

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Great River Energy  
Ramsey-McHenry 230 kV - Temporary Reroute  
Application**

**Case No. PU-2149-01-90**

**FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER**

**November \_\_, 2001**

**Appearances**

Commissioners Susan E. Wefald and Anthony T. Clark.

Charles S. Miller, Jr., Attorney-at-Law, Fleck, Mather & Strutz, Ltd. 400 East Broadway, Suite 600, Bismarck, North Dakota 58502, on behalf of Great River Energy.

William W. Binek, Chief Counsel, Public Service Commission, State Capitol, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Allen C. Hoberg, Administrative Law Judge and Director, Office of Administrative Hearings, 1701 N. 9<sup>th</sup> St., Bismarck, ND 58501-1882, as Procedural Hearing Officer.

**Preliminary Statement**

On or about May 17, 2001, Great River Energy (GRE) filed a consolidated application for a post-construction waiver of procedures and times schedules, a certificate of corridor compatibility and a route permit authorizing temporary relocation of approximately 2.4 miles of 230 kV electric transmission line in Ramsey County, North Dakota (Application).

On August 22, 2001, the Commission issued a Notice of Filing and Notice of Hearing, scheduling a public hearing for October 22, 2001.

The Notice of Hearing identified the following issues to be considered:

1. Will the location, construction, and operation of the proposed transmission line produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Is the proposed transmission line compatible with the environmental preservation and efficient use of resources?
3. Will the proposed transmission line corridor and route minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

4. Is the proposed transmission line of such length, design, location, or purpose that it will produce minimal adverse effects so that procedures and time schedules may be waived?
5. Does a demonstrable emergency exist which requires immediate construction so that adherence to procedures and time schedules would jeopardize the utility's system?
6. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the application?

A public hearing on GRE's Application was held on October 22, 2001 in Devils Lake, North Dakota. The only persons attending the hearing were those who entered formal appearances as noted above, Commission staff, and employees of GRE. Following the hearing, the Commission received certain late filed exhibits as ordered at the hearing.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed and considered all testimony and evidence presented, the Commission makes the following:

### **Findings of Fact**

1. GRE is an electric generation and transmission cooperative headquartered in Elk River, Minnesota. GRE is an operating company formed by two other electric generation and transmission cooperatives that have merged their operations: United Power Association (UPA) and Cooperative Power Association (CPA). GRE operates the electric generating plants and transmission facilities owned by UPA and CPA. In North Dakota, these facilities include two electric generating plants, *i.e.*, the Stanton and Coal Creek Stations, and several transmission lines that support the plants.
2. Power from the Stanton Station is used to meet the electrical service requirements of Northern States Power Company d/b/a Xcel Energy (Xcel) and Otter Tail Power Company (OTP) in the Minot, Devils Lake, and Grand Forks areas. In return for the power that GRE supplies to Xcel and OTP from the Stanton Station, GRE receives offsetting amounts of power by displacement from Xcel and OTP in its service area in Minnesota.
3. GRE operates (and UPA owns) the 230 kV high voltage transmission line (Line) that runs from the Stanton Station to Grand Forks with substations near Minot, the City of Devils Lake, and Grand Forks. The Line provides the outlet for power generated from the Stanton Station. Also, the Line is part of an integrated electric transmission system that supplies power to the entire region and helps provide electric stability to that system. The Line was originally constructed in 1966, which was before the adoption of chapter 49-22, N.D.C.C. (Siting Act). The segment of the Line that runs between GRE's substation at the City of Devils Lake (Ramsey Substation) and the substation near Minot (McHenry Substation) is sometimes referred to as the Ramsey-McHenry Line.

4. On August 12, 2000, 68 structures along a ten-mile section of the Line just west of Devils Lake were knocked down by straight-line winds in excess of 110 m.p.h. Eleven of the toppled structures were in standing water in Devils Lake. The immediate result was that the Line was forced out-of-service and GRE's wholesale customers were deprived of the ability of obtaining electricity from the Ramsey-McHenry Line.
5. In order to insure a reliable source of power, the regional transmission system must be capable of handling multiple contingency events, such as can occur from a single storm event, as well as from other causes. When the ten-mile section of Line was downed, GRE was already in the process of planning for a permanent re-route of the Line, including the downed portion, from just west of the City of Minnewaukan to the Ramsey to avoid reliability problems created by the rising floodwaters of Devils Lake. Initially, GRE believed it could leave the McHenry–Ramsey Line out-of-service until a permanent reroute could be constructed. However, subsequent computer modeling indicated that the regional transmission system was at risk and that a widespread area in eastern and central North Dakota, southern Manitoba, and western Minnesota would be without a reliable supply of power if the Line was not immediately reconstructed and returned to service. More specifically, the modeling showed that operating measures alone would not be sufficient to keep the transmission system in a secure state in the event of another contingency occurring during peak loading. Based on the results of the computer studies, and at the strong urging of other area utilities (including Xcel, Manitoba Hydro, Minnkota Power Cooperative, and OTP) GRE concluded in early December, 2000 that the Line needed to be repaired and returned to service on an emergency basis to meet the upcoming 2000 – 2001 winter peak loads when the transmission system would be most at risk and the consequences of an outage would be the most severe.
6. In order to get the line repaired and returned to service in the short time available, GRE determined it could not rebuild that portion of the damaged Line that was standing in water in Creel Bay. Further, reconstruction of a temporary Line in the water would create serious reliability problems of its own. Consequently, after notifying the Commission and consulting with local public officials, GRE declared a “power emergency” on December 14, 2000 so that it could temporarily reroute the portion of the downed line that was in Creel Bay.
7. GRE began repair and reconstruction of the 10 miles of downed line, including 2.4 miles of temporary re-route along a new right-of-way, on December 18, 2000. Construction was completed on December 29, 2000 and the Line was energized the next day. The estimated cost for reconstruction of the 2.4 mile temporary reroute is approximately \$339,000.
8. On January 5, 2001, GRE filed an application for emergency waivers, a certificate of corridor compatibility, and a route permit in Case NO. PU-2149-00-605 that would authorize construction of a 35 mile long permanent reroute of that portion of the McHenry-Ramsey Line from just west of the City of Minnewaukan to the Ramsey Substation. On June 27, 2001, the

Commission granted the corridor certificate and route permit for the 35 mile permanent reroute. GRE has commenced construction on the reroute and expects it will be completed during the first half of 2002. When the permanent reroute is completed and the line energized, the 2.4 miles of temporary routing that is the subject of this docket will be abandoned.

