

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Great River Energy
230 kV - Reroute/Ramsey, Benson Ctys
Application**

Case No. PU-2149-00-605

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

May __, 2001

Appearances

Commissioners Susan E. Wefald, Leo M. Reinbold, 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.

Douglas W. Gigler, Attorney-at-Law, Nilles, Hansen & Davies, Ltd., 201 North 5th St., Fargo, North Dakota 58101, Attorney for Landowner Interveners.

Preliminary Statement

On January 5, 2001, Great River Energy (GRE) filed a consolidated application for a waiver of procedures and times schedules, a certificate of corridor compatibility and a route permit authorizing construction and relocation of approximately 35 miles of 230 kV electric transmission line in Benson and Ramsey counties of North Dakota (Application).

On January 10, 2001 the Commission deemed the application complete and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing for February 6, 2001. On January 12, 2001, the Commission amended the notice to change the location of the hearing. On January 24, 2001 the Commission postponed the hearing to a date to be determined.

On January __, 2001, a group of landowners (Landowner Interveners) represented by, Nilles, Hansen & Davies, Ltd., Fargo, North Dakota filed a petition to intervene. The names and addresses of the Landowner Interveners are more specifically identified in Exhibit "A" to the petition to intervene.

On March 7, 2001, GRE filed an amendment to the application. The amendment revised GRE's originally proposed route and identified an alternate route within its originally designated corridor.

On March 14, 2001, GRE issued a Notice of Amended Filing and Notice of Rescheduled Hearing giving notice of the amended filing and scheduling a public hearing for April 16, 2001 at the Ramsey County Courthouse, Devils Lake, North Dakota.

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 that 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?

On April 5th, 2001, the Landowner Interveners filed a motion to continue the hearing, which was opposed by GRE. The Commission denied the motion to continue on April 11, 2001.

A public hearing on GRE's Application was held on April 16, 2001 in Devils Lake, North Dakota. 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 transmission lines that support the plants.
2. Power from GRE's Stanton Station is used to meet the electrical service requirements of 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. In 1995, the Commission granted UPA Corridor Certificate No. 69 and Route Permit No. 78 for an 8.5 mile reroute of the Ramsey-McHenry Line just east of the City of Minnewaukan because the rising waters of Devils Lake had inundated portions of the Line creating reliability and safety risks. In that proceeding, the Commission consolidated the route and corridor procedures and granted other procedural waivers in part because the Commission concluded that a demonstrable emergency existed as a result of the reliability and safety risks created by portions of the Line standing in the waters of Devils Lake. UPA constructed the reroute in late 1995 and early 1996 prior to the spring ice breakup.
5. Since 1995, Devils Lake has risen another 12 feet and has now inundated approximately 59 foundation structures, including parts of the line that were re-routed in 1995-96. In addition, on August 12, 2000, a ten-mile section of the Line just west of Devils Lake was knocked down by high winds. This ten-mile section was repaired in December 2000 under emergency authority granted by the Commission, but the repair is only temporary and includes the re-route of about four miles of line around the north end of Creel Bay in close proximity to the Devils Lake Airport.
6. The continued increase in inundation of a significant number of foundation structures along the Ramsey-McHenry Line has once again created a demonstrable emergency requiring expeditious action. In addition, the situation is further exacerbated by the recent downing of a portion of the Line by the referenced windstorm and the need for a permanent replacement of that portion of the Line. The underlying concerns creating the demonstrable emergency involve both system reliability and safety.
7. Recent studies of the regional transmission system reveal that the Line is important for the stability of the transmission system, particularly during the time of winter peak loads when the consequences of an outage would be most severe. The inundation of a significant number of foundation structures creates an unacceptable risk of failure of the Line as a result of ice movement. It also creates problems of accessibility for making repairs in the

event of storm or other damage to the line. Further, in order to restore the Line to service on an emergency basis following the referenced windstorm, a portion of the Line had to be rerouted around Creel Bay in close proximity to the Devils Lake Airport to avoid the high water. Because of the Line's close proximity to the Airport and the need to maintain minimum clearances for approach to the crosswind runway, GRE was unable to install a shield wire above its conductors along the temporarily repaired portion of the Line to protect the Line against lightening strikes. A lightening strike on this portion of the Line could result in damage to the transformer in GRE's nearby Ramsey Substation and cause a blackout to the City of Devils Lake.

