

3/6/79
PP-63
Folder #2

PERMIT
AUTHORIZING
NORTHERN STATES POWER COMPANY
TO CONSTRUCT, CONNECT, OPERATE AND MAINTAIN
ELECTRIC TRANSMISSION FACILITIES
AT THE INTERNATIONAL BORDER BETWEEN
THE UNITED STATES AND CANADA
ERA DOCKET NO. PP-63
(FPC DOCKET NO. E-9589)

On April 18, 1977, Northern States Power Company (Permittee) filed an application with the Federal Power Commission (FPC) pursuant to Executive Order No. 10485, as later amended by Executive Order No. 12038, for authority to construct, connect, operate and maintain electric transmission facilities described in Article 2 below at the international border between the United States and Canada. The application was transferred to the Department of Energy (DOE) upon its formation on October 1, 1977, pursuant to Section 301 of the Department of Energy Organization Act (P.L. 95-91) and, by virtue of DOE Delegation Order No. 0204-4, responsibility for consideration of the application was assigned to the Administrator of the Economic Regulatory Administration (ERA).

The Secretary of State by letter dated February 12, 1979 and the Secretary of Defense by letter dated February 26, 1979 favorably recommended that the Permit be granted as hereinafter provided.

Upon consideration of this matter, ERA finds that the issuance of the Permit as hereinafter provided is appropriate and consistent with the public interest.

Pursuant to the provisions of Executive Order No. 10485, as amended, and the Rules and Regulations thereunder (18 C.F.R. 1 et. seq.) permission is hereby granted to Northern States Power Company to construct, connect, operate and maintain the electric transmission facilities described in Article 2 below at the international border between the United States and Canada upon the conditions hereinafter set forth.

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 or by the Administrator of ERA after public notice and may be amended by ERA on proper application thereto.

Article 2. The facilities covered by and subject to this Permit shall include, in addition to the following facilities, all lands and supporting structures within the rights-of-way occupied by such facilities:

One three-phase, 60 hertz, 500,000 volt overhead transmission line located at a point on the international border between the United States and Canada approximately seven and a half miles west of Warroad in Roseau County, Minnesota, interconnecting with a similar transmission line owned by the Manitoba Hydro-Electric Board and located in the province of Manitoba.

The facilities authorized by this Permit are more specifically shown and described in the application and accompanying exhibits and items by reference filed by Permittee and in the environmental impact statement (DOE/EIS-0032) issued by DOE in this matter. No substantial change shall be made in these facilities or the operation thereof authorized unless and until such change(s) shall have been approved by ERA.

Article 3. Permittee shall at all times maintain the facilities, or any part thereof, in a satisfactory condition for the efficient and safe operation of said facilities in the transmission of electric energy.

Article 4. Insofar as the facilities authorized herein, or which may be subsequently included herein by amendment, are utilized for the transmission of electric energy from the United States to Canada, they may be utilized for such transmission only in the amount, at the rate, and in the manner authorized by ERA under Section 202(e) of the Federal Power Act.

Article 5. The construction, connection, operation and maintenance of the aforesaid facilities shall be subject to the inspection and approval of a properly designated representative of ERA, who shall be an authorized representative of the United States for such purposes. Permittee shall allow

officers or employees of the United States with written authorization free and unrestricted access into, through and across any lands occupied by said facilities in the performance of their official duties.

Article 6. In the construction, connection, operation and maintenance of the facilities authorized herein, Permittee shall place and maintain suitable structures to reduce to a reasonable degree the possibility of contact or inductive interference between such facilities and any other facilities not owned by Permittee. Grounding of all tower structures shall be in accordance with the American National Standard, National Electric Safety Code, C2, 1977 edition.

Article 7. Permittee will respond to and evaluate any complaints from nearby residents of radio or television interference possibly caused by operation of the transmission line. In the case of such complaints, the Permittee will take appropriate action as necessary to mitigate the situation. Complaints from individuals residing within one half mile of the center line of the facility are the only ones that shall require mandatory resolution. Written records will be maintained by the Permittee of all complaints received and the corrective actions taken.

Article 8. Permittee shall be liable for all damages

occasioned to the property of others by the construction, connection, operation and maintenance of the facilities owned by it and covered by this Permit, and in no event shall the United States be liable therefor.

