

BEFORE

OHIO POWER SITING BOARD

In the Matter of the Application of JW Great Lakes Wind, LLC, for a Certificate to Construct a Wind-Powered Electric Generation Facility in Hardin County, Ohio.) Case No. 09-277-EL-BGN

OPINION, ORDER, AND CERTIFICATE

The Ohio Power Siting Board (Board), coming now to consider the above-entitled matter, having appointed its administrative law judge (ALJ) to conduct a public hearing, having reviewed the exhibits introduced into evidence at the public hearing held in this matter, including the Stipulation of the parties, and being otherwise fully advised, issues its opinion, order, and certificate in this case, as required by Chapter 4906, Revised Code.

APPEARANCES:

McMahon DeGulis, LLP, by David E. Nash, 812 Huron Road, Suite 650, Cleveland, Ohio 44115, on behalf of JW Great Lakes Wind, LLC.

Richard Cordray, Ohio Attorney General, by Duane W. Luckey, Section Chief, and William L. Wright and Werner L. Margard III, Assistant Attorneys General, Public Utilities Section, 180 East Broad Street, Columbus, Ohio 43215, and Christina Grasseschi and Erica Spitzig, Assistant Attorneys General, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, on behalf of 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 June 15, 2009, JW Great Lakes Wind, LLC (JWGL or applicant) filed its preapplication notice of the instant application. On July 20, 2009, JWGL filed proof that legal notice was published for the informational public meeting held on June 30, 2009, at the Ohio Northern University, Student Center, 525 South Main Street, Ada, Ohio.

On August 14, 2009, as amended on September 15, 2009, JWGL filed, with the Board, an application for a certificate to site a wind-powered electric generation facility in Hardin County, Ohio, pursuant to Chapter 4906-17, O.A.C.

By entry issued September 18, 2009, the ALJ found that, provided JWGL complies with staff's expectations, JWGL's requests for waiver of the one-year notice period required by Section 4906.06(A)(6), Revised Code; the alternative site information and the formal site selection study required by Rules 4906-17-04(A), (B), and (C), O.A.C.; the mapping of all buildings and structures in a five-mile radius required by Rule 4906-17-05(A)(1)(g), O.A.C.; and the requirement that JWGL provide certain cross-sectional views and locations of borings pursuant to Rule 4906-17-05(A)(4), O.A.C., should be granted. In that same entry, the ALJ concluded that JWGL's requests for waiver of the water consumption budgets required by Rule 4906-17-05(A)(5)(a), O.A.C.; the costs of various alternatives required by Rule 4906-17-06(B)(1), O.A.C.; the detailed preconstruction air quality information required by Rule 4906-17-07(B)(1), O.A.C.; and the detailed information about site and operational water quality required by Rule 4906-17-07(C)(3), O.A.C., should be denied. In addition, in the September 18, 2009, entry, the ALJ granted the motion to intervene in this matter filed by the Ohio Farm Bureau Federation (OFBF).

On October 9, 2009, and October 13, 2009, JWGL supplemented the application. On October 13, 2009, the Board notified JWGL that its application had been found to be complete pursuant to Rule 4906-1, *et seq.*, O.A.C. Thereafter, JWGL served copies of the application upon local government officials and filed proof of service of the application on October 21, 2009. On January 12, 2010, pursuant to Section 4906.07(C), Revised Code, staff filed a report of its investigation of the JWGL application (Staff Report).

By entry issued November 5, 2009, the ALJ scheduled both a local public hearing for January 27, 2010, at the Ada Depot in Ada, Ohio, and an evidentiary hearing for February 1, 2010, at the offices of the Public Utilities Commission of Ohio in Columbus, Ohio. The November 5, 2009, entry also directed JWGL to publish notice of the hearings in accordance with Rule 4906-5-08, O.A.C. On November 24, 2009, as supplemented on January 26, 2010, and February 11, 2010, JWGL filed its proof that the required publications of the hearing notice occurred in the *Kenton Times* and the *Ada Herald*.

The local public hearing was held on January 27, 2010. At the adjudicatory hearing held on February 1, 2010, the parties requested that the hearing be continued until February 12, 2010. At the February 12, 2010, hearing, counsel for staff presented a Stipulation, which was filed on February 9, 2010, and supplemented on February 10, 2010, and signed by JWGL, staff, and OFBF. (Joint Ex. 1). In addition, at the February 12, 2010, hearing, the following exhibits were admitted into the record without objection: JWGL's application and supplemental information and correspondence (App. Exs. 1-3, 5, 7-13); proof of publication of legal notice of the hearings and notice that the application was

served on local public officials and libraries (App. Exs. 4.1-4.2); and the Staff Report filed on January 12, 2010 (Staff Ex. 1).

II. PROPOSED FACILITY

JWGL proposes to build a wind-powered electric generating facility between the village of Dunkirk and the village of Ada, in Washington Township, Hardin County, Ohio. The project will consist of 19 to 27 wind turbines and will include the associated access roads, electrical infrastructure, construction staging areas, and operations and maintenance facility. The project area, including the associated setbacks, covers approximately 3,371 acres of agricultural land. (App. Ex. 13 at 3.)

JWGL has not yet selected the turbine model for this project, but the project will have an aggregate generating capacity of between 47.5 megawatt (MW) and 48.6 MW, depending on the turbine selected. It is expected that the turbines will be operating for 89 percent of the year and would have an overall net capacity factor of 31 percent. The annual energy production for this project is expected to be approximately 130,000 MW hours (MWh). (App. Ex. 13 at 3; Staff Ex. 1 at 3.)

The project will interconnect to the electric utility grid via a 69 kilovolt (kV) overhead transmission line from the project substation to American Electric Power's (AEP) substation located in Dunkirk, Ohio (Dunkirk Substation). The new transmission line will be four to five miles in length. JWGL intends to permit the transmission line through local permitting authorities, because it is below the 115 kV threshold of the Board. (App. Ex. 13 at 3-4.)

III. CERTIFICATION 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, such facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility system 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 hearing held on January 27, 2010, three witnesses testified in support of JWGL's application. Another witness, Michael Smith, the Hardin County Engineer, testified neither in support of nor against the application. Mr. Smith stated that the purpose of his testimony was to make the Board aware of the road issues that would need to be addressed prior to construction and, if the issues are not resolved, no oversize load permits will be issued for county roads. According to Mr. Smith, JWGL has agreed verbally to comply with the county's regulations regarding the load capacity of the roads; however, the witness requested that JWGL's certificate be conditioned upon the

applicant's compliance with the load capacity regulations and that decommissioning be treated in the same manner. (Public Hearing Tr. at 6-9.)

