

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Basin Electric Power Cooperative  
345/230 kV Transmission Line – Williams County  
Siting Application**

**Case No. PU-11-692**

**ORDER**

**May 16, 2012**

The evidence of record has been considered and appraised.

The Commission Orders:

1. The Hearing Officer's May 1, 2012 Recommended Findings of Fact, Conclusions of Law and Recommended Order, a copy of which is attached to this Order and made a part of this Order, is ADOPTED as the Public Service Commission's Findings of Fact, Conclusions of Law and Order.
2. Basin Electric Power Cooperative's application for a waiver of procedures and time schedules is granted.
3. Certificate of Corridor Compatibility No. 134 is issued to Basin Electric Power Cooperative designating a corridor for its Williston Tie Project.
4. Route Permit No. 145 is issued to Basin Electric Power Cooperative granting authority to construct, operate and maintain its Williston Tie Project.
5. The April 4, 2012 Certification Relating to Order Provisions – Transmission Facility Siting (Certification), with accompanying Tree and Shrub Mitigation Specifications, is incorporated by reference and attached to this Order.
6. To the extent there are any conflicts or inconsistencies between Basin Electric Power Cooperative's Applications and the April 4, 2012 Certification, the Certification provisions control.

**PUBLIC SERVICE COMMISSION**



**Kevin Cramer  
Commissioner**



**Tony Clark  
Chairman**



**Brian P. Kalk  
Commissioner**

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**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**PUBLIC SERVICE COMMISSION**

**Basin Electric Power Cooperative  
345/230 kV Transmission Line - Williams County  
Siting Application**

**Case No. PU-11-692**

**OAH File No. 20120085**

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

**May 1, 2012**

**Appearances**

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

Mark E. Gruman, Counsel, North Dakota Public Service Commission.

Chris Marohl, Staff, North Dakota Public Service Commission

Allen C. Hoberg, Administrative Law Judge, Substantive Hearing Officer, Office of Administrative Hearings..

**Preliminary Statement**

On November 8, 2011, Basin Electric Power Cooperative ("Basin Electric") submitted a letter to the North Dakota Public Service Commission ("Commission") notifying the Commission of its intent to construct the Williston Tie Project ("Project"). The Project will consist of three related segments of primarily double circuited transmission line. The first segment (345/115 kV) begins 1.62 miles north of the anticipated location of a new substation ("Judson Substation") and terminates at the Judson Substation location. The second segment (230/115 kV) begins at the Judson Substation location and proceeds easterly for 1.9 miles. The third segment (230 kV) begins at the eastern terminal of the 230/115 kV segment and proceeds north for approximately 0.2 miles terminating at the existing Western Area Power Administration ("Western") Substation. Basin Electric requested the Commission shorten the one-year waiting period between filing a Letter of Intent and the filing of an application for a Certificate of Corridor Compatibility.

On January 20, 2011, Basin Electric submitted its applications for a Waiver of Procedures and Timelines, Certificate of Corridor Compatibility, and Route Permit for the Project ("Applications").

On March 6, 2012, the Commission appointed an Administrative Law Judge from the Office of Administrative Hearings to preside as a Substantive Hearing Officer ("Hearing Officer"). On March 6, 2012, Administrative Law Judge Allen C. Hoberg was designated to preside.

On March 9, 2012, the Hearing Officer issued a Notice of Filing and Notice of Hearing on Basin Electric's Applications, scheduling a public hearing to be held on April 10, 2012 at the Williams County Courthouse, 205 East Broadway, Williston, North Dakota. The Notice of Hearing identified the following issues:

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?
4. Is it appropriate for the Commission to waive procedures and time schedules as requested, including the request for a single consolidated application for corridor certificate and route permit?

On April 10, 2012, the public hearing was held as scheduled.

