

Casey A. Furey  
100 West Broadway, Suite 250  
P.O. Box 2798  
Bismarck, ND 58502-2798  
701.223.6585  
cfurey@crowleyfleck.com

June 20, 2016

***Hand Delivery***

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

Dear Mr. Nitschke:

In re: Brady Wind II, LLC  
PSC Case No. PU-16-042  
Our File No. 35-218-027

Enclosed for filing in the captioned case please find two copies of the Proposed Finding of Fact, Conclusions of Law and Order.

Please call should you have any questions.

Sincerely,



Casey A. Furey

CAF/rw

Enc.

cc: Judge Patrick Ward (via email)  
Zachary E. Pelham (via email)  
Jerry R. Lein (via email)

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

Brady Wind II, LLC  
Wind Energy Conversion Facility – Stark County  
Siting Application

Case No. PU-16-042

---

**PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW  
AND ORDER  
DATED JUNE \_\_\_\_\_, 2016**

---

**Appearances**

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

Brian R. Bjella and Casey A. Furey, Attorneys at Law, Crowley Fleck, PLLP, 100 West Broadway, Suite 250, Bismarck, North Dakota 58501, on behalf of the Applicant, Brady Wind II, LLC.

Zachary Pelham, Attorney at Law, Pearce Durick PLLC, 314 E. Thayer Ave., Bismarck, North Dakota 58502, Special Assistant Attorney General on behalf of the North Dakota Public Service Commission.

Patrick J. Ward, Administrative Law Judge, PO Box 1695, Bismarck, North Dakota 58502-1695.

**Preliminary Statement**

On January 19, 2016, Brady Wind II, LLC (“Brady Wind II”) filed with the North Dakota Public Service Commission (“Commission”) an Application for a Certificate of Site Compatibility for a wind energy conversion project located in Stark County, North Dakota (“Project”). Brady Wind II also filed an application fee of \$100,000.00.

On April 18, 2016, Brady Wind II filed with the Commission an Amended Application for a Certificate of Site Compatibility for the Project.

On April 20, 2016, the Commission deemed the Application complete conditioned of the filing 30-days prior to the public hearing 1) a final site plan with maps and tables showing distances from the nearest turbine to each occupied residence and indicating whether the property owner is participating or not participating in the project 2) final noise and shadow flicker studies; 3) a wetland delineation report; 4) bat and whooping crane habitat assessment studies; 5) a bat acoustic study; 6) an avian and grouse lek field inventory; and 7) an eagle use survey. On that date the Commission

issued a Notice of Filing and Notice of Hearing, scheduling a public hearing for June 7, 2016, at 10:00 a.m. Mountain Time at Memorial Hall, 925 Main Street, New England, North Dakota 58647.

The issues to be considered at the hearing were:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse effects upon 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 impacts while ensuring continuing system reliability and integrity, and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On April 25, 2016 – May 6, 2016 Brady Wind II filed with the Commission its required 30-day prehearing filings.

On June 3, 2016, Brady Wind II filed its Certification Relating to Order Provisions – Wind Energy Conversion Facility Siting, with accompanying Tree and Shrub Mitigation Specifications.

The public hearing was held as scheduled on June 7, 2016. Having allowed all interested persons an opportunity to be heard, and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes the following findings:

### **Findings of Fact**

1. Brady Wind II, LLC is a Delaware limited liability company headquartered in Juno Beach, Florida, and is registered to do business in the State of North Dakota. Brady Wind II, LLC is a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC.
2. Brady Wind II proposes to construct a wind energy facility known as the Brady II Wind Energy Center located in Hettinger and Stark Counties, North Dakota, being approximately 15 miles south of the city of Dickinson, North Dakota. At the request of the Commission, Brady Wind II has reduced the Project Area to include only the lands of participating landowners. As a result, the Project Area consists of approximately 20,317 acres. Wind turbines will be placed within the Project Area in Hettinger County. Brady Wind II has requested that the Project Area, as depicted in Hearing Exhibit No. 19, be designated as the site for the Project.

