
United States
Department of Energy

Office of Electricity Delivery and Energy Reliability
OE Docket No. PP-398

Minnesota Power



Presidential Permit
No. PP-398

November 15, 2016

Presidential Permit

Minnesota Power

Order No. PP-398

I. BACKGROUND

The Department of Energy (DOE) has the responsibility for implementing Executive Order (EO) 10,485, as amended by EO 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 the Permit is in the public interest and after obtaining favorable recommendations from the U.S. Departments of State and Defense.

On April 15, 2014, Minnesota Power filed an application with the Office of Electricity Delivery and Energy Reliability of the Department of Energy (DOE) for a Presidential Permit to construct, operate, maintain, and connect a 500 kilovolt (kV) transmission system across the U.S.-Canada border. Minnesota Power has its principal place of business in Duluth, Minnesota. Minnesota Power is an investor-owned utility and provides retail electric service to 144,000 customers and wholesale electric service to 16 municipalities and several industrial customers. Minnesota Power is an operating division of ALLETE, Inc.

The proposed Great Northern Transmission Line (GNTL) project is an overhead alternating current (AC) electric transmission line that would originate at the Dorsey Substation northwest of Winnipeg, Manitoba, Canada, and terminate at the existing Blackberry Substation east of Grand Rapids, Minnesota. On October 29, 2014, the Applicant submitted an amendment to their Presidential Permit application, changing the location of the proposed international border crossing to approximately 4.3 miles east of the original proposal, to cross the U.S./Canada border in Roseau County, Minnesota at latitude 49° 00' 00.00" N and longitude 95° 54' 50.49" W - approximately 2.9 miles east of Highway 89 in Roseau County. The length of the transmission facilities in the United States would be 224 miles.

DOE published a notice in the *Federal Register* on May 14, 2014, (79 Fed. Reg. 27587) inviting comments and motions to intervene. None was received.

¹ The authority to administer the International Electricity Regulatory Program through the regulation of electricity exports and the issuance of Presidential Permits has been delegated to the Assistant Secretary for the Office of Electricity Delivery and Energy Reliability (OE), in Redelegation Order No. 00-006.05 issued on November 17, 2014.

II. DISCUSSION

In determining whether issuance of a Presidential Permit is in the public interest, DOE as a policy considers the environmental impacts of the proposed Project, determines the Project's impact on electric reliability, and weighs any other factors that DOE may consider relevant to the public interest. When, as in this case, a separate reliability analysis is conducted by an independent system operator (ISO), DOE's practice has been to review the ISO's analysis and make a determination as to the project's impact on reliability.

A. Reliability Analysis

DOE staff reviewed the System Impact Study (MH-US Transmission Service Request (TSR) Sensitivity Analysis) conducted by the Midcontinent Independent System Operator (MISO) on the new transmission line for the MH-US south- (summer) and US-MH north- (winter) bound TSRs. In addition the staff reviewed GNTL Stability Analysis prepared by Siemens PTI, Short Circuit Study prepared by Power Engineers, and the New Tie Line Loop Flow Impact study report submitted by Minnesota Power.

MISO performed AC contingency analysis for transfer from Manitoba Hydro to the U.S. for 883MW during summer months and U.S. to Manitoba Hydro for winter months to accommodate new TSRs under the MISO's Open Access Transmission and Energy Markets Tariff. The combined transmission service requests seek to reserve up to 883MW of yearly, firm, network service from MISO to Manitoba Hydro during winter and from Manitoba Hydro to MISO during summer. The procedure, criteria, and methodology used to perform the System Impact Study in the May 30, 2014 Final Report for this 883MW transfer from Manitoba Hydro to the U.S. during summer and U.S. to Manitoba Hydro during winter months are acceptable, and the results indicate some constraints, improvements to mitigate these constraints, and the estimated costs required for these improvements.

The August 7, 2014 Stability Analysis Siemens Report concludes that dynamics analysis simulations to evaluate the dynamic performance of the GNTL, with 883MW of incremental north-to-south transfer, which represents south-bound transmission service requests from Manitoba to the United States, and 750MW of south-to-north transfer between Manitoba and the United States, which represent north-bound transmission service requests from the United States to Manitoba, are transiently stable and there are no violations of transient-period performance criteria.

The March 8, 2016 Short Circuit Study finds replacement of five roughly 40 year old 115kV circuit breakers that failed the simplified E/X screening and may have insufficient interrupting current ratings. Minnesota Power confirmed the above-mentioned breakers have been added to the replacement list prior to the energization of the GNTL. The results of the New Tie Line Loop Flow Impact study indicate that the Eastern Plan-GNTL project is a superior long-term plan for developing the proposed 500kV tie line between Manitoba and the United States.

DOE has consistently expressed its expectation that owners of international transmission facilities provide access across the border in accordance with the principles of comparable open access and non-discrimination contained in the Federal Power Act and articulated in the Federal Energy Regulatory Commission's Order No. 888, *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities*.¹ The facilities to be operated by Minnesota Power are deemed suitable for third party access to transmit electricity between the United States and Canada.

