



January 13, 2005

TO: EQB Board Members

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EQB Energy Facility Permitting

SUBJECT: **Route Permit to Xcel Energy and Great River Energy for Construction of a 115 kV High Voltage Transmission Line, Substation, and Associated Facilities in Dakota County. (EQB Docket No. 04-81-TR-Air Lake-Empire)**

Action

The Board is asked to issue a Route Permit to Xcel Energy and Great River Energy (GRE) for a new 115 kilovolt (kV) high voltage transmission line (HVTL), a new Vermillion River Substation, and associated facilities extending from the Air Lake Substation in Lakeville on the west to the Empire Substation in Empire Township on the east for a distance of approximately 8.9 miles.

The Findings, Conclusions, and Order, the Judge's Report and Recommendation, and the Route Permit with accompanying maps are in your packet. The issues are discussed below.

Background

On April 30, 2004, Xcel Energy and GRE applied to the EQB for a route permit for a 115 kV HVTL line and substation in Dakota County. Because of the voltage of the proposed line (under 200 kilovolts), the alternative permitting process was applicable in this case. That process requires the EQB to prepare an Environmental Assessment (EA) and to hold a public hearing. The EQB held an information and scoping meeting on June 24, 2004. The Chair issued the Scoping Order for the EA on July 23, 2004. The EA was completed in September, and a public hearing was held on October 11, 2004. Administrative Law Judge Allan W. Klein presided at the hearing. The record was held open until November 8, 2004, and Judge Klein issued his Report and Recommendation on December 13, 2004.

Project Description

GRE and Xcel Energy propose to build a 115 kV overhead transmission line between the Air Lake Substation in Lakeville and the Empire Substation in Empire Township. The line would be bisected by the Vermillion River Substation proposed to be built in Farmington. The entire line as proposed in the application is 9.25 miles long. As proposed, the project would require 5.8 miles of new right-of-way. The entire permit application, maps, appendices and other documents may be viewed at

www.eqb.state.mn.us/Docket.html?Id=6237.

The proposed route is shown in Figures 1 and 2 of the EA. The first half mile of transmission line, from the Air Lake Substation to Cedar Avenue, is already designed for and capable of operating as a triple circuit 115 kV line and is not part of the permit application.

Because the proposed route is less than 10 miles in length, a certificate of need was not required. See Minn. Stat. § 216B.2421, subd. 2 (3). If a route longer than 10 miles is selected by the EQB, the issue of whether a certificate of need is required would need to be determined separately by the Minnesota Public Utilities Commission.

Route Options

EQB staff considered each of the following route options in the Environmental Review, released on September 27, 2004.

1. Utility Proposed Route Xcel Energy and GRE proposed the following route segments in their permit application:

The Xcel Energy portion of the project (EA, Figure 1) would begin at Cedar Avenue and head east along the north side of CR 50 approximately 2.5 miles. A new double circuit 115/69 kV transmission line with distribution underbuild would replace the existing 69 kV line with distribution underbuild along this route. The line would turn north along Eaton Road for approximately ¼ mile to the new proposed Vermillion River Substation site. The 69 kV line continues east from there to Akin Road, while the 115 kV line would extend 300 feet north into the Vermillion River Substation. There have been no alternatives recommended for the above segments of the project.

The GRE portion of the proposed line (EA, Figure 2) would run east out of the Vermillion River Substation and connect with the Xcel Energy 69 kV line. It would go east approximately 1/3 mile, then north along Akin Road for another 1/3 mile. At this point, the 115 kV circuit would split off and head east one mile along the north side of the proposed 208th Street and cross the Vermillion River to the corner of CR 66 and MN Hwy 3. The line then would then run south about 1/3 mile along MN Hwy 3 to the American Legion, turn east for about ½ mile to Cambodia Avenue, then go east along the north side of 210th Street for 4 miles to the Empire Substation.