Article 9. Permittee shall arrange for the installation and maintenance of adequate metering equipment to measure the hourly flow of all electric energy transmitted between the United States and Canada over the afore-described line authorized herein; shall make, keep and preserve full and complete records with respect to the movement of such energy; and shall furnish a report to ERA, annually on or before February 15, with respect to such transmission of energy, showing, with respect to the afore-described line, the gross amount of kilowatt-hours received or delivered, the maximum hourly rate of transmission in kilowatts, and the consideration paid or received therefor during each month of the preceding calendar year. Permittee shall file with the ERA, in such detail as ERA shall require, any additional statement or reports with respect to the facilities authorized herein and owned by the Permittee, or electric energy transmitted thereover by the Permittee; such information will become part of the public record, unless otherwise excepted.

Article 10. Neither this Permit nor the facilities, or any part thereof, covered by this Permit, shall be transferable or assignable, but in the event of the involuntary transfer of the facilities by operation of law (including such transfers to receivers, trustees, or purchasers under foreclosure or judicial sale) the Permit shall continue in effect temporarily thereafter pending the making of an application for a new Permit and decision thereon, provided notice is given in writing to ERA within 30 days, after transfer, accompanied by a statement that the facilities authorized by this Permit remain substantially the same as before the transfer.

Article 11. Upon the termination, revocation or surrender of this Permit, the facilities herein authorized, which are owned, connected, operated and maintained by Permittee, shall be removed within such time as ERA may specify and at the expense of Permittee. Structural foundations and guy anchors shall be removed to a minimum depth of 18 inches below ground level. The right-of-way and access roads will be allowed to revegetate by natural successional processes, except that Permittee will grade and seed any areas where necessary, as determined by the State of Minnesota. Upon failure of Permittee to remove such facilities or any portion thereof or complete such restoration, ERA may direct that such actions be taken and the facilities

7
removed or restoration made at the expense of Permittee, and Permittee shall have no claim for damages by reason of such possession, removal, or repair.

Article 12. To the maximum extent practicable, Permittee shall comply with the following conditions during construction of the transmission line. In the event that Permittee is unable to comply substantially with one or more of these conditions, Permittee shall file with ERA a statement of reasons justifying such failure and requesting waiver of such condition at least 15 (fifteen) days before commencing any action in violation thereof.

a) Erosion - The Permittee shall minimize soil disturbance, erosion and other environmental impacts by clearing that portion of the proposed transmission line route in the open bog areas, i.e., in areas composed of sedges, cottongrass and low growing shrubs such as bog rosemary and leatherleaf, during periods when the surface is frozen enough to support mechanized right-of-way clearing equipment.

b) Wetlands Construction - In the event that non-winter stream crossings and access road construction must be undertaken in wetlands, as defined by Executive Order No. 11990, Protection of Wetlands, the action will be undertaken in accordance with "Construction Procedures in Wetlands; Forbes-International Border 500 KV Transmission Project" (ER Supp., Resp. to Q. 21).

c) Rivers and Streams - To minimize impacts of construction on the rivers and streams crossed by the transmission line, the Permittee will construct (1) during the winter season or, where winter crossings are not possible, (2) during non-fish spawning months. The Permittee will seed or plant stream or river banks to retard erosion and run-off and to reduce visual impacts. At the Big Fork and La Vallee River crossings and at other areas specified by the State of Minnesota, Permittee shall leave or establish a buffer zone of vegetation sufficient to obscure the view of the supporting towers from the rivers. Maximum spanning shall be used to minimize visual impact.

d) Transmission Structures - Transmission structures utilized in floodplains shall be guyed aluminum structures with screw anchors, as described in the final environmental impact statement.

e) Construction Standards - The transmission line, as described in Article 2 above, shall be built in accordance with the terms and conditions of the American National Standard, National Electrical Safety Code, C2, 1977 edition.

f) Temporary Work Camps - Permittee shall limit the number and size of temporary work camp sites as practicable and, upon abandonment, shall restore work camp sites as near as possible to their original physical condition upon abandonment.

g) Archeological and Historical Preservation - 1.

