

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

**Rolette Power Development, LLC**  
**Rolette Wind Energy Project – Rolette County**  
**Siting Application**

**Case No. PU-15-124**

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

**November 18, 2015**

**Appearances**

Commissioners Julie Fedorchak, Randy Christmann, and Brian P. Kalk.

Mollie M. Smith, Fredrikson & Byron, P.A., 200 South 6th Street, Suite 4000, Minneapolis, MN 55402, on behalf of the Applicant, Rolette Power Development, LLC.

John Schuh, Legal Counsel, North Dakota Public Service Commission.

Wade C. Mann, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street – Suite 303, Bismarck, ND 58503, as Procedural Hearing Officer.

**Preliminary Statement**

On March 20, 2015, Rolette Power Development, LLC (Rolette Power) filed an Application for a Certificate of Site Compatibility for a wind energy conversion facility (Application) known as the 15-124t (Project) to be located in Rolette County, North Dakota.

On May 13, 2015, the Commission deemed the Application complete conditioned upon filing final wind turbine locations at least ten days before the hearing and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing to begin June 29, 2015, at 9:30 a.m., at Memorial Hall, 503 2nd Avenue, Rolette, North Dakota. The notice 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?

On June 19, 2015, Rolette Power filed its turbine location layout.

On June 29, 2015, a public hearing was held as scheduled

On July 17, 2015, Rolette Power filed Late-Filed Hearing Exhibit No. 14 (Affidavit of Warren Enyart) and a post-hearing brief in support of the Application.

On August 19, 2015, Rolette Power filed the Affidavit of Grady Wolf and accompanying documentation regarding the location of bald eagle nests in proximity to the Project.

On October 1, 2015, the Commission granted a motion to reopen the record and issued a Notice of Hearing, scheduling a public hearing to begin November 2, 2015 at 10:00 a.m. CDT at the Memorial Hall, 503 2nd Avenue, Rolette, North Dakota, 58366, limited to the issue of whether adverse effects on eagle health and safety will be managed and maintained to an acceptable level.

On November 2, 2015, a public hearing was held as scheduled.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes its:

### **Findings of Fact**

1. Rolette Power is a North Dakota limited liability company jointly owned by M-Power, LLC, and Border Power, LLC. Border Power's ownership consists of 27 participating landowners within the Project's footprint, 46 local investors, 30 M-Power investors, and community development organizations, including the Rolette Jobs Development Authority, the City of Rolette, the Rolette Area Development Authority, and the REAP Investment Fund of Minot, North Dakota. M-Power's ownership consists of 97 participating landowners in its wind farm footprints in Griggs and Steele Counties, 64 local investors, as well as four community development organizations, including Zone Investments, LLC, the Griggs-Steele Wind Development Group, Steele County Job Development Authority, and Hope Area Investments, LLC.

2. Rolette Power proposes to construct the Project within an approximately 14,080 acre area in Rolette County, North Dakota, approximately three miles south and west of the City of Rolette. Rolette Power requested that the Project area, as depicted in Hearing Exhibit No. 3, be designated as the site for the Project.

3. Rolette Power selected the proposed site for the Project based on a number of factors, including: the quality of the wind resource, strong landowner and community interest and support, suitable transmission interconnection capability, avoidance of environmental issues, compliance with the Commission's siting criteria, compliance with Rolette County's requirements, and economic considerations.

4. Section 49-22-16(4) of the North Dakota Century Code provides that a site shall not be designated that violates the rules of any state agency, and that compliance with an agency's rules shall be presumed if the agency fails to present its position with respect to the proposed facility at the public hearing. The federal, state and local departments, agencies and entities that were contacted are:

- a. Federal – United States Department of Agriculture, Natural Resources Conservation Service (NRCS); United States Department of the Army Corps of Engineers (USACE), Planning, Programs, and Project Management Division; USACE, North Dakota Regulatory Office; United States Department of the Interior, Bureau of Indian Affairs (BIA); United States Department of the Interior, Fish and Wildlife Service (USFWS), J. Clark Salyer National Wildlife Refuge; USFWS, Ecological Services; Minot Air Force Base; the Federal Aviation Administration (FAA);
- b. State – North Dakota Department of Commerce; North Dakota Department of Health; North Dakota Department of Transportation; North Dakota Game and Fish Department (NDGFD); North Dakota State Water Commission; State Historical Society of North Dakota, State Historic Preservation Office (SHPO); and
- c. Local – North Central Electric Cooperative, Inc.; Rolette County; Rolette Airport Authority; City of Rolette.