8. The safety concerns created by the high water include (1) the loss of minimum National Electric Safety Code (NESC) clearances between the conductor and surface of Devils Lake for portions of the Line, (2) the risk to the GRE linemen who now have to go out and chip ice around the structures that are in the water under hazardous conditions to try and avoid the structures being taken out by ice movement, and (3) the close proximity of the emergency temporary reroute to the Devils Lake Airport.
9. The foregoing reliability and safety problems will only increase in magnitude if Devils Lake continues to rise.
10. Reconstruction of a new, higher line along the existing alignment to avoid the rising floodwaters would not eliminate the reliability concerns of ice movement and the accessibility problems created by having a significant number of structures in the water. In addition, it would not be possible to construct a larger line along the existing alignment that would accommodate higher water levels, meet minimum NESC clearances, and at the same time stay below the height limitations imposed by the Devils Lake Airport. Finally, reconstruction along the existing alignment would require all new foundations and rock structures for the inundated portion of the line making construction more expensive than a reroute on dry land and requiring that the line be out of service during the period of construction.
11. The corridor and route that GRE has proposed will result in approximately 22 miles of the Line from just west of Minnewaukan to GRE's Ramsey Substation at the City of Devils Lake being rerouted to the north of the existing alignment, around the rising flood waters of Devils Lake and approaching GRE's substation from the north and east of the City of Devils Lake, rather than from the south and west along the current alignment. The total length of the proposed re-route is approximately 35 miles. The reroute abandons that portion of the Line that was rerouted in 1995-96 and the portion that was temporarily rerouted in close proximity to the Devils Lake Airport in December 2000.
12. One of the primary criteria utilized by GRE in the selection of the proposed corridor and route was to keep the new alignment above elevation 1458 m.s.l. to the greatest extent possible. This is the elevation at which Devils Lake would spill over to the Sheyenne and Red River basins. The corridor selected by GRE is the only location that reasonably satisfies this criterion. Any other location would require going many more miles either south around

Devils Lake or north around the chain of lakes that are situated to the north of Devils Lake and would create significantly more impacts to both the human and natural environments.

13. GRE's final recommended route includes several shifts in alignment from its originally proposed route as described in the Amended Application and several minor adjustments to the route, primarily affecting single landowners, that were proposed at the Hearing. These changes and adjustments to the originally proposed route were made by GRE to satisfy landowner concerns and most of the affected landowners are satisfied with the changes and adjustments.
14. The final recommended route primarily utilizes existing transportation and transmission corridors, avoids PSC exclusion areas, and reasonably minimizes impacts to PSC avoidance areas. There are six locations where the route is within 500 feet of an existing residence or business. In each of these locations, the landowners have consented to the route and have executed a written waiver of the 500 feet avoidance criterion. Also, in several of the locations, a reasonable alternative was not available given other routing and design constraints, including the necessity of maintaining line separation at the entrance to the Ramsey Substation for reliability purposes and impacts to other residences and businesses.
15. The proposed transmission line reroute will be constructed using single pole structures except that H-frame structures may be used when paralleling an existing OTP H-frame constructed line in order to minimize impacts to the landowners along this portion of the alignment.
16. The total estimated cost of the reroute is approximately \$10 million dollars. GRE intends to proceed with construction as expeditiously as right-of-way acquisition and material procurement will allow. The goal is to have the line operational before the spring thaw in 2002 with some possibility of the line being operational before the 2001-2002 winter peak.
17. The construction, testing, and operation of the line will conform to the requirements of the National Electric Safety Code.
18. A Class I File and Records Search of archeological and cultural resource sites was conducted for the proposed corridor. Based on the information obtained from the survey, it does not appear that the proposed route will impact any known archeological and cultural resource sites in the proposed corridor. GRE will do a pedestrian survey of the proposed route prior to construction to make sure that the proposed route does not impact sites that were not identified by the Class I survey.
19. The proposed route will result in the loss of a minimal amount of woodlands. GRE proposes to replace any destroyed trees or woody vegetation on a two-for-one basis with saplings that are two or more years old.
20. GRE proposes to remove the abandoned structures in the water at the level of the rock piles and/or foundations supporting and protecting the structures

