

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

Merricourt Wind Power Project Application
for Certificate of Site Compatibility

CASE NO. PU-08-932

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

_____, 2017

Appearances

Commissioners Brian Kroshus, Randy Christmann, and Julie Fedorchak.

Sara Bergan and Sarah Johnson Phillips appearing Pro Hac Vice, Stoel Rives LLP, 33 South Sixth Street, Suite 4200, Minneapolis, Minnesota 55402, on behalf of the Applicant, EDF Renewable Development, Inc.

Mitchell D. Armstrong, Special Assistant Attorney General, 122 East Broadway Avenue, P.O. Box 460, Bismarck, ND 58502-0460, on behalf of the North Dakota Public Service Commission.

Timothy J. Dawson, Chief Administrative Law Judge, Office of Administrative Hearings, 2911 North 4th Street, Suite 303, Bismarck, North Dakota 58503, as Procedural Hearing Officer.

Preliminary Statement

On June 8, 2011, the North Dakota Public Service Commission (Commission) adopted Findings of Fact, Conclusions of Law and Order issuing Certificate of Site Compatibility No. 23 (Certificate No. 23), designating an energy conversion facility site for enXco Development Corporation's Merricourt Wind Energy Project (Project) consisting of up to approximately 150 MW of total wind turbine generating capacity and associated facilities in Dickey and McIntosh Counties of North Dakota.

On May 27, 2015, the Commission adopted Amended Findings of Fact, Conclusions of Law and Order issuing First Amended Certificate of Site Compatibility for Energy Conversion Facility, Certificate No. 23 (First Amended Certificate No. 23) to EDF Renewable Development, Inc. (EDF), formerly enXco Development Corporation. EDF had requested the amendment in order to install Vestas V100 2.0 MW turbines rather than the initially approved GE 1.5 MW turbines, resulting in fewer required turbines and revised turbine locations.

On March 3, 2017, EDF filed an Application for Second Amendment to Certificate of Site Compatibility, requesting further site plan revisions and turbine location flexibility within revised and expanded project area boundaries. The purpose of the amendment is to change the project layout to be consistent with the avoidance and/or minimization measures that EDF committed to

for piping plovers and whooping cranes in coordination with the US Fish and Wildlife Service (USFWS) and to request approval of a revised project boundary and facility locations.

On May 10, 2017, the Commission issued a Notice of Opportunity for Hearing (Notice), setting a deadline for written comments and requests for hearing of June 28, 2017.

The Notice identified the following issues to be considered with respect to the Motion:

1. Will the location 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 26, 2017, EDF filed a letter with the Commission requesting that the Commission postpone the hearing scheduled for June 28, 2017 due to the Ashley Tribune's failure to publish the second notice within 20 days of the hearing, pursuant to NDCC § 49-22-13(4).

On June 27, 2017, the Commission approved a motion acknowledging the cancellation of the scheduled hearing due to the publication error.

On July 26, 2017, the Commission approved a motion to issue a Notice of Rescheduled Hearing and issued the Notice of Rescheduled Hearing, which set the rescheduled hearing for September 13, 2017 and identified the same issues to be considered as the Notice.

On September 13, 2017 the rescheduled hearing was held at City Hall, 113 1st Street NW, Ashley, ND 58413.

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 of fact:

FINDINGS OF FACT

1. Certificate of Site Compatibility for an Energy Conversion Facility No. 23 was issued to enXco Development Corporation on June 8, 2011.
2. First Amended Certificate of Site Compatibility for an Energy Conversion Facility No. 23 was issued to EDF on May 27, 2015.
3. After executing the Certification Relating to Order Provisions - Wind Energy Conversion Facility Siting associated with Certificate No. 23, EDF executed a certification of continuing site suitability on February 18, 2015 in accordance with

North Dakota Century Code section 49-22-17 and section 69-06-09-01 of the North Dakota Administrative Code. On September 11, 2017, EDF executed a new Certification Relating to Order Provisions - Wind Energy Conversion Facility Siting (2017 Certification).

