Presented by: **Tony Clark**
Commissioner
Public Service Commission

Before: **Energy Development and Transmission**
Honorable Rich Wardner, Chairman

Date: **September 23, 2008**

TESTIMONY

Chairman Wardner and members of the Committee, thank you for the invitation to speak with you today. I am state Public Service Commissioner Tony Clark and on behalf of the Public Service Commission I am pleased to discuss with you the criteria that the Commission uses when siting wind generation facilities in North Dakota.

Commission authority over facility siting is provided for in state law, and further implemented through administrative rules the Commission has adopted in accordance with the law. Commission siting authority is triggered anytime a proposed project is to generate 100 MW or more, regardless of the source of the power (e.g. wind, coal, natural gas, nuclear, etc.). Additionally, all commercial wind projects with more than 500 kW of nameplate generating capability must meet Commission rules for the decommissioning of wind turbines when they have reached the end of their useful lives.

Under state law, a hearing regarding a project must be held in at least one of the counties in which the facility is proposed. When the Commission issues its notice, we pose the following issues for consideration at the hearing:

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?

The North Dakota Century Code requires the Commission to develop criteria to be used in identifying exclusion and avoidance areas and to guide the site suitability evaluation and designation process. (N.D. Cent. Code §49-22-05.1).

The statutory factors to be considered by the commission in evaluating applications and designating sites are:

a. Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.
b. The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.
c. The potential for beneficial uses of waste energy from a proposed energy conversion facility.
d. Adverse direct and indirect environmental effects which cannot be avoided should the proposed site or route be designated.

e. Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects.

f. Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designated.

g. The direct and indirect economic impacts of the proposed facility.

h. Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.

i. The effect of the proposed site on existing scenic areas, historic sites, and structures, and paleontological or archaeological sites.

j. The effect of the proposed site on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.

k. Problems raised by federal agencies, other state agencies, and local entities.

N.D. Cent. Code §49-22-09

Energy conversion facility criteria are outlined in North Dakota Administrative Code section 69-06-08-01.

Exclusion areas for a site include:

a. Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; historic districts;

monuments; wilderness areas; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.

b. Designated or registered state: parks; forests; forest management lands; historic sites; monuments; historical markers; archaeological sites; grasslands; wild, scenic, or recreational rivers; game refuges; game management areas; management areas; and nature preserves.

c. County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions; hardwood draws; and enrolled woodlands.

d. Prime farmland and unique farmland, as defined by the land inventory and monitoring division of the soil conservation service, United States department of agriculture, in 7 C.F.R. part 657; provided, however, that if the commission finds that 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 productions, such exclusion shall not apply.

e. Irrigated land.

f. Areas critical to the life stages of threatened or endangered animal or plant species.

g. Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.

Avoidance areas for a site include:

a. Historical resources which are not designated as exclusion areas.

b. Areas within the city limits of a city or the boundaries of a military installation.

c. Areas within known floodplains as defined by the geographical boundaries of the hundred-year flood.

d. Areas that are geologically unstable.

e. Woodlands and wetlands.

f. Areas of recreational significance which are not designated as exclusion areas.

A site shall be approved in an area only when it is demonstrated to the commission by the applicant that any significant adverse effects resulting from the location, construction, and operation of the facility in that area as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum.

Selection criteria include:

a. The impact upon agriculture:

(1) Agricultural production.

(2) Family farms and ranches.

(3) Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.

(4) Surface drainage patterns and ground water flow patterns.

(5) The agricultural quality of the cropland.

b. The impact upon the availability and adequacy of:

(1) Law enforcement.

(2) School systems and education programs.

(3) Governmental services and facilities.

(4) General and mental health care facilities.

(5) Recreational programs and facilities.

(6) Transportation facilities and networks.

(7) Retail service facilities.

(8) Utility services.

c. The impact upon:

(1) Local institutions.

(2) Noise-sensitive land uses.

(3) Rural residences and businesses.

(4) Aquifers.

(5) Human health and safety.

(6) Animal health and safety.