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 project (Staff Ex. 1 at 11).

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

Staff reviewed JWGL's environmental information contained in the application. In addition, staff made site visits to the project area and had discussions with employees, representatives of the applicant, and other public agencies (Staff Ex. 1, at 12). The Staff Report notes the following, regarding the nature of the probable environmental impact:

- (1) A one-year construction phase, starting in 2010 is anticipated and the facility is expected to be brought on-line in mid-2011.
- (2) JWGL has addressed safety with respect to the turbines and the project. The turbines would have a supervisory control and data system, locked tower doors, and towers without external ladders. The substation would have a locked security fence, operation and maintenance personnel, a lightning protection system, and would comply with Occupational Safety and Health Administration requirements.
- (3) The project area is sparsely populated and is expected to grow at a slow rate. The project is not expected to limit future population growth.
- (4) Ten residences are located within 100 feet and 33 residences are located within 1,000 feet of the access road, collection line, or substation. No residences are located within 1,000 feet of any turbine; the shortest distance from any turbine base to a residence is 1,215 feet.
- (5) The property line setback for this project is 558 feet and there are no nonparticipating properties located within the property setback line.

- (6) Ice fragments typically land within 328 feet of the turbine tower and the risk of ice throw is negligible beyond 754 feet, which is within JWGL's 1,000 foot setback.
- (7) The maximum blade throw distance for a wind turbine is approximately 500 feet, which is within JWGL's 1,000 foot setback.
- (8) The turbines under consideration by JWGL have a cut-out speed of 56 miles per hour (mph) and they have been designed to withstand wind speeds of 133 mph.
- (9) No turbines or access roads will be located within the Federal Emergency management authority 100-year floodplain.
- (10) No impact is expected on public or private water supplies.
- (11) Ninety-six percent or 3,000 acres of the project is agricultural fields. The disturbance area is 133 acres, of which 108 acres will be temporarily disturbed and 25 acres will be permanently removed from agricultural production.
- (12) The agricultural districts designations will not be affected.
- (13) The turbines are 494 feet tall from base to blade tip and will have an aesthetic impact on this area.
- (14) The project is not expected to conflict with known local or regional development projects or land use plans.
- (15) There will be an increase in the traffic on highways, and state and local roads during construction, but the operation of the wind farm is not expected to noticeably increase local traffic.
- (16) No significant geotechnical constraints at the project site have been identified.
- (17) Record average ambient noise levels ranged from 42.2 to 59.1 decibels (dBA) and the ambient noise levels during the quietest 10 percent of the time ranged from 23.0 to 47.2 dBA.
- (18) At the 97 residences within one mile of a turbine location, the operational sound output would be within the range of 35 to 49 dBA.

- (19) Construction noise will be temporary and restricted to daylight hours.
- (20) One cultural resource, the Ada Depot located in the village of Ada, was listed on the National Register of Historic Places (NRHP) and is 3.4 miles from the turbines.
- (21) The project lies within the former extent of the Hog Creek Marsh, an Ohio historical site, under the category of physical, cultural, historic features in Ohio.
- (22) None of the Ohio Historic Inventory locations within five miles of the project are listed on the NRHP and none of them are situated in the project area. No structures or inhabited dwellings will need to be removed.
- (23) Three kame burial sites, which are previously documented archaeological sites, are within one mile of the project. There are not known archaeological sites at the turbine locations, but one kame site is 800 feet from a collector line and access road.
- (24) No cemeteries or recreational areas are located in the project site. There are recreational areas in the villages of Ada and Dunkirk, within five miles.
- (25) Construction activity is expected to impact the local roads and bridges. The large turning radius required for transport of turbine components would impact the features around most intersections and some temporary alterations to the intersection may be required. Post-construction and operational impacts to roads and bridges should be limited.
- (26) Shadow flicker was simulated from the proposed turbines out to 1,700 meters. The worst-case analysis identified 17 receptors exceeding 30 hours of exposure to shadow flicker per year.
- (27) The low volume of air emissions during construction are not expected to cause significant adverse impacts within or beyond the project site. No significant air emissions will result from operation of the facility.
- (28) Ten miles of drainage ditches are located in the project area; culverts will be installed to provide access across some, but not all of the ditches. Impacts to the ditches include minor loss of

riparian vegetation, damage to the stream bank and bed, erosion, and sedimentation. No other streams, wetlands, ponds, or lakes are expected to be impacted.

- (29) No tree lots will be clear and minimal herbaceous vegetation will be cleared or impacted.
- (30) Review of information from the Ohio Department of Natural Resources (ODNR), Division of Natural Areas and Preserves regarding state and federally listed threatened and endangered plant and animal species found that this project: does not lie within the known range of any federally listed plant species; lies within the known range of the bald eagle, copperbelly watersnake, eastern massasauga rattlesnake, clubshell mussel, rayed bean mussel, and purple Lilliput mussel, but due to the type of project, location, and lack of nests within five miles, ODNR and United States (U.S.) Fish and Wildlife Service (USFWS) determined that no impact to the species would be expected; is not expected to significantly impact listed bird species, based on the results of avian studies and the location of the turbines in largely agricultural areas; lies within the known range of the endangered Indiana bat, but JWGL categorized the project as having minimal risk to bats and has elected to use curtailment, as outlined in the Cooperative Agreement with ODNR, Division of Wildlife (DOW) (ODNR-DOW agreement), in lieu of bat acoustic monitoring; and this project will likely impact common reptilian, amphibian, avian, mammalian, and aquatic species found in an agricultural setting.
- (31) There are 15 television stations within 40 miles of the project which may be impacted by noise generation at low channels in the very-high frequency range within one-half mile of the turbines, and reduced picture quality; however the transition to digital signal has reduced the likelihood of these effects.
- (32) There are two AM and 23 FM radio stations located more than two miles from the turbines and no impact to these stations is expected.
- (33) The turbines have been located to avoid interference with microwave transmission and the wireless telephone network should be unaffected by the turbine operation. The National Telecommunications and Information Administration (NTIA)

of the U.S. Department of Commerce had no concerns regarding blockage of the communications systems.