5. Agency consultations and comments are noted in Appendices B and E of the Application and in the exhibits and testimony presented at the public hearings. No objections to the proposed Project were raised by any state or federal agencies or local governmental entities.

6. Section 49-22-16(2) of the North Dakota Century Code provides that no energy conversion facility site shall be designated that violates any local land use, zoning or building rules, regulations or ordinances. At the hearing, Rolette Power testified that it has obtained a conditional use permit for the Project from Rolette County, and will comply with applicable county zoning ordinance requirements.

#### Project Design

7. The Project will have a nameplate capacity of up to 100.4 MW, and the Project layout proposed by Rolette will consist of up to 59 wind turbines, with the final number of turbines determined by the capacity of the turbine model selected.

8. Rolette Power is considering six turbine models, or a turbine model of a similar range and class: the GE 1.7-100; the Siemens SWT 2.3-113; the Vestas V110-2.0; the Vestas V117-3.3; the Gamesa G114-2.0; and the Gamesa G114-2.5. Depending on turbine availability, off-taker preference, and economic considerations, among other factors, Rolette Power may select a turbine model other than those currently under consideration.

9. In addition to turbines, associated facilities constructed within the Project Area will include step-up transformers, access roads, an operation and maintenance (O&M) building, a substation, permanent meteorological towers, and a system of underground collection lines and communication cables. Other temporary facilities required for the Project's construction phase include a concrete batch plant, laydown area for equipment, intersection improvements, crane pads and working pads, and a staging area.

10. Foundation size and design will be finalized after geotechnical analyses have been completed and the turbine model selected.

11. Each turbine will communicate directly with the Supervisory Control and Data Acquisition (SCADA) system for performance monitoring, energy reporting, and troubleshooting.

12. Construction of the Project is anticipated to begin in the second quarter of 2016 and be completed in the fourth quarter of 2016. Rolette Power anticipates that the Project will be operational before the end of 2016.

13. The estimated cost for construction of the Project is approximately \$175 million.

#### Siting Criteria

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 site compatibility. The criteria, as set forth in North Dakota Administrative Code Section 69-06-08-01 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria. With the exception of prime farmland and unique farmland, an energy conversion facility shall not be sited within an Exclusion Area. The exception for prime and unique farmland is if the Commission finds the prime farmland and unique farmland that will be removed from use for the life of the facility is of such small acreage as to be of negligible impact on agricultural production, then such exclusion shall not apply. An energy conversion facility must not be sited within an Avoidance Area unless the applicant shows that under the circumstances there is no reasonable alternative. 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 sites. In accordance with the Commission's Selection Criteria, a site shall be approved if it is

demonstrated that any significant adverse effects resulting from the location, construction, and operation of the energy conversion facility will be at an acceptable minimum or that the effects will be managed and maintained at an acceptable minimum. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the proposed energy conversion facility.

#### Exclusion Areas

15. With respect to Exclusion Areas, a small waterfowl production area (WPA), known as the Ghost Valley WPA, is located within the southernmost edge of the Project boundary. No Project facilities will be located within 0.5 miles of the WPA and the Project is not expected to impact the WPA.

16. Prime farmland and farmland of statewide importance are present within the Project area. The Project will avoid such land to the maximum extent practicable and is expected to permanently impact less than 0.6% of such land. The Commission finds the prime farmland and unique farmland that will be removed from use for the life of the facility is of such small acreage as to be of negligible impact on agricultural production. Additional Exclusion Areas within the Project Area are: areas less than one and one-tenth times the height of the turbine plus seventy-five feet from the centerline of any county or maintained township roadway; areas less than one and one-tenth times the height of the turbine from a one hundred fifteen kilovolt or higher transmission line; and areas one and one-tenth times the height of the turbine from the property line of a nonparticipating landowner. No turbines will be sited in these areas.