(7) Plant life.

(8) Temporary and permanent housing.

(9) Temporary and permanent skilled and unskilled labor.

d. The cumulative effects of the location of the facility in relation to existing and planned facilities and other industrial development.

An application for a site certificate must contain:

a. A description of the size and type of facility

b. A summary of any studies which have been made of the environmental impact of the facility.

c. A statement explaining need of the facility.

d. An identification of the location of the preferred site for any energy conversion facility.

e. A description of the merits and detriments of any location identified and a comprehensive analysis with supporting data showing the reasons why the preferred location is best suited for the facility.

f. A description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from the location, construction, and operation of the proposed facility.

g. An evaluation of the proposed site with regard to the applicable consideration set out in section 49-22-09 and the criteria established under section 49-22-05.1.

N.D. Cent. Code §49-22-08.

In addition to detailing the criteria the PSC uses to make a determination in facility siting cases, Legislative Council staff asked the Commission to discuss issues that may have arisen in cases related to "wind wake" and/or the impact that one wind farm can have on another from a wind resource standpoint.

The Commission has not yet had a case in which wind wake issues were substantively raised by an applicant, an intervener, or by a member if the public at

one of our hearings. In one case, the Ashtabula Wind Project, there was some discussion in the general public about the potential for one proposed project in that general area impacting another. However, when Commission members asked witnesses about the matter at our public hearing, we were told that the two companies in question were able to work out an acceptable compromise on their own.

At another hearing, this one in Rugby, Commissioners inquired about the advisability of having a strict wind wake setback requirement for wind turbines. A company witness at that hearing advised against such a ruling because the variability in wind and prairie geology is such that a strict setback requirement could stop otherwise viable projects in the name of protecting land where no project would ever be built.

Having said this, "wind wake" could theoretically become an issue in a future proceeding depending on what facts are entered in to the record by parties to a case.

Finally, when the Commission issues its final siting orders, we include a number of conditions that must be met by the applicant. Having set the precedent through a number of cases, utilities are now familiar with what expectations the Commission has in constructing these types of facilities.

That concludes my testimony. For the Committee's benefit, I have two attachments to this testimony. The first is a listing of all the wind projects that the commission has either already sited, or is in the process of siting. The second is a copy of the Commission's order approving the Ashtabula Wind Energy Center as an example of a typical siting case.

