

**STATE OF MINNESOTA
ENVIRONMENTAL QUALITY BOARD**

In the Matter of the Application by Great River Energy and Xcel Energy for a Route Permit for a 115 kV Overhead High Voltage Transmission Line and a New Vermillion River Substation in Farmington, all in Dakota County, Minnesota

**FINDINGS OF FACT,
CONCLUSIONS AND ORDER
ISSUING A ROUTE PERMIT**

**EQB DOCKET NO.
04-81-TR-Air Lake-Empire**

The above-described matter came before the Minnesota Environmental Quality Board at a regular meeting on January 20, 2005, pursuant to an application by GRE and Xcel Energy to construct a 115 kV High Voltage Transmission Line and a new Vermillion River Substation in Farmington, all in Dakota County, Minnesota.

STATEMENT OF ISSUE

Should Great River Energy and Xcel Energy be granted a Route Permit for a 115 kilovolt transmission line approximately nine miles long and a new substation in Farmington, all in Dakota County, and if so, along what route, at what site and under what conditions?

Based upon all of the proceedings herein, the Minnesota Environmental Quality Board makes the following:

FINDINGS OF FACT

1. The Summary of Evidence (paragraphs 1 – 100) of the Administrative Law Judge in his Report of December 13, 2004, is hereby adopted as Findings of Fact by the EQB, except as amended below.
2. Finding No. 58 is amended to add:

According to the Applicants, the maximum calculated ground level magnetic field expected when the new line is conducting electricity is approximately 28.3 milligauss directly below the line. The only two states that have established standards are Florida (a 150 milligauss limit) and New York State (a 200 milligauss limit). The maximum magnetic field expected from the new line is well within those limits.

3. A new Finding No. 58.1. is added to read:

58.1 In previous route proceedings, the MEQB has included a permit condition in high voltage transmission line permits limiting electric field exposure to 8 kV per meter at one meter above ground. This permit condition was designed to prevent serious hazard from shocks when touching large objects, such as semi tractor trailers or large farm equipment under extra high voltage transmission lines of 500 kV or greater. The proposed line would be below this limit and would create a maximum electric field of approximately 1.6 kV per meter.

4. New findings Nos. 89.1 through 89.20 are added to read:

89.1 Between Akin Road and the point where the planned extension of 210th Street called the Willow Extension intersects State Highway 3, there are two basic choices for a route. One (referred to as the “north route” or the yellow route) is through undeveloped agricultural land owned by Giles Properties, Inc. and the Rother family. The other (called the “south route” or the green route) is through Rambling River Park and along a commercial area that used to be a railroad right-of-way.

89.2 The north route is more specifically described as follows: After exiting the new Vermillion Substation, the route proceeds north along Akin Road double-circuiting an existing 69 kV line, then turns east through undeveloped agricultural land owned by Giles Properties, Inc. and the Rother family, and then runs south along State Highway 3 to the planned Willow Street intersection.

89.3 The other route proceeds south along Akin Road after exiting the new Vermillion Substation, then runs east along school district property, through Rambling River Park, and then along a former railroad right-of-way near commercial areas to the point where Highway 3 and the Willow Extension intersect. This route is modified somewhat from the route recommended by the administrative law judge in that it runs through Rambling River Park and avoids the shopping center on the east side of the Park.

89.4 The north route is 1.66 miles long. The south route is 1.11 miles long.

89.5 The north route will be on the property of or across the street or highway from 18 homes and 7 commercial establishments. The south route will be on or across the street or highway from 3 homes and 11 commercial establishments.

89.6 The commercial establishments along the north route are along Highway 3. The line would most likely be placed on the east side of Highway 3 if the north route is chosen because the highway is likely to be expanded on the west side in the future. There are existing phone and cable lines along the east side of the highway, and these lines would have to be moved or hung on the new structures if the transmission line came down Highway 3.

89.7 The commercial establishments on the south route are along a former railroad right-of-way. These commercial establishments include Dakota County Lumber and Landscape Depot. See Finding No. 88. The transmission structures would be placed on the backside of each of these commercial establishments if the south route were chosen. The south route would avoid the shopping center and the main downtown area of Farmington.