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

### **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 134 member distribution systems serving more than 2.8 million consumers in nine states, including North Dakota.
2. Mountrail-Williams Electric Cooperative ("Mountrail-Williams") is the member distribution cooperative serving the Project area. Mountrail-Williams' Stateline Project schedule has an in-service date of fall of 2012.
3. Basin Electric proposes to construct the Project which will consist of 0.2 miles of single circuit 230 kV, 1.9 miles of double circuit 230/115 kV and 1.62 miles of 345/115 kV overhead electrical transmission line.

4. The Project will be owned and maintained by Basin Electric; however, the 115 kV conductor portions will be installed, owned and operated by Mountrail-Williams. The entire transmission line will be located in Williams County. The total cost of the Project is estimated to be \$4 million.
5. The proposed transmission line ("line") will be designed and constructed to meet or surpass all relevant state 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 design.
6. The line will be constructed on self-supporting galvanized steel single-pole structures. The typical 345/115 kV double-circuit structure will be approximately 130 feet tall. The typical 230/115 kV double-circuit structure will be approximately 112 feet tall. The 230 kV single-circuit structures will be approximately 113 feet tall.
7. The line will be three-phase, with three current-carrying conductors. The 345 kV segment's conductors will be 1.8 inches in diameter with 76 strands of aluminum and 19 strands of steel. The 230 kV segment's conductors will be 1.3 inches in diameter with 54 strands of aluminum and seven strands of steel. Above the conductors will be one 0.5-inch diameter optical ground wire and one 0.5-inch diameter static ground wire. The line will require approximately six to seven structures per mile, depending on terrain and other design factors. The right-of-way will be 80 to 150 feet in width.
8. Basin Electric states that it has complied with all local land use and planning ordinances.
9. Basin Electric states that in 2011 and 2012, Basin Electric and Mountrail-Williams met with local governmental units to provide a project overview and receive comments.
10. In 2011, Basin Electric and Mountrail-Williams contacted 41 local, state and federal agencies, and 10 Native American Tribes to solicit input regarding the Project.
11. A federal environmental assessment is being prepared for the Project by Western. Basin Electric will file a copy of the final document and any resulting findings with the Commission prior to beginning construction.
12. North Dakota Century Code section 49-22-16(3) 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.
13. 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.

14. 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.
15. North Dakota Administrative Code section 69-06-04-02 provides that the width of the corridor must be ten percent of the length of the line, not less than one mile and not more than six miles, unless otherwise designated by the Commission.
16. North Dakota Administrative Code section 69-06-08-02 provides that Exclusion and Avoidance Areas may be located within a corridor, but at no given point shall such an area encompass more than fifty percent of the corridor width, unless there is no reasonable alternative.
17. North Dakota Administrative Code section 69-06-08-02 provides that a transmission facility route must not be sited within an Exclusion Area.
18. North Dakota Administrative Code section 69-06-08-02(2) provides that a transmission facility route must not be sited within an Avoidance Area unless the applicant shows under the circumstances there are no reasonable alternatives. In determining whether an Avoidance Area should be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts, the orderly siting of facilities, system reliability and integrity, the efficient use of resources, and alternative routes. Economic considerations alone shall not justify approval of these areas.
19. 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.
20. 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.
21. Basin Electric evaluated a Corridor width of 150 feet for the 345/115 kV double-circuit segment, 100 feet corridor width for the 230/115 kV double-circuit segment and 80 feet for the 230 kV single-circuit segment.
22. Basin Electric submitted information in its Applications and in testimony at the April 10, 2012, hearing concerning compliance with the Commission Exclusion and Avoidance Area criteria as applied to the Project's proposed corridor and route.
23. The Project's proposed route does not include any Exclusion Areas.