North Dakota Active Wind Projects

Updated 9/22/2008

Project Name	Owner	Location	Turbines	Capacity (MW)	Manufacturer	Notes
Minot Wind Project	BEPC - PrairieWinds	S. of Minot	2	2.6	Nordex N60	In Service
Edgeley/Kulm Wind Project	FPLE / BEPC	Edgeley	27	40	GE 1.5 MW	In Service
Edgeley/Kulm Wind Project	FPLE / Otter Tail	Edgeley	14	21	GE 1.5 MW	In Service
Valley City Wind Project	Minnkota Power Cooperative	Valley City	1	0.9	NEG Micon NM52/900	In Service
Petersperg Wind Project	Minnkota Power Cooperative	Petersberg	1	0.9	NEG Micon NM52/901	In Service
	Sacred Heart Monastary	Richardton	2	0.13	Silver Eagle	In Service
Fort Totten Wind Project	Spirit Lake Sioux Nation	Fort Totten	1	0.1	Micon 108	In Service
Belcourt Wind Project	Turtle Mountain Chippewa Tribe	Belcourt	1	0.1	Micon 108	In Service
	Grafton Technical College	Grafton	1	0.065		In Service
	3 Affiliated Tribes	New Town	1	0.065		In Service
Velva Wind Project	EHN / Xcel Energy	Velva	18	12	Vestas V80	In Service
	Turtle Mountain Community College	Belcourt	1	0.66	Vestas V47	In Service
	FPL Burleigh County Wind LLC	Wilton	33	49.5	GE 1.5 MW	In Service
Oliver County Wind	FPL - Oliver County Wind LLC	Center	22	50.6	2.3 MW Turbines	In Service
Oliver County Wind II	FPL - Oliver County Wind LLC	Center	32	48	GE 1.5 MW	In Service
Langdon Project	FPL- Langdon Wind, LLC	Cavalier County	79	118.5	GE 1.5 MW	In Service
Langdon Project	Otter Tail Corporation	Cavalier County	27	40.5	GE 1.5 MW	In Service
Langdon Expansion	FPL- Langdon Wind, LLC	Cavalier County	26	40	GE 1.5 MW	Under Construction
	Tatanka Wind Power, LLC	Dickey/McIntosh County	60	90	Acciona AW 1500	In Service - Dedication Ceremony 9-24-2008
Ashtabula Wind Project	FPL - Ashtabula Wind, LLC	Barnes County	133	200	GE 1.5s	Under Construction
Phase I	Just Wind	Logan County	160	368	Siemens 93/2.3 MW	Letter of Intent Filed February 2007
Luverne Wind Farm	M-Power LLC	Griggs/Steele Counties	105	157	GE 1.5 MW	Hearing Scheduled July 28, 2008
	CROWNBUTTE WIND POWER LLC	Adams/Bowman Countie:	133	200	GE 1.5 MW	Letter of Intent Filed February 2008
Prairie Winds Project	BEPC - PrairieWinds ND 1, Inc.	Ward County	77	115.5		Letter of Intent Filed February 2008
Rugby Wind Farm	PPM Energy, Inc.	Rugby	71	149.1	Suzlon 2.1 MW S88	Construction to begin fall 2008
Dickey County Wind Farm	FPL Energy, LLC	15 miles NW of Ellendale	100	150		Letter of Intent Filed June 2008
Oliver County Expansion	FPL Energy, LLC	6 miles NW of Center	667	1,000		Letter of Intent Filed June 2008
	Total		**642**	**2,855.22**		

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Ashtabula Wind, LLC **Case No. PU-08-32**
Electric Generation/Wind - Barnes County
Siting Application

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

May 30, 2008

Appearances

Commissioners Susan E. Wefald, Kevin Cramer and Tony Clark.

Brian R. Bjella, Attorney-at-Law, Fleck, Mather & Strutz, Ltd., 400 East Broadway, Suite 600, Bismarck, North Dakota 58501, on behalf of the Applicant, Ashtabula Wind, LLC.

William W. Binek, Chief Counsel, Public Service Commission, State Capitol, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Allen C. Hoberg, Administrative Law Judge and Director, Office of Administrative Hearings, 1701 North Ninth Street, Bismarck, North Dakota 58501-1882, as Procedural Hearing Officer.

Preliminary Statement

On February 22, 2008, Ashtabula Wind, LLC (Ashtabula Wind) filed a Letter of Intent (LOI) to submit an application for a Certificate of Site Compatibility for a proposed 200 MW Ashtabula Wind Energy Center, in Barnes County, North Dakota. Ashtabula Wind requested in its LOI that the Commission shorten the one-year waiting period required between filing of the LOI and the filing of an application.

On February 27, 2008, the Commission shortened the one-year notice period to one day and assessed a filing fee of $100,000.00.

On March 24, 2008, Ashtabula Wind filed its application for a Certificate of Site Compatibility authorizing construction of a 200 MW Ashtabula Wind Energy Center consisting of up to 133 wind turbine generators and associated facilities in Barnes County, North Dakota.

On April 4, 2008, the Commission deemed the Application complete and issued a Notice of Filings and Notice of Hearings scheduling a public hearing to begin May 2, 2008, at 10:30 a.m. CDT in the Valley City Auditorium, 320 Central Avenue South,

Valley City, North Dakota 58072. 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 impacts while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

4. Is it appropriate for the Commission to waive procedures and time schedules requested, including the request for a single consolidated application for a corridor certificate and route permit?

On May 2, 2008, 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 the following:

Findings of Fact

1. Ashtabula Wind is a Delaware limited liability corporation headquartered in Juno Beach, Florida. Ashtabula Wind is a subsidiary of FPL Energy, LLC, also of Juno Beach, Florida and a national leader in the development of wind energy.