3. Brady Wind II selected the proposed site for the Project based on a number of factors, including: identified need for the project, the quality of a wind resource, landowners' support, suitable transmission interconnection capability, avoidance of environmental issues, compliance with the Commission's siting criteria; compliance with Hettinger County's and Stark County's zoning requirements, and economic considerations.
4. Section 49-22-16(4) of the North Dakota Century Code provides 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. Brady Wind II contacted the following federal, state, and local departments, agencies, and entities:
  - a. Federal – U.S. Fish and Wildlife Service (“USFWS”); US Army Corps of Engineers (“USACE”); and U.S. Department of Commerce National Teleconference and Information Administration.
  - b. State – North Dakota Aeronautics Commission; North Dakota Department of Agriculture; North Dakota Department of Health; North Dakota Department of Transportation; North Dakota Department of Trust Lands; North Dakota State Water Commission; North Dakota Indian Affairs Commission; State Historical Society of North Dakota (“SHPO”); North Dakota Geological Survey; and the North Dakota Game and Fish Department (“NDGFD”).
  - c. Local – Stark County; Hettinger County; and Central Stark & Western Soil Conservation District.
5. Agency coordination and comments are noted in the application, and in testimony presented at the public hearing. No objections to the Project were raised by any state or federal agencies, or local governmental entities.
6. North Dakota Century Code § 49-22-16 provides that no energy conversion facility site shall be designated if it violates any local land use, zoning, building rules, regulations, or ordinances. The Hettinger County Commission issued a Conditional Use for the Project on April 8, 2016. Stark County permitting is not required for the proposed Project, because only underground collection lines will be placed in Stark County.
7. All easements and other land rights necessary to build and operate the Project have been obtained.
8. Brady Wind II has signed a Power Purchase Agreement with Basin Electric Power Cooperative (“Basin”) to deliver wind generated electric power for the benefit of Basin's customers, including those in North Dakota.

9. Brady Wind II has plans to begin construction on the Project in July 2016 with an in-service date of December 2016. The Project is estimated to cost \$250 million.

### Project Design

10. The Project will have a name-plate generating capacity of approximately 150 megawatts (“MW”). The Project will consist of up to 72 turbines. Brady Wind II expects to use both General Electric (“GE”) 2.1 MW and GE 1.79 MW Xle wind turbine generators. Depending on turbine availability and economic considerations, among other factors, Brady Wind II may select another turbine model.
11. The turbines have Supervisory Control and Data Acquisitions (“SCADA”) communication technology to allow control and monitoring of the wind farm. The SCADA communications system permits automatic, independent operation and remote supervision, thus allowing the simultaneous control of many wind turbines.
12. The towers will be conical tubular steel with a hub height of up to 262 feet. The portion of the foundation that is above ground is 15 to 16 feet wide at the base of the tower. Each turbine will be grounded and shielded to protect against lightning strike.
13. At the base of each turbine, a step-transformer will be installed to step up the voltage to the power collection line voltage of 34.5 kilovolt (“kV”). The power from these transformers will be run through an underground collection system consisting of various sized buried cables that are generally located alongside the Project access roads. Collection lines will be buried at least 48 inches deep and will not affect farming equipment. At the point where the access and public roads meet, the collection system will continue as underground lines. All collection system cables will terminate at the proposed Brady Wind Energy Center substation, which includes a power transformer to step up the voltage from 34.5 kV to 230 kV and provides the necessary protection and control for interconnection to the transmission grid.
14. Associated facilities to be constructed within the Project Area include access roads, electrical collection systems, and metrological towers. The proposed Project will be located adjacent to the proposed Brady Wind Energy Center, and will utilize the temporary laydown and turbine storage areas identified for the Brady Wind Energy Center during construction. The Operations and Maintenance building proposed for the Brady Wind Energy Center will be used for the proposed Project. Substation equipment to support the proposed Project will be located within the same 8-acre parcel as the Brady Wind Energy Center substation. The overhead 19-mile 230 kV transmission line, PU-15-797, proposed to serve the Brady Wind Energy Center, will also serve the Project.