#### Avoidance Areas

17. With respect to Avoidance Areas, cultural resources are present within the Project area, but the Project will avoid cultural resource sites.

18. Wetlands are present within the Project area, but the Project will avoid permanent impacts to the extent practicable.

19. Some trees and shrubs are located within the Project Area, primarily windbreaks and shelterbelts around farmsteads. The Project will minimize tree removal to the extent practicable. Tree or shrub removal and replacement will be coordinated with landowners and conducted in accordance with the Commission's tree and shrub mitigation specifications.

#### Selection and Policy Criteria

20. The Project and associated facilities are anticipated to occupy and disturb up to approximately 90.7 acres of land, or up to approximately 0.6 percent of the total Project Area, during the life of the Project. Rolette Power will continue to work with landowners to minimize land use disruptions from the facilities. No impacts to irrigation or the quality of the agricultural land are anticipated.

21. Rolette Power submitted evidence to demonstrate that the proposed energy conversion facility will not have a significant impact on the Selection Criteria set forth in North Dakota Administrative Code § 69-06-08-01(5).

22. Rolette Power submitted evidence to demonstrate its commitment to maximize the benefits of the proposed energy conversion facility as far as is possible to meet the Policy Criteria set forth in North Dakota Administrative Code § 69-06-08-01(5).

23. During construction, the Project will likely result in a temporary increase in traffic on county and township roads. However, based on the existing traffic use and the rural nature of the area, the impacts from the additional construction-related traffic are expected to be minimal. Any impacts on county and township roads, and their restoration, will be addressed in accordance with a road use and maintenance agreement between the county and Rolette Power, which will also cover the applicable townships. During operation, no adverse effects to transportation facilities or networks are anticipated.

24. The Project is not anticipated to have significant adverse impacts on the ability of the affected area to provide community services, such as housing, health care, educational services, police and fire protection, water and sewer, or solid waste management. The Project is expected to be of economic benefit to the affected area.

#### Cultural Resources

25. Rolette Power has completed a Class I literature search, a Class II architectural history investigation and a Class III cultural resources inventory for the current Project layout, with the exception of the permanent meteorological tower locations. Rolette Power has submitted its Class II architectural history investigation report and its Class III cultural resources inventory report to SHPO for review, and will obtain and file copies of SHPO's responses regarding the reports prior to beginning construction of the Project.

26. Rolette Power will complete a Class III cultural resources inventory of its permanent met tower locations, will submit the findings to the Commission and SHPO for review, and will obtain and file a copy of SHPO's response prior to beginning construction of the meteorological towers.

27. In the event that the Project layout changes from the layout provided in Hearing Exhibit No. 3, Rolette Power will complete Class III cultural resource survey work for any previously un-surveyed areas, per SHPO's guidance; will submit the findings to the Commission and SHPO for review; and will obtain and file with the Commission a copy of SHPO's response prior to beginning construction in those areas.

28. Project facilities will avoid cultural resource sites and cultural resources are not expected to be impacted by the Project.

## Wetlands, Woodlands, and Wildlife

29. Woodlands comprise less than one percent of the total Project Area. Trees within the Project Area consist primarily of planted windbreaks and shelterbelts around farmsteads. If trees or shrubs are impacted by the Project, Rolette Power will comply with the Commission's tree and shrub mitigation specifications.

30. A wetland delineation was completed for the Project. In the event the Project layout changes, Rolette Power will complete a wetland delineation of any previously unsurveyed areas as necessary. Rolette Power will minimize permanent wetland impacts from the Project to the extent practicable, and will obtain any permits required.

