

[6450-01-P]

**DEPARTMENT OF ENERGY**

**(OE Docket No 371)**

**Record of Decision for Issuing a Presidential Permit to Northern Pass Transmission LLC for the Northern Pass Transmission Line Project**

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

**ACTION:** Record of Decision.

**SUMMARY:** The U.S. Department of Energy (DOE) announces its decision to issue a Presidential permit to Northern Pass Transmission LLC (Northern Pass or Applicant) to construct, operate, maintain, and connect an electric transmission line across the U.S./Canada international border in northern New Hampshire. The potential environmental impacts associated with the transmission line are analyzed in the *Final Northern Pass Transmission Line Project Environmental Impact Statement* (DOE/EIS-0463). The transmission line would cross the U.S./Canada international border into Pittsburg, NH and extend approximately 192 miles to an existing substation located in Deerfield, NH.

**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 <https://energy.gov/nepa/> and the Northern Pass Transmission Line Project EIS website at <http://www.northernpasseis.us/>. The EIS website also includes a list of

libraries where the final EIS is available for review. 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](mailto:Brian.Mills@hq.doe.gov).

**FOR FURTHER INFORMATION CONTACT:** For further information on the Northern Pass Transmission Line Project EIS, contact Mr. Brian Mills as indicated in the **ADDRESSES** section above.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

Executive Order (EO) 10485 (Sept. 3, 1953), as amended by EO 12038 (Feb. 3, 1978), delegates to DOE the authority to issue Presidential permits for the construction, operation, maintenance, or connection of electricity transmission facilities at the U.S. international borders. DOE may issue 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 would be in the public interest, DOE assesses the potential environmental impacts of the proposed project, the potential impact of the proposed project on electric reliability, and any other factors that DOE considers relevant to the public interest. Issuance of a Presidential permit is a Presidential action, carried out by DOE pursuant to delegated Presidential authority. Accordingly, DOE has no legal obligation to prepare an EIS when it considers a Presidential permit application, since NEPA does not apply to acts of the President. Nonetheless, DOE opts to comply with NEPA and other Federal statutes as part of its

“public interest” review of Presidential permit applications, pursuant to DOE’s long-standing Presidential permit regulations.

On October 14, 2010, Northern Pass applied to the DOE for a Presidential permit to construct, operate, maintain, and connect a high voltage direct current (HVDC) electric transmission line with a bidirectional 1,200-megawatt (MW) transfer rating across the U.S./Canada international border. This application was amended in July 2013 and August 2015. The August 2015 amendment represents DOE’s Preferred Alternative (proposed Northern Pass Project or proposed Project). It includes burial of an additional 52 miles of the transmission line over what was proposed in the original application, a minor shift in the international border crossing location, two new transition stations, a change in project size from 1,200 MW to 1,000 MW with a potential transfer capacity of up to 1,090 MW, and other design changes. The proposed Northern Pass Project would cross the international border from Canada into the U.S. in Pittsburg, NH, and extend approximately 158 miles, from the U.S. border to a new DC-to-Alternating Current (AC) converter station to be constructed in Franklin, NH. From Franklin, the 345-kV AC electric transmission line would extend for approximately 34 miles to the proposed Project terminus at an existing substation in Deerfield, NH. The proposed Northern Pass Project would be constructed and owned by Northern Pass. Portions of the proposed Project would cross the White Mountain National Forest (WMNF), requiring a Special Use Permit (SUP) from the U.S. Forest Service (USFS). The USFS issued a draft ROD in September 2017 related to the SUP. In order to construct the proposed Project, Northern Pass is required to obtain a Certificate of Site and Facility (Certificate) from the New Hampshire Site Evaluation Committee (NHSEC). The NHSEC is responsible for

evaluating, issuing and determining the terms and conditions of any Certificate for an energy facility in NH. The NHSEC is in the process of evaluating the proposed Northern Pass Project.

As proposed, the Project would include both overhead and underground line along with six aboveground transition stations, one new converter station, and substation upgrades.