24. The Project's proposed route does include Avoidance Areas. At certain points within the corridor, the Avoidance Areas encompass more than fifty percent of the corridor width. There are five inhabited rural residences and seven places of business within 500 feet of the proposed project route.
25. The Project's proposed route demonstrates the proposed management of adverse impacts by locating the route immediately alongside Western's existing 120-foot utility easement with the greatest distance practicable between existing commercial property and residences; therefore minimizing potential adverse impacts to the public.
26. The Project's proposed route demonstrates the orderly siting of facilities. The route incorporates the input from the members of the public and the landowners. It also reflects joint planning by Basin Electric and Mountrail-Williams.
27. The Project's proposed route demonstrates system reliability and integrity by providing a high voltage connection from the proposed Antelope Valley Station – Nessel 345 kV high-capacity transmission line to the existing Williston 230 kV Substation. This connection will become the primary path for the delivery of electric power into the Williston area which is needed as the existing system lacks sufficient capacity.
28. The Project's proposed route demonstrates the effective use of resources. The plan to double-circuit structures with longer span capabilities reduces impacts to landowners and minimizes use of resources compared to a single-circuit 115 kV line plus a 345 or 230 kV line.
29. The Project's proposed route is not based solely on economic considerations. The extensive existing and planned commercial and industrial development in the area through which the Project is planned left little opportunity for any alternative routes.
30. Further evidence demonstrates that there is no reasonable alternative to the Project's proposed route. The immediate area is congested and experiencing rapid growth. Growth is anticipated to continue. The landowner preferred route is the Project's proposed route. There is one landowner whose residence is within 500 feet of the Project's proposed route that did not sign a waiver. No members of the public testified at the hearing. There appears to be no reasonable alternative to the Project's proposed route.
31. A wetland delineation was conducted along the Project's 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-foot 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 permits for the project from the North Dakota Department of Health.

32. A Class I file search and Class III cultural resource survey (pedestrian survey) were conducted along the Project's proposed route. The Class III survey area consisted of a 150-foot wide corridor centered on the Project's proposed route centerline. There were prehistoric and historic sites identified during the pedestrian survey. Basin Electric will provide a 50 foot buffer zone around the identified sites within the Project's right-of-way. The sites will be protected during construction and will be avoided by placement of the structures outside of the identified sites.
33. Basin Electric submitted information in its Applications and through hearing 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 North Dakota Administrative Code section 69-06-08-02(3), will be at an acceptable minimum or will be managed and maintained at an acceptable minimum.
34. Basin Electric submitted information in its Applications and through hearing testimony to demonstrate its commitment to maximize the benefits of the proposed transmission facility to meet the Policy Criteria set forth in North Dakota Administrative Code section 69-06-08-02(4).
35. Basin Electric made other representations and agreements as contained in the Certification Relating to Order Provisions – Transmission Facility Siting executed by Basin Electric on April 4, 2012 and filed with the Commission (Exhibit 2).

### **Conclusions of Law**

1. The Commission has jurisdiction over this proceeding under North Dakota Century Code chapter 49-22.
2. The Project is a transmission facility as defined in North Dakota Century Code section 49-22-03(12).
3. The location, construction, and operation of the proposed transmission facility will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
4. The Applications submitted by Basin Electric meet the corridor and route evaluation criteria required by North Dakota Century Code chapter 49-22 and North Dakota Administrative Code chapter 69-06-08.
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.

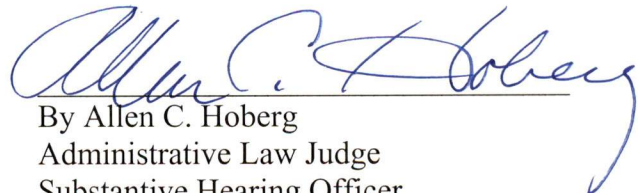
6. The proposed transmission facility is compatible with the environmental preservation and the efficient use of resources.
7. The requested waivers of procedures and time schedules are justified based upon the minimal impacts on the environment and the welfare of the citizens of North Dakota; the lack of objection to the proposed transmission facility by federal, state, and local government bodies and agencies or by the 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. The Commission has jurisdiction to ensure compliance with this order through construction and post-construction monitoring.