2. Ashtabula Wind proposes to construct the Ashtabula Wind Energy Center consisting of up to 133 wind turbines and associated facilities in Barnes County, North Dakota.

3. Construction of the Ashtabula Wind Energy Center is expected to take approximately seven months, at an estimated cost of $335 million.

4. The project site is located just north of Valley City, North Dakota. It encompasses 49,493 acres (77 square miles). The wind turbines will be placed throughout the project site.

5. Associated facilities to be constructed within the project area include access roads, underground collection and feeder lines, meteorological towers, a collection substation, and an operations and maintenance building.

6. The project will have a name plate (gross) generating capacity of up to 199.5 MW. Assuming net capacity factors are between 38% and 45%, the projected average annual output is estimated between 664,096 to 786,429 MW hours.

7. Otter Tail Corporation has filed an application for a certificate of public convenience and necessity to construct and own 32 of the Ashtabula Wind Energy Center turbines and associated facilities totaling 48 MW of nameplate generating capacity. That application is pending before the Commission in Case No. PU-08-200.

8. Ashtabula Wind plans to use General Electric 1.5 MW turbines. These are utility grade wind turbines with a nominal name plate rating of 1,500 kW. Each turbine will have an 80 meter (262 feet) hub height and a 77 meter (253 feet) rotor diameter. The turbines begin operating at wind speeds of 3.5 meters per second (7.8 miles per hour) and reach a rated capacity of 1.5 MW at a wind speed of 14.5 meters per second (32.5 miles per hour).

9. Each turbine is designed to operate at wind speeds of up to 25 meters per second (56 miles per hour) and can withstand wind speeds of over 45 meters per second (100 miles per hour).

10. Each turbine is secured by a concrete foundation. Turbine lighting is limited to warning lights required by the Federal Aviation Administration. The control panel inside the base of each turbine tower houses communication and electronic circuitry. Each turbine is equipped with a wind speed and direction sensor that communicates with the turbine's control system to signal when sufficient winds are present for operation. Electricity generated by each turbine is brought to a pad-mounted transformer where the voltage is stepped up to a power collection line voltage of 34.5 kV. This electricity is collected by sets of underground power collection lines.

11. An underground feeder system delivers the electricity to a project collection substation where the voltage is stepped up for transmission over approximately 9.5 miles of new 230 kV transmission line proposed by Ashtabula Wind in Case No. PU-08-73 to an interconnection with a new Pillsbury-Fargo transmission line and Pillsbury substation being proposed by Minnkota Power Cooperative, Inc. in Case No. PU-08-48.

12. Wind data was collected by two meteorological towers, one on the project site and one adjacent to the project site. The wind data collected indicate this is an excellent site for a wind farm.

13. Ashtabula Wind will construct the Ashtabula Wind Energy Center in compliance with the National Electric Safety Code.

14. Ashtabula Wind contemplates commencing construction in May 2008. Construction is expected to take approximately seven months to complete. Ashtabula Wind anticipates testing and operations to begin in September 2008, and anticipates commercial operation by December 31, 2008.

15. Ashtabula Wind has obtained all easements and other property rights necessary to construct the Ashtabula Wind Energy Center. Land rights acquired include wind easements, buffer easements, access roads, and underground collection and feeder line easements.

16. Safety factors will be incorporated into the wind turbines. Each turbine will be equipped with Supervisory Control and Data Acquisitions (SCADA) communication technology to control and monitor the turbine. In addition, each turbine is also equipped with a lightning protection system and is grounded and shielded to protect against lightning.

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 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. 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. 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; efficient use of resources; and alternative sites. In accordance with the Commission's Selection Criteria, an energy conversion facility shall be approved 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.

18. The Commission finds that the unique and prime farm land to be disturbed by this energy conversion facility is of such small acreage as to be of negligible impact on agricultural production.

