requirements of this Permit. This Permit may be modified or revoked by the President of the United States without notice, or by DOE after public notice, and may be amended by DOE after proper application thereto.

Article 2. The facilities covered by and subject to this Permit shall include the following facilities and all supporting structures within the right-of-way occupied by such facilities: a 1,250-megawatt (MW), high-voltage direct current (HVDC) voltage source converter controllable transmission system, comprised of one (1) 1,250-MW HVDC bipole. The transmission line would cross the international border from Canada into the United States underwater in Lake Champlain, in the Town of Champlain, New York, and

² This Order is consistent with the Department's practices regarding change in multiple joint ownership adopted in Presidential Permit Orders 82-3 and 82-4 and deemed appropriate given the unique nature of the Applicant.

extend approximately 336 miles (541 kilometers) south through New York State to Queens County, New York. These facilities are more specifically shown and described in the application filed in this docket, as amended.

Article 3. The facilities described in Article 2 above shall be designed and operated in accordance with the applicable reliability criteria established by the NYISO and NERC (as approved by FERC) or their successors. The maximum non-simultaneous rate of injection at the point of interconnection at the New York Power Authority's Astoria Annex 345-kV substation shall not exceed 1,250 MW. The facilities shall also be operated consistent with other regulatory and statutory requirements, as well as the requirements of the NYISO LGIA. The upgrades identified by NYISO as necessary for interconnection and operation of the facilities must also be completed before the Project is placed into service.

Article 4. CHPE LLC shall implement the Project-specific mitigation and other measures contained in the *Final Champlain Hudson Power Express Transmission Line Project Environmental Impact Statement* (DOE/EIS-0447) and Record of Decision, and all requirements set forth in all other required federal, state, and local permits, approvals, and consultations.

Article 5. No change shall be made in the facilities covered by this Permit, or in the authorized operation or connection of these facilities, unless such change has been approved by DOE.

Article 6. CHPE LLC shall at all times maintain the facilities covered by this Permit in a satisfactory condition so that all requirements of the National Electric Safety Code in effect at the time of construction are fully met.

Article 7. The operation and maintenance of the facilities covered by this Permit shall be subject to the inspection and approval of a designated representative of DOE, who shall be an authorized representative of the United States for such purposes. CHPE LLC shall allow officers or employees of the United States, with written authorization, free and unrestricted access into, through, and across any lands occupied by these facilities in the performance of their duties.

Article 8. CHPE LLC shall investigate any complaints from nearby residents of radio or television interference identifiably caused by the operation of the facilities covered by this Permit. CHPE LLC shall take appropriate action as necessary to mitigate such situations. Complaints from individuals residing within one-half mile of the centerline of the transmission line must be resolved. CHPE LLC shall maintain written records of all complaints received and of the corrective actions taken.

Article 9. The United States shall not be responsible or liable for damages of any kind which may arise from or be incident to the exercise of the privileges granted herein. CHPE LLC shall hold the United States harmless from any and all such claims.

Article 10. CHPE LLC shall arrange for the installation and maintenance of appropriate metering equipment to record permanently the hourly flow of all electric energy transmitted between the United States and Canada over the facilities authorized herein. CHPE LLC shall make and preserve full and complete records with respect to the electric energy transactions between the United States and Canada. CHPE LLC shall collect and submit the data to EIA as required by and in accordance with the procedures of Form EIA-111, “Quarterly Electricity Imports and Exports Report” or its successor form.

Article 11. Neither this Permit nor the facilities covered by this Permit, or any part thereof, shall be transferable or assignable, unless specifically authorized by DOE in accordance with Title 10, Code of Federal Regulations, Part 205.

Article 12. Upon the termination, revocation, or surrender of this Permit, the permitted facilities that are owned, operated, maintained, and connected by CHPE LLC, and described in Article 2 of this Permit, shall be removed and the land restored to its original condition within such time as DOE may specify and at the expense of CHPE LLC. If CHPE LLC fails to remove such facilities and/or any portion thereof authorized by this Permit, DOE may direct that such actions be taken for the removal of the facilities or the restoration of the land associated with the facilities at the expense of CHPE LLC. CHPE LLC shall have no claim for damages by reason of such possession, removal, or repair. However, if certain facilities authorized herein are useful for other utility operations within the bounds of the United States, DOE may not require that those facilities be removed and the land restored to its original condition upon termination of the international interconnection.

Article 13. CHPE LLC has a continuing obligation to give DOE written notification as soon as practicable of any prospective or actual changes of a substantive nature in the circumstances upon which this Order was based, including but not limited to changes in authorized entity contact information.

Signed in Washington, D.C., on March 22, 2022.

Michelle Manary
Acting Deputy Assistant Secretary
Electricity Delivery Division
Office of Electricity