

March 5, 2012

**Fredrikson**  
& BYRON, P.A.

**VIA HAND DELIVERY**

RECEIVED

MAR 05 2012

PUBLIC SERVICE COMMISSION

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

**RE: Meadowlark Wind I LLC's Application for a Certificate of Site  
Compatibility for the New Frontier Wind Project in McHenry County, North  
Dakota  
Case No. PU-11-69**

Dear Mr. Nitschke:

Enclosed for filing in the above-referenced matter are an original and ten (10) copies of the following:

1. Late-filed Exhibit 6a (e-mail correspondence with the United States Air Force regarding Project review);
2. Late-filed Exhibit 9a (an Addendum Report containing results from the Class III inventory of previously unsurveyed portions of the Project area and the Class II historic structure survey, and a February 22, 2012 letter from the North Dakota State Historical Society, State Historic Preservation Office); and
3. Proposed Findings of Fact, Conclusions of Law and Order.

Also enclosed is a CD containing a copy of this letter and the above-referenced documents in PDF format.

If you have any questions, please let me know.

Sincerely,



Mollie Smith  
Attorney At Law  
Direct Dial: 701.221.4028  
Email: msmith@fredlaw.com

Enclosures

cc: Scott Koziar, Element Power (via e-mail w/ enclosure)

5082090\_1.DOC

Attorneys & Advisors / Fredrikson & Byron, P.A.

main 701  
fax 701.  
www.fred

**59 PU-11-69** Filed: 3/5/2012 Pages: 42  
**Late filed exhibits, proposed Findings of Fact,  
Conclusions of Law and Order**

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

**Meadowlark Wind I LLC**  
**New Frontier Wind Project – McHenry County**  
**Siting Application**

**Case No. PU-11-69**

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

March \_\_\_\_, 2012

**Appearances**

Commissioners Tony Clark, Kevin Cramer, Brian P. Kalk.

Mollie M. Smith, Fredrikson & Byron, P.A., 200 North 3rd Street, Suite 150, Bismarck, North Dakota 58501-3879, on behalf of the Applicant, Meadowlark Wind I LLC.

Mitchell D. Armstrong, Special Assistant Attorney General, Legal Counsel for the North Dakota Public Service Commission.

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

**Preliminary Statement**

On February 22, 2011, Meadowlark Wind I LLC (Meadowlark) filed a Letter of Intent (LOI) to submit an application for a Certificate of Site Compatibility to develop a wind energy conversion facility, referred to by Meadowlark as the New Frontier Wind Project (Project), in McHenry County, North Dakota. In its LOI, Meadowlark requested a shortening of the prescribed one-year notice period between when the LOI is filed and when the application for a Certificate of Site Compatibility is filed.

On March 9, 2011, the Commission acknowledged the LOI, shortened the one year notice period to three months, and assessed a filing fee of \$90,000 due upon the filing of the application.

On August 22, 2011, Meadowlark filed its Application for Certificate of Site Compatibility for the New Frontier Wind Project in McHenry County, North Dakota, Case No. PU-11-69 (Application), requesting authority to construct an up to 102 MW gross wind energy conversion facility.

On October 12, 2011, the Commission deemed the Application complete and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing for December 15, 2011 at 10:30 a.m. at the Verendrye Electric Cooperative Headquarters, 615 Highway 52, Velva, 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 December 7, 2011, Meadowlark filed a number of proposed hearing exhibits, including a map of the final Project layout and a map of the turbine setbacks from residences.

On December 15, 2011, the public hearing was held as scheduled.

On March 5, 2012, Meadowlark filed with the Commission late-filed Exhibit 6a (e-mail correspondence with the United States Air Force regarding Project review), and late-filed Exhibit 9a (an Addendum Report containing results from the Class III inventory of previously unsurveyed portions of the Project area and the Class II historic structure survey, and a February 22, 2012 letter from the North Dakota State Historical Society, State Historic Preservation Office (SHPO)).

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

1. Meadowlark is a Delaware limited liability company headquartered in Portland, Oregon.

2. Meadowlark has been authorized to do business in the State of North Dakota since February 11, 2011, as evidenced by the Certificate of Good Standing issued by the North Dakota Secretary of State on February 22, 2011.