19. Waterfowl production areas administered by the United States Fish and Wildlife Service are located within the project area. Ashtabula Wind has proposed a buffer of 0.25 miles from each waterfowl production area with one exception which was accepted by the USFWS. The access road and collector line running to Turbine 128 will be located within the buffer but will not affect the waterfowl production area. The U.S. Fish and Wildlife Service concurred in this buffer recommendation.

20. The only Avoidance Areas identified within the project area are woodlands and wetlands. Woodland impacts are not anticipated. Ashtabula Wind recommends a buffer of 0.25 miles around waterfowl production areas except as noted above. All other

wetland resources will be avoided to the extent practicable, and Ashtabula Wind will obtain appropriate permits from the U.S. Army Corps of Engineers as necessary. In addition, Lake Ashtabula is located one mile west of the nearest wind farm infrastructure. Thus, there will be minor visual impacts to recreation.

21. With respect to historical resources which are not designated as Exclusion Areas, Ashtabula Wind has been in consultation with the North Dakota State Historic Preservation Office (SHPO). Class I and III surveys, including a search of SHPO's site and managed files, was conducted by Beaver Creek Archeology, Inc., Linton, North Dakota, for the project area. Based upon the results of the file search, one architectural site and one architectural site lead were found within the records. The Class III cultural resource inventory indicated a total of five areas containing cultural materials. Three sites are not eligible for the National Register of Historic Places and therefore do not need to be avoided. Two sites are potentially eligible and will be flagged and avoided during construction. In addition to the newly discovered cultural resources, two site leads that fall within the project boundary were investigated. One site lead is a historic cemetery that will not be impacted by project facilities. The second site lead is a prehistoric effigy mound that was destroyed by farming and deemed ineligible. A "No Historic Properties Affected" will be recommended for the Area of Potential Effect (APE), and consequently, no further investigation will be recommended. Ashtabula Wind will seek concurrence from SHPO on its recommendations.

22. Ashtabula Wind will implement its Wildlife Response Reporting System when turbine construction is completed. The reporting system includes protocols from field technicians during routine maintenance and operations to report and document any avian impacts.

23. Ashtabula Wind will maintain groundwater protection and soil conservation practices to protect topsoil and adjacent resources, and to minimize soil erosion during construction and operation of the project. Best management practices for erosion and sediment control will be installed to minimize erosion during and after construction.

24. Ashtabula Wind submitted substantial evidence to demonstrate that the proposed energy conversion facility would not have any significant impact on the Selection Criteria set forth in North Dakota Administrative Code § 69-06-08-01(3).

25. Ashtabula Wind submitted substantial evidence to demonstrate its commitment to maximize the benefits of the proposed energy conversion facility as far as is possible so as to meet the Policy Criteria set forth in North Dakota Administrative Code § 69-06-08-01(4).

26. The proposed project is not expected to have any significant adverse economic or social consequences. No significant adverse impact is foreseen 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, or

public safety. The proposed project is expected to be of economic benefit to the affected area.

27. No turbines will be placed within 1400 feet of an occupied residence. As a result, average noise levels at such residences should not exceed the general accepted 50 dB standard.

28. Approximately 15 acres of agricultural production will be impacted due to turbine placement and access roads. In addition, approximately ten acres will be permanently impacted due to the operations and maintenance building and project substation. Wind turbine configuration will not result in significant impacts to agricultural production. No impacts to the agricultural quality of the crop land are anticipated. If compaction of soils occurs during construction, Ashtabula Wind will work with landowners to alleviate compaction.

29. No impacts are expected to animal health or safety, other than the potential for avian species and bat species' collisions with turbines. Based upon studies prepared by Ashtabula Wind's environmental consultant, that impact is expected to be minimal. Ashtabula Wind will implement measures to avoid and minimize effects to wildlife at the proposed site by siting facilities away from wetlands and woodlands when possible.