89.8 The owners of the lumberyard and the landscaping business have indicated that at some time in the future they may construct a railroad spur from a nearby railroad onto their property, although no specific plans have been developed for such a project. The transmission line would not prohibit construction of a spur because there is room to construct the railroad spur and provide adequate separation between the rail line and the transmission line structures.

89.9 The north route will cross agricultural property owned by Giles Properties, Inc. and the Rother family. Both owners have prepared concept plans to develop their property into residential areas, although the Rother family are apparently reconsidering their intentions to develop their land. The north route would cross proposed residential structures shown in the concept plans. The south route does not cross any agricultural land.

89.10 The City of Farmington is planning to construct an extension of 208th Street from Highway 3 east across the Rother property to near the Farmington Middle Schools. The 208th Street extension will not enter property owned by Giles Properties. The City's engineer just completed a Feasibility Report on the proposed extension of 208th Street on February 7, 2005.

89.11 The Giles property is in the city limits of the City of Farmington. The Rother property is in Empire Township, as is the portion of the north route along Highway 3.

89.12 The south route must pass through Rambling River Park. The north route avoids Rambling River Park. A new corridor through the Park would be required for the transmission line, although an existing corridor with a distribution line would be eliminated so only one corridor would remain.

89.13 The line along the north route would be approximately 315 feet from the Farmington East Middle School at its closest point near the extension of 208th Street. The line along the south route would follow school district property for several hundred feet near the ballfields and would be 705 feet from the West Middle School building at its closest point.

89.14 The north route will cross the Vermillion River one time and the west branch of the river two times. The south route will cross the Vermillion River one time in Rambling River Park. The Vermillion River and the west branch are small streams and crossing the river is not anticipated to create any adverse impacts on the river.

89.15 There is a DNR-identified wetland on the Giles Properties land. No wetlands are identified on the south route. There is not expected to be any adverse impacts to any wetland areas because of this line regardless of route.

89.16 The north route has been estimated by Great River Energy to cost \$958,200 to construct. The south route has been estimated to cost \$488,100 to construct. The south route will require an existing distribution line to be removed through Rambling River Park, at an estimated cost of \$40,000 to \$50,000. The north route will require GRE to move some phone and cable lines along Highway 3 but the costs of doing that have not been determined.

89.17 The City of Farmington opposes the south route and recommends the north route. The Farmington School District supports the City's preference for the north route. Several business owners along the former railroad right-of-way also oppose the south route. No person along the Highway 3 stretch of the north route submitted comments in support of the north route. One landowner on the east side of Highway 3 testified at the public hearing in opposition to placing the line on the east side of the highway. See Finding No. 47.

89.18 Giles Properties, Inc. and the Rothers oppose the north route. Residents in the Riverside Development near Akin Road and

the Giles property have signed a petition opposing the north route.

89.19 Great River Energy has determined, after reviewing the latest cost estimates for construction of the line, that it prefers the south route but can build the line along either route.

89.20 The EQB finds that the south route through Rambling River Park and along the former railroad right-of-way to the Highway 3 intersection with the Willow Extension is the preferred route through the City of Farmington for the following reasons.

- A. There is no existing corridor of any kind through the properties on the north route owned by Giles Development and the Rother family. Location of a transmission line through these properties would interfere with future residential development and could result in structures being located near homes. There is not much room for residential or other development along the route through the Park.
- B. While the transmission line could be located along the planned 208th Street extension through the Rother property, the extension will not run the entire distance between Highway 3 and Akin Road; it will turn south near the middle school and not traverse the Giles company property. An entirely new corridor through the Giles property would be required. Also, the 208th Street extension will not be built until after the transmission line is constructed.
- C. Some of the Rother property is not within the city limits and is located in Empire Township. The portion of the line on the north route along Highway 3 is also in Empire Township.
- D. The north route through the Rother property must follow Highway 3 between County Road 66 and the planned extension of 210th Street called the Willow Extension, a distance of several thousand feet. There is significant commercial development and some homes along this stretch of Highway 3 in Farmington. There is little right-of-way available along Highway 3 for construction of a new transmission line. The route through the Park does not run along Highway 3 for any distance, except to cross over the highway.
- E. Rambling River Park already has a distribution corridor through the Park. Only one corridor through the Park is necessary because the existing distribution line corridor can be eliminated.