3. Meadowlark proposes to construct and operate a wind energy conversion facility known as the New Frontier Wind Project to be located within an area comprised of approximately 11,352 acres of privately-owned land in McHenry County, North Dakota, just north of Ruso, North Dakota.

4. Meadowlark selected the proposed site for the New Frontier Wind Project based on a number of factors, including: the excellent wind resource, landowner interest and support, suitable transmission interconnection capability, avoidance of environmental issues, compliance with the siting criteria set forth in the North Dakota Century Code, construction and other site-specific limitations, and economic considerations.

5. 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 which were consulted and provided comment are as follows:

a. Federal – Federal Aviation Administration (FAA); United States Army Corps of Engineers Omaha District, North Dakota Regulatory Office (USACE); United States Fish and Wildlife Service, North Dakota Field Office (USFWS); United States Air Force;

b. State – SHPO; North Dakota Parks and Recreation Department; North Dakota Game and Fish Department; North Dakota Department of Health; North Dakota Department of Transportation; North Dakota State Water Commission; Job Service North Dakota; North Dakota Aeronautics Commission; North Dakota Department of Commerce;

c. Local – McHenry County; Bjornson Township; Brown Township.

6. Agency consultations and comments are noted in Appendix E of the Application, as well as in the exhibits and the testimony presented at the public hearing. While comments and suggestions were provided, no objections to the proposed Project were raised by any state or federal agencies or any local governmental entities.

7. 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, Meadowlark testified that it is in the process of obtaining a conditional use permit and a building permit for the Project from McHenry County.

### Project Design

8. The Project will have a nameplate (gross) capacity of approximately 102 MW, with project average annual output of up to 484,000 megawatt hours (MWh) per year, assuming net capacity factors of between 45 and 55 percent.

9. Meadowlark is considering the following six turbine models, or a turbine model similar to these turbine models: the GE 1.6-82.5; the Vestas V90-1.8; the Gamesa G90 2.0; the Gamesa G97 2.0; the Siemens SWT-2.3-101; and the Siemens SWT-2.3-113. The turbine selected will be between 1.6 and 2.3 MW in size, and will have a hub height of between 78 and 80 meters and a rotor diameter of up to 113 meters.

10. If the GE turbine model is selected there will be up to 63 turbines used, if the Vestas turbine model is selected there will be up to 56 turbines used, if the Gamesa turbine model is selected there will be up to 49 turbines used, and if the Siemens turbine model is selected there will be up to 44 turbines used. Except for reducing the number of turbine locations utilized, the turbine locations identified in the final Project layout submitted by Meadowlark will remain the same regardless of which of the proposed turbine models Meadowlark ultimately selects.

11. The turbines will have a Supervisory Control and Data Acquisition (SCADA) system, which will allow for local and remote control monitoring of all turbines, and will have lightning protection in accordance with the manufacturer's specifications. The type of foundation that will be used for the turbines will be determined by geotechnical surveys, turbine tower load specifications, and cost considerations. Meadowlark will develop a lighting and marking plan for the turbines and meteorological towers in accordance with FAA requirements.

12. In addition to turbines, associated facilities that would be constructed within the Project Area include: access roads, a Project collector substation, an operations and maintenance (O&M) building, permanent meteorological towers, pad-mounted transformers, and a system of underground electrical collection lines and communication cables.

13. Meadowlark will construct and operate the Project in compliance with the National Electric Safety Code.

14. Construction of the proposed Project may begin as soon as the second quarter of 2012 and is anticipated to be completed either by the end of 2012 or in 2013 or 2014. Meadowlark anticipates that the Project will be operational either in 2012, 2013, or 2014.

15. The estimated life of the Project is over 25 years. In accordance with the Commission's rules, Meadowlark will file a decommissioning plan with the Commission prior to the Project commencing operations, and decommissioning will be performed in accordance with all applicable rules and regulations.

16. The total cost for construction of Meadowlark's proposed New Frontier Wind Project is estimated to be approximately \$200 million.