### **Consultation**

Consistent with 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 Northern Pass Project, and DOE has prepared a Biological Assessment (BA). On April 14, 2017, DOE sent USFWS a letter requesting initiation of formal Section 7 consultation under the Endangered Species Act. DOE prepared a final BA and submitted it to USFWS on June 16, 2017. The USFWS on October 19, 2017, submitted a Biological Opinion (BO) to DOE which concluded formal consultation. In the BO, USFWS concurred with DOE's determination that the proposed Northern Pass Project "may affect, but is not likely to adversely affect the federally threatened small whorled pogonia (*Isotria medeoloides*), Canada lynx (*Lynx canadensis*), and northern long-eared bat (*Myotis septentrionalis*); and the federally endangered dwarf wedgemussel (*Alasmodonta heterodon*) and Indiana bat (*Myotis sodalister*)." DOE determined in the BA that the proposed Northern Pass Project "may affect, and is likely to adversely affect the Karner blue butterfly (*Lycaeides melissa samuelis*)." In the BO, USFWS concluded that "the Project, as proposed, is not likely to

jeopardize the continued existence of the Karner blue butterfly” but likely will result in incidental take of some Karner blue butterfly and, therefore, included an enforceable incidental take statement. DOE is conditioning its Presidential permit to require the Applicant to comply with all requirements set forth by USFWS in the BO. The BA and the BO are available on the Northern Pass Transmission Line Project EIS website at <https://www.northernpasseis.us/consultations/section-7/>.

Consistent with Section 106 of the National Historic Preservation Act (NHPA), DOE consulted with the New Hampshire and Vermont State Historic Preservation Officers (SHPOs) regarding the potential adverse effects to historic properties from the proposed Northern Pass Project. This consultation is continuing in accordance with a Section 106 Programmatic Agreement (PA) executed between DOE, the New Hampshire and Vermont SHPOs, the Advisory Council on Historic Preservation, and Northern Pass. The PA is available on the Northern Pass Transmission Line Project EIS website at <https://www.northernpasseis.us/consultations/section106/>. DOE is conditioning its Presidential permit to require the Applicant to comply with the terms of the PA. The PA includes processes for identifying National Register of Historic Places (NRHP)-eligible historic properties, assessing effects of the proposed Northern Pass Project on historic properties, and resolving any adverse effects of the proposed Northern Pass Project on historic properties. The PA requires Northern Pass to prepare a Historic Properties Treatment Plan, which will establish specific treatment measures to avoid, minimize, and mitigate adverse effects.

## **NEPA Review**

On February 11, 2011, DOE issued a Notice of Intent (NOI) in the *Federal Register* (76 FR 7828) to prepare an EIS for the Northern Pass Project and conduct public scoping. Seven public scoping meetings were held March 14 through 20, 2011. On September 6, 2013, DOE issued an Amended NOI (78 FR 54876) in which DOE announced its intention to modify the scope of the EIS (based on an amended application from the Applicant), to conduct additional public scoping meetings, and to end the previously indefinitely extended public scoping period. Four additional public scoping meetings were held September 23 through 26, 2013. The scoping period closed on November 5, 2013. During the entire scoping period, the DOE received 7,560 oral and written comments.

On July 31, 2015, the Environmental Protection Agency (EPA) issued a Notice of Availability (NOA) for the draft EIS in the *Federal Register* (80 FR 45652), which began a 90-day public comment period. On September 30, 2015, following receipt of the August 2015 amended application from Northern Pass, DOE issued an NOI to Prepare a Supplement to the Draft Northern Pass EIS (80 FR 58725), and extended the public comment period to December 31, 2015. EPA issued the NOA for the supplement to the draft EIS (80 FR 72719) on November 20, 2015. DOE ultimately extended the public comment period for the draft EIS and the supplement to the draft EIS through April 4, 2016 (81 FR 5995). DOE held four public hearings on the draft EIS and the supplement to the draft EIS March 7 through 11, 2016. DOE received 1,037 comments on the draft EIS and the supplement to the draft EIS. The comments raised concerns related to the following aspects of the draft EIS and supplement to the draft EIS, among others: purpose and need statement, project objectives, alternatives, visual resources,

socioeconomics, historic and cultural resources and the Section 106 process, water resources, and the NEPA process. See Section 1.5.4.1 of the final EIS for additional information regarding these comments. DOE considered all comments received on the draft EIS and the supplement to the draft EIS in the preparation of the final EIS, including those received after the close of the public comment period. Comment letters and detailed responses are included in Appendix L of the final EIS. EPA issued a NOA for the final EIS on August 18, 2017 (82 FR 39424).

