

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**Square Butte Electric Cooperative
250-kV DC Line Reroute—Kidder County
Application**

Case No. PU-551-00-407

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

October 27, 2000

Appearances

Commissioners Leo M. Reinbold and Susan E. Wefald

Mark B. Bring, Staff Attorney, Square Butte Electric Cooperative, Inc., 1822 Mill Road, P.O. Box 13200, Grand Forks, ND 58208-3200, on behalf of Square Butte Electric Cooperative.

William W. Binek, Chief Counsel, Public Service Commission, State Capitol, Bismarck, North Dakota 58505-0480, on behalf of the Public Service Commission.

Bonny M. Fetch, Administrative Law Judge, Office of Administrative Hearings, 1707 North 9th Street, Bismarck, North Dakota 58501-1882, as procedural hearing officer.

Preliminary Statement

On August 8, 2000, Square Butte Electric Cooperative (Square Butte) filed a Letter of Intent with the Commission, announcing its intent to relocate a portion of 250 kV Direct Current (DC) electric transmission line in Kidder County, North Dakota and requesting a waiver of the one-year waiting period for filing an application. On August 16, the Commission shortened the waiting period to one day and assessed a filing fee of \$5,000.

On September 18, 2000, Square Butte filed a consolidated application for a certificate of corridor compatibility, a route permit, and a waiver of certain procedures and time schedules. Specifically, Square Butte requests the Commission: (1) waive the provisions of N.D.C.C. §§ 49-22-08(2), (3) & (5), 49-22-08.1(5), 49-22-13(1) and N.D. Admin. Code § 69-06-01-02(2) which require separate filings of such applications, separate hearings and certain time schedules; and (2) designate the corridor and route as identified in the application and issue the appropriate corridor and route permits. Square Butte also requests that the criteria maps contained in the application be allowed to substitute for a separate set of mylar maps, and that the Commission waive the requirement to furnish a set of stereo-pair aerial photographs.

On September 27, 2000, the Commission deemed the application complete and issued a Notice of Filing and Notice of Hearing scheduling a Public Hearing for October 27, 2000, in the Kidder County Courthouse. The notice 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 the 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?

On September 29, 2000, Square Butte filed a Motion for Expedited Order, requesting the Commission issue a decision on the application immediately upon conclusion of the hearing in order to accommodate construction scheduling objectives.

On October 27, 2000, a public hearing was held as scheduled at the Kidder County Courthouse in Steele, North Dakota. Having heard and considered this matter, the Commission makes its:

Findings of Fact

1. Square Butte is an electric generation and transmission cooperative headquartered at 1822 Mill Road, Grand Forks, North Dakota 58208. Square Butte owns and operates a 250 kV DC transmission line that begins at the Milton R. Young generating station near Center, North Dakota and runs to Duluth, Minnesota, where it delivers 71% of the 430 MW output from Square Butte's Milton R. Young Unit 2 to

Minnesota Power, Inc. The line is Square Butte's only conduit for delivering electricity to Minnesota Power markets.

2. Square Butte proposes to construct approximately 1.2 miles of new 250 kilovolt (kV) Direct Current (DC) electric transmission line around the west side of Horsehead Lake in Kidder County, North Dakota. The purpose is to relocate approximately 1.3 miles of Square Butte's existing Center to Duluth 250-kV transmission line, a portion of which is now flooded because of the rising waters of Horsehead Lake. The proposed corridor and route are located entirely within Kidder County in T 141N, R 72W, Sections 16, 17, 20, 21, 28 and 29.

3. The affected portion of line was originally constructed on dry land in 1975-76 at approximately 1710 feet msl (mean sea level). The water has now reached an elevation of approximately 1,730 feet msl and the proposed reroute would raise the minimum elevation of the structures to 1734 feet msl.

4. Square Butte states that the proposed facility is of such length, design, location and purpose that it will produce minimal adverse effects and that a demonstrable emergency exists that justifies a waiver of procedures and time schedules. Square Butte believes that spring ice movement may severely damage the single-lattice aluminum structures that support the line and cause an outage of electric transmission. Additionally, the water is making it difficult to maintain the line and vertical clearances between the conductors and the water surface no longer comply with minimum requirements of the National Electrical Safety Code.

5. The proposed transmission line will be constructed using eleven aluminum lattice structures installed on precast concrete foundations and ranging from approximately 60 to 70 feet in height with spans of approximately 700 feet between structures. The structures will support two conductors and one overhead shield wire for lightning protection. Each conductor will be 2839.8 MCM (thousand circular mills) 72/7 ACSR (aluminum conductor steel reinforced) and the overhead shield wire will be 3/8-inch 7 strand extra high strength galvanized steel wire. All construction, testing and operation of the transmission line will conform to the requirements of the National Electrical Safety Code.

6. The total estimated cost for the project is approximately \$600,000.

7. Square Butte plans to begin construction on approximately October 30, 2000, energize the new line by November 19, 2000 and remove the existing line by December 31, 2000. Square Butte intends to salvage existing structure footings or bury those that cannot be salvaged a minimum of six feet below the surface, except that Square Butte agrees to remove and dispose of abandoned structure footings when requested by landowners. Abandoned footings in water will be removed or buried when water recedes such that they become accessible.

8. Square Butte's proposed route includes a 120 feet wide right-of-way and primarily follows along section lines and maximum ground elevations. Square Butte's

proposed transmission corridor extends for approximately ½ mile on either side of the proposed route.