2. Rother Alternates 1-2 (EA, Figures 5 & 6) Jerry Rother, who owns land along the proposed route north of the middle school, proposed two alternative routes to the south of the school. The first alternative would run south about 1/3 of a mile on Akin Road, rather than north as GRE has proposed, and then turn east at the Farmington Substation at the intersection of County Road 50 and Akin Road. The route would then run north-northeast to Hwy 3. The second Rother Bypass differs from the first in that the second option would continue due east from the new Vermillion River Substation across Akin Road. About ½ mile east of Akin Road, it would turn south and follow the existing railway corridor for a short distance until it connected with Rother Bypass #1.

3. Adaptation Alternative (EA, Figures 14 & 15) This segment modifies the Rother Alternatives mentioned above. Where the route from the Vermillion River Substation meets Akin Road, it would run south on the east side of Akin Road for approximately 700 feet. It would then turn east and run along the south end of the school district property north of Rambling River Park. It would use an existing distribution line crossing of the Vermillion River, follow east through a shopping center and a light commercial/industrial area along an abandoned railway corridor, and end where the City of Farmington Alternative begins.

4. City of Farmington Alternative (EA, Figure 7) This approximately ½ mile alternative segment proposed by the City of Farmington would follow an existing abandoned railroad corridor, which is also the planned extension of 210th Street just east of Highway 3 (called the Willow Extension). This segment would pass between two homes and the bus company on the north and industrial buildings on the south.

5. Empire Citizens' Alternatives 1-5 (EA, Figures 8-12) Citizens belonging to a group called "Save the 210th Street Residents Group" proposed five alternate segments for the line proposed along 210th Street:
 - 1) Alternative #1 begins on the west end of 210th Street. Instead of running due east as GRE has proposed, this alternative would run diagonally to the north-northeast through agricultural land essentially along a former railroad right-of-way and continue straight east.

 - 2) Alternative #2 would run south on State Highway 3 to State Highway 50 rather than turning east at Willow Street as GRE has proposed. This alternative would run east on State Highway 50 to a point due south of the Empire Substation, where it would turn north.

 - 3) Alternative #3 would run along 210th Street for a short distance, but at Biscayne Avenue it would cut behind a farmstead and move north and east through farm fields behind ten residences on County Road 66. The proposed alternate would then turn back north and run east along County Road 66. In their comments, the 210th Street Group selected this alternative as their principal recommendation.

4) Alternate #4 follows the GRE proposed route along 210th Street from the east until just west of the Baker property, where it would veer north and run east above the properties of interest to the 210th Street Group. This would put the line directly behind a new development of homes north of the properties fronting 210th Street. Alternatively, the line could follow an irrigation ravine further north, cutting across a sod farm.

5) Alternative #5 would run along State Highway 50, as would alternative #2, but differs where the segment enters the City of Farmington. With alternative #5, the route would turn south at Biscayne Avenue in Empire Township, run south to 225th Street, and share a corridor with a proposed Metropolitan Council Interceptor line. This alternate segment would turn north up Denmark Avenue, eventually branching off on Xcel Energy's existing 69 kV line leading to the new substation.

ALJ Report and Recommendation

Judge Klein's recommendation can be summarized as follows:

He recommended the Xcel Energy proposed route from Cedar Avenue to the new Vermillion Substation.

From the Vermillion Substation east through the City of Farmington, Judge Klein did not recommend GRE's proposed route north of the middle school, but recommended a route to the south, cutting through Rambling River Park and near several commercial businesses to Highway 3, essentially the Adaptation of the Rother Alternatives.

He recommended that the route avoid the American Legion along Highway 3, as the City of Farmington and the American Legion preferred.

He recommended the 210th Street route as proposed by GRE, with certain mitigative measures to minimize the loss of trees and other impacts on homeowners along the east end of 210th Street.

Significant Issues

Judge Klein recognized in his Memorandum attached to his Report at page 29 that there are two areas along the route that present real difficulties because there is no route that is clearly superior to the alternatives. One area is through the City of Farmington, from the new Vermillion Substation to Highway 3. And the other portion is along 210th Street on the eastern end near the Empire Substation.