31. The Project will avoid impacts to USFWS wetland easement basins.

32. Rolette Power conducted environmental studies of the Project Area, and impacts to wildlife are anticipated to be minimal. In consultation with the USFWS, Rolette Power will prepare an endangered species document / Bird and Bat Conservation Strategy (BBCS), which will be completed prior to operation of the project to identify minimization and mitigation measures that Rolette Power will implement.

33. At the June 29, 2015 public hearing, the Commission inquired regarding a reference by the USFWS in its 2013 consultation letter to eagle nests in proximity to the Project (see Appendix E of Hearing Exhibit No. 1). On August 19, 2015, Rolette Power provided to the Commission additional documentation regarding the location of two bald eagle nests in proximity to the Project.

34. At the November 2, 2015 public hearing, Rolette Power presented expert testimony and exhibits regarding eagle use and risk for the Project Area, including a Stage 1 Initial Site Assessment of Eagle Use/Risk Report (Stage 1 Assessment) (see Hearing Exhibit No. 17). Bald eagle nests are located approximately 2.7 miles, 5.0 miles and 9.8 miles away from the proposed Project turbine locations, but no bald eagle nests were identified within the Project Area. Based on the Stage 1 Assessment, eagle populations will not be significantly adversely impacted by development of the proposed Project.

35. At the November 2, 2015 public hearing, Rolette Power also committed to implementing certain eagle-related avoidance and minimization measures, and including those measures in the Project's BBCS, which will be developed in coordination with the USFWS (see Hearing Exhibit No. 21). Further, Rolette Power testified that if it identifies changes in eagle-related conditions at the Project, Rolette Power will evaluate the changed conditions, coordinate with the USFWS as appropriate, and consider potential further actions to address the changed conditions (see Hearing Exhibit No. 21).

36. At the November 2, 2015 public hearing, Terry Ellsworth, a representative of the USFWS, testified during the public comment portion of the hearing. Mr. Ellsworth

confirmed that the comments provided in the USFWS 2013 consultation letter were based on a review of the larger Study Area, and not the current Project Area. Mr. Ellsworth did not have specific comments regarding the current Project Area. Mr. Ellsworth testified that compliance with the USFWS's Eagle Conservation Plan Guidance for Land-Based Wind Energy (ECP Guidance) is voluntary, and the USFWS's role is to provide expertise and data to developers who implement the ECP Guidance. As such, he encouraged Rolette Power to continue to coordinate with the USFWS with respect to the Project.

37. In a letter dated October 1, 2015, the NDGFD stated that since Rolette Power has agreed to coordinate with the USFWS regarding eagle nests in proximity to the Project Area, including any potential mitigation measure that may be needed, it has no additional recommendations with respect to the Project.

#### Sound and Shadow Flicker Analyses

38. A sound analysis was conducted for the Project. The analysis demonstrates that sound levels for the Project will comply with the Commission's Avoidance Area requirement that sound levels within 100 feet of an inhabited residence or community building not exceed 50 dBA unless a waiver is obtained.

39. In the event Project modifications occur that are not covered by the current sound analysis, Rolette Power will conduct a sound analysis to ensure that the Project complies with the Commission's Avoidance Area Sound Requirement.

40. A shadow flicker analysis was conducted for the Project. Based on a detailed shadow flicker analysis, using realistic assumptions, no occupied residences are anticipated to have shadow flicker levels of over 30 hours a year using any of the turbine models currently under consideration, or a turbine model with the same or less potential for shadow flicker impacts.

41. Rolette Power will meet a shadow flicker impact of 30 hours per year or less at occupied residences, using realistic modeling assumptions, unless otherwise agreed to by the homeowner. In the event Project modifications occur that are not covered by the current shadow flicker analysis, Rolette Power will conduct a shadow flicker analysis to ensure this commitment is met.

#### Additional Mitigative Measures

42. Rolette Power has agreed to a number of steps to mitigate any potential Project impacts, as indicated by the attached Certification Relating to Order Provisions – Energy Conversion Facility Siting, with accompanying Tree and Shrub Mitigation Specifications, dated June 26, 2015 (Certification).