- F. By selecting the proper corridor through Rambling River Park, GRE can minimize the impact on a nearby shopping center. No structures would need to be located in the shopping center parking area if the line exited the Park to the north of the shopping center. Also, this would allow the transmission line to merge into the old railroad right-of-way.
- G. From near the Park to Highway 3 there is a former railroad right-of-way that can be followed. This right-of-way is presently privately owned along this stretch. Locating power line structures along the former railroad right-of-way will not preclude the owners from running a railroad spur to their property in the future if the owners should decide to do so. GRE can work with the owners to locate the structures to ensure that the structures do not interfere with operations. Also, none of these businesses will front the transmission line structures.
- H. The route through the Park must cross the Vermillion River one time. The northern route crosses the river three times.
- I. The south route costs nearly one-half million dollars less than the north route to construct.

4. Finding No. 100 is amended to add the following sentence:

In a letter dated January 12, 2005, Les Ferris stated that it was not acceptable to him to bring the transmission line across his farm south of County Road 66.

5. New Findings 101 to 105 are added to read:

101. The second area along the transmission line that presents real difficulties is on the eastern end of the line, between Ahern Road and the Empire Substation. The administrative law judge recommended that the EQB approve a route along 210th Street, with certain conditions to mitigate the impacts to landowners along the line.

102. At its meeting on January 20, 2005, after listening to concerned individuals who commented on the matter, the EQB Board directed the staff to address three possible alternative routes from Ahern Road to the Empire Substation. One route (referred to as the blue route) is the one recommended by the administrative law judge, along 210th Street. A second is a route (called the pink route) that turns north at the David Baker property for some distance to avoid the Ferris Development and then runs to an existing 115 kV line just north of the Empire Substation. The third alternative (called the red route)

turns north at Ahern Road and runs north along the road to County Road 66, then east along CR 66 to the existing 69 kV line, and then south as a double circuit 115 kV to the substation.

103. On January 28, 2005, the EQB mailed notice to landowners along Ahern Road and County Road 66 that these three alternatives were under consideration.

104. The 210th Street route is 1.95 miles long, between Ahern Road and the Empire Substation. The pink route through the sod farms is approximately 2.77 miles long, and the red route to the north along CR 66 is 3.72 miles long.

105. The 210th Street route will be along or across the street from 18 homes. The pink route through the sod farm will be along the David Baker property and one other home along 210th Street. The red route along Ahern Road to CR 66 will be along or across the street from 11 homeowners.

106. The 210th Street route does not cross any active agricultural land between Ahern Road and the substation; nor does the Ahern Road red route. The pink route crosses the farm or follows the property boundary of six landowners whose property is being actively used as a sod farm. Each of the owners utilizes a center pivot irrigation system to water the fields. Location of a transmission line anywhere on their property would interfere with operation of the irrigation system. All three owners are opposed to location of the transmission line on their property.

107. A transmission line through the sod farms would be visually apparent to residents of several new homes built as part of the Ferris Estates Development north of 210th Street.

108. There is a windrow of pine trees for approximately one-half mile on the west side of Ahern Road. Location of a transmission line on the west side of Ahern would require the removal of many of the trees. On the east side of the road for much of the distance between 210th Street and CR 66 are irrigation pipes. Location on the east side would interfere with the irrigation operation and some adjustments in irrigation practices would be required.

109. Near the intersection of Ahern Road and CR 66, on the northeast corner, is an area of land that has been deeded by the Miles family to the Trust for Public Land. The Miles family also owns land along Ahern Road south of CR 66. Although it is unlikely that any transmission structures would be located on the land now owned by the Trust for Public Land, the Miles family and the Trust both object to

placement of the line along CR 66.

110. GRE would have to take down some trees on the right-of-way along 210th Street. The two places where tree removal is most crucial are in front of the Baker property and in front of the Gossman property – the Baker property because it is close to the street and the Gossman property because the Gossmans operate a dog kennel on their property.

111. If the line were to be built along 210th Street, GRE would bury an existing distribution line along the street. If the line were to be built along CR 66, something would likely have to be done with the existing distribution line along that road to avoid having structures along both sides of the highway or one set further into the field.

112. The 210th Street route is estimated by Great River Energy to cost \$712,300 to construct. The route through the sod farms is estimated to cost \$1,224,600. The Ahern Road/CR 66 route is estimated to cost \$2,002,400.