- (34) JWGL has proposed posting a bond or equivalent financial security after five years of operation to ensure that funds are available to complete decommissioning.
- (35) The overall capital costs of the project are expected to be between \$2,106 and \$2,235 per kW of installed capacity for the project, which will be incurred within 12 to 18 months of the start of construction.
- (36) The construction phase will require 50 to 100 construction workers for a six to eight month time period and the payroll for these workers is expected to be \$2.7 and \$3.3 million. JWGL plans to hire three to five permanent operations and maintenance staff full-time employees.

In its report, staff recommends that the Board find that the nature of the probable environmental impact has been determined for the proposed facility and that it complies with the requirements specified in Section 4906.10(A)(2), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 12-19.)

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

Due to the specific requirements of a wind-powered electric generating facility, by entry issued September 19, 2009, the ALJ granted JWGL a waiver from providing a comprehensive site selection study. As an alternative, JWGL generally addressed the factors deemed necessary for a viable wind project. (Staff Ex. 1 at 20.) In its review, staff found the following:

(1) Ecological Impacts

With regard to surface waters, staff notes in its report that the project area is situated within the former 8,000 acre Hog Creek Marsh, which was dewatered for agriculture in the mid-1800s. The project is not expected to impact any high quality surface waters; however, it could impact lower quality surface waters due to the installation of permanent and temporary culverts to provide access across the existing drainage ditches. Staff further states that none of the ditches contain high quality riparian vegetation or high quality substrate. Installation of a culvert is not expected to cause any permanent impacts to the substrate. JWGL will utilize best management practices (BMPs)

to minimize erosion to the ditches, and to the impacts associated with turbidity and downstream sedimentation for Hog Creek. (Staff Ex. 1 at 21-22.)

Since this project is largely comprised of agricultural land, staff found that there is limited unique or high quality wildlife habitat. However, segments of the project do contain habitats likely to support common reptilian, amphibian, mammalian, and aquatic species and they could be both directly and indirectly impacted during construction and operation of the facility. To assess the potential for the project to impact avian species, JWGL conducted extensive bird and bat preconstruction surveys in coordination with ODNR and USFWS. Staff notes in its report that the final findings of the surveys showed no significant impact was expected to bird species as a result of this project. In addition, JWGL has agreed to curtailment, pursuant to the ODNR-DOW agreement, and JWGL will develop the project site in both an environmentally conscientious manner and with high regard to the conservation of the state's wildlife. (Staff Ex. 1 at 22.)

Turning to geology, the staff states that, due to the presence of glacial till in the project area, and the possibility of karst formations, geotechnical investigations will be done to ensure structural capability to support the turbines. According to staff, during the final design of the project, JWGL will take special consideration into account to deal with suitability and compaction of the site soils. While the project is being constructed near a seismic zone located 30 miles from the project area, no earthquakes were record from 1884 to 2006; however, JWGL will be evaluating data from subsurface investigations in order to locate karstic features to ensure that the turbine foundation designs take into account potential risks from seismic events. Finally, staff notes that the potential risk to the project site associated with mining activity is low. (Staff Ex. 1 at 22-23.)

(2) Socioeconomic Impacts

Staff found that, within the project area, nearly 96 percent of the land is used as cropland for the farming of corn and soybeans and that, during the life of the project, less than one percent of the area will be used for electrical generation and the rest will remain available to the land owner. Using the minimum requirements set forth in Section 4906.20(B)(2), Revised Code, staff notes that, for this project, the property line setback from the base of the turbine to the property line of the wind farm property equates to a distance of 543 feet. Furthermore, in keeping with Section 4906.20(B)(2), Revised Code, for this project, the minimum setback from a turbine to the exterior of the nearest habitable residential structure located on an adjacent property calculates to 916 feet. (Staff Ex. 1 at 23-24.)

With regard to cultural and archeological resources, staff points out that three kame burial sites are located in close proximity to the project site; therefore, staff recommends that survey work be developed at these locations to ensure that the sites are not disturbed by construction or maintenance of the facility. In addition, staff states that a Phase I shovel

testing program should be developed for further archaeological testing at the turbines, substation, laydown areas, access roads, and collection lines. Staff recommends that, in order to evaluate the minimum adverse impact of the project on the surrounding area, an architectural survey program should be designed and implemented. Furthermore, staff recommends that cemeteries, parks, churches, and sacred places should be included in the applicant's survey approach as areas of potential effect. (Staff Ex. 1 at 24.)

The Staff Report reflects that, while traffic management may be necessary during construction, the applicant believes that nearby roads should be adequate to handle the increase in traffic due to construction and does not anticipate the need for road closures or detours. In addition, JWGL will obtain the necessary permits prior to construction. Moreover, JWGL will develop a fire protection and medical emergency response plan in consultation with the fire department in the project area. (Staff Ex. 1 at 25.)

Looking at roads and bridges, staff states that JWGL should obtain roadway pavement cores and perform an engineering analysis to determine the allowable load capacity of the roads and bridges and this analysis will need to be approved by the county and/or the Ohio Department of Transportation (ODOT). Temporary alteration of the intersections where wide turns are required for trucks that are delivering equipment may be necessary; however, after construction, these alterations will be removed. JWGL will perform a survey of the delivery routes to determine the locations of bumps, crests, and dips that would interfere with the transport of the turbines and either find a new route or modify the roadway to eliminate the interference. (Staff Ex. 1 at 25-26.)

Considering the construction noise level, staff opines that, while JWGL intends to use the BMPs to abate such noise, many of the construction activities will generate significant noise levels. Staff, however, believes that the adverse impact of construction noise will be minimal given the transient nature of the activities, the distance of the activities from structures, and the limitation of most construction traffic to normal daytime working hours. As for the noise level once the facility is operational, JWGL retained BHE Environmental to conduct noise studies. Staff notes that certain conditions will affect the noise level, including ground absorption, wind shear, and temperature inversions. In addition, to determine the ambient noise levels of the project area, JWGL conducted baseline sound measurements. (Staff Ex. 1 at 26-27.)