15. Construction and operation of the Brady II Wind Energy Center will conform to the requirements of the National Electrical Safety Code.

#### Siting Criteria

16. 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 the certificate of site compatibility. The criteria set forth in North Dakota Administrative Code § 69-06-08-01 are classified as Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria. With the exception of prime and unique farm land, an energy conversion facility must not be sited within an Exclusion Area.

#### Exclusion Areas

17. With the exception of prime and unique farm land, an energy conversion facility must not be sited within an Exclusion Area. The exception for prime and unique farm land is if the Commission finds that the prime and unique farm land 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.
18. The Study Area contains approximately two percent of prime farmland. Prime farmland has been avoided to the extent practical. Permanent impacts on prime farmland soils from turbine placement and access roads are estimated to be 0.1 acres, which is less than one percent of the Project Area. The Commission finds the prime farmland which may be disturbed by this energy conversion facility is of such small acreage as to be of negligible impact on agricultural production.

#### Avoidance Areas

19. 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 alternate sites.
20. With respect to Avoidance Areas, historic farmsteads and cemeteries are present within the Project Area. All direct impacts to historic resources will be avoided by the Project footprint.
21. Approximately one percent of the Study Area is within the 100-year floodplain. These areas occur primarily within creek beds and will be avoided as practicable or permitted as required by Hettinger and Stark Counties.

22. Wetlands are present within the Project Area, but permanent impacts to wetlands will be avoided and minimized as practicable.
23. Some trees and shrubs are located within the Project Area, but the Project will be sited to 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

24. In accordance with the Commission's Selection Criteria, an energy conversion facility shall be approved only if it is demonstrated that no significant adverse impacts will result from the location, construction, and operation of the facility. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the energy conversion facility.
25. With respect to Selection Criteria, the Project and associated facilities are expected to occupy and permanently disturb up to 74 acres of land during the life of the Project. Brady Wind II will continue to work with landowners to minimize land use disruptions from the facilities. No impacts to irrigation or quality of the agricultural land are anticipated.
26. Brady Wind II submitted evidence to demonstrate 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).
27. Brady Wind II submitted evidence to demonstrate its commitment to maximize the benefits of the proposed energy conversion facility so far as possible so as to meet the Policy Criteria set forth in North Dakota Administrative Code § 69-06-08-01(6).
28. No significant adverse impact is foreseen on the ability of the affected areas to provide community services, such as housing, health care, schools, police and fire protection, water and sewer, solid waste management, transportation or public safety. The proposed Project is expected to be of economic benefit to the affected area and area schools.

#### Cultural Resources

29. Brady Wind II has completed a Class I literature search and a Class III cultural resources inventory for the current Project. Brady Wind II submitted its Class III cultural resources inventory report to the SHPO for review. Brady Wind II received SHPO concurrence on the Class III Cultural Resource Inventory and will comply with SHPO recommendations to avoid the four sites located within the construction easement, and the 26 sites located outside the construction easement. At the SHPO's recommendation, Brady Wind II conducted a field survey of

architectural resources located within 2 miles of the proposed turbines and this survey was submitted to the SHPO for review. Brady Wind II will obtain and file copies of SHPO's responses regarding the report prior to beginning construction of the Project.

30. In the event that the Project layout changes from the layout provided in Hearing Exhibit No. 19, Brady Wind II will complete Class III cultural resource survey work for any previously un-surveyed areas, per the 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.
31. The Project facilities will avoid cultural resource sites and cultural resources are not expected to be impacted by the project.