Prior to land disturbance connected with the construction of the transmission line as described in Article 2, the Permittee will identify effects on archeological and historic resources due to: (1) construction of tower facilities; (2) clearing for access roads; (3) clearing the right-of-way; and, (4) secondary impacts as the result of increased access due to (2) and (3). Permittee, in consultation with the Minnesota State Historic Preservation Officer (SHPO), will apply criteria, contained in 36 CFR Part 800 to determine whether identified properties may be eligible for inclusion in the National Register of Historic Places and shall comply with the procedures set forth at 36 CFR Part 800 in order to mitigate adverse impacts on the properties. The identification process will comply with the "Guidelines for the Location and Identification of Historic Properties containing Scientific, Prehistoric, Historical, or Archeological Data," contained as Appendix B in proposed procedures 36 CFR Part 66, January 28, 1977.

2. Permittee, in consultation with the Minnesota SHPO, will develop a plan for mitigating adverse effects the construction of the transmission line may have on properties identified as meeting the criteria for the National Register of Historic Places eligibility.

a. The mitigation plan will meet the following requirements:

(1) Data recovery will be conducted under the supervision of an archeologist who meets the qualifications under Subpart b below.

(2) Data recovery will be conducted in accordance with the standards set forth in Subpart c below.

(3) A date will be set for the submission of a final report to the ERA and the Minnesota SHPO.

(4) Plans will be made for curation and storage of the material recovered after it has been analyzed in accordance with accepted professional standards.

(5) Documentation of the condition and significance of the property after data recovery will be provided by the Permittee to ERA, the Minnesota SHPO and the National Register for appropriate action, including nomination, boundary change, or removal from eligibility or National Register status in accordance with the National Register's procedures (36 CFR § 60.16).

b. The supervising archeologist will meet the following requirements:

(1) Minimum professional qualifications for a Supervisory Archeologist are graduate degrees in archeology, anthropology, or a closely related field, or equivalent training accepted for accreditation purposes by the Society of Professional Archeologists and the following:

(a) At least sixteen months of professional experience or specialized training in archeology field, laboratory or library research, including at least four months of experience in general North American archeology and at least six months of field experience in a supervisory role.

(b) A demonstrated ability to carry research to completion, usually evidenced by timely completion of a thesis, research reports, or similar documents.

For work involving prehistoric archeology, a Supervisory Archeologist should have at least one year's experience in research concerning archeological resources of the prehistoric period.

For work involving historic archeology, a Supervisory Archeologist should have at least one year's experience in research concerning archeological resources of the historic period.

c. Data recovery will be conducted in accordance with

the following standards.

(1) Data recovery should be conducted in accordance with a recovery plan that includes a professionally acceptable research design.

(a) The plan should reflect a familiarity with previous relevant research and be prepared or approved by the Supervisory Archeologist.

(b) The plan should include a definite set of research questions, taking into account relevant previous research, to be answered in analysis of the data to be recovered.

(c) The plan should provide for recovery of a usable sample of data on those significant research topics that can reasonably be addressed.

(d) The plan should specify and justify the methods and techniques to be used for recovery of the data contained in the property.

(2) The plan should provide for adequate personnel, facilities, and equipment.

(3) The plan should insure that full, accurate, and

intelligible records are made and maintained of all field observation and operations.

(4) The plan should include adequate provisions for modification of the plan to cope with unforeseen discoveries or other unexpected circumstances.

(5) The plan should provide for distributing program results to at least the following: the Minnesota SHPO, the State archivist, the State archeologist, the Department Consulting Archeologist of the Department of the Interior, the Chairman, Department of Anthropology, Smithsonian Institution, the President's Advisory Council on Historic Preservations, and ERA.

3. The Minnesota SHPO will be given the opportunity to review and determine the adequacy of the survey and mitigation plan prior to initiation of project development.

4. If agreement cannot be reached between Permittee and the Minnesota SHPO on all elements of the survey and mitigation plan, the comments of the President's Advisory Council on Historic Preservation will be requested by the Department of Energy, pursuant to 36 CFR §800.4(e) of the Council's Procedures.

5. Within 90 days of completion of the transmission line, Permittee will nominate identified archeological sites or districts for listing in the National Register of Historic Places, in accordance with the procedures established by the State of Minnesota.