#### Siting Criteria

17. 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 that 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 Section 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.

18. Prime farmland and unique farmland are present within the Project area. However, prime farmland and Farmland of Statewide Importance have been avoided to the maximum extent practicable and impacts to prime farmland and Farmland of Statewide Importance are expected to affect less than one (1) acre; thus, the proposed Project will have a negligible impact on agricultural productions.

19. The proposed Project and its associated facilities will occupy and disturb up to approximately 65 acres of land, or approximately 0.5 percent of the total Project area, during the life of the Project. Meadowlark will continue to work closely with

landowners during the development phase of the Project to minimize land use disruptions from the siting of the facilities. No impacts to irrigation or the quality of the agricultural land are anticipated.

20. Meadowlark submitted evidence to demonstrate that any significant adverse effects resulting from the location, construction, and operation of the Project as they relate to the Selection Criteria set forth in Section 69-06-08-01(3) of the North Dakota Administrative Code will be at an acceptable minimum or managed and maintained at an acceptable minimum.

21. Meadowlark 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 Section 69-06-08-01(4) of the North Dakota Administrative Code.

22. During construction, the Project will likely result in a temporary increase in traffic on local 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 roads and their restoration will be addressed in accordance with the road use and maintenance agreements between the county and Meadowlark and between the townships and Meadowlark. During operation, no adverse effects to transportation facilities or networks are anticipated.

23. The Project will benefit the local economy through the construction and operations and the maintenance jobs created by the Project, as well as the state and local tax revenue generated.

24. The proposed Project is not anticipated to have significant adverse economic or social consequences. It is not expected to cause significant adverse impacts on the ability of the affected area to provide community services, such as housing, health care, schools, police and fire protection, water and sewer, solid waste management, transportation and traffic safety. The proposed Project is expected to have an economic benefit on the affected area.

#### Cultural Resources

25. Meadowlark conducted a Class I literature search, a Class II historic structure survey, and a Class III cultural resource inventory within the Project area. Meadowlark identified three cultural resource sites within the Project area that have not been evaluated for National Register of Historic Places (NRHP) eligibility, and Meadowlark's Project layout avoids these three sites.

26. By letter dated February 22, 2012, the SHPO concurred with the determination that no historic properties or significant sites will be affected by the

Project so long as the Project avoids the three identified unevaluated cultural resource sites present within the Project area.

#### Wetlands, Woodlands, and Wildlife

27. The woodlands present in the Project area generally consist of shelterbelts. Turbine locations will avoid woodlands, and less than one acre of woodlands will be impacted by construction of access roads and installation of underground cables.

28. A wetland delineation was conducted for the Project and the results were provided in the Wetland Delineation Report. The Project layout has avoided wetlands to the extent practicable. Meadowlark will obtain any permits required from the USACE.

29. Meadowlark has conducted environmental studies of the Project area, including a Whooping Crane Habitat Review and a Raptor Nest and Lek Survey. No adverse impacts to federally-listed threatened or endangered species are anticipated. Meadowlark has developed an Avian and Bat Protection Plan that identifies measures Meadowlark will take to avoid impacts to avian and bat species.

#### Mitigative Measures

30. Meadowlark has agreed to a number of steps to mitigate any potential Project impacts, as indicated by the December 8, 2011 Certification Relating to Order Provisions – Transmission Facility Siting, with accompanying Tree and Shrub Mitigation Specifications, which is attached hereto.

31. No wind turbine will be placed within 2,640 feet of the missile facility located near the Project.

32. No wind turbine will be placed within 1,400 feet of any occupied residence, measured from the center of the base of the turbine tower to the closest part of the residence.

33. No wind turbine will be placed within 1.1 times the turbine blade tip height from the edge of any improved road right-of-way maintained and currently being used by the state, county, or township; existing above ground distribution or transmission lines; or adjacent property not under lease by Meadowlark.

34. Per McHenry County zoning regulations, the wind turbines, substation and Project O&M building will be at least 150 feet away from all improved section lines.