1. Route through the City of Farmington. (See Permit Map Figure 2.)

There are two routes through the City of Farmington from the Vermillion Substation to Highway 3. The first route option is the route proposed by GRE that goes north from the

Substation along Akin Road, then east across agricultural land owned by Giles Development and the Rother family (north of the middle school), to the intersection with State Highway 3, and then south on the east side of Highway 3 to the intersection of the highway with the extension of 210th Street called the Willow Extension.

The other route option goes south along Akin Road and then east along school district property, through Rambling River Park, near a shopping center, and along a former railroad right-of-way on commercial property, to the intersection of Highway 3 and the Willow Extension.

The City of Farmington prefers the first proposal to the north because the City has plans to extend 208th Street through this area. Giles Development and the Rother family prefer the option to the south through Rambling River Park because they have plans to develop their property. GRE believes that either route is acceptable.

Judge Klein found that both routes are reasonable routes, but he recommended the alternative route through Rambling River Park. EQB staff agrees with Judge Klein, that the preferred route is the one through the Park, although the staff has a slight modification of the Judge's recommendation. The staff recommends that the corridor through the Park be to the north of an existing corridor for a single-phase distribution line in order to avoid the shopping center. The existing corridor can be eliminated by putting the distribution line along the same corridor as the new 115 kV line so that only one corridor will remain.

There are several reasons why the EQB staff believes that the route through the Park is preferable to the northern route through the Giles and Rother properties. These reasons include: (1) there is no existing corridor through the Rother and Giles properties, which are currently cropped agricultural; (2) the 208th Street extension planned by the City of Farmington is not intended to go through the Giles property; (3) the northern route requires the line to parallel Highway 3 from CR 66 to the Willow Extension, where there is concentrated commercial and residential development and little right-of-way available; (4) by selecting a corridor through the Park to the north of the existing corridor, no structures need be located in the shopping center; (5) the location of structures on commercial property along a former railroad right-of-way will not interfere with the operation of those businesses and will not be near many homes; (5) the structures can be placed so as not to interfere with possible future construction of a railroad spur to the existing businesses; (6) the impacts on Rambling River Park can be minimized by careful selection of the corridor to avoid the larger trees, (7) there already is a power line through the Park and running the new line through the Park will not increase the number of corridors; and (8) the route through the Park crosses the Vermillion River only once while the northern route crosses the river three times. In addition, some of the property where 208th Street may be extended lies in Empire Township, outside the city limits, and the City has not established the precise route for the 208th Street extension.

For all these reasons, the staff agrees with the judge that although both routes are reasonable routes, the route through the Park and along the railroad right-of-way is preferred.

2. 210th Street. (See Permit Map Figure 3.)

The other part of the route that has received a lot of attention is the eastern end along 210th Street near the termination point at the Empire Substation. Homeowners who live along this stretch of 210th Street have suggested a number of different routes instead and are strongly opposed to placing the line along their property. They suggested a number of alternatives, all of which were examined the Environmental Assessment.

The staff agrees with Judge Klein that there is no overriding reason to reject the 210th Street route. The alternatives are all longer and more expensive. The alternatives all would require structures near homes. Some of the alternatives would result in a transmission line through the middle of agricultural land. There is no alternative that does not meet with objection from landowners along those routes.

Also importantly, there are measures that GRE can implement to mitigate the impact on the 210th Street homeowners. The permit will specifically direct GRE to be on the opposite side of the street near the homes that are closest to the street (Baker and Gossman). GRE will minimize the number of trees that will have to be removed. GRE will bury the existing distribution line that presently runs along the street. New construction will use poles that are spaced significantly further apart than the current distribution poles and conductors that will be higher above the view line than the current distribution lines.

The route along 210th Street is the one that was proposed by GRE and is preferred by GRE. GRE does not object to carrying out mitigative measures along 210th Street.

Staff Recommendation

The staff recommends that the Board issue a Route Permit designating the route recommended by the Judge, with two qualifications. One, the route through Rambling River Park should follow a route crossing the Vermillion River to the south side of Pine Street. Two, GRE must implement certain mitigative measures along 210th Street. The permit recommended by the staff contains language specifying the exact route and conditions.