

**BASIN ELECTRIC
POWER COOPERATIVE**

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December 9, 2013

Mr. Darrell Nitschke
Executive Director
North Dakota Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0480



Re: AVS-Neset 345 kV Transmission Line Project
Case No. PU-11-696

Dear Mr. Nitschke:

Enclosed please find the proposed Findings of Fact, Conclusions of Law and Order regarding the above captioned case.

If you have any questions, please feel free to contact me at cjacobson@bepc.com or (701) 557-5413.

Sincerely,

A handwritten signature in black ink that reads "Casey J. Jacobson".

Casey J. Jacobson
Attorney

cjj/ds
enclosure

cc: Mitchell D. Armstrong, Smith Bakke Porsborg Schweigert & Armstrong

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**Basin Electric Power Cooperative
AVS – Neseet 345 kV Transmission Line
Siting Application**

Case No. PU-11-696

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

Date _____

Appearances

Commissioners Brian Kalk, Randy Christmann, Julie Fedorchak

Casey J. Jacobson, Attorney, Basin Electric Power Cooperative, 1717 East Interstate Avenue, Bismarck, North Dakota 58503, on behalf of Basin Electric Power Cooperative.

Mitchell D. Armstrong, Counsel, North Dakota Public Service Commission, State Capitol, 600 East Boulevard Avenue, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Bonny M. Fetch, Administrative Law Judge, Office of Administrative Hearings, 1707 North 9th Street, Bismarck, North Dakota 58503, as Procedural Hearing Officer.

Preliminary Statement

On December 6, 2011, Basin Electric submitted a letter to the Public Service Commission notifying the Commission of its intent to construct approximately 200 miles of 345 kV Transmission Line originating from the Antelope Valley Station and terminating at the Neseet 230 kV Substation located near Tioga.

By a Motion dated December 21, 2011, the Commission acknowledged the Letter of Intent and assessed a filing fee of \$100,000.00, and assigned the Project Case No. PU-11-696.

On March 15, 2013, Basin Electric submitted its combined Applications for a Waiver of Procedures and Time Schedules, Certificate of Corridor Compatibility, and a Route Permit for the AVS to Naset 345 kV Transmission Project (Application).

On July 2, 2013, Basin Electric filed an Amendment to the Application to the North Dakota Public Service Commission for a Consolidated Certificate of Corridor Compatibility and Route Permit.

On July 30, 2013, the Public Service Commission issued a Notice of Filing and Notice of Hearing on Basin Electric's Application and found the Applications to be complete conditioned on Basin Electric filing a map detailing the proposed final transmission line structure locations one week prior to the hearing.

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

1. Will the location, construction and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations 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?

The Notice of Hearing also identified the following issues to be considered in Basin Electric's Application for Waiver of Procedures and Time Schedules.

1. Are the proposed facilities of such length, design, location or purpose that they will produce minimal adverse effects and that adherence to applicable procedures and time schedules may be waived.
2. Is it appropriate for the Commission to waive any procedures and time schedules as requested in the Application?

On August 22, 2013, Basin Electric delivered a map detailing the proposed final transmission line structure locations to the Public Service Commission.

On September 4, 2013 at 10:30 a.m. CST, a public hearing was held in Killdeer, North Dakota. Basin Electric presented seven witnesses and numerous members of the public offered comments.

On September 5, 2013 at 10:00 a.m. CST, a public hearing was held in Tioga, North Dakota. Basin Electric presented five witnesses and members of the public offered comments.

On September 12, 2013 at 10:00 a.m. CST, a public hearing was held in Williston, North Dakota. Basin Electric presented five witnesses and members of the public offered comments.

On September 27, 2013, Basin Electric filed the following late filed exhibits:

Exhibit 31 – Agencies and Permit Status Update;

Exhibit 39 – Wisconsin PSC Underground Study; and

Exhibit 40 – Exclusions & Avoidance Areas for the six mile macro corridor near Killdeer, North Dakota.

