

Before the Public Service Commission
of
The State of North Dakota

In the Matter of the Application of
BASIN ELECTRIC POWER COOPERATIVE
Consolidated Application
for a Certificate of Corridor Compatibility and Route Permit
345-kV Mercer-McLean-Ward-Mountrail-Williams Cty
(Leland Olds Station to Tande 345-kV Transmission Project)

Case No. PU-24-361

Pre-filed Testimony
of
Ryan King

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I. Introduction

Q.1. Please state your name, employer, and business address.

A.1. My name is Ryan King. I am employed by Basin Electric Power Cooperative ("Basin Electric"). My business address is 1717 East Interstate Avenue, Bismarck, North Dakota.

Q.2. What is your position with Basin Electric?

A.2. I am an Environmental Coordinator. My responsibilities include facilitating environmental assessments for new projects and ensuring compliance with environmental laws and permits.

Q.3. Please describe your educational and professional background.

A.3. I received a Bachelor of Science in Construction Management and a Masters of Natural Resources Management from North Dakota State University. I have 12 years of environmental permitting experience. I was hired by Basin Electric in September 2023 and have worked on a variety of transmission and energy conversion facility siting applications.

Q.4. What is your role with respect to the Leland Olds Station to Tande 345-kV Transmission Line Project (the "Project")?

A.4. I am responsible for the overall preparation and coordination of the environmental analysis of the Project within Basin Electric and through our consultants.

Q.5. Are you familiar with the contents of Basin Electric's Consolidated Application for a Certificate of Corridor Compatibility and Route Permit for the Project (the "Application")?

A.5. Yes. I am familiar with the Application's contents.

Q.6. What is the purpose of your testimony?

A.6. I will describe the methodology, with respect to environmental considerations, used to delineate the proposed Project Corridor and Route and to demonstrate that they are in accordance with the North Dakota Energy Conversion and Transmission Facility Siting Act and the Commission's rules and regulations. My testimony, together with the Application and other supporting evidence, will demonstrate that the Project will

have minimal adverse impacts on the environment and human welfare and that it is compatible with environmental preservation and the efficient use of resources.

II. Corridor and Route Siting Criteria

Q.7. What is an “exclusion area”?

A.7. An exclusion area is a geographical area that must be excluded in the consideration of a route for a transmission facility. An exclusion area may be located within a corridor but cannot exceed more than fifty percent of the corridor width unless there is no reasonable alternative.

Q.8. Does the Project contain any exclusion areas?

A.8. Yes, the Project Route is in an area within 1,200’ of the geographic center of two intercontinental ballistic missile (“ICBM”) launch facilities, for which the Commission previously granted an exemption, as addressed in Bobby Nasset’s pre-filed testimony. (Nasset Pre-filed Test. at Section IV.)

The Project Route also spans designated critical habitat of the piping plover, a threatened species under the Endangered Species Act. This critical habitat is located where the Project Route crosses the Missouri River at the south end of the Project.

Q.9. With the presence of this critical habitat, will the Project still meet the Commission’s exclusion area criteria?

A.9. Yes, the Project still meets the Commission’s criteria for exclusion areas. No structures will be placed within the primary constituent elements of the piping plover habitat. There are no reasonable alternatives to the Project that would not span the Missouri River. No construction activities will take place within the designated critical habitat. The nearest structure is approximately 53 feet from the critical habitat. As discussed in Section III.A.4 of my testimony, Basin Electric will take appropriate measures to minimize impacts to the piping plover.

Q.10. What is an “avoidance area”?

A.10. An avoidance area is a geographical area that may not be considered in the routing of a transmission facility unless the applicant shows that under the circumstances there is no reasonable alternative.

Q.11. Does the Project contain any avoidance areas?

A.11. Yes. The following avoidance areas are present:

- Archaeological sites are present in the Project Corridor, as identified through a Class I Literature Review and Class III Cultural Resources Inventory.
- The Project Corridor is also within 500 feet of five residences.

In the Application, it states one structure, 436-041, is located within a geologically unstable area. (Application, Table 3-2 at 3-2, Docket No. 1.) Due to structure relocations, this is no longer the case. No structures are located within geologically unstable areas.

Q.12. Why should the Commission approve the Project when it includes avoidance areas?