4. As part of its application for a second amendment, EDF requested that flexibility in siting be granted for the Project consistent with NDCC Chapter 49-22.
5. EDF anticipates that construction will begin in 2019 with a commercial operation date on or before December 31, 2019.
6. Ownership of the project will be transferred from EDF to Otter Tail Power Company upon the transactional close of an Asset Purchase Agreement (Purchase Agreement), executed on November 16, 2016. Upon Purchase Agreement close, EDF will remain the primary engineering, procurement and construction contractor for the construction of the project and Otter Tail Power Company will assume full ownership of the project as well as all operational responsibilities once the project meets commercial operations. In order to facilitate this transfer, EDF will need to assign the amended certificate to Otter Tail Power Company upon the closing under the Purchase Agreement, which would require a future approval from the Commission.

Size, Type and Preferred Location of Facility

7. A revised project boundary and layout was created following coordination with USFWS to implement avoidance and minimization measures that, if implemented, would cause the likelihood of take for these species to be avoided and minimized such that take for the whooping crane and piping plover would be considered discountable.
8. Revisions to the previous project boundary have increased the project area from approximately 10,960 acres to 13,156 acres. The additional acres of land did not add any new landowners to the project.

Project Design

9. Consistent with First Amended Certificate No. 23, the new project layout includes 75 primary and 6 alternate turbine locations and the proposed facility would be capable of producing 150 MW of power.

Study of Preferred Location

10. EDF performed a noise analysis on all residences within one mile of the project boundary. All noise modeling assumptions were equal to the refined noise analysis previously reported and comply with North Dakota regulatory requirements (i.e., below 50 decibels at all receptors). EDF's updated acoustic modeling for the revised layout predicted that sound levels would continue to be less than 50 decibels within 100 feet of all occupied residences.

11. EDF performed a shadow flicker analysis on all residences within one mile of the project boundary. The results of the analysis are consistent with the First Amended Certificate No. 23 and general industry practice (i.e., below 30 hours per year). EDF's updated the shadow flicker analysis for the new layout predicted that shadow flicker would not exceed 14 hours per year at any occupied residence.
12. Class III Cultural Resource inventories were conducted progressively during layout analysis to identify cultural resources.
13. Numerous wetlands of various hydrology and vegetation exist within the revised project area. Field wetland delineations were completed progressively during layout analysis to determine wetland impacts.
14. EDF commissioned an avian use survey in May 2016 that continued for one year based on the general guidance in the USFWS Eagle Conservation Plan Guidance (ECPG) and Wind Energy Guidelines (WEG). Results of the avian use survey indicated low eagle use in the project area.

Siting Criteria

15. While the amendment would increase the project area by approximately 2,200 acres, there is no increase in the number of turbines and the permanent impact to prime farmland and farmland of statewide importance collectively remains well under 1% of the total land in the project area. The project is proposed to permanently impact approximately 64 acres of prime farmland or farmland of statewide importance, an amount that would be approximately 0.4% of the total project area. The Commission finds that the prime farmland and farmland of statewide importance expected to be removed from use by the Project is of such a small acreage as to have a negligible impact on agricultural production.
16. Wind turbines, access roads, and associated facilities were sited to avoid significant cultural resource sites and traditional cultural properties (TCP). The State Historical Society of North Dakota (SHSND) concurred with EDF's "No Significant Sites Affected" determination for the current turbine, access road, and collector line layout.
17. No other Exclusion Areas are located within the project area.
18. EDF will avoid all wetlands under easement to the USFWS and impacts to other wetlands will be avoided or minimized to the extent practicable.
19. Trees and shrubs are located within the project footprint. EDF will construct the project to minimize impacts to trees and shrubs to the extent practicable. All trees and shrubs removed during construction will be replaced in accordance with the Commission's tree and shrub mitigation specifications.
20. No other Avoidance Areas are present within the project area.

21. The amendment will enhance the compatibility of the Project with environmental preservation by adjusting the turbine layout so that each turbine is at least three miles distance from critical piping plover habitat.