The Staff Report found that the project will have a significant long-term impact on the aesthetics of the area, particularly for nearby residents. The project will consist of 19 to 27 turbines, access roads, electrical infrastructure, construction staging areas, and operations and maintenance facilities. Of the turbines being considered, the maximum turbine height is 494 feet. The turbines will be off-white in color, will be setback more than 1,000 feet from both participating and nonparticipating residences, and turbines on the perimeter will be lit with red strobe lights at night. (Staff Ex. 1 at 27.)

JWGL used WindPRO to calculate how often and in which intervals a specific receptor should be affected by shadows generated by one or more receptors. Staff and JWGL 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, in determining that 30 hours is the appropriate level of measurement, staff referred to international studies and guidelines from Germany and Australia, as well as the standards used in Michigan, New York, Minnesota, and New Hampshire. JWGL simulated shadow flicker from the proposed turbines out to 1,700 meters and, with this worst-case scenario, identified 17 receptors that would exceed 30 hours of flicker per year. Staff also recognized that there is a potential that flashing lights may cause epileptic seizures in some individuals; however, the projects nominal rotor speed is such that it is not likely to trigger seizures. (Staff Ex. 1 at 27-28.)

In reviewing communication interfaces affected by the project, staff notes that there are 15 fully-operational television stations providing programming to the area. Based on the location of the project and the television stations, applicant does not believe there would be many communities where a total loss of coverage would occur; however, JWGL has proposed mitigation measures for this potential impact. Staff also points out that no degradation of service is anticipated for AM or FM radio stations, or wireless telecommunications providers serving the area. Furthermore, JWGL has located the turbines such that they will not interfere with microwave telecommunications systems. Finally, while wind turbines can interfere with civilian and military radar, according to staff, in most cases the U.S. Department of Defense has found that the interference is either not present, not significant, or can be readily mitigated. (Staff Ex. 1 at 28-29.)

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 such safety control mechanisms, including two independent braking systems, ice detection software for the wind turbine controller, automatic turbine shutdown at excessive wind speed, an ice sensor alarm that triggers an automatic shutdown, a lightning protection system, a turbine shutdown at excessive wind speed when excess blade vibration or stress occurs, and a pitch system alarm, address these issues. In addition, staff notes that the minimal residential setback distance of 1,000 feet and restricting access to authorized personnel help to address these issues. Finally, staff recommends that, with regard to the ice throw issue, public access be restricted with the placement of warning signs and that JWGL should instruct workers of the potential hazards of ice conditions. (Staff Ex. 1 at 30.)

In reviewing decommissioning of the turbines, staff points out that megawatt-scale turbines typically have a life expectancy of 20 to 25 years. Upon decommissioning, the site must be restored and reclaimed to the same general topography that existed prior to the

beginning of construction of the facility. Staff explains that JWGL has proposed the posting of a bond or equivalent financial security after five years of operations to ensure that funds are available for decommissioning. (Staff Ex. 1 at 31-32.)

Staff notes in that there are both direct and indirect benefits to the region during construction and operation of the project, including revenue generated from construction spending, permanent employment, local and state taxes, and revenue to the participating landowners. Furthermore, staff points out that JWGL has the ability to take advantage of economic incentive provided under the American Recovery and Reinvestment Act (ARRA); however, if any delays occur in the staging or construction phase of the project, such delays may adversely impact JWGL's ability to meet the deadlines outlined in the ARRA and could result in the applicant not being allowed to take advantage of an ARRA tax credit or grant. (Staff Ex. 1 at 32.)

In looking at the overall socioeconomic impacts of the wind project, staff recommends that the Board find that the proposed site represents the minimum adverse environmental impact in accordance with Section 4906.10(A)(3), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 32.)

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

Staff explains that JWGL plans to use an underground 34.5 kV electric collection system and a 34.5 to 69 kV collector substation to connect the wind turbines to the existing AEP Dunkirk Substation, via a new 69 kV circuit. The Dunkirk Substation, is located in the AEP zone of the PJM Interconnection (PJM) control area, and would interconnect the wind farm to the local and regional transmission grid. Staff notes that JWGL will be responsible for the direct connection costs for the new 69 kV circuit breaker and associated equipment at the Dunkirk Substation that is estimated to be \$1.3 million. (Staff Ex. 1 at 33, 35.)

PJM completed a Feasibility Study and System Impact Study (Impact Study) for the proposed wind farm project, 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 project that would be required to maintain the reliability of the regional transmission system. The results of the Impact Study identified: no problems on the AEP local system or the PJM region with the capacity portion of the generator deliverability; no problems in the PJM region with the multiple contingency outages; no problems on the AEP local system or the PJM region with the interrupting capabilities of the circuit breakers; and no upgrades are required to mitigate criteria violations, such as network impacts, initially caused by the addition of this project.

In addition, the stability and low voltage ride-through criteria capability of the facility was part of a PJM's Facility Study. (Staff Ex. 1 at 33-35.)

In its report, staff recommends that the Board find that the proposed 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 36.)

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

Staff states that there are no air monitoring stations in Hardin County; however, the air monitoring stations in surrounding counties show that the regional air quality meets the standards established to protect human health and welfare. Furthermore, staff points out that the Environmental Protection Agency (EPA) lists Hardin county as in attainment or unclassified with the 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 limitation, NAAQS, prevention of significant deterioration increments, or the need for permits to install and operate an air pollution source. However, fugitive dust rules adopted pursuant to Chapter 3704, Revised Code, may be applicable; however, JWGL asserts that fugitive dust will be controlled by watering roads on an as-needed basis. (Staff Ex. 1 at 37.)

JWGL has indicated that it will apply for the necessary permits and plans relating to water in the project area. In addition, JWGL intends to use the Storm Water Pollution Prevention Plan (SWPPP) to mitigate any potential impacts from construction activities to surface water and a spill Prevention, Containment, and Countermeasure plan will be implemented to prevent the release of hazardous materials. According to the Staff Report, no changes in the water flow patterns are anticipated by the applicant and the applicant claims that no jurisdictional wetlands were identified within the project area, except the agricultural ditches where disturbance will be minimized. In addition, once operational, the turbines will not generate any solid waste except during major repairs. (Staff Ex. 1 at 37-38.)