A.12. While there are archaeological sites present within the Project Corridor, the Project has been designed to avoid all sites, and a buffer zone has been placed around each site. Temporary fencing will be installed around each buffer zone prior to construction to ensure avoidance.

Basin Electric has also obtained waivers from each of the five landowners who have residences within 500 feet of the Project Corridor.

III. Environmental Analysis

A. Threatened and Endangered Species

Q.13. Did the environmental studies for the Project address any concerns for threatened or endangered species?

A.13. Yes. Basin Electric used the United States Fish and Wildlife Service ("USFWS") Information for Planning and Conservation ("IPAC") tool to identify threatened or endangered species or designated critical habitat within the Project area. This tool, along with consultation with the local USFWS ecological services office, identified five species that could potentially occur within the Project area: the endangered whooping crane and northern long-eared bat, and the threatened Dakota skipper, piping plover, and rufa red knot.

1. Whooping Crane

Q.14. Please describe the findings of Basin Electric's analysis with respect to the whooping crane.

A.14. The Project is located within the migration corridor where 75-95% of whooping cranes travel. Land use within the Project Corridor is a mixture of cropland and rangeland, with pothole wetlands interspersed. The Project counties have 285 verified whooping crane sightings. The closest confirmed sighting to the Project Corridor was two adult cranes in 2002, approximately ½-mile from the Project Corridor. During field surveys, no whooping cranes were observed.

Q.15. Please describe the measures that will be taken to protect the whooping crane.

A.15. Noise and vehicle activity during construction activities may cause migrating whooping cranes to divert from the area. If a whooping crane is spotted within one mile of the Project, construction activities would be suspended, and the sighting would be immediately reported to the USFWS.

Flight diverters will be installed per Avian Power Line Interaction Committee ("APLIC") suggested practices, which increase transmission line visibility, thereby reducing collision risks.

2. Northern long-eared bat

Q.16. Please describe the findings of Basin Electric's analysis with respect to the northern long-eared bat ("NLEB").

A.16. Prior to field surveys, a desktop analysis was conducted to determine potential impacts to treed habitat and examine what locations have a higher probability of providing habitat for the NLEB. A 1,000-foot buffer of the Project Corridor was digitized, and tree habitat patches greater than 10-acres in size were selected as potential NLEB habitat. The review concluded approximately 23 acres of potential treed habitat was located within Survey corridor. No NLEB were observed during field surveys.

Q.17. Please describe measures being taken to protect the NLEB.

A.17. The Project will require tree clearing at 62 locations, totaling 1.54 acres (ac), for structure placement. To reduce the potential to impact NLEB at the tree clearing locations, Basin Electric has committed to conducting tree clearing activities from November 1 – March 31, outside of the NLEB active season. If localized tree clearing activities could not be conducted during this window, presence/absence surveys would occur, and tree removal would happen immediately following a negative survey.

3. Dakota skipper

Q.18. Please describe the findings of Basin Electric's analysis with respect to the Dakota skipper ("DASK").

A.18. A desktop assessment of habitat within the Project Corridor was used to divide habitat into one of two basic habitat groups: grassland habitat and unsuitable habitat. The assessment identified approximately 1,822 acres, or 34%, of grassland habitat and approximately 3,561 acres, or 66%, of unsuitable habitat. The field survey was conducted within the identified grassland habitat to determine if suitable habitat was present. Suitable habitat is defined as native grassland that contains one or more primary constituent elements for the skipper to complete its entire life cycle. The field survey recorded 61 locations of suitable habitat, totaling approximately 11.69 acres – less than 1% of the Project Corridor. No DASK were observed during the field surveys.

Q.19. Please describe the measures that will be taken to protect the DASK.

A.19. Basin Electric has designed the Project to minimize impacts to suitable habitat for the DASK. This includes placing pole structures and routing access trails around suitable habitat. Temporary fencing will be placed around each found suitable habitat during construction and will remain up until construction is complete. GIS files of these habitat areas will be shared with reclamation contractors and Basin Electric maintenance personnel to continue avoiding these areas.

