

**ROUTE PERMIT  
FOR CONSTRUCTION OF  
THREE HIGH VOLTAGE TRANSMISSION LINES  
IN  
BLUE EARTH COUNTY, MINNESOTA  
ISSUED TO**

**NORTHERN STATES POWER COMPANY d/b/a XCEL ENERGY**

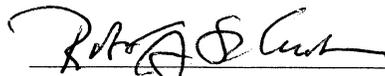
**MEQB DOCKET NO. 04-86-TR-Xcel Mankato**

In accordance with the requirements of Minnesota Statutes section 116C.57 and Minnesota Rules chapter 4400, this Route Permit is hereby issued to

**NORTHERN STATES POWER COMPANY d/b/a XCEL ENERGY**

Northern States Power Co. d/b/a Xcel Energy ( hereinafter Xcel Energy) is authorized by this permit to construct two new 115 kilovolt transmission lines and a new 345 kilovolt transmission line, approximately 1,000 feet long to connect the Wilmarth Substation to the Mankato Energy Center Power Plant, along a route identified in this Permit and in compliance with the conditions specified in this Permit.

STATE OF MINNESOTA  
ENVIRONMENTAL QUALITY BOARD



Robert A. Schroeder  
Chair

Issued: November 18, 2004

## **I. ROUTE PERMIT**

The Minnesota Environmental Quality Board hereby issues this Route Permit to Xcel Energy, pursuant to Minnesota Statutes section 116C.57 and Minnesota Rules chapter 4400. This permit authorizes Xcel Energy to construct two 115 kilovolt transmission lines and a 345 kilovolt transmission line approximately 1,000 feet long and associated facilities on property owned by either Xcel Energy or Mankato Energy Center, LLC, in Blue Earth County, Minnesota.

## **II. PROJECT DESCRIPTION**

The high voltage transmission lines authorized to be constructed under this Permit consist of two 115 kilovolt lines that will be double-circuited on the same structures and a 345 kilovolt transmission line. The 115 kV structures will be steel single pole structures approximately 70 – 80 feet high. The 345 kV structures will be H-frame wood pole structures approximately 80 – 115 feet high. The transmission lines will connect the Mankato Energy Center power plant with the existing Wilmarth Substation owned by Xcel Energy.

The project also involves the expansion of the Wilmarth substation. The substation will be expanded to the south and west to accommodate the additional equipment that will be necessary. The 345 kV line will require two circuit breakers, a new overhead line termination structure, protective relaying for the new connection, and associated switches and bus work. The 115 kV double circuit line will require relocation of three existing transformers, installation of additional circuit breakers and underground cable, expansion of existing steel structures, and installation of associated switch and bus work.

## **III. DESIGNATED ROUTE**

The route designated by the Environmental Quality Board in this permit is an 800 foot wide route from the northern edge of the Mankato Energy Center switchyard to the edge of the parking lot south of the Wilmarth substation. The entire route is on property owned by Xcel Energy or Mankato Energy Center, LLC. The route is shown on the map attached to this permit.

## **IV. PERMIT CONDITIONS**

The Permittee shall comply with the following conditions during construction of the HVTL and the life of this Permit.

### **A. Construction Practices.**

1. The Permittee shall follow those specific construction practices and material specifications described in the Application, unless this Permit establishes a different requirement in which case this Permit shall prevail.

2. The Permittee shall notify the EQB at least 14 days before construction of the transmission lines begin.
3. The Permittee shall locate all transmission structures on property owned or easements obtained by the Permittee.
4. The Permittee shall repair all private roads and lands damaged during construction of the transmission lines.
5. The Permittee shall implement reasonable measures to minimize runoff during construction.
6. The Permittee shall avoid placing any structures in wetlands , if possible. If any structures must be placed in wetland, the Permittee shall notify EQB of such decision before proceeding with construction. The Permittee shall minimize impacts to any wetlands by using special construction mats during construction in such areas and shall obtain any permits required for such construction from the DNR and Blue Earth County.

#### **B. Completion of Construction**

1. **Notification.** At least three days before the line is to be placed into service, the Permittee shall notify the EQB of the date on which the line will be charged and the date on which construction was complete.
2. **As-Builts.** Upon request of the EQB, the Permittee shall submit copies of all the final as-built plans and specifications developed during the project.
3. **GPS Data.** Within sixty days of completion of construction, the Permittee shall submit to the EQB, in the format requested by the EQB, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all above ground structures associated with the transmission lines and each substation connected.

#### **C. Electrical Performance Standards.**

1. **Grounding.** The Permittee shall design, construct, and operate the transmission line in such a manner that the maximum steady-state short-circuit current shall be limited to five milliamperes rms alternating current between the ground and any non-stationary object within the right-of-way including but not limited to, large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the short circuit current between ground and the object so as not to exceed one milliamperere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code.

2. **Electric Field.** The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.
3. **Radio and Television Interference.** Where radio or television interference is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

**D. Applicable Codes.** The Permittee shall comply with applicable requirements of the National Electric Safety Code (NESC) including clearances to ground, clearance to crossing utilities, clearance to buildings, right-of way widths, erecting power poles, and stringing of transmission line conductors.

**E. Other Requirements.** The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. A list of the required permits is included in the permit application and the environmental assessment.

**F. Delay in Construction.** If the Permittee has not commenced construction or improvement of the route within four years from the date of issuance of this Permit, the EQB shall consider suspension of the Permit in accordance with Minn. Rules part 4400.3750.

## **V. PERMIT AMENDMENT**

This permit may be amended at any time by the Environmental Quality Board. Any person may request an amendment of this permit by submitting a request to the Chair in writing describing the amendment sought and the reasons for the amendment. The Chair will mail notice of receipt of the request to the Permittee. The EQB may amend the permit after affording the Permittee and interested persons such process as is required.

## **VI. TRANSFER OF PERMIT**

The Permittee may request at any time that the Environmental Quality Board transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the EQB with such information as the EQB shall require to determine whether the new permittee can comply with the conditions of the permit. The EQB may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

## **VII. REVOCATION OR SUSPENSION OF THE PERMIT**

The Environmental Quality Board may initiate action to revoke or suspend this permit at any time. The EQB shall act in accordance with the requirements of Minnesota Rules part 4400.3950 to revoke or suspend the permit.