STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Baldwin Wind, LLC **Case No. PU-09-668**
102 MW Baldwin Wind Energy Center - Burleigh County
Siting Application

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

JULY 14, 2010

Appearances:

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

Brian R. Bjella and Wade C. Mann, Attorneys at Law, Crowley Fleck, PLLP, 400 East Broadway, Suite 600, Bismarck, North Dakota 58501, on behalf of the Applicant, Baldwin Wind, LLC.

Annette Bendish, Legal Counsel, Public Service Commission, State Capitol, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Al Wahl, Administrative Law Judge, Office of Administrative Hearings, 1701 North Ninth Street, Bismarck, North Dakota 58501-1882, as Procedural Hearing Officer.

Preliminary Statement

On October 5, 2009, NextEra Energy Resources, LLC (NextEra) filed a Letter of Intent (LOI) to submit an application for a Certificate of Site Compatibility for a wind energy conversion facility in Burleigh County, North Dakota. NextEra requested in its LOI that the Commission shorten the one-year waiting period between the filing of the LOI and the filing of an application.

On October 14, 2009, the Public Service Commission (Commission) shortened the one-year waiting period to three weeks and assessed a filing fee of $100,000.00.

On March 5, 2010, Baldwin Wind, LLC filed an Application for a Certificate of Site Compatibility authorizing construction of the Baldwin Wind Energy Center consisting of up to 62 1.6 MW wind turbine generators and associated facilities in Burleigh County, North Dakota (Application).

On March 10, 2010, NextEra filed a request with the Commission that this case be transferred to the entity of Baldwin Wind, LLC (Baldwin Wind). Baldwin Wind is a wholly owned subsidiary of NextEra, created November 24, 2009, and was registered to do business in the State of North Dakota effective December 1, 2009.

On April 8, 2010, the Commission deemed the Application complete and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing for May 20, 2010, at 9:00 a.m. CDT, at the Brynhild Haugland Room, Ground Floor, State Capitol, 600 East Boulevard Avenue, Bismarck, North Dakota 58505.

On April 9, 2010, Baldwin Wind filed an amended Application stating its intent to construct up to a 102.4 MW wind energy facility consisting of up to 64 1.6 MW wind turbine generators and associated facilities in Burleigh County, North Dakota (Amended Application). Baldwin Wind indicated that the wind turbines will be located within the same footprint of land as set forth in the original Application.

On April 13, 2010, the Commission deemed the Amended Application complete and issued a Revised Notice of Filing and Notice of Hearing scheduling a public hearing for May 20, 2010, at 9:00 a.m CDT, at the Brynhild Haugland Room, Ground Floor, State Capitol, 600 East Boulevard Avenue, Bismarck, North Dakota 58505. The Revised Notice identified the following issues to be considered:

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 location minimize adverse human and environmental impacts while ensuring continuing system reliability and integrity and ensuring that energy needs are met and filled in an orderly and timely fashion?

On May 12, 2010, Baldwin Wind filed its final turbine site plan.

On May 20, 2010, the public hearing was held as scheduled.

On June 1, 2010, Baldwin Wind filed an executed Certification Relating to Order Provisions – Wind Energy Conversion Facility Siting.

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. Baldwin Wind is a Delaware Limited Liability Company headquartered in Juno Beach, Florida. Baldwin Wind is a subsidiary of NextEra, also of Juno Beach, Florida.

2. Baldwin Wind was created November 24, 2009, and was registered in the State of North Dakota effective December 1, 2009, as evidenced by Certificate of Good Standing issued by the North Dakota Secretary of State on March 3, 2010.

3. Baldwin Wind proposes to construct a wind energy facility (Baldwin Wind Energy Center) to be located in Burleigh County, North Dakota, near the City of Wilton. The Project Area consists of approximately 21,000 acres (33 square miles) in Crofte, Ecklund, and Grass Lake Townships. The wind turbines will be placed throughout the project site.

4. Associated facilities to be constructed within the project area include access roads, underground electrical and feeder lines, and an electrical substation.

5. North Dakota Century Code § 49-22-16 provides that no energy conversion facility site shall be designated if it violates any county or city land use, zoning, building rules,

regulations or ordinances. Burleigh County regulates zoning in Crofte Township, while Grass Lake Township and Ecklund Township have their own zoning ordinances.