#### Wetlands and Wildlife

32. Brady Wind II has coordinated with numerous local, state, and federal agencies, which are identified in the Application. Brady Wind II has engaged in extensive coordination with the USFWS and NDGFD. No agencies have objected to construction of the Project.
33. A wetland survey report has been completed and submitted. Wetland determinations were conducted for the Project November 2015 through April 2016. Brady Wind II designed the Project to minimize impacts to wetlands and streams, however a few minor impacts to wetlands are unavoidable. In the event the Project layout changes, Brady Wind II will complete a wetland determination of any previously un-surveyed areas as necessary. Brady Wind II will minimize permanent wetland impacts from the Project to the extent practicable, and will obtain any permits required.
34. Brady Wind II conducted an avian survey, lek aerial survey, a raptor survey, a habitat assessment, and eagle use surveys. No federally endangered, threatened or candidate species were recorded. No potentially occupied or occupied eagle nests are located within the Project Area boundary. The 2016 nest surveys reflected a golden eagle was incubating at a previously identified mall raptor nest approximately 0.2 miles outside the Project Area. This was the closest occupied eagle nest to the Project Area. The nest was reported to both the NDGF and the USFWS and Brady Wind II applied a half mile buffer around the nest following recommendations from the NDGFD, and obtained flight path data following the recommendations of the USFWS. Based on discussions with both agencies and subsequently obtained flight path data, Brady Wind II voluntarily increased this buffer to 1.3 miles by 1 mile. This nest failed around May 15, 2016 and was reported to both the USFWS and NDGF. No significant impacts are anticipated.

35. Brady Wind II performed a desktop analysis of potential whooping crane habitat in the area of the wind energy facility. No confirmed whooping crane sightings have been documented.
36. Brady Wind II conducted environmental studies of the Project Area, and impacts to wildlife are anticipated to be minimal. Among the studies conducted were a bat desktop habitat assessment, bat acoustic monitoring, spring avian point-count surveys, eagle use surveys, and multiple rounds of raptor nest surveys using ground and aerial methods. Brady Wind II will continue to coordinate with the USFWS to determine potential mitigation/minimization measures. Brady Wind II will also prepare a Wildlife Conservation Strategy prior to operation of the Project, which will outline specific conservation methods.
37. Neither the USFWS nor the NDGFD have raised any objections to Brady Wind II's proposed wildlife mitigation measures.

#### Noise and Shadow Flicker Studies

38. Brady Wind II conducted a sound analysis for the Project. This analysis demonstrates that the 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. Brady Wind II completed a shadow flicker study for the Project using realistic modeling assumptions. There are no occupied receptors with shadow flicker impacts greater than 30 hours per year under the primary turbine only or primary plus alternative turbine scenarios. Under the cumulative scenario for Brady I and Brady II (primary turbines only), there are two occupied receptors that exceed 30 hours per year of shadow flicker. Of those, only one occupied receptor (880001) is located on non-participating land or based on a parcel that is not signed as participating in Brady II. However, that landowner is participating in Brady I. Based upon the analysis, shadow flicker impacts in the Project Area are expected to be minor and well within acceptable ranges for avoidance of nuisance and/or health hazards.
40. In the event Project modifications occur that are not covered by the current shadow flicker analysis, Brady Wind II will conduct a shadow flicker analysis to ensure that no currently occupied residences experience a shadow flicker impact of more than 30 hours per year, unless otherwise agreed by the homeowner.

#### Further Mitigative Measures

41. For purposes of this Project, Brady Wind II is voluntarily applying the Stark County setback of 2,000 feet from occupied residences in Hettinger County. This voluntary setback is more restrictive than Hettinger County's zoning ordinance