With regard to aviation, there are four commercial-service airports within 70 miles of the proposed facility and one privately-owned, public-use airport three miles west of the nearest turbine. According to staff, all turbine locations were submitted to the Federal Aviation Administration (FAA) for review and the FAA has determined that there is no hazard to aviation. In addition, after filing with the ODOT, Office of Aviation (ODOT-

OA), the applicant received notice that a permit from their office was not required. (Staff Ex. 1 at 38-39.)

According to staff, the applicant's description of the construction and operation of this facility would be in compliance with the rules and regulations adopted in conformance with the air and emission requirements in Chapter 3704, Revised Code, the requirements under Chapter 6111, Revised Code, and the solid waste disposal requirements of Chapter 3734, Revised Code. Staff believes that the proposed 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 37-39.)

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

According to the Staff Report, JWGL will carry liability insurance on the wind facilities and activities on the premises during the life of the project. The general liability insurance policies will carry a minimum combined occurrence and limitation of \$1 million and participating landowners will be listed as additional insured parties. (Staff Ex. 1 at 41.)

JWGL will install the turbines and associated facilities on leased privately-owned land. On average, one acre of land is required per turbine. In total, the applicant states that it has leased about 6,500 acres of private-owned land, about 3,300 of which will be used for the project. The lease agreements are valid for 30 years and may be extended. Under the terms of the lease agreements, the landowners retain the right to fully use the surface of the premises, as long as they do not interfere with the speed or direction of the wind flowing over and across the premises or with the development and operation of the wind facilities. In exchange for the exclusive right to convert, collect, and transmit wind-generated electricity, JWGL guarantees to pay landowners an annual lease payment. JWGL will repair damage to field drainage tiles and will compensate landowners for crop or soil damage caused during construction. (Staff Ex. 1 at 41-42.)

According to the applicant, the current methodology used to calculate property tax on production equipment would result in an annual tax burden to the applicant in excess of \$41,000 per MW of installed capacity. JWGL plans to take advantage of the opportunity to monetize the investment tax credit provided for in the ARRA. JWGL believes that taking advantage of this tax credit will allow the project to be more economically viable than it would be with the production tax credit and it will also lead to a lower power purchase price agreement. (Staff Ex. 1 at 45.)

Staff recommends that the Board find that the proposed facility will serve the public interest, convenience, and necessity. Staff believes that the proposed facility complies with

the requirements specified in Section 4906.10(A)(6), Revised Code, provided the certificate issued includes staff's recommendations. (Staff Ex. 1 at 45.)

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

According to the Hardin County Auditor's record, four agricultural district parcels are located within the project area and the proposed facilities will directly impact three of the parcels by either the placement of turbines, collection lines, or access roads. However, staff notes that these impacts will not affect the agricultural district status of these parcels. Furthermore, while the construction activities could lead to temporary reductions in farm productivity, the applicant has had discussions with landowners and has received their approval of the locations of turbines, roads, and cabling, and will take steps to address potential impacts to farmland. Therefore, staff recommends that the Board find that the impact of the proposed facility on the viability of existing agricultural land in an agricultural district has been determined and that the project 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 46.)

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

Staff found that, during construction, local water will be used for the preparation of concrete for the foundations of the turbines, as well as for dust control. However, 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 operations and maintenance building employees. Therefore, staff recommends that the Board find that the proposed 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 47.)

V. STIPULATION'S RECOMMENDED CONDITIONS

As stated previously, at the February 12, 2010, hearing, counsel for staff presented a Stipulation, which was filed on February 9, 2010, and supplemented on February 10, 2010, and signed by JWGL, staff, and OFBF. The stipulating parties recommend that the Board issue the certificate requested by JWGL, 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) JWGL shall install the facility at the proposed site utilizing the equipment and construction practices, and the mitigative measures, as set forth in the application and modified by subsequent filings.

- (2) JWGL shall conduct a preconstruction conference prior to the start of any construction to discuss how environmental concerns will be satisfactorily addressed.
- (3) JWGL shall properly install and maintain erosion and sedimentation control measures in accordance with the following requirements:
 - (a) During construction, 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 spoils 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) Obtain National Pollutant Discharge Elimination System (NPDES) permits for storm water discharges during construction and provide staff a copy of each permit within seven days of receipt.
- (4) JWGL shall employ the following construction methods in proximity to any watercourses: all watercourses, including wetlands, shall be delineated by fencing, flagging, or other prominent means; all construction equipment shall avoid watercourses, including wetlands, except at specific locations where staff has approved construction; storage, stockpiling, and/or disposal of equipment and materials in these sensitive areas shall be prohibited; structures shall be located outside of identified watercourses, including wetlands, except at specific locations where staff has approved construction; and all storm water runoff is to be diverted away from fill slopes and other

exposed surfaces to the greatest extent possible, and directed instead to appropriate catchment structures, sediment ponds, etc., using diversion berms, temporary ditches, check dams, or similar measures.

- (5) JWGL shall employ BMPs when working near environmentally sensitive areas, including, but not limited to, the installation of silt fencing or a similarly effective tool prior to initiating construction near streams and wetlands. The installation shall be done in accordance with generally accepted construction methods and shall be inspected regularly.
- (6) JWGL shall have an environmental specialist on site at all times that construction, including vegetation clearing, is being performed in or near a sensitive area such as a designated wetland, stream, river, or in the vicinity of identified threatened and endangered species or their identified habitat.
- (7) JWGL shall adhere to all terms and conditions as outlined in the ODNR-DOW agreement; provided, however, that nothing in this Stipulation shall be construed to add to or diminish the terms and conditions of the agreement. In the event JWGL and/or ODNR chooses to exercise its option to terminate the agreement, JWGL shall utilize BMPs as referenced in the agreement and shall adhere to the condition that turbines will not operate at wind speeds less than or equal to four meters per second (as measured within the rotor swept area) from dusk to dawn, July 1 to October 31 annually. Furthermore, JWGL shall adhere to the mitigation measures in ODNR's On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio (ODNR's Protocol), as also referenced in the ODNR-DOW agreement.
- (8) JWGL shall develop a post-construction avian and bat mortality monitoring plan in conjunction with methodologies outlined in ODNR's Protocol, for staff review and approval. The monitoring shall be conducted for a minimum of one year (April 1 to November 15) with the possibility of a second season of monitoring at the discretion of staff and ODNR-DOW.