9. URS Corporation on behalf of the Federal Emergency Management Agency (FEMA) did an environmental assessment for this project. As a result of the assessment, the FEMA issued a Finding of No Significant Impact dated August 29, 2000.

10. A Class III cultural resource inventory conducted along the proposed route identified no cultural resources and no further study was recommended. The North Dakota State Historical Society reviewed the study and concurred with its findings.

11. There are some shelterbelts and small native wooded areas within the corridor, but no wooded areas or trees are found along the proposed route.

12. The proposed route passes primarily through hayland and pastureland, which Square Butte will reseed if necessary for regrowth. No Conservation Reserve Program acreage will be disturbed and the National Resource Conservation Service has determined the project would probably result in no net loss of prime farmland. Some agencies noted the presence of native prairie lands within the project corridor and recommend any disturbed areas be revegetated with native species comparable to what currently exists.

13. The proposed route avoids wetlands that are located within the proposed corridor, some of which are protected under permanent easement by the U.S. Fish and Wildlife Service. The proposed route spans a small intermittent stream in the NW ¼ of Section 28, T 141N, R 72W, but no structures would be placed in the drainage area. The Commission finds no reasonable alternative that would further avoid these wetland areas.

14. The U.S. Fish and Wildlife Service identified the project area as potential habitat for three federally threatened or endangered species: whooping crane (endangered), bald eagle (threatened), and piping plover (threatened). URS Corporation performed a reconnaissance and evaluated for the presence of favorable habitat as part of the environmental assessment. URS Corporation concluded that occurrence of these species in the project area is unlikely.

15. The North Dakota Game and Fish Department has identified the project area as known or potential habitat for grassland nesting birds such as Sprague's pipit (watched) and Baird's sparrow (state bird species of concern). The Department recommends construction not take place next year before July 15th to reduce impacts. The Department also recommends use of bird flight diverters and raptor protection modifications as necessary to avoid avian collisions. Square Butte will commence construction well after July 15th of this year using bird flight diverters and current guidelines for preventing raptor electrocution.

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

Conclusions of Law

1. The Commission has jurisdiction over the parties and subject matter of this proceeding.
2. The transmission line proposed by Square Butte is a transmission facility as defined in N.D.C.C. section 49-22-03(12).
3. The application submitted by Square Butte meets the corridor and route evaluation criteria required by N.D.C.C. chapter 49-22.
4. The location, construction, and operation of the proposed transmission line relocation will produce only minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The proposed transmission line relocation is compatible with the environmental preservation and the efficient use of resources.
6. The proposed transmission line corridor and route will 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.
7. The proposed transmission line relocation is of such length, design, location, and purpose that it will produce minimal adverse effects.
8. A demonstrable emergency does exist which requires immediate construction such that adherence to procedures and time schedules would jeopardize the utility's system.

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

Order

The Commission Orders:

1. Square Butte's application for a waiver of procedures and time schedules is granted.
2. Certificate of Corridor Compatibility for Transmission Facility No. 78 is issued to Square Butte Electric Cooperative, designating a one mile wide corridor for its proposed transmission line reroute as shown on the attached map.
3. Route Permit for the Construction of a Transmission Facility No. 88 is issued to Square Butte Power Cooperative, granting authority to construct the transmission line reroute in the location shown on the attached map.
4. Square Butte shall hold a preconstruction conference prior to commencement of any construction, which must include a Square Butte representative, its construction supervisor, and a representative of Commission Staff to ensure that Square Butte fully understands the conditions set forth in this order.
5. Square Butte 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 construction of the transmission line.
6. Square Butte 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, Square Butte shall keep the Commission updated on construction activities on a weekly basis.
7. Square Butte shall construct and operate the transmission line in the manner described in Square Butte's application and in accordance with all applicable safety requirements.
8. Square Butte 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 Square Butte becomes aware of and which were not previously reported to the Commission.
9. If any cultural resource, paleontological, archeological, historical, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances 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 construction must be restored to a condition that will accommodate their previous use, and areas used as temporary roads or working areas during construction must be restored to their original condition.
11. Construction must 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. Square Butte shall remove abandoned structure footings upon landowner request.
13. Minimum burial depth for abandoned structure footings is six feet from the top of the 60-inch diameter footing such that the burial trench is at least 11 feet deep.
14. When burying structure footings or performing other excavations, at least twelve inches of topsoil must be stripped and segregated from the subsoil whenever possible and replaced only after the subsoil is replaced.
15. Reclamation and clean-up along the right-of-way must be continuous and coordinated with construction.
16. Reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service and the Kidder County Farm Service Agency recommendations for CRP, native prairie and other lands unless otherwise specified by the landowner and approved by the Commission.
17. Trees or other woody vegetation must be replaced at a rate of two for every one removed. Square Butte shall contact landowners to determine preferred locations off of the right-of-way for replacement plantings. Trees and woody vegetation must be replaced with saplings that are two or more years old.
18. Square Butte's obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the transmission line.
19. Square Butte shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the reroute of the transmission line.
20. Square Butte shall obtain approval from the Commission or from Commission Staff prior to any changes in structure locations.
21. Square Butte shall provide the Commission with a copy of the design specifications for the construction of the transmission line showing the location of the transmission line as built.

22. The authorizations granted by the corridor certificate and route permit are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

23. Square Butte shall work with landowners to determine and implement appropriate damage mitigation measures.

PUBLIC SERVICE COMMISSION

**Susan E. Wefald
Commissioner**

**Bruce Hagen
President**

**Leo M. Reinbold
Commissioner**