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 conclusions:

Findings of Fact

1. Basin Electric is a regional wholesale electric generation and transmission cooperative, organized under the laws of the State of North Dakota, and headquartered in Bismarck, North Dakota. Basin Electric provides power to more than 137 member systems serving more than 2.8 million consumers in nine states, including North Dakota.
2. Basin Electric proposes to construct and operate a 345 kV transmission line known as the AVS to Naset 345 kV Transmission Project. The Project consists of approximately 197 miles of new, high voltage 345 kV and 230 kV alternating current transmission line and associated facilities extending from Basin Electric's existing Antelope Valley Station (AVS) and terminating at the Naset 230 kV Substation located near Tioga.
3. The AVS to Naset 345 kV Transmission Project will be constructed, owned and maintained by Basin Electric with the exception of a 31-mile 115 kV/345 kV double circuit segment between the proposed Judson and Tande Substations. The 115 kV circuit will be owned by Basin Electric Electric's member Mountrail-Williams Electric Cooperative but maintained by Basin Electric. The transmission line will be located in Mercer, Dunn, Williams, McKenzie, and Mountrail Counties.
4. The Project is needed to provide Basin Electric members access to generation and to address grid reliability issues in northwestern North Dakota and eastern Montana. Basin Electric states that if the Project does not get built as proposed, the existing transmission capacity will curtail future load growth.
5. The total cost of the Project is estimated to be \$375 million.
6. Basin Electric states it selected the proposed route based on a number of factors including: input from landowners and federal and state agencies; minimizing environmental impacts through measures such as avoidance of wetlands; cultural sites and environmentally sensitive areas; compliance with Chapter 49-22 of the North Dakota Century Code and the Commissions siting rules; and feasibility from a design and construction perspective.

Project Design

7. The proposed transmission line and associated facilities will be designed and constructed to meet or surpass all relevant codes and standards of the Rural Utilities Service, the National Electric Safety Code, the Institute of Electrical and Electronics Engineers, the American Society of Civil Engineers, the American Institute of Steel Construction, the American Concrete Institute, Basin Electric standards, and in accordance with Avian Power Line Interaction Committee suggested practices for raptor-safe transmission line design.
8. The Project will be constructed on self-supporting galvanized steel single-pole structures. The typical structure will be around 115 feet tall. The top of the pole will be about 15 inches in diameter and the bottom will be about 50 inches in diameter. The angle structures will also be single poles and will have concrete foundations and no guy wires. The regular in-line structures will be directly buried in the ground. Some special situations will require H-frame structures or structures requiring two poles.
9. The Project will be 3-phase, meaning it uses three current carrying conductors. The 345 kV conductor will be 1.8 inches in diameter with 76 strands of aluminum and 19 strands of steel. Above the conductors will be an optical ground wire and a steel ground wire both of which are approximately ½ inch in diameter. The line will require approximately six to seven structures per mile, depending on terrain and other design factors. The right-of-way will be 125 feet wide for the 230 kV segments and 150 feet wide for the 345 kV segments.
10. Associated facilities will include upgrades or additions to the AVS Substation, Charlie Creek Substation, Neseet Substation and new construction of the Judson and Tande Substations.
11. Construction of the proposed Project from AVS to Judson is expected to begin in the spring of 2014 and is anticipated to be complete by the end of 2015. Construction of the segment from Judson to Tande is expected to be completed no later than the fourth quarter of 2017.

12. Project benefits include: providing Basin Electric and its member-owner distribution cooperatives with access to additional low-cost base load generation to serve increasing load in their service territories; improving grid reliability; generating long-term state and local tax revenue; providing construction related jobs, and stimulus to local economies in the form of expenditures for products and services.

Siting Criteria – Corridor & Route

13. North Dakota Administrative Code, Chapter 69-06-08 sets forth certain criteria to guide the Commission in evaluating the suitability of granting an application for a Certificate of Corridor Compatibility and a Route Permit for a transmission facility. The criteria as set forth in Section 69-06-08-02 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria. North Dakota Administrative Code, Chapter 69-06-08 provides that Exclusion and Avoidance Areas may be located within a corridor, but at no given point shall such an area encompass more than 50% of the corridor width, unless there is no reasonable alternative. North Dakota Administrative Code, Section 69-06-08-02 provides that a transmission facility route must not be sited within an Exclusion Area. A transmission facility route must not be sited within an Avoidance Area unless the Applicant shows under the circumstances there are no reasonable alternatives.
14. Section §69-06-05-02(5) of the North Dakota Administrative Code provides that, “the width of the corridor must be at least ten percent of its length, but not less than one mile or greater than six miles unless otherwise approved by the Commission.” In accordance with the Commission’s Selection Criteria, a corridor or route may be approved if it is demonstrated that any significant adverse impacts that will result from the location, construction and maintenance of the transmission facility will be of an acceptable minimum or managed at an acceptable minimum. In accordance with the Commission’s Policy Criteria, preference may be given to an applicant demonstrating certain benefits from the adoption of certain policies and practices.
15. Basin Electric submitted substantial information in its Application and testimony at the hearings, concerning compliance with the Commission Exclusion and Avoidance Area criteria as applied to the proposed Corridor.