unless a portion of the structure is required for marking of the rock piles. The cost and environmental problems of removing the inundated rock piles make removal at this time impractical. GRE has committed to removing the rock piles, at the request of the landowner, if the water recedes and the work can be done from dry land, so long as necessary accesses and permits can be obtained. In the meantime, GRE proposes to mark the existing rock piles using markings acceptable to the United States Coast Guard and North Dakota State Game & Fish and proposes to maintain the markings with yearly inspections. Structures on dry land that are abandoned will either be removed or cut off 42 inches below ground level.

21. As indicated in Late-filed Exhibit #8, GRE proposes to install Bird Flight Diverters or Spiral Vibration Dampers on the shield wire where the proposed line parallels the Silver Lake Wildlife Refuge.

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

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 emergency exists that requires immediate construction such that adherence to the procedures and time schedules required by the Siting Act would jeopardize the utility's system and would not be in the public interest. The requested waiver of procedures and time schedules is justified and should be granted on this basis. In addition, the corridor proposed by GRE is the only practicable corridor that could have been selected for the proposed reroute given the criterion utilized by GRE of trying to keep the proposed reroute above elevation 1458 to the greatest extent possible, which criterion is reasonable under the circumstances. This being the case, consolidation of the corridor and route selection processes is justified for this reason, as well.
5. The proposed transmission line location is compatible with the environmental preservation and the efficient use of resources.
6. The proposed transmission corridor and route will 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. A preconstruction conference shall be held prior to commencement of any construction, and shall include a GRE representative, its construction supervisor, and Commission staff to ensure that GRE fully understands the conditions set forth in this order.
5. GRE shall comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed transmission line, and shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to the construction of the transmission line. The submittals shall include any environmental assessment prepared by FEMA and RUS and any findings made by FEMA and RUS with regard to the environmental assessment.
6. GRE shall inform the Commission of its intent to start construction on the transmission line prior to the commencement of construction, and, once construction has started, GRE shall keep the Commission updated of construction activities on a weekly basis.
7. GRE shall construct and operate the transmission line in the manner described in its Application and at the hearing, and in accordance with all applicable safety requirements.
8. 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 that GRE becomes aware of and that were not previously reported to the Commission.
9. GRE shall complete the pedestrian survey of the route for archeological and cultural resource sites and provide the results of this search to the Commission prior to construction. If any cultural resource, paleontological, archeological, historical, or grave site is discovered during construction, it shall be marked, preserved and protected from any further disturbance until a professional examination can be made by the State Historical Society, a report of such examination is filed with the Commission, and clearance to proceed is given by the Commission.
10. 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.

11. Construction shall be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures approved by the Commission are taken.
12. Reclamation along the right-of-way shall be continuous and coordinated with the construction.
13. 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.
14. GRE's obligation for reclamation and maintenance of the right-of-way shall continue throughout the life of the transmission line.
15. GRE shall replace all trees and woody vegetation destroyed as a result of construction on a two-for-one basis with saplings that are two or more years old.
16. Abandoned structures in the water shall be removed or cut off at the top of the foundation or rock piles unless a portion of the structure is required for marking the rock piles. If the water around the rock piles recedes, GRE shall reclaim the rock piles upon landowner request if the work can be done from dry land and the necessary accesses and permits can be obtained.
17. Rock piles that remain in the water shall be marked and inspected in accordance with the recommendations that have been received from the United States Coast Guard and North Dakota State Game and Fish, unless other more stringent requirements are imposed by these or other agencies having jurisdiction over the premises.
18. GRE shall install Bird Flight Diverters or Spiral Vibration Dampers on the shield wire where the line parallels the Silver Lake Wildlife Refuge.
19. GRE shall provide the Commission with as-built drawings showing the location of the transmission line as completed.
20. 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

Anthony T. Clark
Commissioner

Susan E. Wefald
President

Leo M. Reinbold
Commissioner

