
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

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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, socioeconomics, 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.