35. An acoustic modeling analysis was performed for the Project. The analysis demonstrates that sound levels for the Project are anticipated to be relatively low. Meadowlark is utilizing a minimum turbine siting setback of 1,400 feet from any

residence, which minimizes the potential noise impacts on sensitive receptors (*i.e.*, occupied residences).

36. A shadow flicker analysis was conducted for the Project using the “worst case” scenario. The analysis shows that the residences in the Project area are anticipated to have relatively low levels of shadow flicker (typically just a few minutes a day at most residences). Three residences owned by participating landowners may see shadow flicker levels of over 30 hours a year; however, Meadowlark testified that it has communicated this information to the landowners, and no concerns were raised. In the event that flicker mitigation is necessary, Meadowlark will work with individual landowners to address issues, and the mitigation measures employed may include adding vegetative screening or installing curtains or blinds on the windows facing the turbine casting shadows.

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

38. All electrical equipment associated with the turbines, with the exception of pad-mounted transformers, will be contained within the solid steel enclosed tubular towers on which the turbines are mounted. Access to the towers will be restricted to a single solid steel door that will be locked when not in use. The Project substation will be fenced and locked, and will have applicable warning signs.

39. Meadowlark will participate in the North Dakota One-Call Excavation Notice System.

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

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

### **Conclusions of Law**

1. The Commission has jurisdiction over this proceeding under Chapter 49-22 of the North Dakota Century Code.

2. The wind energy conversion facility proposed by Meadowlark is an energy conversion facility as defined in North Dakota Century Code Section 49-22-03(5).

3. The Application submitted by Meadowlark 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 the 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. \_\_\_\_ for an Energy Conversion Facility is issued to Meadowlark Wind I LLC for the construction, operation and maintenance of a wind energy facility known as the New Frontier Wind Project.

2. That the site described in the Application, located just north of Ruso, North Dakota, is designated as the site for construction of the New Frontier Wind Project, and is as follows:

Township 151 North, Range 80 West, McHenry County, ND  
Sections 8-9, 16-23, and 26-35

3. Within the permitted area, Meadowlark is authorized to site and construct up to 102 MW of wind turbines, electrical collection and communication lines, access roads, an operation and maintenance building, a Project substation, meteorological towers, and other associated facilities identified in the Application, at the hearing, in any supplemental filings and in any late-filed exhibits.

4. That the December 8, 2011 Certification Relating to Order Provisions – Transmission Facility Siting be incorporated by reference and attached to the Order issued by the Commission.

**PUBLIC SERVICE COMMISSION**

---

**Kevin Cramer  
Commissioner**

---

**Tony Clark  
Chairman**

---

**Brian P. Kalk  
Commissioner**

**From:** "Hough, Charles D Civ USAF AFGSC 5 OSS/A3" <[Charles.Hough@minot.af.mil](mailto:Charles.Hough@minot.af.mil)>  
**Date:** December 22, 2011 8:30:20 AM CST  
**To:** Scott Koziar <[scott.koziar@elpower.com](mailto:scott.koziar@elpower.com)>  
**Subject:** RE: McHenry County, ND - Wind Farm

That's right. When you go through the FAA formal process they check with the Air Force to determine if there are any problems or concerns with the proposed construction.

//SIGNED//

Denny Hough, GS-11  
Chief, Airspace Management  
5 OG/FM  
DSN:453-2967 COM: (701)723-2967  
CELL:240-1677

-----Original Message-----

From: Scott Koziar [<mailto:scott.koziar@elpower.com>]  
Sent: Thursday, December 22, 2011 8:24 AM  
To: Hough, Charles D Civ USAF AFGSC 5 OSS/A3  
Subject: FW: McHenry County, ND - Wind Farm

Denny

It was a pleasure to speak with you this morning about our wind farm project near Ruso, ND. As we've discussed in the past our DOD screening showed that the site is in or close to the IR678 USAF military route, including that area near the missile ready facility on HWY 41. As we spoke, and you confirmed, the Air Force will not have a problem with the project (location of turbines) with the maximum height of the our turbines, including the blade, being under 500 feet. It was my understanding in talking with you that the formal process to take for any Department of Defense or USAF issues about the project would come out during the FAA determinations that we must submit for.