9. From west to east, the route selected by GRE for the temporary 2.4 mile re-route proceeds north from the existing alignment along the western edge of Creel Bay for a distance of a little over a half mile. The route then turns and proceeds due east approximately a half mile along the northern edge of Creel Bay and adjacent to State Highway 19. The route then trends south and east abutting the dike on the east side of Creel Bay and avoiding the Devils Lake Airport to the north. The proposed corridor is one mile wide centered on the selected route.
10. No transmission facility exclusion areas have been identified within the proposed corridor.
11. The route selected by GRE is in close proximity to the southern edge of the crosswind runway of the Devils Lake Airport and is within 500 feet of four rural residences. However, there was no reasonable alternative to the route selected by GRE in that a more southerly route would have put the Line back in the lake and a more northerly route would have impermissibly conflicted with the Devils Lake Airport.
12. GRE worked with the FAA and the Airport Authority to minimize the impact of routing close to the crosswind runway at the Airport. Measures taken to mitigate the impact included installation of special lighting and markings on the transmission line, alteration of the PAPI system on the crosswind runway, and elimination of the shield wire running along the top of the transmission line. With these alterations and adjustments, the Airport Authority has been able to use the crosswind runway. The Line does not impact use of the primary runway.
13. At the time of construction of the 2.4 mile reroute, one structure was located in a small wetland area that is not protected by any wildlife easements. Since construction, this wetland area has expanded with the continuing rise of Devils Lake and has inundated the foundations of several additional structures. GRE has consulted with the Army Corps of Engineers about the route selected and the Corps did not object to the temporary reroute at the selected location. The only concern of the Corps was that the Line not be located on the dike that protects the City of Devils Lake from the rising water levels in Creel Bay.
14. A Class I files and records search for archeological and cultural resources revealed no sites along the route selected by GRE and none were found during construction.
15. The construction and operation of the Line will conform to the requirements of the National Electric Safety Code.

16. The construction of the temporary reroute did not result in the loss of any woodlands.
17. When the temporary reroute is abandoned, GRE proposes to remove the structures, together with any foundational fill material, and reclaim the sites.

### **Conclusions of Law**

1. The Commission has jurisdiction over this proceeding under chapter 49-22, N.D.C.C.
2. The transmission line proposed by GRE is a transmission facility as defined in section 49-22-03(11), N.D.C.C.
3. The Application submitted by GRE, as amended, meets the corridor and route evaluation criteria required by chapter 49-22, N.D.C.C.
4. A demonstrable “power emergency” existed in December 2000 as a result of the destruction of a significant stretch of the Ramsey–McHenry Line due to unexpected natural forces. The loss of use of the line deprived GRE’s wholesale customers of the ability to obtain electricity over the line. Further, it put the regional transmission system at risk and left a widespread area in eastern and central North Dakota, southern Manitoba, and western Minnesota without sufficient protection from additional contingencies that could occur, particularly during peak winter loading when the consequences of a wide spread outage could be quite severe.
5. The location and operation of the temporary line will produce only minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
6. The proposed transmission line location is compatible with the environmental preservation and the efficient use of resources.
7. The proposed transmission corridor and route minimize adverse human and environmental impacts while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes its:

### **Order**

The Commission Orders:

1. GRE’s application for a waiver of procedures and time schedules is granted.
2. Certificate of Compatibility for a Transmission Facility Corridor No. \_\_\_ is issued to GRE on behalf of UPA, designating a corridor for its proposed transmission line as shown on the attached map.

3. Route permit for Construction of a Transmission Facility No. \_\_\_ is issued to GRE, granting authority to construct the transmission line in the location shown on the attached map.
4. GRE shall comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission line, and shall provide copies of all licenses and permits to the Commission.
5. GRE shall operate the transmission line in the manner described in its Application and at the hearing, and in accordance with all applicable safety requirements.
6. GRE shall promptly report to the Commission the presence in the permit area of any critical habitat of threatened or endangered species, or of bald or golden eagles which GRE becomes aware of and which were not previously reported to the Commission.
7. All pre-existing roads and lanes used during the construction shall be restored to a condition that will accommodate their previous use and areas used as temporary roads during construction shall be restored to their original condition.
8. Reclamation, fertilization, and reseeding is to be done by GRE according to landowner preferences or the United States Soil Conservation recommendations or as approved by the Commission.
9. GRE's obligation for reclamation and maintenance of the right-of-way shall continue throughout the life of the transmission line.
10. When the temporary route is abandoned, the structures, together with any fill material, shall be removed and the sites restored as closely as possible to their original condition.
11. The abandoned structures and rock piles in Creel Bay shall be dealt with as ordered in Case No. PU 2149-00-605.
12. The authorization granted by the corridor certificate and route permit is subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

**PUBLIC SERVICE COMMISSION**

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**Anthony T. Clark**  
**Commissioner**

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**Susan E. Wefald**  
**President**

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**Leo M. Reinbold**  
**Commissioner**