B. Environmental Analysis

On June 27, 2014, DOE issued a Notice of Intent (NOI) (79 Fed. Reg. 36493) to prepare an environmental impact statement (EIS) for the GNTL Project and to conduct Public Scoping Meetings. The NOI also indicated that the GNTL Project would involve actions in floodplains and wetlands, which would be assessed in the EIS.

On June 26, 2015, DOE published a Notice of Availability (NOA) of the Draft EIS (80 Fed. Reg. 36795) and held a 45-day public review period. DOE held nine public hearings on the Draft EIS and received more than 200 comments on it. Concerns raised during the comment period were related to the following topics: the regulatory process/public involvement, purpose and need, project description/design, alternatives, human settlement, noise and vibration, air quality/greenhouse gases, socioeconomic, recreation and tourism, public health and safety, aesthetics, land use and ownership, cultural resources, wetlands and water quality, and biological resources. See Section 1.4.4.1 of the Final EIS for additional information regarding these comments. DOE considered all comments received on the Draft EIS in the preparation of the Final EIS. Comment letters and detailed responses are included in Appendix Y of the Final EIS. Throughout the EIS process, DOE worked with the cooperating agencies to ensure that impacts were appropriately addressed. DOE issued the Final EIS in November 2015 (80 Fed. Reg. 68868). In addition, concurrently with this Presidential Permit, DOE is issuing a Record of Decision regarding its grant of the Permit.

C. Concurrences

The Secretary of State and the Secretary of Defense concur with the issuance of a Presidential Permit to Minnesota Power.

¹ *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996), *order on reh'g*, Order No. 888-A, 62 Fed. Reg. 12,274 (Mar. 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part* *Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000) (*TAPS v. FERC*), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002).

III. FINDINGS AND DECISION

Based on the information available, DOE staff has determined that the 883 MW of incremental north-to-south transfer, which represents south-bound transmission service requests from Manitoba to the United States, and 750 MW of south-to north transfer between Manitoba and the U.S., which represents north-bound transmission service requests from the United States to Manitoba, will not have a negative impact on the reliability of the United States electric grid if operated consistent with both MISO and North American Electric Reliability Corporation (NERC) policies and standards, terms and conditions of the Presidential Permit and other regulatory and statutory requirements.

In addition to DOE's reliability determination, based upon the above discussion and analysis of environmental issues, and the concurrences of the Departments of State and Defense, DOE determines that the issuance of a Presidential Permit to Minnesota Power is consistent with the public interest.

IV. DATA COLLECTION AND REPORTING

The responsibility for the 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 has been transferred from OE to DOE's Energy Information Administration (EIA). Minnesota Power is required to submit Form EIA-111 "Quarterly Electricity Imports and Exports Report" as specified by the EIA, or any successor form. Minnesota Power is instructed to 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 Executive Order 10,485, as amended by EO 12,038, and the regulations issued thereunder (Title 10, Code of Federal Regulations, Part 205), permission is granted to Minnesota Power 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 500-kV overhead, single circuit, alternating current (AC) electric transmission system extending from the Canadian Province of Manitoba crossing the U.S.

Canada border in Roseau County, Minnesota at latitude 49° 00' 00.00" N and longitude 95° 54' 50.49" W, to the proposed Iron Range 500 kV Substation, located just east of the existing Blackberry Substation near Grand Rapids, Minnesota.

Article 3. The facilities described in Article 2 above, shall be designed and operated in accordance with all policies and standards of the Federal Energy Regulatory Commission, NERC, Regional Entities, Reliability Coordinators, and independent system operators, or their successors, as appropriate, on such terms as expressed therein and as such criteria, standards, and guides may be amended from time to time.

Furthermore, the facilities described in Article 2 shall be operated in such a manner that the scheduled rate of transmission of electric energy entering the United States over the facilities operated herein shall not exceed 883MW and south-to-north transfers shall not exceed 750MW.

Article 4. Minnesota Power shall implement the Project-specific avoidance, minimization, and mitigation measures contained in the Final EIS, the Biological Opinion, and the Section 106 Programmatic Agreement, and referenced in the Record of Decision.

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. Minnesota Power 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. Minnesota Power 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. Minnesota Power shall investigate any complaints from nearby residents of radio or television interference identifiably caused by the operation of the facilities covered by this Permit. Minnesota Power 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. Minnesota Power 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. Minnesota Power shall hold the United States harmless from any and all such claims.

Article 10. Minnesota Power 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. Minnesota Power shall make and preserve full and complete records with respect to the electric energy transactions between the United States and Canada. Minnesota Power 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.

Article 12. Upon the termination, revocation or surrender of this Permit, the permitted facilities which are owned, operated, maintained, and connected by Minnesota Power 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 Minnesota Power. If Minnesota Power 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 Minnesota Power. Minnesota Power 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. Minnesota Power 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.

Issued in Washington, D.C., on November 15, 2016.



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