Measures to Minimize Impact

22. The distance from the closet residence to a turbine under the revised layout is 1531 feet.
23. In coordination with USFWS, EDF agreed to commit to biological avoidance and minimization measures approved in the Western Area Power Association Programmatic EIS for piping plovers and whooping cranes. EDF coordinated with the USFWS and there was agreement that if EDF committed to the avoidance and minimization measures outlined in the Programmatic EIS that the threat of any take of piping plover and whooping crane would be reduced to a discountable level. On September 11, 2015, EDF submitted a letter to the USFWS confirming its commitment to implement these measures. Accordingly, EDF is no longer pursuing incidental take authorization under Section 10 of the Endangered Species Act for the whooping crane or the piping plover. Avoidance and minimization measures for the whooping crane include: monitoring for whooping cranes with curtailment if sighted and worker instruction on identification and reporting. Avoidance and minimization measures for the piping plover include: setbacks of 3 miles from alkali lakes where piping plovers have nested or are designated as critical habitat and not siting project facilities between any such lakes where the out limit of the buffer zones are less than 3 miles.
24. EDF will install lights that are compatible with light mitigation technology. Subject to Federal Aviation Administration approval, EDF plans to install light mitigation technology suitable to the Commission as soon as practicable after commercial operation and in no event later than December 31, 2021.
25. EDF has obtained all land rights necessary to construct the project as revised.
26. EDF has voluntarily agreed to comply with the Commission's new decommissioning requirements announced on May 2, 2017 as revisions to North Dakota Administrative Code Section 69-09-09.
27. EDF has voluntarily agreed to construct the project such that it complies with the recent change to North Dakota Century Code 49-44-05.1(3) which identifies areas less than one and one-tenth times the height of the turbine from a property line of a nonparticipating landowner and less than three times the height of the turbine from an inhabited rural residence of a nonparticipating landowner as wind specific exclusion areas.

From the foregoing Findings of Fact, the Commission 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 EDF is an energy conversion facility as defined in North Dakota Century Code § 49-22-03(5).
3. The application submitted by EDF meets the site evaluation criteria required by the North Dakota Century Code Chapter 49-22.
4. The location, construction and operation of the Project will produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota and is otherwise compatible with the environmental preservation and the efficient use of resources.
5. 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.
6. The Commission has jurisdiction to ensure compliance with the 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. EDF's request for a second amendment to Certificate of Site Compatibility for an Energy Conversion Facility, Certificate No. 23 (Certificate No. 23) is granted; and EDF is issued Second Amended Certificate of Site Compatibility for Energy Conversion Facility, Certificate No. 23 for the construction, operation and maintenance of the Merricourt Wind Power Project.
2. The authorizations granted by Second Amended Certificate of Site Compatibility for Energy Conversion Facility, Certificate No. 23 are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.
3. EDF is authorized to construct up to 75 wind turbines producing a total nameplate capacity of 150 MW within the project area as revised, along with associated access roads, underground electrical collection systems and communication cables, substation and operations and maintenance building.

4. In the event the layout is modified, EDF shall complete a Class III cultural resource survey for any previously unsurveyed areas in accordance with SHSND guidance, and shall submit cultural resource findings to the SHSND for review and obtain and file a copy of the SHSND's response with the Commission prior to beginning construction in affected areas.
5. In the event the layout is modified, EDF shall complete a wetland determination of any previously unsurveyed areas affected by project activities, and file with the Commission.
6. In the event that project modifications occur that are not covered by its existing acoustic analysis, EDF shall conduct a revised acoustic analysis and file the results of that analysis with the Commission.
7. In the event that project modifications occur that are not covered by its existing shadow flicker analysis, EDF shall conduct a revised shadow flicker analysis and file the results with the Commission.
8. EDF shall locate turbines such that shadow flicker at any currently inhabited residence is less than 30 hours per year, unless otherwise agreed to by the landowner in writing.
9. 2017 Certification is incorporated by reference, attached to this Order and supercedes and replaces in full the prior existing Certification to Order Provisions associated with the Certificate No. 23.
10. All provisions and requirements in the Commission's June 8, 2011 Findings of Fact, Conclusions of Law and Order and May 27, 2015 Findings of Fact, Conclusions of Law and Order continue to apply except where altered by this Order.

PUBLIC SERVICE COMMISSION

Brian Kroshus
Commissioner

Randy Christmann
Chairman

Julie Fedorchak
Commissioner