The DOE invited several federal and state agencies to participate in the preparation of the draft and final EIS as cooperating agencies because of their special expertise or jurisdiction by law. The USFS – WMNF, EPA – Region 1, the U.S. Army Corps of Engineers (USACE) – New England Region, and the New Hampshire Office of Energy and Planning (NHOEP) participated as cooperating agencies in the preparation of the EIS. The WMNF Forest Supervisor will use the EIS to inform its decision regarding the SUP. In September 2017, the WMNF Forest Supervisor issued a draft ROD related to the SUP.

### **Alternatives Considered**

In the EIS, DOE analyzed the No Action Alternative, the Proposed Action, and ten additional action alternatives. Under the No Action Alternative, DOE would not issue a Presidential permit and the USFS would not issue a SUP for the proposed Project, the proposed transmission system would not be constructed, and the potential impacts from the proposed Project would not occur. Under the Proposed Action of granting the Presidential permit (DOE's Preferred Alternative, Alternative 7), the transmission line

would cross the U.S./Canada international border in Pittsburg, NH and extend approximately 192 miles to an existing substation located in Deerfield, NH. The ten additional action alternatives (Alternatives 2 through 6, with variations) involve variations in route and total length, including varying lengths of overhead and underground line and are described in detail in Chapter 2 of the final EIS.

DOE's Presidential permitting authority is limited to the international border crossing; however, it is DOE's policy to analyze not only the border crossing, but also the alignment of new infrastructure required between the border crossing and connection to the existing U.S. electricity system as a "connected action" under NEPA. The EIS analyzed the potential environmental impacts associated with the Applicant's proposed route (Alternative 7) and ten alternative routes that were proposed by the Applicant, agencies and the public during scoping and development of the EIS.

### **Analysis of Potential Environmental Impacts**

The EIS analyzed potential environmental impacts associated with the alternatives for each of the following resource areas: visual resources, socioeconomics, recreation, health and safety, traffic and transportation, land use, noise, historic and cultural resources, environmental justice, air quality, wildlife, vegetation, water resources, geology and soils, and cumulative impacts. Chapter 4 of the final EIS contains the analysis of the potential environmental impacts of the alternatives. Analysis of the impacts assumed the implementation of Applicant-proposed impact avoidance and minimization measures contained in Appendix H of the final EIS.



## **Floodplain Statement of Findings**

DOE prepared this Floodplain Statement of Findings in accordance with DOE's regulations, entitled "Compliance with Floodplain and Wetland Environmental Review Requirements" (10 CFR Part 1022). The Floodplain Statement of Findings addresses the proposed Northern Pass Project that would cross the U.S./Canada international border into Pittsburg, NH and extend approximately 192 miles to an existing substation located in Deerfield, NH. As described above and in Chapter 2 of the EIS, DOE analyzed the proposed Project as well as the No Action Alternative and ten action alternatives. Appendix A of the final EIS contains maps of the proposed Northern Pass Project, and Appendix A of the Water Resources Technical Report contains maps of the proposed Northern Pass Project, including watershed, surface water and wetlands locations. The required floodplain and wetland assessment was conducted during development and preparation of the EIS (see Sections 4.1.13, 4.2.13, 4.3.13, 4.4.13 and 4.5.13 of the final EIS and the final EIS' Water Resources Technical Report). Federal Emergency Management Agency (FEMA) data were used to determine the influence of flood zones. According to the Water Resources Technical Report, construction and operation activities (e.g. trenchless installation, structure construction, converter/transition substations, access roads, clearing activities, etc.) associated with the proposed Northern Pass Project would potentially affect approximately 1,449 acres of floodplains, resulting in increased erosion and sedimentation. The majority of the effected acres would be in the 500-year floodplain, rather than the 100-year floodplain. Each of the action alternatives analyzed in the FEIS would involve disturbance of floodplains; given the nature of the proposed Project and its geographic expanse, disturbance of floodplains was found to be