Project Design

6. The project will have a name plate (gross) generating capacity of 102.4 MW, consisting of up to 64 1.6 MW wind turbines and associated facilities. Assuming net capacity factors of 45%, the projected average annual output is estimated at 197,100 MW hours per year.

7. Baldwin Wind plans to use General Electric 1.6 MW turbines. These are utility-grade wind turbines with a nominal name plate rating of 1.6 MW. Each turbine will have a 262 feet (80 meter) hub height and a 271 feet (82.5 meter) rotor diameter. The turbines begin operation at wind speeds of 7.8 miles per hour (3.5 meters per second) and reach their rated capacity at a wind speed of 28 miles per hour (12.5 meters per second). The turbines are designed to operate in wind speeds of up to 45 miles per hour (20 meters per second).

8. Each turbine is secured by a concrete foundation that can vary in design depending upon soil conditions. A typical foundation extends seven to ten feet below grade where it spreads to a final diameter of 40 to 60 feet at the base. Turbine lighting is limited to warning lights required by the Federal Aviation Administration (FAA). A 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. Electricity is collected by a series of underground collection lines.

9. The underground collection line feeder system will deliver the electricity to the project substation. At the substation the voltage will be stepped up to 230 kV for transmission via an existing 230 kV transmission line operated by Central Power Cooperative, which will connect to the Western Area Power Administration's (Western) Hilken substation.

10. The site for the wind energy facility was selected based primarily upon its wind resource, and also based upon operational history from the Wilton I and Wilton II Wind Energy Centers, operated by subsidiaries of NextEra. Baldwin Wind also utilized wind data from meteorological towers located on the project site. The data indicates that this site is well suited for a wind farm.

11. Construction of the Baldwin Wind Energy Center is expected to take approximately six months, at a total estimated cost of $200 million.

12. Baldwin Wind anticipates commencing construction in July 2010. Testing and operations are set to begin in October 2010, and commercial operations to begin in December 2010.

13. An Engineering, Procurement, and Construction (EPC) contractor will be retained for construction management of the project. The EPC contractor will use services of local contractors, where possible, to assist in project construction.

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

15. Baldwin Wind states that construction and operation of the Baldwin Wind Energy Center will conform to the requirements of the National Electric 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 is 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 farm 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; the efficient use of resources; and alternate sites. 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.

17. The Project Layout dated May 5, 2010, indicates up to 9 acres of project infrastructure in prime farmland, not including the collection lines that will be buried and would be a temporary disturbance of soil. Unique and prime farmland to be disturbed by this energy conversion facility is of such small acreage as to be of negligible impact on agricultural production.

18. Approximately 365 acres of agricultural production will be impacted due to turbine placement, associated access roads, and project substation. Wind turbine configuration will not result in significant impacts to agricultural production. No impacts on the agricultural quality of the crop land are anticipated. If compaction of soils occurs during construction, Baldwin Wind will work with landowners to alleviate the compaction.

19. Abandoned coal mines, and mined areas that are filled with sinkholes are found throughout the project area. An area in the northwest portion of the project area will be avoided due to numerous abandoned underground coal mines.

20. Baldwin Wind submitted evidence to demonstrate that the proposed energy conversion facility will not have a significant impact on the Selection Criteria set forth in North Dakota Administrative Code § 69-06-08-01(3).

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

22. 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.

23. Avoidance Areas identified in the project area are the abandoned coal mines as discussed above, historical resources that are not designated as exclusion areas, woodlands and wetlands. The historical resources identified by project archeologists will be avoided. Woodland impacts are not anticipated. Wetlands will be avoided. As a result, it is not anticipated that Baldwin Wind will need to obtain permits from the U.S. Army Corps of Engineers with respect to jurisdictional wetlands.

Cultural Resources

24. Several sites potentially eligible for the National Register of Historic Places have been identified within the project area. Baldwin Wind will avoid all such sites.

25. With respect to historical resources that are not designated as Exclusion Areas, Baldwin Wind has consulted with the North Dakota State Historic Preservation Office (SHPO). Class I and Class III Cultural Resource Inventories, including review of SHPO's site manuscript files, were conducted by archeologists for the project area. During the course of the inventory, 18 prehistoric stone feature sites and a prehistoric rock-lined pit feature site were identified within the project area. None of these sites will be impacted by the project, as they will be avoided by project construction. The recommendations of the archeologists will be forwarded to SHPO for review, and concurrence.

Wetlands and Wildlife

26. Baldwin Wind has consulted with numerous local, state and federal agencies, which are identified in Appendix E of the Application. Two agencies providing significant input are the North Dakota Game and Fish Department and the United States Fish and Wildlife Service (USFWS). Neither agency has objected to construction of the project. Mr. Terry Ellsworth, a fish and wildlife biologist with the USFWS, Ecological Services Division, Bismarck, North Dakota, testified that the USFWS supports the reasonable development of wind energy. Mr. Ellsworth addressed the potential impact of wind farms upon wildlife resources. The USFWS encourages all wind power developers to plan, design, construct and operate their projects in a manner that fish and wildlife resource conservation is given equal consideration with other features of project development. Mr. Ellsworth testified that the project is in the center of the whooping crane migration corridor and expressed concern about cumulative effects from the existing wind farms and the proposed wind farm upon migrating whooping cranes and wildlife resources. He indicated that Baldwin Wind and Western have been working with the USFWS to demonstrate compliance.

27. The North Dakota Game and Fish Department indicated its primary concern is with disturbance of native prairie and wetlands. Native prairie is present within the project area. The disturbance of native prairie will be minimal.

28. Avian use surveys were conducted in the fall of 2008, spring of 2009, and spring of 2010 covering the project area. In addition, Baldwin Wind commissioned a detailed likelihood of occurrence assessment for whooping cranes. There are no historical records of whooping cranes occurring within the project area. Based upon the low magnitude of potential habitat loss, the low probability of site usage and the avoidance and minimization measures being implemented by Baldwin Wind, the assessment indicates that potential for adverse effects on whooping cranes is low.

29. Other minimization measures that Baldwin Wind states it will implement are modification or curtailment of construction activities within two miles of whooping cranes observed onsite during construction; post construction monitoring during spring and fall whooping crane migration seasons for three years post construction; and curtailment of turbines within two miles if a whooping crane is observed during operation of the wind energy center.

30. As a result of the interconnection with a Western transmission line, Western is preparing an Environmental Assessment (EA) to comply with the National Environmental Policy Act (NEPA). The EA will include compliance recommendations from the USFWS.

31. Baldwin Wind has prepared an Avian and Bat Protection Plan (ABPP) and an Adaptive Management Plan (AMP). Based upon the surveys, the potential for avian and bat collisions with turbines is anticipated to be relatively small.

32. Baldwin Wind states it will implement its Wildlife Response Reporting System (WRRS) once turbine construction is completed. The WRRS will include protocols for field technicians to report and document avian mortalities during routine maintenance operations.

33. A wetlands delineation was conducted pursuant to U.S. Army Corps of Engineers' guidance in September 2009 and completed in the spring of 2010. The project is below the 0.5 acre threshold, making it eligible under the U.S. Army Corps of Engineers Nationwide Permit (NWP) 12 for utility line activities. The project is also below the 0.1 acre notification and mitigation thresholds of NWP 12. As a result, a 404 Permit is unnecessary. All wetlands will be avoided during the construction phase of the project.

Sound and Flicker Studies

34. Baldwin Wind included an acoustic assessment in Appendix C of the Application, and also filed a revised assessment on June 1, 2010 to include Grass Lake Township. The results of the acoustic modeling were compared to the U.S. Environmental Protection Agency (EPA) environmental noise guidelines, and the Occupational Safety and Health Administration (OSHA) regulatory limits for worker exposure and public safety. In addition, the existing Wilton I and II turbines located near the project area were included in the analysis.

35. The acoustic assessment illustrated the worst case scenario (downwind, full rotational speed, high air density, low background sound levels). The analysis indicates that with respect to occupied residences within or adjacent to the wind farm that the average sound levels will be within EPA guidelines. Although turbines may be periodically audible, the sound will be in compliance with acoustic design goals set by EPA guidelines, which have been developed to protect both health and human welfare.

The acoustic modeling demonstrates that the wind farm will also comply with Occupational Safety and Health Administration (OSHA) safety standards at all inhabited residences considered to be noise sensitive areas.

36. Baldwin Wind included a Shadow Flicker Impact Analysis for the Baldwin Wind Energy Center in Appendix C of the Application, and also filed a revised analysis on June 3, 2010 to include Grass Lake Township. Baldwin Wind performed a shadow flicker impact study to determine potential impacts on occupied residences located in or near the project. Shadows cast by moving blades were assessed for all wind turbines located within 1.5 kilometers (4921.26 feet) of each occupied residence (receptor). The analysis was based assuming worst case conditions for shadow flicker (full sunlight and blades perpendicular to incoming sunlight) so as to conservatively estimate the potential amount of shadow impact hours for a year.

37. While though there are no established standards, the siting recommendation of the American Wind Energy Association for allowable shadow flicker is 30-40 hours per year. There are currently three occupied residences that exceed 30 hours per year and Baldwin Wind is working cooperatively with these owners to secure participation agreements. If such agreements cannot be secured, Baldwin Wind will utilize alternative turbine locations to avoid shadow impacts on these three residences. Should shadow flicker occur and result in complaints from occupants of residences, Baldwin Wind, at its expense, will work with the owner to promptly undertake measures, such as tree planting or installation of awnings to mitigate shadow flicker.

Further Mitigative Measures

38. No turbines will be placed within 1400 feet of an occupied residence. The average noise levels at such residences should not exceed 48.6 decibels.

39. In accordance with Burleigh County ordinances, no turbine will be placed within 1,750 feet of occupied non-participant residences in Crofte Township.

40. Baldwin Wind has proposed setbacks of 440 feet (1.1 x turbine height) from existing transmission lines, roads, railroads and property boundaries.

41. Baldwin Wind will maintain ground water 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 (BMPs) 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.

42. Baldwin Wind has developed a management plan to protect against the spread of noxious weeds throughout the project area or adjacent areas during construction and ongoing operations.

43. Baldwin Wind has a legal obligation to decommission the wind energy facilities.

44. Baldwin Wind made other representations and covenants as contained in the Certification Relating to Order Provisions - Wind Energy Conversion Facility Siting executed by Baldwin Wind and filed with the Commission on June 1, 2010, which is 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 Baldwin Wind is an energy conversion facility as defined in North Dakota Century Code § 49-22-03(11).

3. The application submitted by Baldwin 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 proposed energy conversion facility.

8. The proposed project is of such design, location, and purpose that it will produce minimal adverse effects.

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 Baldwin Wind for the construction, operation and maintenance of a wind energy facility known as the Baldwin Wind Energy Center.

2. The site as designated in the application is located in northern Burleigh County near Wilton, North Dakota, and is designated as the site for construction of the wind energy facility.

3. Within the permitted area, Baldwin Wind is authorized to site and construct up to 102.4 MW of wind turbines in proposed and alternate locations, along with electric collection and communication lines, a project substation, access roads, and other associated facilities as identified in the application and at the hearing.

4. Baldwin 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.

5. Baldwin Wind shall obtain all other necessary approvals and permits and provide copies to the Commission prior to any construction activity associated with the wind energy facility that requires said license, or permit.

6. Baldwin Wind shall obtain concurrence from the State Historic Preservation Office and provide copies to the Commission prior to any construction activity associated with the wind energy facility that requires concurrence.

7. Baldwin Wind shall file with the Commission a copy of the final federal Environmental Assessment and resulting findings prior to beginning construction.

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

9. Baldwin 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, Baldwin Wind shall keep the Commission updated of construction activities on a weekly basis.

10. Baldwin 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.

11. Baldwin Wind shall construct the energy conversion facility in compliance with the National Electric Safety Code.

12. Baldwin 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 Baldwin Wind becomes aware of and were not previously reported to the Commission.

13. 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 SHPO. A report of such examination must be filed with the Commission, and clearance to proceed must be given by the SHPO and the Commission.

14. All pre-existing township and county roads and lanes used during construction must be restored to a satisfactory condition and areas used as temporary roads during construction must be restored to their original condition.

15. 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.

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

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

18. 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 original condition as is practicable.

19. Baldwin Wind shall comply with the Commission's Tree and Shrub Mitigation Specifications attached to this Order.

20. Baldwin 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.

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

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

23. Baldwin 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.

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

25. Baldwin 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.

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

27. Baldwin 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.

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

29. All underground electric line crossing of graded roads shall be bored unless the responsible governing agency permits Baldwin Wind to open cut the road.