- (9) JWGL 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.
- (10) Staff, ODNR, and USFWS shall be immediately contacted if threatened or endangered species are encountered on site during construction and operation activities. Construction activities that could adversely impact the identified plants or animals will be halted until an appropriate course of action has been agreed upon by JWGL, 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, however, 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, this Stipulation and the ODNR-DOW agreement.
- (11) JWGL shall: assure compliance with fugitive dust rules by the use of water spray or other appropriate dust suppressant measures; conform to any drinking water source protection plan, if it exists, for turbines located within the drinking water source protection areas of the local villages; and become a member of the Ohio Utilities Protection Service prior to commencement of operation of the facility.
- (12) JWGL shall complete a full geotechnical investigation to confirm that there are no issues to preclude development of the wind farm, including borings at each turbine location to provide subsurface soil properties and recommendations needed for the final design and construction of each turbine foundation, as well as the final location of the transformer substation and interconnection substation. All boreholes must be filled and borehole abandonment must comply with state and local regulations. Copies of all geotechnical boring logs shall be provided to staff and to the ODNR, Division of Geological Survey prior to construction.
- (13) At least 30 days before the preconstruction conference, JWGL shall submit to staff, for review and/or approval: the final turbine foundation design for each turbine location and a fire protection and medical emergency plan, to be developed in

consultation with the fire department having jurisdiction over the area.

- (14) At least 30 days prior to the preconstruction conference, JWGL shall provide to staff and to the Hardin County Engineer the final delivery route plan and the results of any traffic studies. JWGL shall complete a study on the final equipment delivery route to determine what improvements will be needed in order to transport equipment to the construction sites. The study and delivery route plan shall consider, but not be limited to: a survey of the final delivery routes to determine the exact locations of vertical constraints where the roadway profile will exceed the allowable bump and dip specifications; identification of 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 are required to be raised; identification of upgrades to any roads and bridges that are not able to support the projected loads from delivery of the turbines and other facility components; and a description of the restoration of locations where wide turns may impact the road facilities and surrounding areas, and where any roads or bridges are damaged, to their original condition.
- (15) JWGL shall obtain all required Hardin County 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.
- (16) JWGL 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 maintenance of the facility in agricultural areas. Damaged field tile systems shall be promptly repaired to at least original conditions at JWGL's expense. Excavated topsoil shall be segregated and restored upon backfilling. Severely compacted soils shall be plowed or otherwise decompacted, if necessary, to restore them to original conditions.
- (17) JWGL shall comply with all of the requirements of the Hardin County Engineer on repairing damage to any roads and/or bridges caused by construction activity. Any damage will be

repaired to its preconstruction state and will be outlined in a written agreement between JWGL and the Hardin County Engineer. If this cannot be agreed upon, then JWGL must post a surety bond to cover any damages to interstate roads and all state, county, and township roads and bridges that may occur while transporting turbines and other facility components to and from the wind farm site and during all construction activities. At its expense, JWGL shall promptly repair all impacted roads and bridges following construction to at least their condition prior to the initiation of construction.

- (18) Prior to construction, JWGL shall: prepare a Phase I cultural resources survey program acceptable to staff for archaeological work at known or probable kame sites/topographic rises, turbine locations, access roads, substation and laydown sites, and collection lines, and conduct an architectural survey of the project area consistent with the work program filed in this docket, which has a focus starting in the project boundary in Washington Township, the community of Dola, and the outlying areas in Dunkirk and Ada, closest to the project site. If the resulting surveys disclose a find of cultural, archaeological, and/or architectural significance, or a site that is likely to be eligible for inclusion on the NRHP, then JWGL shall submit an amendment, modification, or mitigation plan for staff's acceptance. Any such mitigation effort shall be developed in coordination with the Ohio Historic Preservation Office, with input from the Hardin County Historical Society, and submitted to staff for review and acceptance.
- (19) JWGL shall provide to staff its final 69 kV interconnection line route, no later than 30 days prior to the preconstruction conference and obtain staff's concurrence on any portion of the route that is located within the project area boundary.
- (20) JWGL shall remove all temporary gravel and other construction staging area and access road materials after completing construction, but no later than 60 days after the start of commercial operation, unless otherwise directed by the participating landowner, and restore the impacted areas to substantially preconstruction conditions, in compliance with the Ohio NPDES permit(s) obtained for the project and the approved SWPPP created for this project.

- (21) JWGL shall not dispose of gravel or any other construction materials during or following construction 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 Ohio EPA regulations.
- (22) After one year of operation, JWGL shall provide staff with the actual shadow flicker amounts generated by each turbine for that year of operation. Actual shadow flicker should be modeled at each receptor within 1,000 meters using each turbine's operational statistics, actual wind speed and direction values, and solar data for the year.
- (23) After construction, any turbine validly measured to create in excess of 30 hours per year of shadow flicker at a non-participating receptor within 1,000 meters shall be subject to mitigation. JWGL shall propose, and upon agreement among JWGL, the receptor(s), and staff, implement, mitigation consisting of either reducing the turbine's impact to no more than 30 hours per year, or other measures acceptable to the affected receptor(s) and staff.
- (24) Prior to construction and after construction, any turbine(s) forecasted or measured, respectively, to exceed the recorded average ambient noise levels during the daytime (measured between the hours of 7:00 a.m. and 10:00 p.m.) by greater than five dBA under any operating conditions at the exterior of any nonparticipating residence within one mile of the project area shall be subject to further study or review of the impact and possible mitigation. If required, JWGL shall propose, and upon agreement among JWGL, the receptor(s), and staff, implement, mitigation consisting of either reducing the impact so that the average ambient noise levels during the daytime is not exceeded by greater than five dBA, or other measures acceptable to the affected receptor(s) and staff.
- (25) Construction activities shall generally be limited to daylight hours. Impact pile driving and blasting operations shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday. Construction activities that do not involve noise or light increases above ambient levels at sensitive receptors are permitted at any time.