30. Ashtabula Wind has proposed setbacks of 420 feet from existing transmission lines, roads and railroads.

31. North Dakota Century Code § 49-22-16(3) provides that no energy conversion facility site shall be designated that violates any county or city land use, zoning, building rules, regulations or ordinances. Ashtabula Wind has obtained a Conditional Use Permit and Variance from the Barnes County Commission, granting zoning approval for the Ashtabula Wind Energy Center.

32. Ashtabula Wind has consulted with numerous other local, state and federal agencies which are listed on pages 60 and 61 of its Application. Two agencies providing significant input are the North Dakota Game and Fish Department and the U.S. Fish and Wildlife Service. The North Dakota Game and Fish Department indicated that its primary concern is with the disturbance of native prairie and avian monitoring. The disturbance of native prairie will be minimal. Ashtabula Wind conducted an avian survey in the fall of 2007. Results were submitted to the Commission. Concerns of the U.S. Fish and Wildlife Service focused on migratory birds, wetlands, native grasslands, woodland resources, and threatened and endangered species. No significant impacts to any of these resources are anticipated. Neither agency has objected to construction of the project.

33. Ashtabula Wind reports a contractual obligation to landowners to remove the wind facilities, including foundations to a depth of three feet, when the wind easement expires. Ashtabula Wind reserves the right to explore alternatives regarding project decommissioning at the end of the project term. Retrofitting the turbines and power

systems with upgrades based on new technology may allow the wind farm to produce efficiently and successfully for many more years.

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 energy conversion facility proposed by Ashtabula Wind is an energy conversion facility as defined in North Dakota Century Code, § 49-22-03(11).

3. The proposed project is of such design, location and purpose that it will produce minimal adverse effects, as defined in North Dakota Century Code § 49-22-05.2.

4. The application submitted by Ashtabula Wind meets the site evaluation criteria required by North Dakota Century Code Chapter 49-22.

5. 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.

6. The proposed energy conversion facility is compatible with environmental preservation and the efficient use of resources.

7. 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.

8. 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. 7 for an energy conversion facility is issued to Ashtabula Wind for the construction, operation and maintenance of a wind energy facility known as the Ashtabula Wind Energy Center.

2. The site as described in the application is located north of the City of Valley City, North Dakota, and is designated as the site for construction of the Energy Conversion Facility.

3. Within the permitted area, Ashtabula Wind is authorized to site and construct up to 200 MW of wind turbines in proposed and alternative locations, along with electric collection and communication lines, a project substation, a project operations and maintenance building, meteorological towers, access roads, and other associated facilities as identified in the application.

4. Ashtabula Wind shall comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed project, including all city, township and county zoning regulations. Prior to commencing construction of any phase of the proposed project, Ashtabula Wind shall obtain all other necessary approvals and permits for construction of such phase, and provide copies to the Commission prior to construction of each such phase.

5. Ashtabula Wind shall conduct a pre-construction conference prior to the commencement of any construction, and must include an Ashtabula Wind representative, its construction supervisor, and a representative of the Commission staff to ensure that Ashtabula Wind fully understands the conditions set forth in this Order.

6. Ashtabula Wind shall inform the Commission of its intent to start construction on the energy conversion facility prior to the commencement of construction, and while construction is underway, Ashtabula Wind shall keep the Commission updated of construction activities on a weekly basis.

7. Ashtabula Wind shall construct and operate the energy conversion facility in the manner described in this application, at the hearing, in late filed exhibits, and in accordance with all applicable safety requirements.

8. Ashtabula Wind shall construct the energy conversion facility in compliance with the National Electric Safety Code.

9. Ashtabula Wind shall report to the Commission the presence in the permit area of any critical habitat of threatened or endangered species, or a bald or golden eagle that Ashtabula Wind becomes aware of and were not previously reported to the Commission.

10. If any cultural resources, paleontological resources, archeological site, historical resource, or grave site is discovered during construction of the facility, earth disturbing activities in the immediate vicinity of this discovery must be halted. The resource must

be marked, preserved, and protected from any further disturbance until a professional examination can be made in consultation with the North Dakota SHPO. A report of such examination must be filed with the Commission, and clearance to proceed is given by the Commission.