unavoidable. However, DOE determined that the potential harm to floodplains from the proposed Project will be avoided or minimized by implementing the Applicant-Proposed Measures listed in Appendix H of the final EIS and Appendix B of the Water Resources Technical Report. These measures include: minimizing impacts through route selection, siting and design, complying with permit requirements and EO 11988 for Floodplain Management, implementing best management practices, installing erosion and sediment controls prior to construction, and ensuring that construction within the White Mountain National Forest will be carried out consistent with the Forest Plan. The Water Resources Technical Report concluded that by complying with New Hampshire best management practices, adverse impacts to floodplains would be minimized and be indirect, localized, short-term and minor. DOE has determined that the project would comply with applicable floodplain protection standards.

### **Environmentally Preferable Alternative**

Implementation of the No Action Alternative would not result in changes to the existing condition in the above-listed resource areas and is, therefore, the environmentally preferable alternative.

### **Comments Received on the Final EIS**

Comments on the final EIS were received from the EPA, the Appalachian Mountain Club, the Pessamit Innu First Nation, New Hampshire Department of Environmental Services, Hydro Quebec, the Conservation Law Foundation, and one

individual. These comments may be viewed on the Northern Pass Transmission Line Project EIS website at <http://www.northernpasseis.us/>. DOE considered all comments received on the final EIS and concluded that those comments do not identify a need for further NEPA analysis. The Appendix to this ROD summarizes DOE's consideration of those comments.

### **Decision**

DOE has decided to issue Presidential permit PP-371 to authorize Northern Pass to construct, operate, maintain, and connect a HVDC transmission line capable of transmitting up to 1,090 MW of power across the U.S./Canada international border in Pittsburg, NH at Latitude 45.017719 N, Longitude -71.500028 W. The permit will include conditions requiring Northern Pass to implement the impact avoidance and minimization measures identified in the final EIS, the requirements set forth by USFWS in the BO, and the terms of the PA.

### **Basis for Decision**

DOE determined that issuance of a Presidential permit for the proposed Northern Pass Project is consistent with the public interest. The decision by DOE to grant a Presidential permit is based on consideration of the potential environmental impacts, impacts on the reliability of the U.S. electric power supply system, and the favorable recommendations of the U.S. Departments of State and Defense provided, respectively,

on May 24 and June 27 of 2016.

Notwithstanding DOE's analysis of alternatives in the final EIS, DOE does not have siting or alignment authority for projects proposed in applications for Presidential permits. In this case, the siting authority is the NHSEC. DOE has evaluated the Preferred and reasonable alternatives and has determined that the Preferred Alternative meets the project objectives and is consistent with the project being reviewed by the NHSEC.


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 considered the operation of the electrical grid with a specified maximum amount of electric power transmitted over the proposed line. DOE reviewed the reliability studies conducted by RLC Engineering for Independent System Operator (ISO) New England (ISO-NE). A summary of the study is available on the EIS web site at <http://www.northernpasseis.us>. DOE also considered ISO-NE's interconnection standards and its restrictions on any requested transmission service to and from the proposed interconnection.

### **Mitigation**

All practicable means to avoid or minimize environmental harm from the proposed Northern Pass Project have been, or will be, adopted. Applicant-proposed measures to avoid and minimize adverse impacts are described in Appendix H of the final EIS and Appendix B of the Water Resources Technical Report. The Applicant will be responsible for implementing these avoidance and minimization measures as well as

applicable measures required through ongoing consultations and other Federal, State and local permitting processes.

Issued in Washington, DC on November 16, 2017.