- (26) At least 30 days prior to the preconstruction conference and subject to staff review and approval, JWGL shall create a complaint resolution procedure in order to address potential operational noise and shadow flicker concerns experienced by the public. JWGL shall work to mitigate and resolve any issues with those who file a complaint. Any complaint submitted must be immediately copied to the staff.
- (27) The siting of any concrete batch plant shall be subject to staff review and approval.
- (28) JWGL must meet all FAA and ODOT-OA requirements to construct an object that may affect navigable airspace and all structures shall be lit in accordance with FAA regulations.
- (29) At least 90 days prior to construction, JWGL shall notify, in writing, any airport owner, whether public or private, whose operations, operating thresholds/minimums, landing/approach procedures and/or vectors are altered, or are expected to be altered by the siting, operation, maintenance, or decommissioning the facility.
- (30) Prior to construction, JWGL shall submit the final layout and turbine locations to the FAA and the ODOT-OA for review and approval. Further, JWGL shall provide to staff for review and approval the determinations by the FAA and ODOT-OA for turbines 5 and 22.
- (31) JWGL must meet all FAA and federal agency requirements to construct an object that may affect local and/or long-range radar, and mitigate any effects or degradation caused by wind turbine operation, up to and including removal of afflicting turbine(s).
- (32) If any turbine is determined to cause Next-Generation Radar interference, JWGL 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, JWGL shall exert reasonable effort to restore connectivity in a timely manner.

- (33) Prior to construction, JWGL shall submit the final layout and turbine locations to the NTIA for review and approval.
- (34) JWGL must meet all 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 a total loss of television reception due to the facility operation, JWGL shall provide, at its own expense, cable or direct broadcast satellite service.
- (35) JWGL shall: comply with the turbine manufacturer's safety manual; maintain a copy of the safety manual in the operations building of the facility; restrict public access to the site with appropriately placed warning signs or other necessary measures; and instruct workers on potential hazards of ice conditions on wind turbines.
- (36) Prior to construction, JWGL shall file a letter with the Board that identifies which of the three turbine models listed in the application has been selected.
- (37) JWGL shall comply with the following conditions regarding decommissioning:
 - (a) At least 30 days prior to the preconstruction conference, pursuant to Rule 4906-17-08(E)(6), O.A.C., JWGL shall provide a final draft of a decommissioning plan to staff and the Hardin County Engineer for review and for staff approval. In this plan, JWGL shall: identify lands in the project area that a reconnaissance inspection suggests may be prime farmlands (A soil survey shall be made or obtained according to standards established by the U.S. Department of Agriculture and/or the Ohio Department of Agriculture in order to confirm the exact location of the prime farmlands and confirmed prime farmlands should be reclaimed to such standards after site decommissioning.); indicate the future use that is proposed to be made of the land following reclamation; describe the 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; describe how JWGL will implement BMPs to control impacts to surface or ground water resources. (If necessary, JWGL will obtain permits from the Ohio EPA and/or the U.S. Army Corps of Engineers.); and provide a detailed timetable for the accomplishment of each major step in the decommissioning plan, the steps to be taken to comply with applicable air and water quality laws and regulations and any applicable health and safety standards, and a description of the degree to which the decommissioning plan is consistent with the local physical, environmental, and climatological conditions.

- (b) At the end of the project's life, the turbines may either be "re-powered" with new nacelles, towers, and/or blades, or the facility shall be decommissioned at the expense of the facility owner or operator. In the event that the facility or individual turbines are decommissioned, such decommissioning shall be completed within 12 months after the end of the useful life of the facility or individual turbines. The facility, or individual turbines, shall be decommissioned if: the Board finds that the public health, safety, or welfare is substantially imperiled from the state of disrepair of the facility or individual turbines; or if the facility or individual turbines fail to produce electricity for 12 consecutive months.
- (c) Decommissioning shall include: the removal of all physical material pertaining to the facility to a depth of at least 36 inches beneath the soil surface and restoration of the disturbed area to a condition substantially similar to the same physical condition that existed before erection of the facility; the removal of the turbine foundation

to the depth of 36 inches or to the top of the foundation spread footing, whichever depth is greater; the restoration of roads and bridges to substantially the same physical condition that existed before decommissioning; the removal and transportation of the turbines off-site; the removal of buildings, cabling, electrical components, access roads, and any other associated facilities; the regrading, reseeding, and restoration of disturbed earth to conditions substantially consistent with surrounding land use at the time of decommissioning; and the repair of damaged field tile systems to at least original conditions. The participating landowner may request that JWGL not decommission access roads.

- (d) If JWGL 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 financial securities. The entry into a participating landowner agreement constitutes agreement and consent of the parties to the agreement, their respective heirs, successors and assigns, that the Board may take action that may be necessary to implement the decommissioning plan, including the exercise by the Board, staff, and contractors, of the right of ingress and egress for the purpose of decommissioning the facility.
- (e) Decommissioning funds or financial assurance shall be released by the holder of the funds or financial assurance when JWGL has demonstrated, and the Board concurs, that decommissioning has been satisfactorily completed, or upon written approval of the Board in order to implement the decommissioning plan.
- (f) During construction, operation, and 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.

- (g) JWGL shall leave intact any improvements made to the electrical infrastructure, pending approval by the concerned utility.
 - (h) Subject to staff approval, within five years after the start date of commercial operation, and every five years thereafter, an independent and Ohio-licensed professional engineer shall be retained by JWGL to estimate the total cost of decommissioning, without regard to salvage value of the equipment (decommissioning costs), and the cost of decommissioning net salvage value of the equipment (net decommissioning costs). The estimate shall be on a per-turbine basis and include: an analysis of the physical activities necessary to implement the approved reclamation plan, with physical construction and demolition costs based on ODOT's Procedure for Budget Estimating and RS Means material and labor cost indices; the number of units required to perform each of the activities; and an amount to cover contingency costs, not to exceed 10 percent of the above-calculated reclamation cost. JWGL shall post and maintain decommissioning funds or financial assurance in an amount equal to the following schedule: from years one through five, \$5,000 per turbine; and from year six through the end of the life of the project the greater of \$10,000 per turbine, 15 percent of the decommissioning costs, or 120 percent of the net decommissioning costs.
- (38) Prior to the commencement of construction, JWGL 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 and provide staff a copy of each permit and all supporting documentation within seven days of receipt.

- (39) JWGL 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 facility into the regional transmission system. JWGL shall provide a letter stating that the agreement has been signed or provide a copy of the signed agreement to the staff.
- (40) At least seven days before the preconstruction conference, JWGL shall submit to staff a copy of its SWPPP and its erosion and sediment control plan for review and approval.
- (41) At least 30 days before the preconstruction conference, JWGL shall submit to staff, for review and approval, the following documents: one set of detailed engineering drawings for the final project design; 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 project 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; and a detailed frac-out contingency plan for stream and ditch crossings that are expected to be completed via horizontal directional drill.
- (42) Within 60 days after the commercial operation date, JWGL shall submit to staff a copy of the as-built specifications for the entire facility to the extent they have been completed.
- (43) The certificate shall become invalid if JWGL has not commenced a continuous course of construction of the proposed facility within five years of the date of journalization of the certificate.
- (44) JWGL 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.