In addition, during the DASK flight period, a 500-meter avoidance buffer will be placed around suitable habitat locations to minimize the impacts to foraging or dispersing adult DASK. Existing surfaced roads within the buffers may be used for travel, but

construction within the buffers will not occur during the flight period. A ½-mile buffer will also be established during the flight period. Travel on existing surfaced and unsurfaced roads will be allowed, and construction can occur within previous disturbed areas, but no new access roads or construction areas will be created during the flight period. The flight period is typically 14 days long between the dates of June 10 – July 25. Dates may be adjusted based on annual observations by the USFWS. If suitable habitat cannot be avoided, then presence/absence surveys will be conducted by a permitted surveyor.

4. Piping plover

Q.20. Please describe the findings of Basin Electric's analysis with respect to the piping plover.

A.20. As explained in Section II of my testimony, the Project spans critical habitat, the Missouri River, at the southern end of the Project Route. There are two additional locations where critical habitat falls within ½ mile of the Project Corridor. No piping plover were observed during field surveys.

Q.21. Please describe the measures that will be taken to protect the piping plover.

A.21. During the USFWS designated period of concern (April 15 to August 15), prior to construction, piping plover presence/absence surveys will be conducted in suitable habitat within ½-mile of the Project Corridor. If nesting birds are observed during the surveys, the USFWS will be consulted to determine the necessary action.

Flight diverters will be installed on the transmission line, per APLIC standards.

5. Rufa red knot

Q.22. Please describe the findings of Basin Electric's analysis with respect to the rufa red knot.

A.22. The shoreline of the Missouri River provides stopover habitat for rufa red knots utilizing a midcontinental migratory route during their annual migrations. However, the species is rare and is not reported in North Dakota every year. The remainder of the Project Corridor does not have suitable shoreline stopover habitat. Therefore, adverse

impacts to the rufa red knot are not anticipated.

B. Bald and Golden Eagles

Q.23. How are bald and golden eagles treated under federal law?

A.23. Eagles are protected under the Bald and Golden Eagle Protection Act, which does not designate critical habitat for the species but does protect individual eagles and their nests from disturbance.

Q.24. Please describe the findings of Basin Electric's analysis with respect to bald and golden eagles.

A.24. An aerial survey of the Project Corridor, with a mile buffer on either side of the centerline, was conducted in May 2024. Thirty-two active raptor nests were observed, two of which were documented as bald eagle nests. These nests are approximately 0.5 and 0.4 miles from the Project centerline.

Q.25. Please describe the measures that will be taken to protect bald and golden eagles.

A.25. Due to the two document bald eagle nests being greater than 660 feet from the Project centerline, a disturbance permit through the USFWS is not needed. Basin Electric will implement APLIC-suggested practices to minimize impacts to bald and golden eagles, including marking the line with bird diverters. Prior to construction, a migratory bird nest survey will be completed. On the ground survey for eagle nests is part of that protocol. If a nest is observed, the USFWS will be notified to determine the next steps.

C. Wetlands and Waterbodies

Q.26. Please briefly explain the Project's potential impacts on wetlands and waterbodies.

A.26. The Project has been sited to avoid impacts to wetlands and waterbodies to the greatest extent possible. Near the southern end of the Project, the transmission line will cross the Missouri River. The Project avoids all permanent impacts to wetlands except for three locations, structures 436-214, 436-215, and 436-222, will be placed

within delineated wetlands. To clarify, the Application originally stated that two structures would impact wetlands, however due to shifts in structure siting, that number is now three. Permanent wetland impacts are anticipated to be less than 0.01 acres.

Q.27. Please describe the measures that Basin Electric will take to protect wetlands and waterbodies.

A.27. Basin Electric is working with the United States Army Corps of Engineers (“USACE”) through Section 10 permitting for crossing the Missouri River and Section 404 permitting for impacting the above-described wetlands. Except for those two wetlands, all field delineated wetlands and waterbodies will have temporary fencing installed around the boundaries to ensure construction activities remain outside of the resource.

D. Trees and Shrubs

Q.28. Please briefly explain the Project’s potential impact on trees and shrubs.

A.28. Overall impacts to trees and shrubs are anticipated to be minimal. Approximately 1.54 acres of trees present clearance violations to the proposed line and will need to be removed in accordance with the requirements of the National Electric Reliability Council (“NERC”). For unavoidable tree and shrub impacts during the Project’s construction and operation, Basin Electric will comply with the Commission’s Tree and Shrub Mitigation Specifications and submit a tree and shrub inventory and replacement plan for Commission review and approval.