43. Rolette Power agreed that its obligation for reclamation and maintenance of the approved site will continue throughout the life of the energy conversion facility.

44. Rolette Power agreed that it shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the proposed energy conversion facility.

45. Rolette Power agreed that it shall repair or replace all drainage tile broken or damaged as a result of construction or operation of the proposed energy conversion facility.

46. In addition, Rolette Power agreed that:

- a. No more than 59 turbines will be constructed within the Project area;
- b. No more than 100.4 MW will be constructed within the Project area;
- c. The Project will be constructed so as to comply with a setback of at least 1,400 feet between wind turbines and currently occupied residences; and
- d. The Project will be constructed so as to comply with a setback of at least 0.5 mile from the Ghost Valley Waterfowl Production Area; and
- e. The project will apply a shadow flicker goal of 30 hours per year or less at currently occupied residences, unless otherwise agreed to by the homeowner.

47. All setbacks applied will be measured from the center of the base of the turbine to the closest part of the applicable feature.

48. Rolette Power has agreed to implement the eagle-related measures set forth in Hearing Exhibit No. 21:

- a. Working with Project landowners to remove dead livestock from the Project Area;
- b. Coordinating with Rolette County on removal of roadkill in the Project Area;
- c. Requiring Project operations and maintenance personnel to implement a wildlife reporting program during the life of the Project that documents avian and other wildlife impacts;
- d. Requiring Project operations and maintenance personnel to adhere to a speed limit when driving within the Project Area to minimize the potential for wildlife strikes resulting in carrion that could attract eagles to the Project Area;

- e. Training Project operations and maintenance personnel to be aware of eagle activity in the Project Area and identify potential eagle attractants;
- f. During operations, minimizing to the extent practicable Project equipment and material storage within the Project Area outside of the Project operations and maintenance yard, as it can provide cover for eagle prey sources; and
- g. Burying the Project's electrical collection system, and constructing any Project-related overhead transmission lines owned by Rolette Power in accordance with Avian Power Line Interaction Committee ("APLIC") Avian Protection Plan Guidelines.

49. Rolette Power will utilize best management practices (BMPs) to minimize impacts on ground and surface water, and to prevent soil erosion. Rolette Power will implement the erosion control measures required under the National Pollution Discharge Elimination System (NPDES) permit and the associated Stormwater Pollution Prevention Plan. Construction of the Project is not anticipated to have a significant adverse impact on surface or ground water resources or soils.

50. Rolette Power will participate in the North Dakota One-Call Excavation Notice System.

51. Rolette Power will coordinate with local authorities and first responders regarding emergency response measures as part of the Project commissioning activities.

52. Rolette Power will develop a lighting and marking plan for the turbines and meteorological towers in accordance with FAA and state requirements.

53. In accordance with the Commission's rules, Rolette Power will file a decommissioning plan with the Commission prior to the commencement of operation of the Project, and decommissioning will be performed in accordance with all applicable rules and regulations.

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

### **Conclusions of Law**

1. The Commission has jurisdiction over this proceeding under North Dakota Century Code Chapter 49-22.
2. The wind energy conversion facility proposed by Rolette Power is an energy conversion facility as defined in North Dakota Century Code Section 49-22-03(5).

3. The Application submitted by Rolette Power meets the site evaluation criteria required by North Dakota Century Code Chapter 49-22.
4. The location, construction, and operation of the proposed energy conversion facility will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
5. The proposed energy conversion facility is compatible with environmental preservation and the efficient use of resources.
6. The proposed energy conversion facility location 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 Commission has jurisdiction to ensure compliance with National Electric Safety Code standards in the construction and operation of the proposed energy conversion facility.