(Joint Ex. 1 at 2-13.)

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 August 14, 2009, and as amended by supplemental filings 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. As set forth in the stipulation, the parties submit that the stipulation: is the product of serious bargaining among capable, knowledgeable parties which are represented by counsel and technical consultants; as a package, it promotes the public interest, benefits the local economy of the area, and will create new, in-state renewable energy supply; and the stipulation does not violate any important regulatory principle or practice (Joint Ex. 1 at 15). 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 August 14, 2009, as amended on September 15, 2009, and supplemented on October 9, 2009, and October 13, 2009, 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 JWGL 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 August 14, 2009, as amended on September 15, 2009, and supplemented on October 9, 2009, and October 13, 2009, and subject to the conditions set forth in Section V of this opinion, order, and certificate.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) JWGL is a corporation and a person under Section 4906.01(A), Revised Code.
- (2) The proposed JWGL wind-powered electric generation facility project is an economically significant wind farm under Section 4906.13(A), Revised Code.
- (3) On June 15, 2009, JWGL filed its preapplication notice and on July 20, 2009, JWGL filed proof that legal notice was published for the informational public meeting held on June 30, 2009, at the Ohio Northern University, Student Center, 525 South Main Street, Ada, Ohio.
- (4) On August 14, 2009, as amended on September 15, 2009, JWGL filed for a certificate to site a wind-powered electric generation facility in Hardin County, Ohio.

- (5) By entry issued September 18, 2009, the ALJ granted JWGL's requests for waiver of the one-year notice period required by Section 4906.06(A)(6), Revised Code; the alternative site information and the formal site selection study required by Rules 4906-17-04(A), (B), and (C), O.A.C; the mapping of all buildings and structures in a five-mile radius required by Rule 4906-17-05(A)(1)(g), O.A.C.; and the requirement that JWGL provide certain cross-sectional views and locations of borings pursuant to Rule 4906-17-05(A)(4), O.A.C. JWGL's requests for waiver of the water consumption budgets required by Rule 4906-17-05(A)(5)(a), O.A.C.; the costs of various alternatives required by Rule 4906-17-06(B)(1), O.A.C.; the detailed preconstruction air quality information required by Rule 4906-17-07(B)(1), O.A.C.; and the detailed information about site and operational water quality required by Rule 4906-17-07(C)(3), O.A.C., were denied.
- (6) By entry issued September 18, 2009, the ALJ granted the motion to intervene filed by OFBF.
- (7) On October 9, 2009, and October 13, 2009, JWGL supplemented the application.
- (8) On October 13, 2009, the Board notified JWGL that its application, as amended, had been found to be complete pursuant to Rule 4906-1, *et seq.*, O.A.C.
- (9) JWGL served copies of the application upon local government officials and filed proof of service of the application on October 21, 2009.
- (10) On January 12, 2010, staff filed a report of the investigation of JWGL's application.
- (11) A local public hearing was held on January 27, 2010, at the Ada Depot in Ada, Ohio.
- (12) The February 1, 2010, adjudicatory hearing was called and continued until February 12, 2010.
- (13) On November 24, 2009, January 26, 2010, and February 11, 2010, JWGL filed its proofs of publication of the hearing notice.
- (14) On February 9, 2010, JWGL, staff, and OFBF filed a Stipulation.

- (15) Adequate data on the JWGL 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.
- (16) JWGL's application, as amended and supplemented, complies with the requirements of Chapter 4906-17, O.A.C.
- (17) The record establishes that the basis of need, under Section 4906.10(A)(1), Revised Code, is not applicable.
- (18) 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.
- (19) The record establishes that the proposed 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.
- (20) 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.
- (21) 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.
- (22) The record establishes that the facility will serve the public interest, convenience, and necessity, as required under Section 4906.10(A)(6), Revised Code.
- (23) 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.

- (24) The record establishes that the facility will comply with water conservation practice under Section 4906.10(A)(8), Revised Code.
- (25) 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 JWGL 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 JWGL 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,

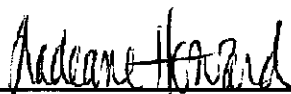
ORDERED, That the certificate contain the conditions set forth above in Section V of this opinion, order, and certificate. It is, further,

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

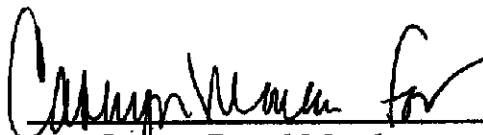
THE OHIO POWER SITING BOARD



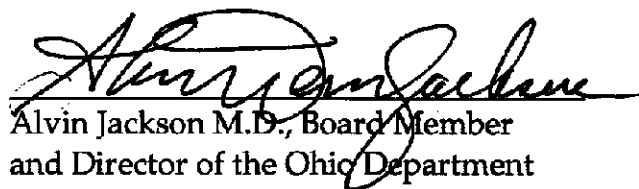
Alan R. Schriber, Chairman of the
Public Utilities Commission of Ohio



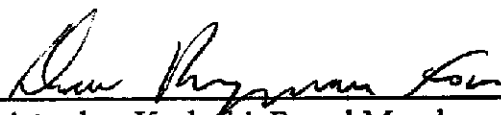
Lisa Patt-McDaniel, Board Member
and Director of the Ohio Department of
Development



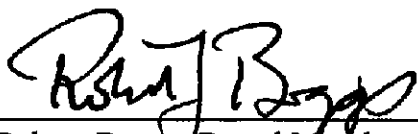
Sean Logan, Board Member
and Director of the Ohio Department
of Natural Resources



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



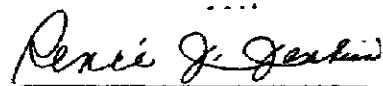
Robert Boggs, Board Member and
Director of the Ohio Department
of Agriculture

Board
Member and Public Member

CMTP/vrm

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Renee J. Jenkins
Secretary