16. Basin Electric evaluated a Corridor of 150 and 125 feet wide.
17. The proposed Route and Corridor do not include any Exclusion Areas.
18. Avoidance Areas crossed by the Route and Corridor include:
 - a. Little Missouri Grasslands Management Area;
 - b. Lewis & Clark Wildlife Management Area;
 - c. Areas that are geologically unstable;
 - d. Areas that have recreational significance;
 - e. The route is located within 500 feet of four rural residences; and
 - f. The route is located within 500 feet of two businesses.

There are no reasonable route alternatives other than the proposed Route concerning the six Avoidance Areas.

19. The route is located within 500 feet of four rural residences. Waivers have been obtained from the homeowners in each of the four occurrences.
20. No rare or unique resources have been identified along the route. It is not anticipated that the proposed Project will impact rare and unique resources. To help avoid potential impacts to avian species along the proposed route during operation of the transmission line, bird flight diverters will be installed in high risk areas determined in consultation with the Western Area Power Administration biologist and consultation with the United States Fish and Wildlife Service.
21. Basin Electric submitted substantial information in its Application and through its testimony that any significant adverse effects from the location, construction and maintenance of the transmission facility as they relate to the Selection Criteria listed at Section 69-06-08-1(3) North Dakota Administrative Code, will be at an acceptable minimum or will be managed and maintained at an acceptable minimum.

22. Basin Electric submitted substantial information in its Application and through its testimony to demonstrate its commitment to maximize the benefits of the proposed transmission facility to meet the Policy Criteria set forth in Section 69-06-08-1(4), North Dakota Administrative Code.
23. A Class I file search and Class III cultural resource survey (pedestrian survey) were conducted along the proposed route. The survey area consisted of a 150 ft. wide corridor centered on the proposed route centerline. Numerous prehistoric and historic sites were identified during the Class III Surveys. When feasible, significant cultural resources were avoided during routing of the proposed transmission line. Where impacts to sites were necessary, subsurface testing was conducted to determine if significant cultural deposits would be impacted during pole construction. Pole locations were adjusted to limit adverse effects on the cultural resource. Additionally, it is unlikely that paleontological resources would be affected by the Project.

Other Issues

24. A National Wetlands Inventory was conducted along the proposed route. No permanent impacts to the wetlands are anticipated as a result of project construction. Structures will not be placed in wetland areas. Basin Electric will provide a 100 ft. buffer zone around wetlands, whenever feasible, to prevent impacts; wetland areas along the line route will be avoided or spanned. Basin Electric will implement mitigation measures to minimize indirect impacts to surface water and wetland resources, such as erosion and sedimentation control Best Management Practices. Basin Electric will require its contractor to secure required storm water construction permits for the project from the North Dakota Department of Health.
25. Basin Electric states that it has complied with all local land use and planning ordinances.
26. During the route selection process, federal, state and local departments, agencies and entities who were consulted by and provided feedback to Basin Electric regarding the Project include:

- a. Federal Agencies – Rural Utilities Service (RUS); Federal Aviation Administration; United States Army Corps of Engineers (USACE) Omaha District, North Dakota Regulatory Office; United States Fish and Wildlife Service (USFWS), United States Forest Service (USFS), North Dakota Ecological Services; United States Department of Agriculture (USDA), Natural Resources Conservation Service; United States Department of the Interior – National Park Service;
- b. State Agencies – State Historical Society of North Dakota, State Historic Preservation Office (SHPO); North Dakota Parks and Recreation Department; North Dakota Game and Fish Department; North Dakota Department of Health; North Dakota Department of Transportation; North Dakota State Water Commission; Job Service North Dakota; North Dakota Department of Trust Lands; and
- c. Local Entities – County Commissioners, County Zoning Boards and Township Commissioners.

27. Agency consultations and comments were included within the Application (see Section 7.11 and Appendix G), as well as in the exhibits and the testimony presented at the public hearings.
28. The United States Department of Agriculture (USDA) Rural Utilities Service (RUS), the USFS and Western Area Power Administration (Western) as federal agencies are required to complete an Environmental Impact Statement of the Project under the National Environmental Policy Act (NEPA). Basin Electric will file a copy of the final document and any resulting findings with the Commission prior to beginning construction of the Project.
29. Section 49-22-16(3) of the North Dakota Century Code provides that an applicant for a route permit from the Commission shall obtain all permits that may be required to construct and operate the transmission facility.