Article 13. To maximum extent practicable, the Permittee shall comply with the following conditions during operation of the transmission line as described in Article 2. In the event that the Permittee is unable to comply substantially with one or more of these conditions, the Permittee shall file with ERA a statement of reasons justifying such failure and request a waiver of such condition at least 15 (fifteen) days before commencing any actions in violation thereof.

a. Herbicides - Selective or basal application shall be used wherever possible. When spraying herbicides along the right of way, the Permittee will establish buffer zones of 300-400 feet around all water areas for aerial application. Spraying within 100 meters of any body of water will be limited to hand application only. Permittee will not spray any herbicides in open bog areas. No spraying will occur near any area defined by the Minnesota Department of Natural Resources as environmentally sensitive. Permittee will mark all wildlife habitats to be avoided in areas where broadcast spraying is unavoidable. Permittee will not spray during nesting seasons of waterfowl or in any areas of wetland

having substantial open water during periods of nesting and/or migration.

b. Operational Monitoring - Permittee shall conduct a study to determine the impact of the construction and operation of the above-described transmission line on peatlands in the Lake Agassiz basin. This study shall continue for a minimum of 3 consecutive years and up to 5 years if deemed necessary by the U.S. Fish and Wildlife Service (USFWS) and DOE. The cost of the study will be borne by the Permittee; USFWS and the Minnesota Department of Natural Resources (MDNR) will provide technical advice. The contractor(s) chosen to carry out this study and the exact study procedures shall be acceptable to USFWS, DOE and the Permittee. Semi-annual detailed progress reports will be submitted to DOE, USFWS, the Environmental Protection Agency, and MDNR by the Permittee.

1. Peatland Organic Soil - Permittee shall make several measures of peat soil disturbances on frozen peatlands. If unforeseen construction delays necessitate construction activities when the bog surface is not frozen, several measures of peat soil disturbance shall be made including a comparison of construction impacts on frozen versus thawed peatlands.

Soil disturbance will be measured by:

- a. degree of soil compaction
- b. degree of erosion
- c. depth of ruts, area of construction vehicle right-of-way, etc.

Sample locations will be chosen along the transmission line route where measurements of soil compaction, erosion, and surface disturbance will be measured during the course of the study.

Erosion and surface disturbance can be monitored by a combination of field measurement and aerial photography interpretation.

2. Local Surface Water Movement. Permittee shall monitor local surface water movement patterns by field inspection and interpretation of aerial photographs to detect changes resulting from construction activities.

3. Vegetation. Permittee will examine vegetation on both a macroscale and a microscale.

Aerial photograph interpretation supported by selective field checks will form the basis of the macroscale evaluation.

Color infrared photographs will be taken along the transmission line right-of-way at several different scales.

Permittee will photograph portions of the right-of-way two times each year, once as the vegetation is coming out of quiescence and once when the vegetation is at its peak. The two photographings each year will depict the full phenological range of vegetation.

4. Bird Populations. Six vegetation types have been identified for study: open bog, open fen, shrub bog (swamp thicket), black spruce, tamarack, and riparian.

In each vegetation type, study areas will be established both in the control situation and along the transmission line right-of-way. Activities such as breeding bird censuses, observations of nesting activity, mist netting, and other appropriate activities will be carried out in relation to the study areas.

Permittee will establish vegetation plots along the study areas and detailed parameters will be measured (micro-scale). Bird use of vegetation types will be related to Vegetation structure and compared between disturbed and undisturbed sites.

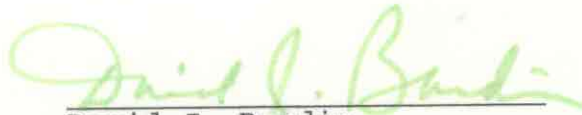
5. Small Mammals. Small mammals will be trapped in the disturbed (transmission line right-of-way) and undisturbed (control) vegetation types identified above.

Permittee will set traps in an appropriate pattern in each vegetation type. Trapping will occur in spring and fall each year.

Trapped specimens will be identified and appropriate measurement taken. In addition, vegetation will be characterized at each trap station.

Article 14. Permittee's exports of electric energy to Canada as a result of the interconnection shall not result in increased oil consumption over what would be a normal and reasonable oil usage as determined by ERA. Permittee shall furnish a report to ERA, annually on or before February 15th, showing the amount and type of oil consumed and identifying usage of that oil for each month of the preceding year by type of unit: diesel, combustion turbine or steam. The report will also show the percentage change of these figures from the year preceeding the reported year. Permittee shall explain any increase in oil usage.

In Witness Whereof, I David J. Bardin, Administrator, Economic Regulatory Administration, have hereunto signed my name, this *6th day of March*, 1979, in the City of Washington, District of Columbia.



David J. Bardin
Administrator,
Economic Regulatory Administration