113. Burying the distribution line along 210th Street is estimated to cost approximately \$120,000. Combining the transmission line along CR 66 with an existing distribution system is estimated to cost \$200,000. A short segment of the distribution line along 210th Street would have to be buried if the line ran through the sod farms, and that cost is estimated to be \$16,200.

114. Residents along the eastern end of 210th Street are strongly opposed to construction of the line on or near their property. They prefer either of the other two options under consideration – through the sod farms or along Ahern Road and CR 66.

115. The owners of the sod farms are opposed to any line through or along their property. They claim that the location of transmission structures in this area could eliminate their ability to continue sod operations on this property. One resident of Ferris Estates objected to the sod farm route.

116. Residents along Ahern Road and CR 66 object to this route for the line.

117. The EQB finds that the route as proposed along 210th Street is the preferred route for the following reasons:

- A. 210th Street is an existing right-of-way. There is already a distribution line along 210th Street.

- B. 210th Street is the shortest distance between Ahern Road and the Empire Substation.
- C. GRE will have to take down some trees on the right-of-way along 210th Street. The two places where tree removal is most crucial are in front of the Baker property and in front of the Gossman property – the Baker property because it is close to the street and the Gossman property because the Gossmans operate a dog kennel on their property. In both instances, removal of trees can be minimized if the line is on the other side of the road, which would be the south side. Houses on the south side of 210th Street are farther from the street than those on the north side.
- D. Besides the Baker property and the Gossman property, there is not much difference between the south side and the north side of 210th Street, and GRE can elect to place the structures on either side of the street along these other stretches.
- E. The Ahern Bypass route would cross fewer homes than would the route along 210th Street. However, this reduction in homeowners directly affected (from 18 along 210th Street to 11 along Ahern and CR 66) does not seem to warrant the additional length and cost associated with the Ahern route. Homeowners along Ahern Road and CR 66 are just as opposed to that route as the 210th Street residents are to the route down their street.
- F. The route through the sod farms would not cross any homeowners directly, although at least one landowner in the Ferris Estates Development has registered an objection to this route. The owners of the sod farms, and the lessees who operate the farms, are opposed to this route because the line would interfere with their irrigation equipment and with operation of the sod farms. There is no corridor through the sod farm property at the moment, and for at least two of the owners, the line would cross directly across their property.
- G. The Ahern Bypass route is over a mile and half longer than the 210th Street route. The construction costs are over a million dollars more. The route through the sod farms is almost a mile longer and would cost approximately one half million dollars more to construct.
- H. The 210th Street route does also include additional costs to bury the existing distribution line, estimated to be \$120,000. The Ahern Road/Cr 66 option is likely to have even higher costs for

dealing with an existing distribution system. Even with these costs, the 210th Street route is the cheapest of the three alternatives.

- I. There is no route along the east end of the line that does not meet with objection to landowners whose property would abut the transmission line.

Based on the foregoing Findings of Fact, the Environmental Quality Board makes the following

CONCLUSIONS

1. Any of the foregoing Findings more properly designated as Conclusions are hereby adopted as such.
2. The Environmental Quality Board has jurisdiction over the subject matter of this proceeding pursuant to Minn. Stat. § 116C.57, subdivision 2.
3. This project qualifies for review under the Alternative Review Process of Minn. Stat. § 116C.575 and Minn. Rules parts 4400.2000 to 4400.2950.
4. The Applicants and the EQB have complied with all procedural requirements required by law.
5. The EQB has completed an Environmental Assessment on this project as required by Minn. Stat. § 116C.575, subdivision 5, and Minn. Rules part 4400.2750, and considered all the pertinent factors in determining which route to approve.
6. The conditions included in the Route Permit are reasonable and appropriate and will help to minimize the impacts of this new line, and are agreed to by the Applicants.

Based on the Findings of Fact and Conclusions contained herein and the entire record of this proceeding, the Environmental Quality Board hereby makes the following

ORDER

A Route Permit is issued to Great River Energy and Xcel Energy for construction of a 115 kilovolt transmission line and substation in Dakota County along the route described in the permit and under the conditions specified in the permit. The Permit shall be issued in the form attached hereto, with a map showing the approved route.

Approved and adopted this 22nd day of February, 2005

STATE OF MINNESOTA
ENVIRONMENTAL QUALITY BOARD


Robert A. Schroeder, Chair