I would be greatly appreciated if you could confirm this email and that any concerns or issues would formally be reviewed and addressed during the FAA process. Thank you again.

2/24/2012

**Exhibit 6a**

Scott

From: Scott Koziar  
Sent: Tuesday, December 20, 2011 12:10 PM  
To: '[charles.hough@minot.af.mil](mailto:charles.hough@minot.af.mil)'  
Cc: '[denny.hough@minot.af.mil](mailto:denny.hough@minot.af.mil)'  
Subject: McHenry County, ND - Wind Farm

Mr. Hough

I spoke with you about a year ago about a wind farm that Element Power is developing near the town of Ruso, ND in McHenry County. As a part of our development we received a report that part of site may be near/under the confines of IR678 training routes, and is located near a military facility on HWY 41 in-between Velva, ND and Ruso, ND. I believe from our discussion that you had mentioned that the USAF would comment if there any potential issues or concerns through the FAA permitting process that we would go through for tall structures. Is this still the process that the USAF is following?

I would be more than happy to speak with you about the project and our location to see if there would be any concern from the USAF on the project or potential impacts to USAF operations. Please feel free to give me a call at 612-294-4630 or at [scott.koziar@elpower.com](mailto:scott.koziar@elpower.com). Thanks

cid:image002.png@01CA9078.E0746480

Scott Koziar

Senior Project Manager

222 South Ninth Street, Suite 2870

Minneapolis, MN 55402 | [www.elpower.com](http://www.elpower.com) <<http://www.elpower.com/>>

612-294-4630 (o) | 612.834.6039 (m)

2/24/2012



**STATE  
HISTORICAL  
SOCIETY  
OF NORTH DAKOTA**

RECEIVED  
FEB 22 2012

Jack Dalrymple  
Governor of North Dakota

February 21, 2012

North Dakota  
State Historical Board

Ms. Jennifer Harty  
Archaeology Group Manager/Principal Investigator  
KLJ

Gereld Gerntholz  
Valley City - President

128 Soo Line Drive  
PO Box 1157

Calvin Grinnell  
New Town - Vice President

Bismarck ND 58502-1157

A. Ruric Todd III  
Jamestown - Secretary

ND SHPO REF: 11-2377 PSC/Element Power's Meadowlark Wind I LLC New  
Frontier Wind Energy Center, McHenry County, North Dakota

Albert I. Berger  
Grand Forks

Two cultural resources reports "New Frontier Wind Project: A Class III Cultural  
Resource Investigation in McHenry County, North Dakota," and "Addendum to  
the New Frontier Wind Project: A Class II and Reroute Results in McHenry  
County, North Dakota"

Diane K. Larson  
Bismarck

Chester E. Nelson, Jr.  
Bismarck

Dear Ms. Harty,

Margaret Puetz  
Bismarck

Sara Otte Coleman  
Director  
Tourism Division

We received two cultural resources reports "New Frontier Wind Project: A Class III  
Cultural Resource Investigation in McHenry County, North Dakota," and  
"Addendum to the New Frontier Wind Project: A Class II and Reroute Results in  
McHenry County, North Dakota," and find the reports acceptable. If consulted by a  
federal agency, we would concur with a "No Historic Properties Affected"  
determination and for state agencies a "No Significant Sites" determination, provided  
the unevaluated sites 32MH408, 32MH409, and 32MH410 are avoided.

Kelly Schmidt  
State Treasurer

Thank you for the opportunity to review this project. If you have any questions please  
contact Susan Quinnell, Review and Compliance Coordinator at (701) 328-3576, e-  
mail [squinnell@nd.gov](mailto:squinnell@nd.gov).

Alvin A. Jaeger  
Secretary of State

Mark Zimmerman  
Director  
Parks and Recreation  
Department

Sincerely,

Francis Ziegler  
Director  
Department of Transportation

Merlan E. Paaverud, Jr.  
Director

Merlan E. Paaverud, Jr.  
State Historic Preservation Officer (North Dakota) and  
Director, State Historical Society of North Dakota

Accredited by the  
American Association  
of Museums since 1986

C: Patrick Fahn, PSC