A handwritten signature in cursive script, reading "Catherine Jereza", is written over a horizontal line.

Catherine Jereza  
Deputy Assistant Secretary  
Transmission Permitting and Technical  
Assistance Division  
Office of Electricity Delivery and Energy  
Reliability

**Appendix: Comments Received on the Final EIS**

DOE received seven comment documents on the final EIS – from the Appalachian Mountain Club, the EPA, Pessamit Innu First Nation, Hydro-Quebec, New Hampshire Department of Environmental Services, the Conservation Law Foundation, and one individual. These comment documents may be viewed on the Northern Pass Transmission Line Project EIS website at <http://www.northernpasseis.us/>. DOE considered all comments contained in these comment documents. The comments address a variety of topics; however, many of the comments reiterated issues already raised during the comment period for the draft EIS and supplement to the draft EIS. All prior comments submitted on the draft EIS and supplement to the draft EIS and DOE responses to those comments have been published in the final EIS, Appendix L, *Comment Response Document*, and are not being revisited in the ROD.

**Appalachian Mountain Club**

Appalachian Mountain Club stated that “NH DOT has determined that burial under the roadway is contrary to their policy and burial would need to take place outside of the road surface.” DOE reviewed the NHSEC session cited by Appalachian Mountain Club but did not find a conclusion by NHDOT. Burial in the roadway and necessary authorizations was addressed in the final EIS. The final EIS explained that “[t]he Applicant would be required to secure an authorization in order to construct the Project within any roadway corridor . . . Areas of the Project located within a NHDOT ROW would be reviewed by NHDOT and are also subject to the provisions of the NHDOT Utility Accommodation Manual.” (Section 4.1.6.1 of final EIS.) Also, for “portions of

the Project located underground adjacent to or beneath state and federal highways, the Applicant would be required to comply with direction outlined in the NHDOT Utility Accommodation Manual. Required permits and authorizations would not be acquired through this EIS process, but rather through a separate, subsequent process” (Section 1.7.3.2). In addition, the final EIS analyzed potential impacts not only within the roadway, but in adjacent areas. For example, for assessing potential impacts on historic and cultural resources, DOE defined a direct area of potential affects for Alternative 7 (Proposed Action/Preferred Alternative) as a “20-foot-wide area extending away from the edge of pavement on both sides of existing roads in which portions of the Project may be buried” (Table 3-7 of final EIS).

#### **Environmental Protection Agency**

In commenting on potential impacts to bedrock aquifers, EPA said “the updated [Water Resources technical] report fails to capture potential impacts to bedrock aquifers,” and referenced statements in the technical report such as “No bedrock aquifers are within the study area.” EPA said such statements “do not appear to comport” with other information in that technical report and general knowledge of New Hampshire aquifers.

In response to EPA’s comment that the Water Resources Technical Report includes statements such as “[n]o bedrock aquifers are within the study area,” DOE clarifies that this conclusion applies to particular segments of the route alternatives, as delineated in the technical report. In total, DOE identified less than 1 acre of bedrock aquifer in the study area for all of the route alternatives assessed in the Water Resources Technical Report. For example, DOE identified approximately 0.1 acres of bedrock aquifer in the

study area for Alternative 7 (DOE's Preferred Alternative) (0.1 acres in the Central section). DOE also explained in the technical report that "once more detailed plans are in place, a coordinated effort with the NHDES, local communities, and well owners would need to occur to verify the location of nearby wells and ensure that they are protected during construction of the Project." The technical report describes the process for reviewing well data including that a "GIS-based review of data supplied by NH GRANIT was completed to identify locations of private water supply wells along the existing transmission line ROW. This data layer identifies private wells established for a variety of uses, including drinking water, industrial, agricultural, and commercial, among others."