11. All pre-existing township and county roads and lanes used during construction must be restored to a condition that will accommodate their previous use, and areas used as temporary roads during construction must be restored to their original condition.

12. Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures approved by the Commission are taken.

13. Reclamation, fertilization and reseeding will be completed by Ashtabula Wind according to the Natural Resource Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.

14. Ashtabula Wind's obligations for reclamation and maintenance of the site shall continue throughout the life of the energy conversion facility.

15. When the energy conversion facility is retired, structures and other facilities must be removed to a depth of at least four feet, or in accordance with applicable rules, and the areas restored to as near as original condition as is practicable.

16. Trees and other woody vegetation must be replaced with saplings that are two or more years old at a rate of two for every one removed. Landowners shall be given the option of having replacement trees/shrubs planted on the landowners' property or waiving that requirement in writing, and allowing Ashtabula Wind to plant replacement trees/shrubs elsewhere. Ashtabula Wind shall inspect tree replacements once a year for three years and send a report on or before October 1 of each year to the Commission documenting work completion and condition of woodlands planting. The Commission may order additional plantings if survival rates are less than 75%.

17. Ashtabula Wind shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the proposed energy conversion facility.

18. Ashtabula Wind shall repair or replace all drainage tile, broken or damaged, during all phases of construction and operation of the proposed energy conversion facility.

19. Staging areas or equipment must not be located on cultivated land unless otherwise negotiated with landowners.

20. Ashtabula Wind shall remove all waste that is a product of construction and operation, restoration and maintenance of the site, and properly dispose of it on a regular basis.

21. Ashtabula Wind shall, as soon as practicable, upon the completion of the construction of each wind turbine, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.

22. Ashtabula Wind shall provide, if requested, educational material for landowners within the site boundaries about the proposed energy conversion facility, and any restriction of possible danger concerning the proposed energy conversion facility.

23. Ashtabula Wind shall provide any necessary safety measures for traffic control or to restrict public access to the energy conversion facility.

24. Ashtabula Wind shall advise the Commission of any extraordinary events which take place at the site of the energy conversion facility, such as tower collapse, extensive turbine failure, injured worker or private individual, mortality events of any threatened or endangered species or the discovery of a large number of dead birds or bats on the site within five business days of such event.

25. Ashtabula Wind shall implement a procedure for how complaints concerning the proposed energy conversion facility will be handled by Ashtabula Wind.

26. All Underground electric line crossing of graded roads must be bored unless the responsible governing agency permits Ashtabula Wind to open cut the road.

27. Where available, at least 12 inches of topsoil over and along open cut areas, roadways, tower locations, and locations of associated facilities must be stripped and segregated from the subsoil and be replaced only after the subsoil is replaced.

28. Ashtabula Wind shall bury all underground collection and feeder lines to a depth of at least 48 inches to the top of the lines.

29. Ashtabula Wind shall work with landowners and residents in the area to mitigate any increase in television and residential radio interference that results from the construction of the energy conversion facility.

30. Ashtabula Wind shall provide the Commission with engineering design drawings showing surveyed structure and collection substation locations prior to construction, and shall obtain approval from the Commission or from Commission staff prior to any changes in those surveyed locations.

31. Ashtabula Wind shall provide the Commission with as-built drawings within three months after construction of the energy conversation facility is complete.

32. The Certificate of Site Compatibility is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the Certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.

33. Ashtabula Wind shall maintain records which will demonstrate that it has complied with the requirements of this order and the Certificate of Site Compatibility, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.

34. North Dakota Century Code § 49-02-07 provides that the Commission has the power to establish rules for decommissioning of wind energy conversion facilities. Ashtabula Wind is required to comply with all applicable rules adopted by the Commission pursuant to such statute.

35. The authorizations granted by the Certificate of Site Compatibility for this energy conversion facility are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

PUBLIC SERVICE COMMISSION

Tony Clark **Commissioner**	**Susan E. Wefald** **President**	**Kevin Cramer** **Commissioner**