30. Basin Electric's application and supplemental filings include a listing of permits and approvals that must be obtained for the proposed transmission facility and the status of each of these permits or approvals.

Conclusions of Law

1. The Commission has jurisdiction over this proceeding under Chapter 49-22 of the North Dakota Century Code.
2. The Project proposed by Basin Electric is a transmission facility as defined in Section 49-22-03(12), of the North Dakota Century Code.
3. The location, construction, and operation of the proposed Project will produce only minimal adverse effects of the environment and upon the welfare of the citizens of North Dakota.
4. The Application submitted by Basin Electric meets the Corridor and Route evaluation criteria required by Chapter 49-22 of the North Dakota Century Code.
5. The proposed transmission facility 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.
6. The proposed Project is compatible with the environmental preservation and the efficient use of resources.
7. The requested waivers of procedures is justified based upon: the minimal impacts on the environment and the welfare of the citizens of North Dakota; the lack of objection to the proposed transmission facility by federal, state and local government bodies and agencies or by the majority of landowners along the route; and the objective to have a reliable integrated transmission system in North Dakota.
8. The proposed transmission facility is of such length, design, location and purpose that it will produce minimal adverse effects.

9. It is appropriate for the Commission to approve a Corridor less than one mile.

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

Order

The Commission orders:

1. Basin Electric's request for a waiver of procedures and time schedules is granted.
2. A Certificate of Corridor Compatibility and Route Permit for Transmission Facility Corridor No. _____ is issued to Basin Electric, designating a Corridor and Route for its proposed transmission facility as described in Basin Electric's Application and supplemental Findings and granting Basin Electric authority to construct the Project.
3. Basin Electric shall conduct a preconstruction conference prior to commencement of any construction, which must include a Basin Electric representative, its construction supervisor, and a representative of Commission staff to ensure that Basin Electric fully understands the conditions set forth in this Order.
4. Basin Electric shall complete cultural resource surveys on all remaining parcels and shall file with the Commission documentation showing SHPO concurrence with the findings set forth in the associated reports prior to beginning construction on the unsurveyed parcels.
5. Basin Electric shall file with the Commission a copy of the final federal Environmental Impact Statement and resulting findings prior to beginning construction.

6. Basin Electric will comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed transmission facility. Prior to commencing construction of any phase of the proposed project, Basin Electric shall obtain all other necessary approvals and permits for construction of such phase and provide copies to the Commission prior to the construction of each such phase.
7. Basin Electric shall inform the Commission of its intent to start construction on the transmission facility prior to the commencement of construction, and, once construction has started, Basin Electric shall keep the Commission updated of construction activities on a weekly basis.
8. Basin Electric shall construct and operate the Project in the manner described in its Application and at the hearing, and in accordance with all applicable safety requirements.
9. Basin Electric 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 Basin Electric becomes aware of and that were not previously reported to the Commission.
10. If any cultural resource, paleontological, archeological, historical, or grave site is discovered during construction, earth disturbing activities in the immediate vicinity of the discovery must be halted. The resource must be marked, preserved and protected from further disturbances until a professional examination can be made and consultation with the State Historical Preservation Office. A report of such examination must be filed with the Commission, and clearance to proceed must be given by the Commission.
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. Reclamation along the right-of-way shall be continuous and coordinated with construction.

13. Reclamation, fertilization and reseeding is to be done by Basin Electric according to the Natural Resource Conservation Service or USFS recommendations for CRP, native prairie and other non-cropped lands unless otherwise specified by the landowner and approved by the Commission.
14. Basin Electric will comply with the Commission's Tree and Shrub Mitigation Specifications attached to this Order.
15. Basin Electric's obligation for reclamation and maintenance of the right-of-way shall continue throughout the life of the transmission facilities.
16. Basin Electric shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the path of the transmission line.
17. Basin Electric shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the proposed transmission facilities.
18. Basin Electric shall obtain approval from the Commission or from Commission staff prior to any changes in structure locations.
19. Basin Electric shall provide the Commission with a copy of the facility alignment plan and profile drawings showing the facility as built (hard copy and electronic versions), and an electronic version of the as-built facility that can be imported into ESRI GIS mapping software, within three months of the completion of the construction.
20. 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.

21. Prior to construction on the Judson to Tande segment, Basin Electric shall provide the Commission with a letter from the Williston City Commission on their concurrence that the Project will not interfere with the Soulin Field Airport Project.

PUBLIC SERVICE COMMISSION

Brian Kalk
President

Randy Christmann
Commissioner

Julie Fedorchak
Commissioner