In commenting on protection of drinking water in the study area, EPA said "[t]he FEIS response to EPA's comments does not indicate whether the Public Drinking Water Suppliers for these communities were notified about the proximity of the project to their public supply wells. Also, there do not appear to be any applicant proposed measures (APMs) that apply directly to groundwater or any that apply specifically to drinking water or drinking water protection areas. We recommend the DOE condition the Record of Decision (Presidential permit) to require the Applicant to avoid or minimize impacts to these resources, including specific steps for contacting well owners (both private and public), conducting water quality testing, and monitoring for impacts to well yield in areas near blasting and HDD. These steps would represent practicable means to avoid or minimize environmental harm from the project." The Water Resources Technical Report (Section 3) of the final EIS acknowledges the potential impacts of blasting on



groundwater, including on wells. The report states that blasting "could temporarily increase turbidity in groundwater wells and infiltration of material spills or leaks near the blast zone." DOE believes that the issues raised by EPA have been addressed in the mitigation measures incorporated in the final EIS. The Water Resources Technical Report (Section 3) goes on to state that "BMPs would be implemented to prevent the contamination of groundwater and to identify private and public water supply wells in advance." In addition, the APMs listed in Table H-1 of Appendix H (noise), include the following measures, "[f]or any required project blasting activities, a blasting plan will be developed that addresses, among other things, . . . pre-blast surveys, notification protocols, and safety analysis. Blasting in any sensitive areas will be coordinated with the community and addressed in the construction planning phase." Should the project be approved, specific standards and methods required by the New Hampshire Department of Environmental Services would be established during the subsequent state permitting process.

Regarding wetland issues, EPA commented that "the FEIS does not analyze the viability of the hybrid alternative and additional narrative comparing the hybrid with the other alternatives would have made the EIS more valuable for future state and federal permitting. Regardless, the information provided will help focus the upcoming analysis of project design alternatives and determination of the least environmentally damaging practicable alternative by the Corps of Engineers. EPA intends to continue to work closely with the applicant and the Corps of Engineers regarding project routing, impact minimization throughout the balance of the design and permitting process for the

project.” DOE thanks EPA for its commitment to work with the applicant and the Corps regarding project routing and impact minimization.

### **Pessamit Innu First Nation and Hydro-Quebec**

In an August 30, 2017 letter, the Pessamit Innu First Nation provided information about its past experiences with Hydro-Quebec and ongoing concerns related to Hydro-Quebec’s operations including planned modifications, operational changes, Canadian environmental review and potential effects on the Pessamit Innu First Nation and its territory. Hydro-Quebec submitted a letter to DOE on October 11, 2017 in which it responded to points raised in the letter from the Pessamit Innu First Nation. DOE acknowledges the differing viewpoints of the commenters. However, the issues raised relate to impacts and processes in Canada. As DOE explained in its response to similar comments in Appendix L of the final EIS, potential impacts in Canada are beyond the scope of the NEPA analysis, and “NEPA does not require an analysis of potential environmental impacts that occur within another sovereign nation that result from actions approved by that sovereign nation.” As the final EIS noted, DOE does not analyze the impacts in Canada of Hydro-Québec power generation and transmission line projects because these impacts are analyzed in accordance with the sovereign laws of Canada and because DOE (nor any other U.S. federal agency) has no authority over development of the Hydro-Québec system.”

### **New Hampshire Department of Environmental Services**

In its September 22, 2017 letter to DOE, the New Hampshire Department of Environmental Services (NHDES) provided recommended conditions that “represent

NHDES' detailed technical comments relative to the potential environmental impacts (and proposed mitigation measures) related to this project." NHDES attached a March 1, 2017 letter and set of conditions it sent to the NHSEC and characterized them as "conditions . . . that are to be incorporated into the decision-making process by the NHSEC during its upcoming deliberations." DOE has reviewed the recommended conditions provided by NHDES. DOE notes that Appendix H (Applicant-Proposed Impact Avoidance and Minimization Measures) of the final EIS references the March 2017 NHDES conditions. Specifically, Appendix H states "this analysis assumes that the Applicant will adhere to all stipulations defined in all permits issued by the State of New Hampshire, including those defined by the New Hampshire Department of Environmental Services in their March 2017 approval recommendation to the SEC (NHDES 2017a)."