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

### **Order**

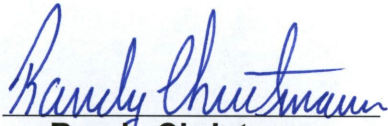
The Commission orders:

1. Certificate of Site Compatibility No. 46 for an Energy Conversion Facility is issued to Rolette Power Development, LLC, designating a site for a wind energy conversion facility corresponding to the Project Area depicted in Hearing Exhibit No. 3.
2. Within the designated area, Rolette Power is authorized to construct, operate, and maintain wind turbines and associated equipment, access roads, an O&M building, a substation, permanent meteorological towers, and a system of underground collection lines and communication cables, as well as any other associated facilities identified in the Application, at the hearing, in any supplemental filings and in any late-filed exhibits.
3. Rolette Power shall comply with the following commitments:
  - a. Rolette Power will construct no more than 59 turbines within the designated site;
  - b. Rolette Power will construct no more than 100.4 MW within the designated site;

- c. Rolette Power will apply a setback of at least 1,400 feet between wind turbines and currently occupied residences;
  - d. Rolette Power will apply a setback of at least 0.5 mile from the Ghost Valley Waterfowl Production Area; and
  - e. Rolette Power will site turbines so as to meet a shadow flicker goal of 30 hours per year or less at currently occupied residences, unless otherwise agreed to by the homeowner. In the event Project modifications occur that are not covered by the current shadow flicker analysis, Rolette Power will conduct a shadow flicker analysis to ensure this commitment is met.
4. If modifications are made to the Project layout, Rolette Power shall complete a Class III cultural resource survey for any previously un-surveyed portions of the designated site upon which Project-related facilities will be located, in accordance with SHPO guidance, submit cultural resource findings to SHPO for review and file a copy of SHPO's response with the Commission prior to beginning construction in those areas.
5. If modifications are made to the Project layout, Rolette Power shall complete a wetland delineation of any previously un-surveyed areas upon which Project-related facilities will be located, as necessary, and submit a copy of the delineation report to the Commission.
6. In the event Project modifications occur that are not covered by its current shadow flicker analysis, Rolette Power shall conduct a shadow flicker analysis to ensure the commitment made in Order Provision 3(e) herein is met.
7. In the event Project modifications occur that are not covered by its current sound analysis, Rolette Power shall conduct a sound analysis to ensure that the Project complies with the Commission's Avoidance Area Sound Requirement.
8. Rolette Power shall fulfill its obligation for reclamation and maintenance of the approved site continuing throughout the life of the energy conversion facility.
9. Rolette Power shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the proposed energy conversion facility.
10. Rolette Power shall repair or replace all drainage tile broken or damaged as a result of construction and operation of the proposed energy conversion facility.
11. Rolette Power shall implement the eagle-related measures set forth in Hearing Exhibit No. 21.

12. The June 26, 2015 Certification Relating to Order Provisions-Energy Conversion Facility Siting, with accompanying Tree and Shrub Mitigation Specifications (Hearing Exhibit 6) is incorporated by reference and attached to this Order.

**PUBLIC SERVICE COMMISSION**

  
Randy Christmann  
Commissioner

  
Julie Fedorchak  
Chairman

  
Brian P. Kalk  
Commissioner

# **PUBLIC SERVICE COMMISSION**

## **STATE OF NORTH DAKOTA**

### **Certificate of Site Compatibility Number 46**


*This is to certify that the Commission has designated an energy conversion facility site for Rolette Power Development, LLC's Rolette Wind Power Project consisting of up to 100.4 MW of total wind turbine generating capacity and associated facilities in Rolette County, North Dakota.*

*The facility may be sited in this designated location in compliance with the energy conversion facility siting criteria. This certificate is issued in accordance with the Finding of Facts, Conclusion of Law and Order of the Commission in Case No. PU-15-124 dated November 18, 2015 and is subject to the conditions and limitations noted in the order.*

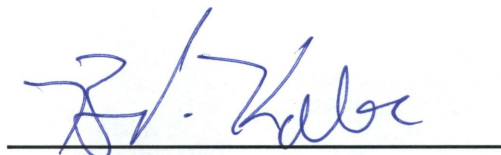
*Bismarck, North Dakota, November 18, 2015.*

**ATTEST:**

**PUBLIC SERVICE COMMISSION**



**Executive Secretary**



**Commissioner**