Q.29. Is Basin Electric requesting the ability to clear trees in areas wider than 50 feet?

A.29. Yes. To meet the NERC requirements, Basin Electric is requesting the ability to clear trees wider than 50 feet in 13 locations.

E. Cultural and Historic Resources

Q.30. Please briefly describe the cultural and historic resource assessments conducted for the Project.

A.30. Basin Electric, through its consultant Metcalf Archaeological Consultants (“Metcalf”),

consulted with the North Dakota State Historic Preservation Office (“NDSHPO”) regarding survey and testing methodology and reporting needs. To assess potential cultural and historic resources, a Class I Literature Search and a Class III Intensive Inventory were performed for all areas directly impacted. The Class I Literature Search was done to identify cultural resources that have been previously documented and determine if there were any known cultural resources in need of further evaluation. The Class III Intensive Inventory is a systematic, 100 percent pedestrian field survey, which was done to identify cultural resources in previously un-surveyed areas, update previously recorded resources, and make recommendations for each cultural resource’s eligibility to be considered for the State Registry.

Q.31. Please describe the results of the cultural and historic resource assessments.

A.31. Metcalf completed and submitted two report volumes for NDSHPO review. These reports detailed their findings, and include archaeological sites and site leads, historical archaeological sites and site leads, and architectural sites and site leads. Nearly all the archaeological sites or site leads were lithic scatters or stone circle sites. The historical archaeological sites include collapsed abandoned farmsteads, foundations, cultural material scatters, or a combination of these features. Metcalf did not identify any architectural sites or site leads. The reports recommended that none of the documented cultural resources are eligible for consideration for the State Registry and no eligible or unevaluated cultural resource lies within the footprint of the Project, and therefore, no cultural resource will be impacted by the Project’s temporary construction activities or permanent operations.

NDSHPO is currently reviewing the reports, and we will notify the Commission when we have received concurrence.

Q.32. Please describe any mitigation efforts being implemented for cultural and historic resources.

A.32. During the Class III Intensive Inventory, Metcalf documented and mapped each site or site lead and used a testing strategy to assess the cultural resources’ significance. No avoidance or additional research is recommended, and as such, no mitigation measures will be needed.

IV. Agency Coordination

Q.33. Will the Project impact existing development plans of federal, state, or local agencies, or private entities?

A.33. No. The Project will not impact any existing development plans. Agency and public correspondence as of October 2024 is included in the Application. (Application, Appx. H at 361-559, Docket No. 1.) No further correspondence was received. The Project Route presented here is a work product of input from multiple local, county, state, and federal offices, as well as the multitude of landowners. Basin Electric believes that this route is a balance between a viable, cost-effective project and one that satisfactorily minimizes impacts.

Q.34. Can you please explain the consultation with federal agencies to date?

A.34. Basin Electric consulted with federal agencies, as follows:

- The United States Department of Interior's Bureau of Reclamation requires a Special Use Permit ("SUP") to cross the McClusky Canal, located immediately east of Lake Audubon. Basin Electric submitted an application and received an executed SUP on November 26, 2024.
- The USFWS requires a Compatibility Determination for structures located within USFWS-managed grassland easements. An application has been submitted.
- The USACE require Section 10 and 404 permits to cross the Missouri River and to place structures within a wetland. An application has been submitted and is being reviewed.
- Basin Electric has consulted with the United States Air Force ("USAF") regarding structure placement in relation to their operations. The USAF has concluded the Project will have minimal impacts on military operations conducted in the area.
- Basin Electric consulted with the Federal Aviation Administration regarding

structure locations and heights. It was determined that all structures have a determination of no hazard to air navigation.

Q.35. Can you please explain the consultation with state agencies to date?

A.35. State agencies' comments varied according to function and jurisdiction but generally emphasized a desire to minimize impacts to environmental resources, which Basin Electric has done by incorporating the mitigation measures into the Project.

Q.36. Can you please explain the consultation with local agencies to date?

A.36. Overhead transmission lines are permitted under conditional uses in McLean, Mercer, Mountrail, and Ward Counties. Overhead transmission lines are a permitted use in Williams County.