From the foregoing Findings of Fact and Conclusions of Law, the Hearing Officer issues the following:

**Order**

1. That Basin Electric's Application for a Waiver of Procedures and Timelines be granted.
2. That a Certificate of Corridor Compatibility for the proposed transmission facility be issued to Basin Electric, designating a corridor for the Project as described in Basin Electric's Applications and as presented at the hearing.
3. That a Route Permit for the proposed transmission facility be issued to Basin Electric granting authority to construct the Project as described in the Applications and presented at the hearing.
4. That the April 4, 2012, Certification Relating to Order Provisions-Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications, be incorporated by reference and attached to the Order issued by the Commission, except that Basin Electric may clear cut the entire width of the right-of-way through windbreaks, shelterbelts, and all other wooded areas .

State of North Dakota  
Public Service Commission



By Allen C. Hoberg  
Administrative Law Judge  
Substantive Hearing Officer  
2911 North 14<sup>th</sup> Street – Suite 303  
Bismarck, North Dakota 58503  
Telephone: (701) 328-3200

STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION



Basin Electric Power Cooperative  
345/230 kV Transmission Line – Williams County  
Siting Application

Case No. PU-11-692

**CERTIFICATION RELATING TO ORDER PROVISIONS - TRANSMISSION FACILITY SITING**

I am Gary Christenson, a representative of BEPC ("Company") with authority to bind BEPC to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission will be subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
3. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the transmission facility including all city, township, and county zoning regulations.
4. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the transmission facility that requires said license or permit.
5. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the transmission facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated on construction activities on a weekly basis.
6. Company understands and agrees that any Certificate of Corridor Compatibility or Route Permit issued by the Commission is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to

comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.

7. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order issuing a Certificate of Corridor Compatibility or Route Permit, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
8. Company agrees to construct and operate the energy conversion facility in accordance with all applicable safety requirements.
9. Company agrees to construct and operate the transmission facility in the manner described in Company's application, in any late filed exhibits, and supplemental materials (Application). To the extent there are any conflicts or inconsistencies between Company's Application and the provisions in this Certification Relating to Order Provisions, the Certification provisions control.
10. Company agrees to report promptly to the Commission the presence in the permit area of any critical habitat or threatened species, endangered species, bald eagles, or golden eagles of which Company becomes aware and which were not previously reported to the Commission.
11. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
12. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made and a report of such examination is filed with the Commission and the State Historical Society and clearance to proceed is given by the Commission.
13. Company understands and agrees that all buried facility crossings of graded roads must be bored unless the responsible governing agency specifically permits Company to open cut the road.
14. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.

15. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures approved by the Commission are taken.
16. Company understands and agrees that all topsoil, up to 12 inches, or topsoil to the depth of cultivation, whichever is greater, over and along trench areas where cuts will be made, must be stripped and segregated from the subsoil. Any area on which excavated subsoil will be placed must also be stripped of topsoil. After backfilling is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must be replaced over areas from which it was stripped only after the subsoil is replaced.
17. Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.
18. Company understands and agrees that its obligation for reclamation and maintenance of the right-of-way will continue throughout the life of the transmission facility.
19. Company understands and agrees that its obligation for reclamation and maintenance of the transmission facility, associated facilities, and roadways will continue throughout the life of the transmission facility.
20. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
21. Company understands and agrees that it shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the construction of the transmission facility.
22. Company understands and agrees that it shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.
23. Company understands and agrees that it shall repair or replace all drainage tile broken or damaged drainage tile as a result of construction and operation of the transmission facility.

24. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
25. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.
26. Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
27. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the transmission facility.
28. Company understands and agrees that it shall advise the Commission of any extraordinary events which take place at the site of the transmission facility, including injuries to any person, or the death of any threatened or endangered species on the site within five business days of such event.
29. Company understands and agrees that it shall advise the Commission of the discovery of a large number of dead birds or bats on the site within five business days of such event.
30. Company understands and agrees that it shall implement a procedure for how complaints concerning the transmission facility will be handled by Company
31. Upon request, Company agrees to provide the Commission with engineering design drawings of the transmission facility prior to construction.
32. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the transmission facility or of any plans to modify the site plan for the transmission facility. Company understands and agrees to obtain written approval from the Commission prior to any modifications to the site plan or the transmission facility. Approval may be granted after notice and opportunity for hearing.
33. Company agrees to provide the Commission with both an electronic and a paper copy of the corridor approved by the Commission, and will provide this information within 3 months of the Commission order approving the corridor. Company also agrees to provide an electronic version of the approved corridor that can be imported into ESRI GIS mapping software within 3 months of the Commission order approving the corridor. This electronic map data must be referenced to the North

Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.

34. Company agrees to provide the Commission with both an electronic and a paper copy of the design specifications for the construction of the transmission facility showing the location of the transmission facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the as-built facility design specifications that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.
35. Company understands and agrees that the authorizations granted by any Certificate of Corridor Compatibility or Route Permit issued by the Commission for the transmission facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.
36. Company understands and agrees that in the event Company desires to construct, within any corridor granted by a Certificate of Corridor Compatibility in this proceeding, a transmission facility or energy conversion facility that was not included in Company's application in this proceeding, Company shall apply to the Commission for a Route Permit or Site Certificate for the facility.
37. Company shall notify the Commission, as soon as reasonably possible, if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined and clearance to proceed has been given by the Commission.
38. Company understands and agrees that the corridor certificate and route permit are subject to suspension or revocation and may, after hearing, be suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the certificate or permit or subsequent

modification, or failure to comply with applicable statutes, or rules, regulations, standards, and permits of other state or federal agencies.

Dated this 4<sup>th</sup> day of April, 2012

COMPANY NAME Basin Electric Power Coop

By 

Its Project Manager

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**Basin Electric Power Cooperative  
345/230 kV Transmission Line – Williams County  
Siting Application**

**Case No. PU-11-692**

**Tree and Shrub Mitigation Specifications**

**Inventory**

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (*e.g.*, *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation

population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

### **Clearing for Construction**

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

### **Replacement**

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-

noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
14. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
15. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).

**PUBLIC SERVICE COMMISSION**  
**STATE OF NORTH DAKOTA**

**Certificate of Corridor Compatibility Number 134**

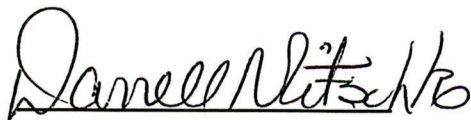
*This is to certify that the Commission has designated a transmission facility corridor for Basin Electric Power Cooperative for the construction of approximately 0.2 miles of single circuit 230 kV, 1.9 miles of double circuit 230/115 kV and 1.6 miles of double circuit 345/115 kV electric transmission line and associated facilities in Williams County, North Dakota.*

*This certificate is issued in accordance with the Order of this Commission dated May 16, 2012 in Case No. PU-11-692 and is subject to the conditions and limitations noted in the Order.*

*Bismarck, North Dakota, May 16, 2012.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**



**Executive Secretary**



**Commissioner**

**PUBLIC SERVICE COMMISSION  
STATE OF NORTH DAKOTA**

**Route Permit Number 145**

*This is to certify that the Commission has designated a transmission facility route for Basin Electric Power Cooperative for the construction of approximately 0.2 miles of single circuit 230 kV, 1.9 miles of double circuit 230/115 kV and 1.6 miles of double circuit 345/115 kV electric transmission line and associated facilities in Williams County, North Dakota.*

*This certificate is issued in accordance with the Order of this Commission dated May 16, 2012 in Case No. PU-11-692 and is subject to the conditions and limitations noted in the Order.*

*Bismarck, North Dakota, May 16, 2012.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**

  
**Executive Secretary**

  
**Commissioner**