- which requires a 1,320 foot setback from occupied residences. In addition, after receiving feedback from Hettinger County officials, Brady Wind II will apply a 2,640 foot setback from residences located on land that is not signed within the Project Area.
42. The Commission's setbacks applicable to the Project with respect to roads are one and one-tenth times the height of the turbine from interstate or state roadway right-of-way; and one and one-tenth times the height of the turbine plus seventy-five feet from the centerline of any county or maintained township roadway.
  43. Brady Wind II has agreed to implement the following eagle-related measures:
    - a. Implement a 1.3 mile by 1 mile nest buffer around the golden eagle nest south of the Project Area boundary and continue to coordinate with the NDGF and USFWS regarding any new developments regarding this nesting site.
    - b. Burying the Project's electrical collection system in accordance with Avian Power Line Interaction Committee Avian Protection Plan Guidelines.
  44. Burying the Project's electrical collection system in accordance with Avian Power Line Interaction Committee Avian Protection Plan Guidelines.
  45. Brady Wind will maintain groundwater protection and soil conservation practices to protect topsoil and adjacent resources, and to eliminate soil erosion during construction, and operation of the Project. Best Management Practices for erosion and sediment control will be used to minimize wind and water erosion in the Project Area during and after construction. Only land needed for the facility will be impacted. Temporarily disturbed areas will be restored and reseeded following landowner preferences to comply with requirements of the construction stormwater permit.
  46. Subject to FAA approval, Brady Wind II will use commercially reasonable efforts to install an Aircraft Detection and Lighting System or other technology suitable to the Commission on the Brady II Wind project as soon as practicable after commercial operation, and in any event by no later than December 31, 2018.
  47. Brady Wind II will participate in the North Dakota one-call excavation notice system.
  48. Brady Wind II will coordinate with local authorities and first responders regarding emergency response measures as a part of the Project commissioning activities.
  49. Brady Wind made certain representations and covenants as contained in the Certification Relating to Order Provisions-Wind Energy Conversion Facility

Siting executed by Brady Wind and filed with the Commission on June 3, 2016, which are incorporated into these Findings of Fact.

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 energy conversion facility proposed by Brady Wind is an energy conversion facility as defined in North Dakota Century Code Section 49-22-03(5).
3. The application submitted by Brady Wind 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 only 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 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 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 for an Energy Conversion Facility No. \_\_\_\_\_, is issued to Brady Wind II, LLC for the construction, operation and maintenance of an energy conversion facility known as the Brady II Wind Energy Center corresponding to the Project Area depicted in Hearing Exhibit No. 19.
2. Within the permitted area, Brady Wind II is authorized to site and construct up to 150 megawatts within the designated area consisting of up to 72 wind turbines in

proposed and alternate locations, as identified in Hearing Exhibit No. 19, along with electric collection and communication lines, access roads, and with other associated facilities as identified in the application and at the hearing.

3. If modifications are made to the Project layout, Brady Wind II shall complete a Class III cultural resource survey for any previously un-surveyed portions of the designated site affected by Project-related construction activities, in accordance with SHPO guidance; shall submit cultural resource findings to SHPO for review; and shall obtain and file a copy of SHPO's response with the Commission prior to beginning construction in said areas.
4. If modifications are made to the Project layout, Brady Wind II shall complete a wetland determination of any previously unsurveyed areas affected by Project-related activities, as necessary, and file the report with the Commission.
5. In the event Project modifications occur that are not covered by its current sound analysis, Brady Wind II shall conduct a sound analysis and file a report with the Commission to ensure that the Project complies with the Commission's Avoidance Area Sound Requirement.
6. Brady Wind II shall site Project turbines so as to meet a shadow flicker goal of 30 hours per year or less at each currently occupied residence, considering site-specific conditions, unless otherwise agreed to by the landowner. In the event Project modifications occur that are not covered by its current shadow flicker analysis, Brady Wind II shall conduct a shadow flicker analysis and file a report with the Commission to ensure this requirement is met.
7. Brady Wind II shall implement the eagle-related measures set forth in this Order.
8. The June 3, 2016, Certification Relating to Order Provisions – Energy Conversion Facility Siting, with accompanying Tree and Shrub Mitigation Specifications are incorporated by reference and attached to this Order.

PUBLIC SERVICE COMMISSION

---

Randy Christmann  
Commissioner

---

Julie Fedorchak  
Chairman

---

Brian P. Kalk  
Commissioner