Basin Electric has submitted conditional use permit applications for McLean, Mercer, Mountrail, and Ward Counties. To date, approvals have been received from McLean and Mercer Counties. Applications have been submitted to Mountrail and Ward Counties, and we expect commission approvals in March.

No township approvals were needed for this Project.

Q.37. Are there any other outstanding permits or approvals are needed to begin construction of the Project?

A.37. No, there are no other outstanding permits or approvals.

V. Site Selection Criteria

Q.38. Did Basin Electric evaluate the impacts to public health and welfare, natural resources and the environment that could be expected from the Project's location, construction, and operation?

A.38. Yes. Basin Electric addresses these issues in the Application. (Application, Section 5, Docket No. 1.) Based on the careful analyses presented in the Application, the Project will not have any significant impacts to public health and welfare, natural resources, or the environment.

Q.39. How will the Project impact agriculture?

A.39. The Project route was selected to minimize impacts on agriculture by placing structures on field splits or quarter lines and accommodating landowner requests where feasible, as explained in other witnesses' pre-filed testimony. (Kleyer Pre-filed Test., Sections II and III; Nasset Pre-filed Test., Section IV.)

Q.40. Do you anticipate any significant adverse effects on noise-sensitive land uses resulting from the Project's location, construction, or maintenance?

A.40. There may be temporary noise impacts from construction activities. Temporary construction noise would be limited to no more than a few days at any particular location along the line and would be mitigated by scheduling work to daylight hours, particularly when near sensitive receptors.

Q.41. Will the Project have any visual impacts to the adjacent areas?

A.41. The Project will be visible to landowners and travelers along roadways. Existing transmission lines, oil and gas well pads, and roads are already present in the viewshed.

Q.42. Do you anticipate any significant impacts on areas of extractive or storage resources?

A.42. The Project will not directly affect any wells or drill rigs, because the Project has been designed to avoid these areas and provide sufficient clearance for well maintenance and operation.

Q.43. Do you anticipate any significant impacts on wetlands, woodlands, or wooded areas?

A.43. The Project will avoid direct impacts to all wetlands. Any trees or shrubs removed will be replaced consistent with the Commission's Tree and Shrub Mitigation Specifications.

Q.44. Will the Project effect radio and television reception, and other communication or electronic control facilities?

A.44. No, the Project is not anticipated to affect radio, television, communication, or other electronic control facilities.

Q.45. Will the Project affect human health and safety, animal health and safety, or plant life?

A.45. The Project is not anticipated to have an effect on human or animal health and safety but will have a negligible effect on plant life where the structures are installed. Basin Electric will replace trees and shrubs consistent with the Commission's Tree and Shrub Mitigation Specifications.

VI. Conclusion

Q.46. Based on your knowledge of the Project, will the Project's construction, operation, and maintenance produce minimal adverse effects on the environment and human welfare?

A.46. Yes. Basin Electric conducted a thorough environmental review of the Project area to avoid environmentally sensitive areas and areas where there could be adverse impacts to human welfare. Where such areas cannot be avoided completely, Basin Electric is committed to taking appropriate measures to minimize any adverse effects.

Q.47. Based on your knowledge of the Project, is it compatible with the environmental preservation and the efficient use of resources?

A.47. Yes. The Project will be constructed, operated, and maintained in a manner to protect the environment and natural resources.

STATE OF NORTH DAKOTA
BEFORE THE
PUBLIC SERVICE COMMISSION

Basin Electric Power Cooperative)
345kV Mercer-McLean-Ward-Mountrail-Williams Cty)
Siting Application)

Case No: PU-24-361;
OAH File No. 20250009

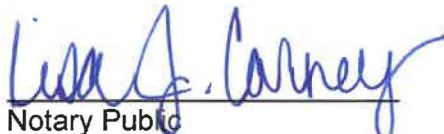
**AFFIDAVIT OF
RYAN KING**

I, the undersigned, being duly sworn, state as follows: (1) I have read the pre-filed testimony and exhibits submitted in the above captioned matters under my name; (2) they were prepared by me or under my direction and I know their contents; and (3) they are true and correct to the best of my knowledge and belief.



Ryan King

Subscribed and sworn to before me, this 18th day of February 2025.



Notary Public
My Commission Expires:

