

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of Paulding)
Wind Farm II, LLC, for a Certificate to)
Construct a Wind-Powered Electric) Case No. 10-369-EL-BGN
Generating Facility in Paulding County,)
Ohio.)

OPINION, ORDER, AND CERTIFICATE

The Ohio Power Siting Board (Board), coming now to consider the above-entitled matter, having appointed administrative law judges (ALJ) to conduct the hearings, having reviewed the exhibits introduced into evidence in this matter, and being otherwise fully advised, hereby issues its opinion, order, and certificate in this case as required by Chapter 4906, Revised Code.

APPEARANCES:

Vorys, Sater, Seymour and Pease LLP, by M. Howard Petricoff and Stephen M. Howard, 52 East Gay Street, P.O. Box 1008, Columbus, Ohio 43216-1008, on behalf of Paulding Wind Farm, LLC.

Richard Cordray, Ohio Attorney General, by William L. Wright, Section Chief, and Stephen A. Reilly, Assistant Attorney General, Public Utilities Section, 180 East Broad Street, Columbus, Ohio 43215, and Margaret A. Malone and Christina Grasseschi, Assistant Attorneys General, Environmental Enforcement Section, 30 East Broad Street, Columbus, Ohio 43215, on behalf of the staff of the Board.

Larry Gearhardt, Chief Legal Counsel, 280 North High Street, P.O. Box 182383, Columbus, Ohio 43218, on behalf of the Ohio Farm Bureau Federation.

OPINION:

I. SUMMARY OF THE PROCEEDINGS

All proceedings before the Board are conducted according to the provisions of Chapter 4906, Revised Code, and Chapter 4906, Ohio Administrative Code (O.A.C.).

On March 19, 2010, Paulding Wind Farm II, LLC, (Paulding Wind II or applicant) filed its preapplication notice of the instant application. On April 14 and 21, 2010, Paulding Wind II filed proofs that legal notice was published for the informational public

meeting concerning the application held on April 20, 2010, at Wayne Trace School, in Haviland, Ohio.

On May 14, 2010, Paulding Wind II filed its application for a certificate of environmental compatibility and public need (certificate) to construct a wind-powered electric generation facility (facility) of up to 150.4 megawatts (MW) in Paulding County, Ohio, pursuant to Chapter 4906-17, O.A.C.

By entry issued June 21, 2010, the ALJ granted Paulding Wind II's request for waiver of the one-year notice period required by Section 4906.06(A)(6), Revised Code, and of the requirement that Paulding Wind II provide certain cross-sectional views and locations of borings pursuant to Rule 4906-17-05(A)(4), O.A.C. In that same entry, the ALJ also granted Paulding Wind II's request for a waiver of the requirement that Paulding Wind II provide a map showing modifications in grade elevations during construction pursuant to Rule 4906-17-05(B)(2)(h), O.A.C., provided that Paulding Wind II files a description of the standard grade elevations. In addition, the ALJ granted Paulding Wind II's request for waiver of the requirements that Paulding Wind II file an archaeological reconnaissance survey and a historical architecture survey pursuant to Rule 4906-17-08(B)(2), O.A.C.; an estimate of tax benefits in accordance with Rule 4906-17-08(C)(2)(c), O.A.C.; and an estimate of impacts upon cultural landmarks pursuant to Rule 4906-17-08(D)(2), O.A.C., provided that the applicant file the required information no later than eight weeks before the public hearing in this matter. Paulding Wind II's motion for protective order to keep confidential portions of pages 58-61 of its application and a brochure for a wind turbine manufacturer, was also granted by the ALJ in the June 21, 2010, entry, as was the motion to intervene filed by the Ohio Farm Bureau Federation (OFBF) on May 28, 2010.

By letter dated July 6, 2010, the Board notified Paulding Wind II that its application had been certified as complete pursuant to Rule 4906-1, *et seq.*, O.A.C. Paulding Wind II served copies of the application upon local government officials and filed proof of service of the application on July 13, 2010. On September 7, 2010, pursuant to Section 4906.07(C), Revised Code, staff filed a report of its investigation of the Paulding Wind II application (Staff Report) (Staff Ex. 1).

By entry issued July 15, 2010, the ALJ scheduled both a local public hearing for September 22, 2010, at The Ohio State University (OSU) Extension Center, in Paulding, Ohio, and an evidentiary hearing for October 5, 2010, at the offices of the Public Utilities Commission of Ohio in Columbus, Ohio. The July 15, 2010, entry also directed Paulding Wind II to publish notice of the hearings in accordance with Rule 4906-5-08, O.A.C. On September 13 and 20, 2010, Paulding Wind II filed proof that the required publications of the hearing notice occurred in the *Paulding County Progress* and the *Antwerp Bee-Argus*.

Staff filed a motion for an extension of time to file testimony on September 30, 2010. The ALJ granted this motion by entry issued on October 1, 2010.

The local public hearing in this proceeding was held on September 22, 2010, in Paulding, Ohio, at which six witnesses testified regarding the facility. During the October 5, 2010, adjudicatory hearing, one witness testified in support of the Stipulation. In addition, at the October 5, 2010, adjudicatory hearing, the following exhibits were admitted into the record without objection: Paulding Wind II's application; notice that the application was served on local public officials and libraries; a sample letter sent to property owners and a follow-up letter indicating that some letters were returned with no forwarding address; proofs of publication of the legal notice for the April 20, 2010, informational public meeting and the September 22 and October 5, 2010, hearings; the prefiled direct testimony of applicant witness Erin Bowser (App. Exs. 1-7); a Joint Stipulation and Recommendation (Joint Ex. 1) and the Staff Report filed on September 7, 2010 (Staff Ex. 1).

On October 19, 2010, pursuant to a staff request, Paulding Wind II filed, as a supplement to its application, the interconnection service agreement among PJM Interconnection, L.L.C., Paulding Wind II, and Ohio Power Company.

II. PROPOSED FACILITY

Paulding Wind II proposes to construct a 150.4 MW facility comprised of up to 98 wind turbines with a nameplate capacity of 1.5 to 1.8 MW each. Annual energy production for the facility would be between 395,000 to 460,000 megawatt hours (MWh). On October 19, 2010, the applicant filed a notice stating that it will utilize the Vestas V90 turbine model with a 95 meter hub height. An electric collection system would be installed to transfer power from the wind turbines to a four-acre transformer substation. The 34.5 kilovolt (kV) system would consist of 59 miles of underground cable buried to a minimum depth of 36 inches. A small portion of the electric collection system would be buried in the public right-of-way along State Route 114, county roads 106 and 124, and various township roads, while the majority would be buried on privately-owned land leased by the applicant. The transformer substation would then connect to American Electric Power's (AEP) Haviland-Milan 138 kV transmission line and interconnection substation. In addition, approximately 30 miles of new or improved access roads would be needed to support the facility. (Staff Ex. 1 at 5-6.)

The facility area is located in Paulding County, near the villages of Antwerp and Payne, in Benton and Harrison townships. The facility area covers 15,000 acres of leased land. (Staff Ex. 1 at 5.)

III. CERTIFICATE CRITERIA

Pursuant to Section 4906.10(A), Revised Code, the Board shall not grant a certificate for the construction, operation, and maintenance of a major utility facility, either as proposed or as modified by the Board, unless it finds and determines all of the following:

- (1) The basis of the need for the facility if the facility is an electric transmission line or gas or natural gas transmission line.
- (2) The nature of the probable environmental impact.
- (3) The facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations.
- (4) In the case of an electric transmission line or generating facility, that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and that the facility will serve the interests of electric system economy and reliability.
- (5) The facility will comply with Chapters 3704, 3734, and 6111, Revised Code, and all rules and standards adopted under those chapters and under Sections 1501.33, 1501.34, and 4561.32, Revised Code.
- (6) The facility will serve the public interest, convenience, and necessity.
- (7) The impact of the facility on the viability as agricultural land of any land in an existing agricultural district established under Chapter 929, Revised Code, that is located within the site and alternate site of the proposed major facility.
- (8) The facility incorporates maximum feasible water conservation practices as determined by the Board, considering available technology and the nature and economics of various alternatives.

The record in this case addresses all of the above-required criteria. In addition, pursuant to Section 4906.20, Revised Code, the Board's authority applies to economically significant wind farms and provides that such entities must be certified by the Board prior

to commencing construction of a facility. In accordance with Chapter 4906, Revised Code, the Board promulgated rules which are set forth in Chapter 4906-17, O.A.C., prescribing regulations regarding wind-powered electric generation facilities and associated facilities.

IV. SUMMARY OF THE EVIDENCE

A. Local Public Hearing

At the local public hearing held on September 22, 2010, four witnesses testified in support of Paulding Wind II's application. Another witness, Donald Carter, voiced concerns about the effect of the wind farm on the health of area residents and on his lifestyle. In addition, Andrea Ehresman expressed concerns about health issues and the impact of the facility upon property values, the quality of life, the environment, and property easements. (Public Hearing Tr. at 5-21.)

B. Basis of Need - Section 4906.10(A)(1), Revised Code

Staff submits that the basis of need criterion specified under Section 4906.10(A)(1), Revised Code, is not applicable to this electric generating facility (Staff Ex. 1 at 17).

C. Nature of Probable Environmental Impact - Section 4906.10(A)(2), Revised Code

The Staff Report notes the following, regarding the nature of the probable environmental impact:

- (1) The facility area is sparsely populated and is expected to lose population over the next 20 years. The facility is entirely within the unincorporated areas of Harrison and Benton Townships, and is not expected to limit future population growth or have a noticeable effect on the demographics of the region. (Staff Ex. 1 at 18.)
- (2) Within the facility area, 191 of the 15,000 acres of leased land (approximately 1.3 percent) would be converted to facility components necessary for the purpose of electrical generation, while the rest would remain available to the landowner or land manager for agricultural use. There would be a temporary conversion of 775 acres of leased land during the construction process. The applicant does not anticipate that any structures would be removed or relocated as a result of the project, and there are no plans for concurrent or secondary uses of the project area. The impacts to the agricultural district land

would not be significant enough to affect the agricultural district designation of any of the properties within the project area. (Staff Ex. 1 at 18.)

- (3) The residential development within the project area is comprised of single-family homesteads along rural roads. One residential structure is located within 100 feet of a proposed underground collection line. No residences are within 100 feet of any other proposed facility components. There are 105 residences located within 1,000 feet of a proposed access road, collection line, laydown yard, or operations and maintenance (O&M) facility. No structures or inhabited dwellings would need to be removed as part of this project. Based on the largest proposed turbine model, the statutory minimum setback requirements equate to 505 feet from nonparticipating property lines and 914 feet from residences on nonparticipating property. The applicant has designed the wind farm to exceed all statutory setback requirements. (Staff Ex. 1 at 18-19.)
- (4) The facility is not expected to conflict with known local or regional development projects or land use plans (Staff Ex. 1 at 19).
- (5) No state or national parks, forests, wildlife management areas or refuges, or natural landmarks are located within a five-mile radius of the proposed facility. One Ohio Scenic Byway (Lincoln Highway Historic Byway) is located in the southeastern portion of the study area. Original sections of the byway are present in the western and central portions of the study area. However, the majority of this byway has been replaced by a modern four-lane highway. There are 13 recreational areas within five miles of the proposed facility. Impacts to these recreational resources would be limited to indirect visual impacts. (Staff Ex. 1 at 19.)
- (6) The literature review and cultural resource records check performed by the applicant found 85 Ohio Archaeological Inventory (OAI) sites, 290 Ohio Historic Inventory (OHI) sites, one site listed in the National Registry of Historic Places (NRHP), 27 cemeteries, and one unmarked grave within five miles of the facility area. Most of these sites are located outside of the facility boundary. No known archaeological sites or

cemeteries will be disturbed as a result of the project. (Staff Ex. 1 at 19.)

- (7) The installed facility costs indicate the capital costs of the facility fall within industry trends. These costs would be incurred within a one- to two-year time period after construction begins. (Staff Ex. 1 at 20.)
- (8) Construction of the facility would add approximately 420 full-time jobs in the local economy. Wages and salaries, combined with increased local expenditures (direct, indirect, and induced impacts), are estimated to have a total local benefit of \$53.9 million during the eight-month construction phase. O&M of the facility would add 43 full-time jobs in the local economy, totaling \$1.6 million in wages and salaries, and is estimated to generate another \$4.0 million in local expenditures (direct, indirect, and induced impacts) for a total annual benefit of \$5.6 million to the local economy. (Staff Ex. 1 at 20.)
- (9) During field investigations, a total of 92 wetlands and 20 streams were found in the facility vicinity. The vast majority of the wetlands are considered linear emergent freshwater wetlands confined to ditches, while many of the streams are tributaries to North Creek, South Creek, Wildcat Creek, Blue Creek, and Flatrock Creek, which drain to the Auglaize River and the Maumee State Scenic River. The facility will temporarily or permanently impact 69 wetlands and 12 streams by the installation of culverts for new access roads, temporary gravel roads, and the placement of underground electric collection cables. Some impacts include minor loss of riparian vegetation, damage to the stream bank and stream bed, erosion, and sedimentation. (Staff Ex. 1 at 20.)
- (10) No ponds or lakes are expected to be impacted by this facility (Staff Ex. 1 at 20.)
- (11) No wood lots would be cleared for this facility. Minimal herbaceous vegetation would be cleared or impacted during construction. (Staff Ex. 1 at 21.)
- (12) The facility area is comprised of almost exclusively agricultural land. However, portions of the facility area contain habitat likely to support numerous common reptilian, amphibian, avian, and mammalian species. These species would likely be

impacted, both directly and indirectly, during the construction, operation, and maintenance of the proposed facility. Faunal impacts would include the loss of habitat, increased disturbance (e.g., noise, lighting, human activity), and temporary and permanent displacement. In addition, operational impacts may include bird and bat mortalities through either direct strike or barotraumas. (Staff Ex. 1 at 21.)

(13) Threatened or endangered species historically in or near the facility area include:

- (a) Plants: This project does not lie within the known range of any federally-listed plant species. The Ohio Department of Natural Resources (ODNR) did not find any listed plant records in the Natural Heritage Database within 0.25 miles of the project area. Additionally, the applicant did not identify any listed plant species during field assessments. Due to the project type, location, and lack of suitable habitat for listed plant species within the project area, impacts to listed plant species would not be expected.
- (b) Birds: The facility's potential impact upon avian species was assessed through a review of existing data for the area, as well as through on-site surveys. No federally-threatened or endangered species were observed during the surveys, but eight state-listed species were recorded. It is also not expected that the facility poses a substantial threat to migratory birds, based on the lack of suitable habitat for these species and the disturbed nature of the project area. However, mortality of migratory birds should be expected to occur.
- (c) Reptiles: The facility is within the range of the eastern massasauga, a state-endangered and federal candidate snake species. However, the facility is not expected to impact this species.
- (d) Mammals: The facility falls within the historical range of the Indiana bat, a state and federally-

endangered species. The applicant has indicated that no suitable summer roosting or rearing habitat would be removed as a result of this project, no known or suspected winter habitat is located within 10 miles, and there are no positive capture records within five miles of the facility area. Therefore, impacts to this species would not be expected with this facility.

- (e) Aquatic Species: This facility does not lie within the range of any federally-listed aquatic species. ODNR has identified a record for the state-endangered greater redhorse, a fish species that exists near the project area. Due to the distance of this project to known records and the mobility of this species, impacts to this species would not be expected. The facility also lies within the historically known range of mussel species including the state-endangered purple lilliput, the state-threatened pondhorn, and the deertoe, a state species of concern.

In an effort to identify mussels that occur in reaches of streams that would be impacted by construction activities associated with the project, ODNR and staff would require the applicant to retain an ODNR-approved biologist. The biologist would perform a mussel presence/absence survey of the appropriate stream reaches to determine the likelihood of impacts to all mussel species and provide appropriate avoidance, minimization, and mitigation measures that would be implemented prior to and/or during construction of the facility.

- (f) Other: The facility is within the historical range of the plains clubtail, a state-endangered dragonfly, but is not expected to negatively impact this species due to the dragonfly's mobility. (Staff Ex. 1 at 21-23.)

- (14) The applicant and staff do not anticipate impacts to public or private water supplies from construction or operation of the

facility. The applicant would conduct unanticipated spill response training for construction and O&M staff as needed to limit the potential for impact. (Staff Ex. 1 at 23.)

- (15) The applicant has stated that no turbines or access roads would be located within the Federal Emergency Management Authority 100-year floodplain. A small portion of the electric collection system would be constructed within the floodplain, but would not impact the floodway or increase the 100-year flood base elevation discharge. (Staff Ex. 1 at 23.)
- (16) The applicant has performed a preliminary geotechnical investigation for the project area in order to determine soil and bedrock conditions, obtain geotechnical design data, and undertake a preliminary foundation design. The findings indicate that significant mitigation would not be needed for geologic considerations. Final geotechnical investigations will be undertaken in advance of construction and will focus on specific locations of the final design. These investigations would allow for planning of any unusual foundation conditions. (Staff Ex. 1 at 23.)
- (17) The facility area is accessible through numerous highways, state routes, and local roads. During construction, some roads near the project would experience an increase in truck traffic due to the delivery of turbine components, concrete, gravel, and heavy equipment to each turbine site. Workers commuting during construction would also increase traffic. Operation of the wind farm is not expected to noticeably increase local traffic. (Staff Ex. 1 at 23.)
- (18) Wind farm construction activity is expected to impact the pavement condition of the state, county, and township roads along the regional delivery route as well as the existing state, county, and township bridges. The large turning radius required for the transport of long wind turbine generator components would impact the features around most intersections and some temporary alterations to the intersection would be required. (Staff Ex. 1 at 23.)
- (19) Post-construction and operational impacts to roads and bridges should be limited, as the roads would be able to handle any traffic from operational or maintenance requirements that the

applicant may need to perform on the wind turbine generator components. (Staff Ex. 1 at 24.)

- (20) Air emissions during construction could include nitrous oxides, sulfur dioxide, carbon dioxide, carbon monoxide, lead, particulate matter, and volatile organic compounds, but these emissions are not expected to cause significant adverse impacts within or beyond the facility boundary. No significant air emissions would result from operation of the proposed facility. (Staff Ex. 1 at 24.)
- (21) Noise impacts from construction activities would include the operation of various trucks and heavy equipment. Impacts from construction noise would be temporary and would be primarily restricted to daylight hours. (Staff Ex. 1 at 24.)
- (22) Data supplied by Paulding Wind II indicates that the nighttime operational ambient noise levels (L_{EQ})¹ will average 41 decibels (dBA), as compared with recorded ambient noise levels currently ranging from 35 to 53 dBA, while current ambient (L_{90})² ranges from 26 to 46 dBA. The applicant also states that during full sound power conditions, the operational sound output for the project would range between 25 to 47 dBA at residences within the project area. Modeling of the cumulative impacts of the Paulding Wind II facility and adjacent proposed projects indicates that the expected sound levels at residences within the project area would remain in the 25 to 47 dBA range. (Staff Ex. 1 at 24.)
- (23) The applicant's shadow flicker simulation identified eight receptors within 1,000 meters that were modeled to receive 30 hours or greater per year of shadow flicker. Seven of these receptors are inhabited residences and project participants, while the remaining receptor is an uninhabited structure and a nonparticipant. The maximum predicted shadow flicker impact at any receptor is approximately 42 hours per year. (Staff Ex. 1 at 24.)
- (24) There are 63 television stations within 40 miles of the facility, which may be impacted by noise generation at low channels in

¹ L_{EQ} refers to the equivalent continuous sound level, or average sound level, over a specific period of time.

² L_{90} refers to the sound level that is exceeded 90 percent of the time.

the very-high frequency range within one-half mile of turbines and reduced picture quality; however, the transition to digital signal has reduced the likelihood of these effects occurring. In addition, the facility is not expected to impact any radio stations, as the nearest stations are located more than two miles from the turbines. (Staff Ex. 1 at 24-25.)

- (25) The applicant identified three microwave paths near the project area. Based upon the calculated worst-case scenario and subsequent analysis, the applicant expects three proposed turbine locations (15, 17, and 76) to obstruct the identified microwave paths. The applicant will be required to mitigate impacts to microwave paths. (Staff Ex. 1 at 25.)
- (26) Wireless telephone network communications should be unaffected by wind turbine presence and operation (Staff Ex. 1 at 25).
- (27) With regard to ice throw, the applicant states that ice fragments typically land within 100 meters (328 feet) of the wind turbine tower and the risk from ice throw is negligible beyond 220 meters (722 feet). The shortest distance between a turbine base and a residence is greater than 1,400 feet. (Staff Ex. 1 at 25.)
- (28) All of the turbines under consideration cut-out at wind speeds of 25 meters per second (m/s), or 56 miles per hour (mph), or less. All proposed turbines models are certified by the International Electrotechnical Commission to withstand high wind speeds of at least 37.5 m/s or 84 mph. (Staff Ex. 1 at 25.)
- (29) The applicant has addressed safety with respect to individual wind turbines and the facility as a whole. The turbines would have a supervisory control and data acquisition system, potential gates along access roads to turbines, and locked tower doors. The substation would be equipped with a locked security fence, a fire suppression system, a lightning protection system, and would comply with National Fire Protection Association standards in addition to Occupational Safety and Health Administration requirements. (Staff Ex. 1 at 25.)
- (30) The proposed facility would be decommissioned once it is no longer operational. The applicant has proposed the posting of a bond or equivalent financial security in the amount of \$25,000 per turbine after ten years of operation to ensure that funds are

available to complete decommissioning. Any decommissioning costs in excess of this amount would be covered by the salvage or resale value of the wind generators. (Staff Ex. 1 at 25.)

Based on the preceding considerations, staff recommends that the Board find that the nature of the probable environmental impact has been determined for the proposed facility and that the application complies with the requirements specified in Section 4906.10(A)(2), Revised Code, provided that any certificate issued by the Board for the proposed facility include the conditions specified in staff's Recommended Conditions of Certificate. (Staff Ex. 1 at 26.)

D. Minimum Adverse Environmental Impact - Sections 4906.10(A)(3), Revised Code

Pursuant to Section 4906.10(A)(3), Revised Code, the proposed facility must represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, along with other pertinent considerations.

1. Socioeconomic Impacts

Staff found that the land use within a five-mile radius of the proposed facility is predominantly agricultural and would not be significantly impacted by the facility. In addition, upon decommissioning of the project, the land would be restored to its original use. (Staff Ex. 1 at 27.)

Using the minimum requirements set forth in Section 4906.20(B)(2), Revised Code, staff notes that, for this facility, the property line setback from the base of the turbine to the property line of the wind farm property equates to a distance of 505 feet. The applicant designed the turbine layout so that all turbine locations comply with these statutory setback requirements. Furthermore, Section 4906.20(B)(2), Revised Code, requires a minimum setback from a turbine to the exterior of the nearest habitable residential structure located on an adjacent property equates to at least 914 feet for this facility. Paulding Wind II has set forth a more stringent residential setback design, with setbacks ranging from 1,450 to 4,000 feet and an average setback of 2,171 feet. (Staff Ex. 1 at 27-28.)

With regard to cultural and archeological resources, applicant identified 27 historic structures, six archaeological sites, and six Ohio Genealogical Society-listed cemeteries within the project area for the facility. All facility components have been sited to avoid these resources and the applicant has incorporated mitigation options when possible to reduce the indirect visual impacts from the facility. Additionally, the applicant continues

to work independently with the Ohio Historical Preservation Office to ensure that no additional impacts to archaeological resources will occur. (Staff Ex. 1 at 28.)

The staff report notes that the facility is expected to have a long-term aesthetic impact on residences near the facility, as it would be visible from most, if not all, of the residences in the facility area. Staff notes that all of the turbines in the project area are outside of the statutory minimum residential and property line setbacks, and adds that screening the turbines from view is not a practical mitigation measure in most cases. Staff notes, however, that mitigation in the form of additional landscaping could be helpful to minimize impacts of the substations and O&M facility. (Staff Ex. 1 at 28.)

Staff found that the facility would offer direct and indirect economic benefits to the region during both construction and operation, including purchases of construction materials from local vendors and the use of goods and services by facility personnel. The proposed wind farm would positively impact and generate revenue from construction spending, permanent employment, and local/state taxes. The facility would also provide an additional revenue source per wind turbine for the landowners. (Staff Ex. 1 at 28.)

Any delay could result in unnecessary costs to the facility. There are delay costs due to the high carrying cost of the turbines, lost construction days, and costs associated with idle contractors and equipment. Additionally, there could be penalties incurred for failing to meet production deadlines under a potential Power Purchase Agreement. (Staff Ex. 1 at 29.)

2. Ecological Impacts

The facility is not expected to impact any high-quality surface waters since none are present in the facility area. However, the facility could pose some impacts to lower quality surface waters, such as the loss of riparian vegetation, damage to the stream bank and stream bed, erosion, and sedimentation. Paulding Wind II would utilize horizontal directional drilling (HDD) for installing the underground electric collection system to minimize impacts to wetlands, streams, and ditches. Potential impacts associated with HDD would include disturbances around the bore pits and impacts from potential frac-outs. In order to minimize impacts during HDD, the drilling equipment would be set up away from riparian corridors and the drilling activity would be closely monitored for signs of frac-outs. Paulding Wind II has committed to using HDD to install an underground electric collection cable under Flatrock Creek and a high-quality forested floodplain wetland, as an avoidance measure. Due to the use of HDD, staff would require the applicant to submit a detailed frac-out contingency plan for staff review and approval. In addition, in order to minimize impacts associated with turbidity and sedimentation, wetlands would be marked for avoidance in advance of construction, erosion and

sedimentation controls would be installed around wetlands, and in-stream work restrictions during fish spawning periods would be implemented. (Staff Ex. 1 at 29-30.)

The facility area is largely agricultural, so tree and shrub removal would be minimal. While riparian vegetation would be cleared for the installation of access roads and underground electric collection cable crossings, reseeding would occur immediately after construction to minimize erosion. Additionally, no turbines will be located within one-half mile of Flatrock Creek or its associated riparian corridor in order to protect this high quality natural resource. (Staff Ex. 1 at 30.)

The facility area hosts numerous wildlife species, including commercial and recreational species. The construction and operation of the proposed facility would likely negatively impact some of these species in the form of habitat loss, disturbance (e.g., noise, lighting, human activity), temporary and permanent displacement, and direct mortality due to construction and operation activities. (Staff Ex. 1 at 30.)

As previously discussed, it is unlikely that this facility would appreciably impact avian species in the facility area. To further minimize potential avian impacts, Paulding Wind II intends to minimize lighting at its proposed substation and O&M building as a means of reducing potential attractants to migratory birds during certain weather conditions. Given the bat activity in the area, it is likely that some level of direct mortality of common bat species would occur during the facility's operation. With regard to the Indiana bat, the applicant's avoidance of habitat typically identified as suitable (i.e., wooded areas) for summer roosting by Indiana bats reduces the likelihood of the facility impacting this species. However, the facility may have some potential to negatively impact Indiana bats, if present within the facility area during migration. (Staff Ex. 1 at 30.)

The project is within the range of the purple lilliput, pondhorn, and deertoe mussel species. If listed or common mussel species are present within the project area, they could be negatively impacted due to stream disturbances associated with the construction of the underground electric collection system and both temporary and permanent access roads. Minimizing potential impacts to mussels, if present, could be achieved through a combination of certain stream crossing methodologies or the relocation of project components and/or the mussels. ODNR and staff require that the applicant perform a presence/absence survey for all stream segments that have a potential to be impacted by construction activities associated with this project. This survey would indicate if particular avoidance, minimization, or mitigation strategies are warranted to protect mussels. (Staff Ex. 1 at 30.)

Impacts to other species would be minimized largely by Paulding Wind II's efforts to locate the overall facility footprint so as to avoid many of the more environmentally-sensitive areas, including wooded areas, streams, and wetlands. (Staff Ex. 1 at 31.)

According to staff, Paulding Wind II does not anticipate significant adverse impacts to public or private water supplies from construction of the facility. Staff suggests that applicant conduct spill response training with construction and O&M staff, as needed, and also recommends that the applicant comply with any drinking water source protection plans developed by villages within the project boundaries. (Staff Ex. 1 at 31.)

With regard to the geology of the facility area, staff states that geotechnical exploration and evaluation must be done at each wind turbine site and the substation location to ensure structural capability to support the facilities. Staff notes that no earthquake epicenters lie within the facility area. (Staff Ex. 1 at 31.)

3. Public Safety

Because local emergency responders would likely be unfamiliar with addressing emergencies related to wind turbines, Paulding Wind II would coordinate and develop a fire protection and medical emergency response plan in consultation with the fire department that has jurisdiction over the facility area. In addition, Paulding Wind II would need to become a member of a one-call system, such as the Ohio Utilities Protection Service (OUPS), since the electric collection system for the wind farm would be buried underground. (Staff Ex. 1 at 32.)

According to staff, existing nearby roads should be adequate to handle the increase in traffic during construction, although minor delays may be experienced, and the roadways within the study area appear to be in good condition and adequate to accommodate construction activities. However, any improvements necessary for the roads to handle the additional weight of the turbine components must be made prior to delivery of the turbine components. In addition, these roads should be monitored during construction for pot-holing and deterioration of the pavement to ensure they are safe for general construction and local roadway traffic. (Staff Ex. 1 at 32-33.)

Within the study area, all roadways proposed for use by the construction vehicles are wide enough to accommodate construction traffic, except for County Road 11, Township Road 5, and portions of Township Roads 60 and 94 which would need to be widened to a minimum of 16 feet. Because the bridges in the area are generally narrower than the roadways, over-wide vehicles would likely need to cross the center line to traverse the bridges. Roadways outside of the study area will be evaluated by the company delivering the turbine components prior to construction, as part of the Special

Hauling Permit process required by the Ohio Department of Transportation (ODOT). (Staff Ex. 1 at 32.)

All intersections in the area would need improvements to accommodate the oversize/overweight vehicles for turbine delivery from the manufacturer. There does not appear to be any significant construction challenges such as steep grades, existing structures, or significant clearing with the proposed improvements. (Staff Ex. 1 at 33.)

The vertical profile of the roadways within the facility should be adequate with the exception of turn on/turn offs and directly over Route 49. In addition, any location along the delivery route with a vertical clearance of less than 16 feet would need to be adjusted. Paulding Wind II must coordinate and obtain permits from utility companies in order to adjust utility lines crossing the roadways. (Staff Ex. 1 at 33.)

Paulding Wind II identified nine bridges that could be part of the delivery route and determined that all of these bridges could accommodate legal loads. Staff recommends reevaluation of these bridges, in coordination with the county engineer. Post-construction and operational impacts to roads and bridges should be limited, as the roads would be able to handle any operational or maintenance requirements that Paulding Wind II may need to perform on the wind turbine generator components. (Staff Ex. 1 at 33).

Noise impacts from construction activities would include the operation of various trucks and heavy equipment. Although many of the construction activities would generate significant noise levels, staff believes that the adverse impact of this noise would be minimal because it is temporary and intermittent, it would occur away from most residential structures, and most construction activities would be limited to normal daytime working hours. (Staff Ex. 1 at 33.)

Staff also notes that some atmospheric conditions, such as wind shear and temperature inversions, can also further amplify sound, and that, as discussed previously, the noise impact of the wind farm also depends on the existing ambient noise level of the facility area. Staff reports that an increase in the ambient noise level at any given receptor should probably not be exceeded by more than six dBA, and an increase of six dBA may cause complaints; thus, such an increase warrants further study of potential impacts. (Staff Ex. 1 at 34.)

Paulding Wind II used WindPRO, a computer model, to calculate how often and in which intervals a specific receptor could be affected by shadows generated by one or more wind turbines. Staff and Paulding Wind II used 30 hours of shadow flicker per year as the threshold of significant impact, or the point at which shadow flicker is commonly perceived as an annoyance. While staff notes that there are no state or federal standards

for the frequency or duration of shadow flicker from wind turbines, staff refers to international studies and guidelines from Germany and Australia, as well as the standards used in Michigan, New York, Minnesota, and New Hampshire. Paulding Wind II simulated shadow flicker from the proposed turbines out to one kilometer (3,281 feet). This shadow simulation identified eight receptors that are anticipated to experience 30 hours or greater per year of shadow flicker. Staff also recognizes that there is a potential that flashing lights may cause epileptic seizures in some individuals; however, the facility's nominal rotor speed is such that it is not likely to trigger seizures. (Staff Ex. 1 at 34-36).

In reviewing communication interfaces impacted by the facility, staff states that the potential exists for a reduction of television reception, radar line-of-sight, and microwave transmission and that Paulding Wind II has proposed mitigation measures for all known potential impacts. According to staff, Paulding Wind II has not yet submitted its proposed turbine locations to the National Telecommunications and Information Administration (NTIA) for review regarding potential radar interference. Staff notes that 14 fully operational television stations provide programming to the area, but that, based on the location of the facility and the television stations, the applicant does not believe that there would be many communities where a total loss of coverage would occur. Staff reports that no degradation of service is anticipated for AM or FM radio stations, or wireless telecommunication providers. (Staff Ex. 1 at 36-37.)

In addressing ice throw and blade shear from the turbines, as well as the effects of high winds, staff found that the applicant's plan to install safety control mechanisms, such as two independent braking systems, ice detection software, a pitch control system, a lightning protection system, automatic turbine shut down at excess vibration, and automatic turbine shut down at excessive wind speeds, address these issues. Staff also notes that restricting access to authorized personnel, coupled with the approximately 1,400 foot distance from the nearest residence and an applied property setback of 505 feet, also minimizes the potential impacts from ice throw, blade shear, and high winds. (Staff Ex. 1 at 37-38.)

In reviewing decommissioning of the turbines, staff points out that MW-scale wind turbine generators typically have a life expectancy of 20-25 years. Upon decommissioning, the site must be restored and reclaimed to the same general topography that existed prior to the beginning of the construction of the facility. Staff explains that Paulding Wind II has proposed the posting of a bond or equivalent financial security in the amount of \$25,000 per turbine after 10 years of operation to ensure that funds are available to complete decommissioning. (Staff Ex. 1 at 38.)

Based on the preceding considerations, staff concludes that the project, as proposed, would result in both temporary and permanent impacts to the project area and

surrounding areas. Further, Staff notes that it has recommended several conditions in order to address and minimize these impacts. Staff, therefore, recommends that the Board find that the proposed site represents the minimum adverse environmental impact consistent with Section 4906.10(A)(3), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 38.)

E. Electric Grid - Section 4906.10(A)(4), Revised Code

Staff explains that Paulding Wind II plans to use an underground 34.5 kV electric collection system to gather the energy into a single project substation owned by the applicant. The applicant's collection substation would collect energy from the individual wind turbines and step the voltage up from 34.5 kV to 138 kV. A new AEP interconnection switching station would then take the stepped up voltage from the project substation and inject it into the local and regional transmission grid via AEP's Haviland-Milan 138 kV transmission line. (Staff Ex. 1 at 39.)

PJM completed a feasibility study and system impact study (impact study) for the facility, which includes local and regional transmission system impacts and stability and short circuit analysis. These studies looked at the impacts of adding the proposed facility to the regional bulk power system and identified any transmission system upgrades caused by the facility that would be required to maintain the reliability of the regional transmission system. The results of the impact study identified no problems on the PJM regional transmission system but indicated that an upgrade would be required on the AEP local transmission system. Paulding Wind II would be responsible for the costs of the required local upgrade, as well as for any expenses associated with the proposed AEP interconnection switching station. (Staff Ex. 1 at 39-42.)

In its report, staff recommends that the Board find that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facility would serve the interests of electric system economy and reliability. Staff believes that the proposed facility complies with the requirements specified in Section 4906.10(A)(4), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 42.)

F. Air, Water, Solid Waste, and Aviation - Section 4906.10(A)(5), Revised Code

Although there are no air monitoring stations in Paulding County, staff states that the air monitoring stations in nearby Ohio counties monitor for the following pollutants; particulate matter, ozone, and sulfur dioxide in Allen County; lead in Fulton County; particulate matter in Hancock County; and ozone in Wood County. Also an air monitoring station in Allen County, Indiana, monitors ozone and particulate matter. Furthermore, staff points out that the Ohio Environmental Protection Agency (OEPA) lists

Paulding County as being in attainment or unclassified with National Ambient Air Quality Standards (NAAQS). Since the operation of the wind turbine facility will not produce air pollution, there are no applicable air quality limitations, NAAQS, prevention of significant deterioration increments, or the need for permits to install and operate an air pollution source. The applicant plans to minimize emissions during site clearing and construction by keeping equipment in good working order, as well as controlling dust by minimizing the extent of exposed/disturbed areas and using water or a county approved dust suppressant. (Staff Ex. 1 at 43.)

Paulding Wind II has represented that it will apply for the necessary permits and plans relating to water in the facility area. In addition, Paulding Wind II intends to obtain an approved Storm Water Pollution Prevention Plan (SWPPP) to mitigate any potential impacts from construction activities to surface water. According to the Staff Report, approximately 191.3 acres of impervious surface would be generated as a result of the facility, including turbine foundations, access roads, substations, and an O&M building footprint. The facility would not significantly alter flow patterns or erosion and, given the small increase in impervious surface within the facility, no modifications in the direction, quality, of flow patterns of storm water run-off are anticipated. (Staff Ex. 1 at 44.)

Staff notes that, if a temporary batch plant is necessary, the wastewater would be minimal and be handled via reuse in the concrete production process, stored in an on-site holding tank for disposal at a publicly owned treatment works, or discharged to a local surface waterway under an OEPA approved discharge permit. (Staff Ex. 1 at 44.)

Further, Paulding Wind II states that approximately 7,000 tons of waste, consisting of plastic, wood, cardboard, and metal packaging materials, would be generated during construction. Once operational, the turbines would generate only a minimal amount of solid waste, of a type and amount comparable to a small business office. (Staff Ex. 1 at 44.)

With regard to aviation, one commercial service-primary and four general aviation airports exist within 20 miles of the proposed facility. According to the Staff Report, the Federal Aviation Administration (FAA) has reviewed all turbine locations and determined that none of the locations present a hazard to aviation. (Staff Ex. 1 at 44-45.)

Consequently, staff recommends that the Board find that the facility complies with the requirements specified in Section 4906.10(A)(5), Revised Code, provided the certificate issued includes staff's recommendations (Staff Ex. 1 at 45).

G. Public Interest, Convenience, and Necessity - Section 4906.10(A)(6), Revised Code

According to the Staff Report, Paulding Wind II will carry liability insurance on the wind facilities and activities on the premises during the life of the facility. Landowners will be named as an additional insured on the policy. The applicant has also agreed to work with the Paulding County Engineer and to establish a bond or similar surety to ensure that all damage to public roads is repaired. (Staff Ex. 1 at 46.)

In exchange for the exclusive right to convert, collect, and transmit wind-generated electricity, Paulding Wind II will pay landowners an annual lease payment. Those living near the project, but not hosting components, would also receive annual lease payments. (Staff Ex. 1 at 47.)

According to Paulding Wind II, the proposed project would have a significant positive impact on the local tax base, since it anticipates paying the maximum real and personal property tax of \$9,000 per MW of installed nameplate capacity per year, or about \$1,346,400 annually for the life of the project. Paulding Wind II also plans to utilize federal grant options available under the American Recovery and Reinvestment Act of 2009 for qualified energy facilities. (Staff Ex. 1 at 47-48.)

Staff recommends that the Board find that the facility will serve the public interest, convenience, and necessity, in accordance with Section 4906.10(A)(6), Revised Code, provided the certificate issued includes staff's recommendations (Staff Ex. 1 at 48).

H. Agricultural Districts - Section 4906.10(A)(7), Revised Code

A total of 23.4 acres of temporary impacts and 4.9 acres of permanent impacts would occur to designated agricultural district land within the project area. Staff states that these impacts would not be significant enough to affect the agricultural district designation of any of the properties within the project area. Furthermore, while construction activities could lead to temporary reductions in farm productivity, Paulding Wind II will take steps to address potential impacts to farmland. Therefore, staff recommends that the Board find that the impact of the facility on the viability of existing agricultural land in an agricultural district has been determined and that the facility complies with the requirements specified in Section 4906.10(A)(7), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 49.)

I. Water Conservation Practice - Section 4906.10(8), Revised Code

Staff determined that water conservation practice, as specified under Section 4906.10(A)(8), Revised Code, is not directly applicable to this facility. Staff found that,

during operation of the facility, the wind-powered generators will not use water and the only potable water that will be used will be a minimal amount for the facility's O&M building employees. Therefore, staff recommends that the Board find that the facility will incorporate maximum feasible water conservation practices and will comply with the requirements specified in Section 4906.10(A)(8), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 50.)

V. STIPULATION'S RECOMMENDED CONDITIONS

As stated previously, at the October 5, 2010, hearing, counsel for staff presented a Stipulation, which was filed on October 5, 2010, and signed by all the parties. The stipulating parties recommend that the Board issue the certificate requested by Paulding Wind II, subject to certain conditions. The following is a summary of the conditions agreed to by the stipulating parties and is not intended to replace or supersede the Stipulation:

- (1) Paulding Wind II shall install the facility at the proposed site as presented in the application filed on May 14, 2010, and as modified and/or clarified by Paulding Wind II's supplemental filings.
- (2) Paulding Wind II shall utilize the equipment and construction practices as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations staff included in the Staff Report.
- (3) Paulding Wind II shall implement the mitigative measures as described in the application and as modified and/or clarified in supplemental filings, and the replies to data requests, and recommendations included in the Staff Report of Investigation as amended by this Stipulation.
- (4) Prior to the commencement of construction, Paulding Wind II shall obtain and comply with all applicable permits and authorizations as required by federal and state laws and regulations for any activities where such permit or authorization is required. Copies of permits and authorizations, including all supporting documentation, shall be provided to staff within seven days of issuance or receipt by applicant.

- (5) Paulding Wind II shall conduct a preconstruction conference prior to the start of any construction activities, which staff shall attend, to discuss how environmental concerns will be satisfactorily addressed. Staff shall be notified of any modification to the final facility design at this time.
- (6) At least 30 days before the preconstruction conference, the applicant shall file a letter with the Board that identifies which of the turbine models listed in the application has been selected.
- (7) At least 30 days before the preconstruction conference, Paulding Wind II shall submit to staff, for review and approval, the final turbine foundation design for each turbine location.
- (8) Paulding Wind II shall not commence construction of the facility until it has a signed Interconnection Service Agreement with PJM, which includes construction, operation, and maintenance of system upgrades necessary to reliably and safely integrate the proposed generating facility into the regional transmission system. The applicant shall provide a letter stating that the agreement has been signed or a copy of the signed agreement to staff.
- (9) At least 30 days prior to the preconstruction conference, and subject to staff review and approval, Paulding Wind II shall create and implement a complaint resolution procedure in order to address potential operational concerns experienced by the public. The applicant shall work to mitigate and resolve any issues with those who file a complaint. Any complaint submitted must be immediately forwarded to staff.
- (10) At least 30 days before the preconstruction conference, Paulding Wind II shall submit to staff, for review and approval, no more than three potential locations on which a concrete batch plant may be built for construction of the facility.
- (11) During construction, if Paulding Wind II makes a finding of cultural, architectural, or archaeological significance, or a site that could be eligible for inclusion on the NHRP, then the applicant shall submit an amendment, modification, or mitigation plan. Any such mitigation effort shall be developed in coordination with the Ohio Historic Preservation Office,

with input from the Paulding County Commissioners, and submitted to staff for review.

- (12) No commercial signage or advertisements shall be located on any turbine, tower, or related infrastructure. If vandalism should occur, Paulding Wind II shall remove or abate the damage within 30 days of discovery or as extended by staff for good cause shown, to preserve the aesthetics of the facility. Any abatement, other than the restoration to prevandalism condition, is subject to approval by staff.
- (13) Paulding Wind II shall avoid, where possible, or minimize to the maximum extent practicable, any damage to field tile drainage systems and soils resulting from construction, operation, and/or maintenance of the facility in agricultural areas. Damaged field tile systems shall be promptly repaired to at least original conditions at the applicant's expense. Excavated topsoil, with the exception of soil excavated during the laying of cables for the collection system, shall be segregated and restored in accordance with the applicant's lease agreement with the landowner. Severely compacted soils shall be plowed or otherwise de-compacted, if necessary, to restore them to original conditions, unless otherwise agreed to by the landowner.
- (14) At least seven days before the preconstruction conference, the applicant shall submit to staff a copy of all the Ohio National Pollutant Discharge Elimination System (NPDES) permit(s) including its approved SWPPP, approved Spill Prevention Containment and Countermeasure (SPCC) procedures, and its erosion and sediment control plan for review and approval. Any soil issues must be addressed through proper design and adherence to OEPA best management practices (BMPs) related to erosion and sedimentation control.
- (15) Paulding Wind II shall employ the following erosion and sedimentation control measures, construction methods, and BMPs when working near environmentally-sensitive areas and/or when in close proximity to any watercourses, in accordance with the NPDES permit(s) and SWPPP obtained for the facility:

- (a) During construction of the facility, seed all disturbed soil, except within actively cultivated agricultural fields, within seven days of final grading with a seed mixture acceptable to the appropriate County Cooperative Extension Service. Denuded areas, including spoil piles, shall be seeded and stabilized within seven days, if they will be undisturbed for more than 21 days. Reseeding shall be done within seven days of emergence of seedlings, as necessary, until sufficient vegetation in all areas has been established.
 - (b) Inspect and repair all erosion control measures after each rainfall event of one-half of an inch or greater over a 24-hour period, and maintain controls until permanent vegetative cover has been established on disturbed areas.
 - (c) Delineate all water courses, including wetlands, by fencing, flagging, or other prominent means.
 - (d) Avoid entry of construction equipment into watercourses, including wetlands, except at specific locations where construction has been approved.
 - (e) Prohibit storage, stockpiling, and/or disposal of equipment and materials in these sensitive areas.
 - (f) Locate structures outside of identified watercourses, including wetlands, except at specific locations where construction has been approved.
 - (g) Divert all storm water runoff away from fill slopes and other exposed surfaces to the greatest extent possible, and direct instead to appropriate catchment structures, sediment ponds, etc., using diversion berms, temporary ditches, check dams, or similar measures.
- (16) Paulding Wind II shall remove all temporary gravel and other construction staging area and access road materials after

completion of construction activities, as weather permits, unless otherwise directed by the landowner. Impacted areas shall be restored to preconstruction conditions in compliance with the NPDES permit(s) obtained for the facility and the approved SWPPP created for this facility.

- (17) The applicant shall not dispose of gravel or any other construction material during or following construction of the facility by spreading such material on agricultural land. All construction debris and all contaminated soil shall be promptly removed and properly disposed of in accordance with OEPA regulations.
- (18) Paulding Wind II shall assure compliance with fugitive dust rules by the use of water spray or other appropriate dust suppressant measures whenever necessary.
- (19) Paulding Wind II shall have an environmental specialist on site during construction activities that may affect sensitive areas as mutually agreed upon between the applicant and staff, and as shown on the applicant's final approved construction plans, including vegetation clearing, areas such as a designated wetland or stream, or in the vicinity of identified mussels (common or federal/state-listed threatened or endangered species) and threatened or endangered species or their identified habitat. The environmental specialist shall be familiar with water quality protection issues and able to field-identify mussels (common or federal/state-listed threatened or endangered species) and potential threatened or endangered species of plants and animals that may be encountered during facility construction.
- (20) Prior to construction, Paulding Wind II shall conduct a presence/absence mussel survey within streams segments that will be impacted by trenching activities for the installation of culverts and the underground electric collection system or from potential frac-out as a result of utilizing HDD. All findings from this survey shall be submitted to staff and ODNR, in coordination with the U.S. Fish and Wildlife Service (USFWS), for review, comment, and establishment of avoidance, minimization, and mitigation measures. For common mussel species, the applicant may either relocate components of the facility to avoid the identified species locations (mussel

concentrations), or include potential relocation of mussels in the required frac-out contingency plan. As part of this plan, Paulding Wind II shall provide survey/relocation methods, details on the survey area(s) and relocation site(s), and establish post-relocation monitoring protocols. All surveys/relocations shall be conducted by an ODNR-approved malacologist. The post-relocation monitoring shall be for two consecutive years at the recipient relocation site(s) to determine survivorship. A survivorship report shall be submitted to staff and ODNR by December 31 of each consecutive year for review. If federal or state-listed threatened or endangered mussels are found during the survey, Paulding Wind II must avoid the identified species location by relocating facility components, subject to staff and ODNR review and approval. If staff and ODNR, in coordination with the USFWS, determine that a significant adverse impact has occurred to threatened or endangered mussels, additional mitigation measures will be prescribed to the applicant by staff in coordination with ODNR.

- (21) Paulding Wind II shall utilize HDD when installing underground electric collection cable under Flatrock Creek, under a high-quality forested floodplain wetland, and at other locations as deemed necessary by applicant and staff. The wetland is located approximately 750 feet west of CR33 along Flatrock Creek.
- (22) Paulding Wind II shall not work in the following types of streams during fish spawning restricted periods (April 15 to June 30), unless a waiver is issued by ODNR and approved by staff releasing applicant from a portion of, or the entire, restriction period: class 3 primary headwater streams; exceptional warm water habitat; coldwater habitat; warm water habitat; and streams potentially supporting threatened and endangered species.
- (23) Prior to the first turbine becoming operational, Paulding Wind II shall develop a post-construction avian and bat mortality monitoring plan in conjunction with methodologies outlined in ODNR's *On-Shore Bird and Bat Pre-and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio*, for staff review and approval. The monitoring shall be conducted for a minimum of one season (April 1 to November

- 15), with the possibility of a second season of monitoring at the discretion of staff, in coordination with ODNR.
- (24) Paulding Wind II shall adhere to seasonal cutting dates of October 1 through March 31 for removal of suitable Indiana bat habitat, if avoidance measures cannot be achieved.
- (25) Staff, ODNR, and USFWS shall be immediately contacted if threatened or endangered species are encountered during construction and operation activities. Construction activities that could adversely impact the identified plants or animals shall be halted until an appropriate course of action has been agreed upon by Paulding Wind II, staff, and ODNR in coordination with USFWS. If threatened or endangered species are encountered during operation activities, then only the above referenced notification is required. Nothing in this provision shall preclude agencies having jurisdiction over the facility with respect to threatened or endangered species from exercising their legal authority over the facility consistent with law.
- (26) Applicant shall conform to any drinking water source protection plan, if it exists, for any part of the facility that is located within drinking water source protection areas of the local villages and cities.
- (27) Paulding Wind II shall complete a full geotechnical investigation to confirm that there are no issues to preclude development of the wind farm. The geotechnical investigation shall include borings at each turbine location to provide subsurface soil properties, static water level, rock quality description, percent recovery, and depth and description of the bedrock contact and recommendations needed for the final design and construction of each wind turbine foundation, as well as the final location of the transformer substation and interconnection substation. The applicant must fill all boreholes, and borehole abandonment must comply with state and local regulations. Paulding Wind II shall provide copies of all geotechnical boring logs to staff and to ODNR Division of Geological Survey prior to construction.

- (28) Applicant shall comply with the turbine manufacturer's most current safety manual and shall maintain a copy of that safety manual in the O&M building of the facility.
- (29) Paulding Wind II shall become a member of OUPS prior to commencement of operation of the facility. Notification of membership shall be provided to staff.
- (30) At least 30 days before the preconstruction conference, Paulding Wind II shall submit to staff, for review, a proposed emergency and safety plan to be used during construction developed in consultation with the fire department(s) having jurisdiction over the area. Before the first turbine is operational, the applicant shall submit to staff, for review, a fire protection and medical emergency plan to be used during operation of the facility, which shall be developed in consultation with the first responders having jurisdiction over the area.
- (31) Paulding Wind II shall restrict public access to the site with appropriately placed warning signs or other necessary measures.
- (32) Paulding Wind II shall instruct workers on the potential hazards of ice conditions on wind turbines.
- (33) Paulding Wind II shall provide the final delivery route plan and the results of any traffic studies to staff and to the Paulding County Engineer 30 days prior to the preconstruction conference. Paulding Wind II shall complete a study on the final equipment delivery route to determine what improvements will be needed in order to transport equipment to the turbine construction sites. The applicant shall make all improvements outlined in the final delivery route plan prior to wind turbine delivery. After the commencement of construction, the applicant may deviate from the final delivery route as necessary, provided the deviation from the final delivery route is submitted to staff and to the Paulding County Engineer seven days prior to the use of the alternative delivery route and is approved by staff and the Paulding County Engineer. The applicant's final study and delivery route plan shall consider, but not be limited to, the following:

- (a) Perform a survey of the final delivery routes to determine the exact locations of vertical constraints where the roadway profile will exceed the allowable technical bump and dip specifications and outline steps to remedy vertical constraints.
 - (b) Identify locations along the final delivery routes where overhead utility lines may not be high enough for over-height permit loads and coordinate with the appropriate utility company if lines must be raised.
 - (c) Identify upgrades to any roads and bridges that are not able to support the projected loads from delivery of the wind turbines and other facility components and make all necessary upgrades.
 - (d) Identify locations where wide turns would require modifications to the roadway and/or surrounding areas and make all necessary alterations. Any alterations for wide turns shall be removed and the area restored to its preconstruction condition unless otherwise specified by the Paulding County Engineer.
- (34) Applicant shall repair damage to roads and bridges caused by construction activity. Any damage shall be repaired promptly to its preconstruction state by the applicant under the guidance of the appropriate regulatory agency. Any temporary improvements shall be removed, unless the Paulding County Engineer requests that they remain. Paulding Wind II shall provide financial assurance to the counties that it will restore the public roads it uses to their preconstruction condition. These terms will be defined in a Road Agreement that will be entered into between the applicant and the Paulding County Engineer prior to construction and will be subject to staff review. The Road Agreement shall contain the following:
- (a) A preconstruction survey of the conditions of the public roads and bridges.
 - (b) A post-construction survey of the condition of the public roads and bridges.

- (c) An objective standard of repair that obligates the applicant to restore the roads and bridges to the same or better condition as they were prior to construction.
- (35) Applicant shall repair damage to government maintained, public, roads and bridges caused by decommissioning activity. Any damage shall be repaired promptly to its predecommissioning state by the applicant under the guidance of the appropriate regulatory agency. The applicant shall provide financial assurance to the counties that it will restore the public roads and bridges it uses to their predecommissioning condition. These terms will be defined in a Road Agreement that will be entered into between the applicant and the Paulding County Engineer prior to construction and will be subject to staff review. The Road Agreement shall contain the following:
 - (a) A predecommissioning survey of the conditions of the public roads and bridges conducted within a reasonable time prior to decommissioning activities.
 - (b) A post-decommissioning survey of the condition of the public roads and bridges to be conducted within a reasonable time after decommissioning activities.
 - (c) An objective standard of repair that obligates the applicant to restore the public roads and bridges to the same or better condition as they were prior to decommissioning.
 - (d) A timetable for the posting of the decommissioning road and bridge bond prior to the advent of any heavy equipment on public roads or bridges.
- (36) Paulding Wind II shall obtain all required county and township transportation permits and all necessary permits from ODOT. Any temporary or permanent road closures necessary for construction and operation of the proposed facility shall be coordinated with the appropriate entities including, but not limited to, the Paulding County Engineer, ODOT, local law enforcement, and health and safety officials.
- (37) At least 30 days prior to the preconstruction conference and subject to staff review and approval, Paulding Wind II shall

model the expected project noise contribution at the exterior of all nonparticipating residences within one mile of the facility boundary at critical wind speed calculated in accordance with ISO 9613-2 standard day conditions assuming moderate downwind propagation.

- (38) If preconstruction acoustic modeling indicates a facility contribution that exceeds the facility area nighttime LEQ (41 dBA) by greater than five dBA at the exterior of any nonparticipating residences within one mile of the facility boundary, the project shall be subject to further study of the potential impact and possible mitigation prior to construction. Mitigation, if required, shall consist of either reducing the impact so that the project contribution does not exceed the facility ambient nighttime LEQ (41 dBA) by greater than five dBA, or other means of mitigation approved by staff and Paulding Wind II in consultation with the affected receptor(s).
- (39) After commencement of commercial operation, Paulding Wind II shall conduct further review of the impact and possible mitigation of all facility noise complaints. Mitigation shall be required if the facility contribution at the exterior of any nonparticipating residences within one mile of the facility boundary exceeds the greater of: (1) the project ambient nighttime LEQ (41 dBA) plus five dBA, or (2) the validly measured ambient LEQ at the location of the complaint and during the same time of day or night as that identified in the complaint plus five dBA. Mitigation, if required, shall consist of either reducing the impact so that the project contribution does not exceed the greater of: (1) the project ambient nighttime LEQ (41 dBA) plus five dBA, or (2) the validly measured ambient LEQ plus five dBA, or other means of mitigation approved by staff and the applicant in consultation with the affected receptor(s).
- (40) General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. This limitation shall not apply to nacelle, tower, and rotor erection activities which may need to be carried out during low wind, nighttime hours for safety reasons. Impact pile driving and blasting operations, if needed, shall be limited to the hours between 7:00 a.m. to 7:00 p.m., Monday through Friday. Construction activities that do not involve noise

increases above ambient levels at sensitive receptors are permitted outside daylight hours when necessary. The applicant shall notify property owners or affected tenants within the meaning of Rule 4906-5-08(C)(3), O.A.C., of upcoming construction activities including potential for nighttime construction activities.

- (41) Any turbine forecasted prior to construction to create in excess of 30 hours per year of shadow flicker at a nonparticipating receptor within 1,000 meters shall be subject to further review and possible mitigation. Mitigation shall be completed before commercial operation commences and consist of either reducing the turbine's forecasted impact to 30 hours per year, or other measures acceptable to staff and the applicant in consultation with the affected receptor(s).
- (42) Prior to construction, Paulding Wind II shall submit the final layout and turbine locations to the NTIA for review and approval. Any concerns identified regarding obstruction to microwave or other communication systems shall be forwarded to staff for review and approval prior to construction.
- (43) Applicant must meet all recommended and prescribed Federal Communications Commission and other federal agency requirements to construct an object that may affect communications and, subject to staff approval, mitigate any effects or degradation caused by wind turbine operation. For any residence that is shown to experience degradation of television (TV) reception due to the facility operation, the applicant shall provide, at its own expense, cable or direct broadcast satellite TV service.
- (44) At least 30 days before the preconstruction conference, the applicant shall submit to staff, for review and approval, a licensed microwave report based on the final turbine layout.
- (45) Any turbines modeled to have the potential to interfere with existing microwave paths in the project area shall be subject to further review and possible mitigation. Mitigation shall be completed prior to construction and consist of either shifting the turbine locations so as to not affect any existing microwave

paths, or other measures approved by staff, the applicant, and the affected path licensee(s).

- (46) Any turbine observed to create microwave communication interference to existing paths shall be subject to mitigation. If required, the applicant shall propose mitigation consisting of either reducing the impact so as to not affect the path, or other measures approved by staff, the applicant, and the affected path licensee(s).
- (47) Paulding Wind II must meet all FAA and federal agency requirements to construct an object that may affect existing local and/or long-range radar, and mitigate any effects or degradation caused by wind turbine operation as required by the FAA.
- (48) If any turbine is determined to cause interference to the next-generation radar (NEXRAD) system operated by the National Weather Service, the applicant shall propose a technical or administrative work plan, protecting proprietary interests in wind speed data that provides for the release of real-time meteorological data to the National Weather Service Office in Wilmington, Ohio. If an uncontrollable event should render this data temporarily unavailable, Paulding Wind II shall exert reasonable effort to restore connectivity in a timely manner.
- (49) Paulding Wind II must meet all recommended and prescribed FAA and ODOT Office of Aviation (ODOT-OA) requirements to construct an object that may affect navigable airspace. This includes submitting all final turbine locations for ODOT-OA and FAA review prior to construction, and the nonpenetration of any FAA *Part 77* surfaces.
- (50) Thirty days prior to any construction, Paulding Wind II shall notify, in writing, any owner of an airport listed on the ODOT-OA "Ohio Aeronautical Chart" and located within two miles of the facility boundary, whether public or private, whose operations, operating thresholds/minimums, landing/approach procedures and/or vectors are expected to be altered by the siting, operation, maintenance, or decommissioning of the facility.
- (51) All applicable structures shall be lit in accordance with FAA circular 70/7460-1 K Change 2, *Obstruction Marking and*

Lighting; Chapters 4, 12, and 13 (Turbines); or as otherwise prescribed by the FAA.

- (52) The applicant, facility owner, and facility operator shall comply with the following conditions regarding decommissioning:
- (a) Provide a final draft of the decommissioning plan to staff and the Paulding County Engineer for review, and for staff approval, at least seven days prior to the preconstruction conference. In this plan, the applicant shall:
 - (i) Indicate the future use that is proposed to be made of the land following reclamation.
 - (ii) Describe the following: engineering techniques proposed to be used in decommissioning and reclamation and a description of the major equipment; a plan for the control of surface water drainage and of water accumulation; and a plan, where appropriate, for backfilling, soil stabilization, compacting, and grading.
 - (iii) Describe how the applicant, facility owner, and facility operator will implement best management practices to control impacts to surface or ground water resources. If necessary, the applicant, facility owner, and facility operator will obtain permits from the Ohio EPA and/or the U.S. Army Corps of Engineers.
 - (iv) Provide a detailed timetable for the accomplishment of each major step in the decommissioning plan, including the steps to be taken to comply with applicable air and water quality laws and regulations and any applicable health and safety standards in effect as of the date of the submittal.
 - (b) File a revised decommissioning plan every five years from the commencement of construction

with staff and the Paulding County Engineer reflecting advancements in either the engineering techniques or reclamation equipment and standards. The revised plan shall apply for purposes of the five-year decommissioning cost estimates. The decommissioning plan and any revisions shall be reviewed and approved by staff prior to its implementation.

- (c) At its expense, complete decommissioning of the facility, or individual wind turbines, within 12 months after the end of the useful life of the facility or individual wind turbines. If no electricity is generated for a continuous period of 12 months, or if the Board deems the facility or turbine to be in a state of disrepair warranting decommissioning, the wind energy facility or individual wind turbines will be presumed to have reached the end of its useful life. The Board may extend the useful life period for the wind energy facility or individual turbines for good cause as shown by the facility owner and/or facility operator.
- (d) Decommissioning shall include the removal of all physical material pertaining to the wind energy facility to a depth of at least 36 inches beneath the soil surface and restoration of the disturbed area to substantially the same physical condition that existed before erection of the facility. The foundation for each wind turbine shall be removed to the depth of 36 inches or to the top of the foundation spread footing, whichever depth is greater. Decommissioning shall include the removal and transportation of the wind turbines off-site; and removal of buildings, cabling, electrical components, access roads, and any other associated facilities, with the exception of the project substation, unless otherwise mutually agreed upon by the facility owner or facility operator, and the landowner. Disturbed earth shall be regraded, reseeded, and restored to substantially the same physical condition that

existed immediately before erection of the facility. Damaged field tile systems shall be repaired to at least original conditions.

- (e) If the facility owner and/or facility operator of the proposed facility does not complete decommissioning within the period prescribed in these conditions, the Board may take action as necessary to complete decommissioning, including requiring forfeiture of the surety bond or financial securities posted pursuant to this paragraph. Should the Board assume the responsibility of completing decommissioning due to a failure of the facility owner or facility operator to decommission as required by its certificate, the facility owner and facility operator shall be deemed to have granted to the Board their full authority pursuant to the facility owner's and facility operator's then current agreements with the landowner and their respective heirs, successors and assigns, to take all reasonable actions that may be necessary to implement the decommissioning plan, including the exercise by the Board, staff, and their contractors, of the right of ingress and egress for the purpose of decommissioning the facility.
- (f) The decommissioning funds, surety bond, or financial assurance shall be released by the holder of the funds, bond, or financial assurance when the facility owner or facility operator has demonstrated, and staff concurs, that decommissioning has been satisfactorily completed, or upon written approval of the Board in order to implement the decommissioning plan.
- (g) During decommissioning, all recyclable materials, salvaged and nonsalvaged, shall be recycled to the furthest extent possible. All other nonrecyclable waste materials shall be disposed of in accordance with state and federal law.

- (h) The facility owner and/or facility operator shall leave intact any improvements made to the electrical infrastructure, pending approval by the applicable regional transmission organization and interconnection utility.
- (i) Subject to approval by staff, and seven days prior to the preconstruction conference, an independent and registered professional engineer, licensed to practice engineering in the state of Ohio, shall be retained by the applicant, facility owner, or facility operator to estimate the total cost of decommissioning in current dollars, without regard to salvage value of the equipment. Said estimate shall include: (1) an identification and analysis of the activities necessary to implement the most recent approved decommissioning plan including, but not limited to, physical construction and demolition costs assuming good industry practice and based on ODOT's Procedure for Budget Estimating and RS Means material and labor cost indices or any other publication or guidelines approved by staff, (2) the cost to perform each of the activities, (3) an amount to cover contingency costs, not to exceed 10 percent of the above calculated reclamation cost. Said estimate will be converted to a per-turbine basis (the decommissioning costs) and shall be submitted for staff review and approval seven days prior to the commencement of construction. This estimate shall be conducted every five years by the facility owner and/or facility operator. Upon approval by staff, the revised decommissioning costs estimate shall be the basis for setting the amount of the required decommissioning fund, surety bond, or financial assurance.
- (j) The facility owner or facility operator shall post and maintain for decommissioning, at its election, funds, a surety bond, or financial assurance in an amount equal to the aggregate of the decommissioning costs on a per-turbine basis.

The funds, surety bond, or financial assurance for decommissioning must be posted for each turbine no later than the commencement of construction of the turbine foundation. The fund, surety bond or financial assurance need not be posted on an individual turbine basis, but reflect the aggregate of the decommissioning costs for each turbine no later than the commencement of construction of the turbine foundation. The form of financial assurance will be a financial instrument mutually agreed upon by staff and the applicant and conditioned on the faithful performance of all requirements and conditions of this application's approved decommissioning and reclamation plan. Once the financial assurance is provided, Paulding Wind II shall maintain such funds throughout the remainder of the applicable term and shall adjust the amount of the assurance, if necessary, to offset any increase or decrease in the decommissioning costs at the end of the applicable term. The value of salvaged steel and copper, at the end of the five-year term and for any other revisions of this report thereafter, shall be calculated based on the five-year annual average for the years preceding the anniversary of such reports.

- (53) At least 30 days before the preconstruction conference, Paulding Wind II shall submit to staff, for review and approval, the following documents:
 - (a) One set of detailed engineering drawings of the final facility design, including all turbine locations, collection lines, access roads, the crane route, permanent meteorological towers, substations, construction staging areas, and any other associated facilities and access points, so that staff can determine that the final facility design is in compliance with the terms of the certificate. The final facility layout shall be provided in hard copy and as geographically-referenced electronic data. The final plan shall include both temporary and permanent access

routes, as well as the measures to be used for restoring the area around all temporary sections, and a description of any long-term stabilization required along permanent access routes. The plan shall consider the location of streams, wetlands, wooded areas, and sensitive plant species as identified by the ODNR Division of Natural Areas and Preserves, and explain how impacts to all sensitive resources will be avoided or minimized during construction, operation, and maintenance.

- (b) A stream and/or wetland crossing plan including details on specific streams and/or ditches to be crossed, either by construction vehicles and/or facility components (e.g., access roads, electric collection lines), as well as specific discussion of proposed crossing methodology for each stream crossing and post-construction site restoration. The stream crossing plan shall be based on final plans for the access roads and electric collection system.
- (c) A detailed frac-out contingency plan for stream and wetland crossings that are expected to be completed via HDD. Such contingency plan may be incorporated within the required stream and/or wetland crossing plan.
- (d) A tree clearing plan describing how trees and shrubs around turbines, along access routes, in electric collection line corridors, at construction staging areas, and in proximity to any other facility facilities will be protected from damage during construction, and, where clearing cannot be avoided, how such clearing work will be done so as to minimize removal of woody vegetation. Priority should be given to protecting mature trees throughout the facility area, and all woody vegetation in wetlands and riparian areas, both during construction and during subsequent operation and maintenance of all facilities.

- (54) All changes outside the environmental survey areas and any changes within environmentally-sensitive areas shall be subject to staff review and approval prior to construction in those areas and shall be provided to staff in hard copy and as geographically-referenced electronic data.
- (55) Any wind turbine site proposed by the applicant but not built as part of this facility shall be available for staff review in a future case.
- (56) If construction has commenced at a turbine location and it is determined that the location is not a viable turbine site, that site shall be restored to its original condition within 30 days.
- (57) Within 60 days after the commencement of commercial operation, the applicant shall submit to the staff a copy of the as-built specifications for the entire facility. If the applicant demonstrates that good cause prevents it from submitting a copy of the as-built specifications for the entire facility within 60 days after commencement of commercial operation, it may request an extension of time for the filing of such as-built specifications. The applicant shall use reasonable efforts to provide as-built drawings in both hard copy and as geographically-referenced electronic data.
- (58) The certificate shall become invalid if the applicant has not commenced a continuous course of construction of the proposed facility within five years of the date of journalization of the certificate.
- (59) The applicant shall provide to staff, as it becomes known, the date on which construction will begin, the date on which construction was completed, and the date on which the facility began commercial operation.
- (60) Prior to the commencement of any blasting operations, the applicant must submit to staff a blasting plan which at a minimum provides (a) the type, location, and area of impact from the blasting; (b) the location of any water wells and/or historic structures that could possibly be affected; and (c) the intended date or dates for the blasting. The applicant agrees that it shall not engage in blasting unless and until it receives approval from the staff.

VI. CONCLUSION

According to the Stipulation, the parties recommend that, based upon the record and the information and data contained therein, the Board should issue a certificate for construction, operation, and maintenance of the facility, as described in the application filed with the Board on May 14, 2010, and supplemental filings thereto, subject to the provisions of the Stipulation. Although not binding upon the Board, stipulations are given careful scrutiny and consideration, particularly where no party is objecting to the stipulation. The Board believes that approval of the Stipulation will promote the public interest, benefit the local economy, and create new, in-state renewable energy supply. Based upon the record in this proceeding, the Board finds that all of the criteria established in accordance with Chapter 4906, Revised Code, are satisfied for the construction, operation, and maintenance of the facility as described in the application filed with the Board on May 14, 2010, and supplemented by later filings, subject to the conditions set forth in the Stipulation. Accordingly, based upon all of the above, the Board approves and adopts the Stipulation and hereby issues a certificate to Paulding Wind II pursuant to Chapter 4906, Revised Code, for the construction, operation, and maintenance of the facility as proposed in its application filed in this case on May 14, 2010, and subsequently supplemented, and subject to the conditions set forth in the Stipulation.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) Paulding Wind II is a corporation and a person under Section 4906.01(A), Revised Code.
- (2) The proposed Paulding Wind II wind-powered electric generation facility is a major utility facility under Section 4906.01(B)(1), Revised Code.
- (3) On April 2, 2010, Paulding Wind II filed its preapplication notice and on April 14 and 21, 2010, Paulding Wind II filed proof that legal notice was published for the informational public meeting held on April 20, 2010, at the Wayne Trace School, Jr. High Gymnasium, 4915 U.S. 127, Haviland, Ohio 45851.
- (4) On May 14, 2010, Paulding Wind filed an application for a certificate to site a wind-powered electric generation facility in Paulding County, Ohio.
- (5) By entry issued June 21, 2010, the ALJ granted Paulding Wind II's requests for waiver of the one-year notice period required by Section 4906.06(A)(6), Revised Code. The ALJ also granted

waivers of Rules 4906-17-05(A)(4), 4906-17-05(B)(2)(h), 4906-17-08(B)(2), 4906-17-08(C)(2)(c), and 4906-17-08(D)(2), O.A.C., subject to certain conditions.

- (6) On June 21, 2010, the ALJ granted the motion to intervene filed by OFBF.
- (7) On June 21, 2010, the ALJ granted Paulding Wind II's motion for protective order to keep confidential portions of pages 58-61 of its application.
- (8) On July 6, 2010, the Board notified Paulding Wind II that its application had been certified as complete pursuant to Rule 4906-1, *et seq.*, O.A.C.
- (9) Paulding Wind II served copies of the application upon local government officials and filed proof of service of the application on July 13, 2010.
- (10) On September 7, 2010, staff filed a report of the investigation of Paulding Wind's application.
- (11) A local public hearing was held on September 22, 2010, at the OSU Extension Center in Paulding, Ohio.
- (12) The adjudicatory hearing was held on October 5, 2010.
- (13) On September 13 and 20, 2010, Paulding Wind II filed its proofs of publication of the hearing notice.
- (14) On September 30, 2010, staff filed a motion for extension of time to file testimony, which was granted by the ALJ by entry issued on October 1, 2010.
- (15) On October 5, 2010, Paulding Wind II, staff, and OFBF submitted a Stipulation.
- (16) Adequate data on the Paulding Wind II wind-powered electric generation facility has been provided to make the applicable determinations required by Chapter 4906, Revised Code, and the record evidence in this matter provides sufficient factual data to enable the Board to make an informed decision.
- (17) Paulding Wind II's application, as supplemented, complies with the requirements of Chapter 4906-17, O.A.C.

- (18) The record establishes that the basis of need, under Section 4906.10(A)(1), Revised Code, is not applicable.
- (19) The record establishes that the nature of the probable environmental impact of the facility has been determined and it complies with the requirements in Section 4906.10(A)(2), Revised Code, subject to the conditions set forth in the Stipulation.
- (20) The record establishes that the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations under Section 4906.10(A)(3), Revised Code, subject to the conditions set forth in the Stipulation.
- (21) The record establishes that the facility is consistent with regional plans for expansion of the electric power grid and will serve the interests of electric system economy and reliability, under Section 4906.10(A)(4), Revised Code, subject to the conditions set forth in the Stipulation.
- (22) The record establishes, as required by Section 4906.10(A)(5), Revised Code, that the facility will comply with Chapters 3704, 3734, and 6111, Revised Code, and Sections 1501.33 and 1501.34, Revised Code, and all rules and standards adopted under these chapters and under Section 4561.32, Revised Code.
- (23) The record establishes that the facility will serve the public interest, convenience, and necessity, as required under Section 4906.10(A)(6), Revised Code.
- (24) The record establishes that the facility will not impact the viability of any land in an existing agricultural district, under Section 4906.10(A)(7), Revised Code.
- (25) The record establishes that the facility will comply with water conservation practice under Section 4906.10(A)(8), Revised Code.
- (26) Based on the record, the Board shall issue a Certificate of Environmental Compatibility and Public Need pursuant to Chapter 4906, Revised Code, for construction, operation, and maintenance of the Paulding Wind II wind-powered electric

generation facility, subject to the conditions set forth in the Stipulation.

ORDER:

It is, therefore,

ORDERED, That the Stipulation be approved and adopted. It is, further,

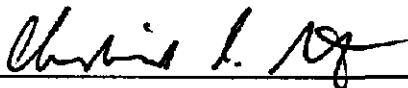
ORDERED, That a certificate be issued to Paulding Wind II pursuant to Chapter 4906, Revised Code, for the construction, operation, and maintenance of the wind-powered electric generation facility, subject to the conditions set forth in the Stipulation. It is, further,

ORDERED, That the certificate contain the conditions set forth in the Stipulation. It is, further,

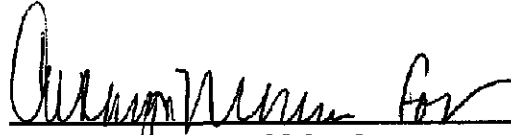
ORDERED, That a copy of this opinion, order, and certificate be served upon each party of record and any other interested person.

THE OHIO POWER SITING BOARD

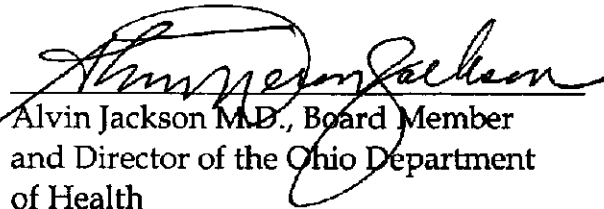
Alan R. Schriber, Chairman of the
Public Utilities Commission of Ohio



Lisa Patt-McDaniel, Board Member
and Director of the Ohio Department
of Development



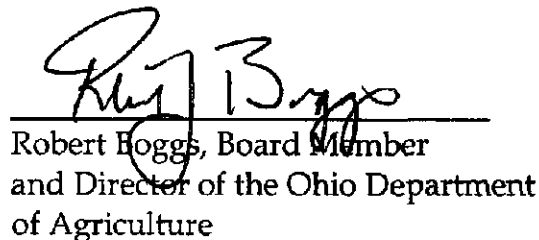
Sean Logan, Board Member
and Director of the Ohio Department
of Natural Resources



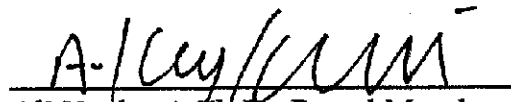
Alvin Jackson M.D., Board Member
and Director of the Ohio Department
of Health



Christopher Korleski, Board Member
and Director of the Ohio
Environmental Protection Agency



Robert Boggs, Board Member
and Director of the Ohio Department
of Agriculture

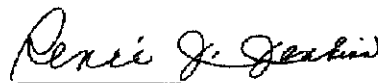


Ali Keyhani, Ph.D., Board Member
and Public Member

KKS/HPG/vrm

Entered in the Journal

NOV 18 2010



Renee J. Jenkins
Secretary