30. 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.

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

32. Baldwin Wind shall work with landowners and residents in the area to mitigate any adverse effects that results from the construction of the energy conversion facility.

33. Baldwin Wind shall provide the Commission with as-built engineering design drawings and an electronic version of the as-built drawings that can be imported into ESRI GIS mapping software within six months after construction of the energy conversion facility is complete.

34. 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 each Certificate or subsequent modification, or failure to comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.

35. Baldwin 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.

36. Baldwin Wind shall inform the Commission of any plans to add additional turbines to the energy conversion facility or of any plans to modify the site plan for the energy conversion facility. Any additions or modifications to the site plan for the energy conversion facility must be approved in writing by the Commission or Commission staff.

37. When the facility is at the end of its useful life Baldwin Wind shall remove turbine structures and decommission the project area in accordance with all decommissioning rules adopted by the Commission and as delineated under North Dakota Century Code section 49-02-27.

38. 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**	**Kevin Cramer** **Chairman**	**Brian P. Kalk** **Commissioner**

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Baldwin Wind, LLC **Case No. PU-09-668**
102 MW Baldwin Wind Energy Center - Burleigh County
Siting Application

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (*e.g., Caragana arborescens, Elaeagnus angustifolia, Rhamnus cathartica, Tamarix chinensis, T. parviflora, T. ramosissima, Ulmus pumila*), shall be inventoried before cutting. The inventory shall record the location, number, and species of trees and shrubs.

2. In windbreaks, shelterbelts, and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, shall be inventoried for replacement.

3. In native growth areas, trees anticipated to be cleared that are 1-inch diameter at breast height (dbh) or greater shall be inventoried for replacement.

4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way shall be inventoried for replacement.

5. In native growth areas outside the permanent right-of-way, shrubs shall be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil shall be preserved and replaced after construction. Shrubs shall be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared shall be inventoried for replacement.

6. In native growth areas, trees and shrubs may be inventoried by actual count or by sampling method that will properly represent the woody vegetation population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission), and approved prior to the start of construction shall define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots shall be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs shall be selectively cleared, leaving mature trees and shrubs intact where practical.

8. The width of clear cuts through windbreaks, shelterbelts and all other wooded areas shall be limited to 50 feet or less unless otherwise approved by the Commission.

9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced shall be noted on the inventory.

Replacement

10. Prior to replacement, documentation identifying the number and variety of trees removed as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings shall be filed with the Commission for approval.

11. Tree replacement shall be on a 2 to 1 basis with 2-year-old saplings. Shrub replacement shall be on a 2 to 1 basis with stem cuttings.

12. Trees and shrubs shall be replaced by the same species or similar species, except in the case of invasive species or noxious weeds, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.

13. Landowners shall be given the option of having replacement trees or shrubs planted off the right-of-way on the landowner's property or waiving that requirement in writing and allowing those replacement trees or shrubs to be planted at alternative locations.

14. At the conclusion of the project, documentation identifying the actual number, variety, type, location, and date of the replacement plantings shall be filed with the Commission.

15. Tree and shrub replacements shall be inspected once a year for three years, on about the anniversary of the plantings, and, on or shortly before October 1 of each year, a report shall be submitted to the Commission documenting the condition of replacement planting and any woodlands work completed. If after three years from the anniversary of the plantings the survival rate is less than 75%, the Commission may order additional planting(s).

PUBLIC SERVICE COMMISSION

STATE OF NORTH DAKOTA

Certificate of Site Compatibility for Energy Conversion Facility

Certificate Number 16

This is to certify that the Commission has designated an energy conversion facility site for Baldwin Wind, LLC's , Baldwin Wind Energy Center consisting of up to 64 1.6 MW wind turbine generators and associated facilities in Burleigh County, North Dakota.

The facility may be sited in this designated location in compliance with the energy conversion facility siting criteria. This certificate is issued in accordance with the Finding of Fact, Conclusion of Law and Order of the Commission in Case No. PU-09-668 dated July 14, 2010 and is subject to the conditions and limitations noted in that order.

Bismarck, North Dakota, July 14, 2010.

ATTEST: ***PUBLIC SERVICE COMMISSION***

Executive Secretary ***Commissioner***